Value change in adolescents: school effectiveness in the affective domain

Durance, George Murray

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TITLE: Value Change in Adolescents: School Effectiveness in the Affective Domain
BY: George Murray Durance

Factors contributing to school effectiveness in the affective domain have been largely ignored in recent research in spite of a transnational concern about value disorientation. This thesis explores the influence a secondary school has on adolescent value formation. Current theories on “effective schooling” and “valuing” provide a framework for the research.

Following an introduction to the issue of values in schools, the thesis reviews the literature on “values”, “effective schools”, and “school climate” before proceeding to a description of a two site, longitudinal study. The creation of a value change-effective schools (VCES) model enabled local school issues to be analysed in conjunction with an overarching theory and principles which are relevant to a broad educational community. The four complementary surveys of parents, students and staff included a wide range of items which address frequently voiced methodological criticisms of the “effective schools” approach. Subsequent chapters summarise and discuss the findings of the surveys and place them in the context of current research.

The thesis demonstrates that a school has a significant, unique role to play in adolescent value formation. Value change did not emerge as a cause and effect phenomenon, but as a complex interaction of change agents operating within the terms of the value change-effective schools model. Programmes and strategies, which have meaning at the local level, can be developed for the affective domain based on insights provided by the model. The factors associated with effectiveness were determined and defined primarily by the local schools. They crossed over domains from the cognitive to the affective, coalescing to form an effective learning environment.
DEDICATION

To: Beverley and the memory of my father, Leon J. Durance
ACKNOWLEDGEMENTS

I would like to thank Professor David Galloway for his many helpful comments and expressions of support throughout the project. He was an insightful, thought-provoking advisor as well as an encouraging friend.

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PART ONE: INTRODUCTION

CHAPTER ONE: Societal expectation and values in schools

Teaching values in schools today is a contentious issue. At the heart of current calls for educational reform in the affective domain is the hope that educational systems will provide a values foundation which will enable students to make wise decisions and to behave in responsible and effective ways. This hope assumes that the outward expression of life is a reflection of an interior value system which orientates diverse elements of personality. As George Pugh (1977) put it, values are the "connectors" of life, the fundamental driving force in history, and the "guiding criteria for all personal decisions," and, as such, they deserve a central place in the educational process. Some critics, particularly those with a moral inclination, feel that societies which fail to transmit values experience decline and that character formation, the essence of values education, is the critical element in the survival and development of a society (e.g., Ryan and Lickona 1987).

It is not difficult to see how the current concern for the role of values in education gained ascendancy in the minds of many parents and politicians. Information technology has widely disseminated the view that society is in trouble. Few adults, or even students, are unaware that a "crisis" is thought to be imminent. This, coupled with the fact that social scientists are establishing an increasingly accurate picture of social moods and views, leaves one with the impression that Western civilisation is experiencing a disastrous values disintegration (Bennett 1992; Barrow 1995).

The worse the problem is perceived to be, the more urgent are the demands that schools fulfil their cultural mandate, that is, that they graduate students who are prepared for participatory citizenship in a democratic society which requires both affective and effective skills (cf., Jones 1985). Cognitive training, with its emphasis on
objectivity, efficiency, and specialisation, requires an affective balance with its emphasis on the subjective and personal.

1.1 Facets of a perceived dichotomy: an historic perspective

Interest in values education and character formation is not a uniquely modern phenomenon. A review of past educational theory and practice reveals that concern for the values children acquire in the educational process is "an enduring adult preoccupation" (Ryan and Lickona 1987).

The Greeks, represented by philosophers such as Aristotle and Plato, held that the goal of education was the development of both intellectual and moral capacities (Grant 1981; Ryan 1985). Indeed, they held that education was primarily a moral activity rather than an intellectual one.

Latin culture subsumed the Greek and in the process adopted the concept of a dualistic function for education with the values orientation holding primacy:

The man who can really play his part as a citizen and is capable of meeting the demands both of public and private business, the man who can guide a state by his counsels, give it a firm basis by his legislation and purge its vices by his decisions as a judge, is assuredly no other than the orator of our quest (Quintilian, De institutio oratoria).

Adoption of this objective in the Renaissance brought the humanist movement into conflict with its academic rival, late medieval scholasticism. Should the educational "system" strive to produce people of knowledge or people virtuous in deed? The contrasting emphases, which have their modern parallels in the debate between those who advocate holistic education in contrast to primarily cognitive training, had caused tension centuries earlier both in Athens, as is evident in the debates between the Sophists, Socrates and Isocartes, and in Rome, as is indicated by the dialogue between Crassus and Antonius in Cicero's De oratore (Seigel 1968). Theoretically the rhetorical (humanistic) ratio and the philosophical (scholastic) ratio were incompatible traditions in spite of the efforts to unite the two (McNally 1969,70). Today there is a danger the differing orientations could once again be construed as incompatible.
Scholasticism (cognitive emphasis with an obscuring of affective concerns) was unacceptable to humanists (holistic emphasis with a predominant values component) not merely on superficial methodological grounds but, more importantly, because its language and style were private rather than public and, therefore, incapable of reforming society through applied moral wisdom.

Renaissance humanists condemned an approach "which appeared to stress the abstract and intellectual," which had no "true utility or direct relevance for human life" and which failed "to communicate important truths with persuasive effect" (Gray 1963). The pursuit of practical wisdom and true eloquence, which persuaded others to a "better" life, united an otherwise economically, geographically, religiously, and professionally fractured humanistic movement. Similarly today, the widespread interest in developing a values component in education unites an otherwise heterogeneous group of reformers. Popular demands for a return to values in education obscure deeply divisive issues inherent in divergent metaphysical presuppositions. One suspects that ultimately reformers will have to address these suppressed discrepancies if a truly satisfying values educational programme is to be found.

A leading fourteenth century educator, Vittorino da Feltre, emphasised the 'living spirit' over 'dead letters' in an attempt to promote balance between eloquence, or cognitive skill, and the acquisition of values. For him, the truly educated person was one who actively sought the betterment of the society in which he or she lived:

Not everyone is called to be a lawyer, a physician, a philosopher, or to live in the public eye, nor has everyone outstanding gifts; but all of us are created for the life of social duty, all are responsible for the general influence that goes forth from us (in Bouwsma 1973, p.23).

Vittorino felt social duty took a variety of forms but it always embodied the idea that thought could not be divorced from expression. For many humanists the desire to communicate learning involved a struggle between two contrasting expressions of wisdom - the vita activa and the vita contemplativa. The active life was the embodiment of the humanist ideal, because Renaissance humanists wished to educate an individual rich in culture, in the totality of human experience, who would be capable of making prudent decisions beneficial to society.
1.2 The modern context

The belief in education's redemptive power and its ability to produce virtue, is not unique to the twentieth century. Similarly, the modern emphasis on the cognitive domain has an historic antecedent in the early decades of the twentieth century for it could be argued that various elements in the social sciences - empiricism, logical positivism, pragmatism, relativism, conditioning theory, and the awareness of human subconsciousness - were woven together into an educational philosophy which pulled values out of the public domain into a private, personal world. In this interpretation, values became what people in the twentieth century made of them, and as long as these values provided meaning in the private, existential sense, that was enough.

The veracity of this particular line of reasoning is not at issue here. The point is that there exists today a tension between the privatisation of values and the expectation that a public institution is to educate the whole child and not just his/her intellect. There is a vestige of this expectation in most school's statements of philosophy but implementation of the philosophy has proven to be increasingly problematic in spite of strong societal support for it (Ormell 1993). Explanations for this apparent contradiction lie in the non-sectarian, secular, and pluralistic nature of modern society. What kind of values should be taught, by whom, and how? Traditional societies of another era faced some of these questions, such as 'who should teach values' and 'how,' but the critical question of 'which or whose values should be taught' were not as contentious as they are today.\(^1\)

The modern school's retreat from the overt transmission of values should not obscure the fact, however, that values are learned in the school environment. One can imagine a student leaving a school without a logically integrated values system or adopting a value system incompatible with that of parents, teachers and society at large, but one cannot imagine a student leaving the school devoid of values.

\(^1\) On pressure from interest groups and the "pendulum swing" they create, see, for example, Cohen 1988, Doyle 1988, and Wilson 1985.
1.3 School effectiveness in the values domain

The research which follows confirms that schools do make a difference in the lives of children who attend them and that this difference is discernible in all areas of the child's life, including the values domain. Research into the cognitive outcomes of schooling is extensive and the issues relatively clearly defined. By contrast, factors contributing to effectiveness in non-cognitive areas, where values are imbedded, has been generally ignored until recently in spite of a transnational concern over the issue of value disorientation (Saqeb 1980; Harnisch 1987). The low profile and general ignorance of how schools impact students in non-cognitive ways have meant that schools do not maximise the opportunities available to them to facilitate change (Lynch 1988, Keeves 1988).

Pluralistic societies seeking to placate both special interest groups and individuals concerned with the abuses of indoctrination, hesitate to mandate a particular ethical agenda. Nevertheless, the dream of amoral education is illusory. Not only do teachers consider affective learning desirable (Mortimore 1988) and, in the process, repudiate the amoral model, but, as was noted above, many groups in society expect schools to promote and cultivate “traditional values.”

Furthermore, an amoral education programme assumes people are capable of divorcing themselves from their values. Such an assumption is psychologically unsatisfying and improbable; it is much more likely that people are not conscious of the values they hold or the manner in which they communicate them (e.g., see Broadfoot 1988).

While policy makers search for an acceptable series of value objectives and a moral platform upon which to base them, the system continues to transfer values as though a mandate existed. Consequently, there are substantial school effects in the affective domain (Reynolds 1985) even though the effects may be other than that which is desired. The result is an impasse, for on the one hand explicit education in
values appears impossible, while implicit values education is often confused and contradictory (Hemming 1995; Cox, 1988; Hailstone 1994).

If schools foster values in an unavoidable process, then it is important to understand, identify, explain, and evaluate the methodology which makes this process effective. There is widespread agreement that the methodological factors contributing to value change in school-attending adolescents needs analysis. Reynolds and Reid (1985) have called for an array of "new outcome measures to tap 'affective' rather than cognitive outcomes" because of the evidence testifying to significant school impact in this area. At the same time, they point out the "awesome difficulty" entailed in such a task (see also Jones 1985; Anderson 1985; and Strivens 1985).

Given societal expectations and the inevitability of value learning in schools, it is not surprising that recent studies in school effectiveness have included components in their research design which attempt to analyse the effectiveness of schools in the value transfer process. Peter Mortimore et al. (1985 and 1988), for example, assessed school effectiveness in both cognitive and non-cognitive areas because his team felt social outcomes were a significant objective in education. Mortimore argued that if one were to evaluate effectiveness but exclude an examination of the non-cognitive area, the research would be of limited value because the entire scope of school effectiveness had not been examined. After interviewing over 220 teachers in 50 London primary schools over a four year period, his team found that 77 per cent of the teachers had a social-moral aim for their children. Clearly the affective domain remains of critical concern to educational practitioners and an essential criteria in any evaluation of a school's effectiveness.

Another large scale study under the auspices of the IEA is seeking to identify which values can be learned in school and under which conditions with special
emphasis on educational environmental factors such as the formal and 'hidden curriculum' (T.N. Postlethwaite 1985). Studies like Mortimore's and the IEA's reflect an on-going awareness of and concern for holistic education. Current public dissatisfaction with the values dimension of education suggests that the conclusions drawn from this research will be of interest to the general public as well as to the professional educational community.

1.4 The focus of this study

In focusing on the conscious and unconscious impact of schools on the valuing dimension of adolescents, this study seeks to answer the following question: Is there a value change in adolescents attributable to the influence of the school and if so, can the shift be quantified and explained? This question deals with the de facto impact of schools, not with the more moralistic idea, should schools impact students and, if so, in what way? Furthermore, the question of which values should be taught in schools is also not considered. Although this is a critical question and lies at the heart of a satisfying theory of values education, the question of should values be consciously taught in schools raises additional metaphysical questions which are beyond the scope of this research project. However, a pragmatic explanation of a school's impact on adolescent value formation has import for those who seek to mandate a particular roster of values in the school setting as well as for those concerned with the appropriateness of a school teaching values.

In order to address the complex issues associated with research in the affective domain an innovative approach is required. This study begins with a literature review of values (Chapter Two), effective schooling, and school climate (Chapter Three). The theories of effective schooling, climate, and valuing which emerge describe the nature and significance of the problem associated with value learning in schools and provide
the framework for the research design which was used. The design, described in
Chapter Four, features a two site, longitudinal case study in which survey data is used
to explain theoretical formulations. The schools in the study were chosen deliberately
because their two distinct approaches to values education allow for the exploration of
the parameters of value change.

A series of surveys were given to parents, teachers, and students at the two
sites over a two year period. The surveys themselves are included in appendices 1-4.
The rationale and structure of the surveys appear in the appropriate sections dealing
with each respondent group. The methodology (Chapter Five), results (Chapter Six),
and discussion (Chapter Seven) of the parent surveys are presented first. The student
and staff surveys are similarly summarised in chapters eight to ten. Chapters eleven
and twelve examine the methodology, results and procedures of surveys which are
readily available and not constructed specifically for this research project.

A multiple survey approach was used in order to obtain as accurate and
comprehensive a definition of the value change process as possible, given the time and
budget constraints of the project. All the surveys were constructed on the basis of a
value change-effective schools model (VCES) which represented the interface of
theories related to effective schools and valuing. The creation of the VCES model
enabled local school issues to be analysed in conjunction with overarching theory and
principles which are relevant to a broad educational community.
PART TWO: LITERATURE REVIEW

CHAPTER TWO: Review of Literature on “Values”

2.1 Definitional Issues

In everyday language, “value” has many meanings, some of which are quite esoteric. Musicians use the term to denote the duration of a note, linguists use the term to denote the quality of verbal sound associated with a written character, and artists use the term to denote the gradation of tone from light to dark in painting.

People more commonly use the term to refer to the desirability of an object or to the moral principles which individuals and societies accept as standards for behaviour. The nuances of this common usage require articulation if an intelligible picture is to emerge of what educators mean when they speak of values. The dictionary’s ‘ordinary language’ definition does not fully reflect the way in which social scientists use "value" to discriminate amongst various things.

Some writers have given "value" a very definite, idiosyncratic meaning while others have chosen to use the term in an umbrella fashion to categorise some "aspect of human desiring, approval, interest, motivation, preference, aspiration" or some sense of "decency, beauty, worth, or goodness" (Kitwood 1976, p.81; cf., Straughan 1993).

In addition to a linguistic problem, there is a paradigm difficulty associated with the use of the term "value." Does the construct lie within the domain of the anthropologist, the economist, the sociologist, the psychologist, the theologian or the philosopher? "Value" as a construct, is present within the literature of all these disciplines. Therefore, in order to place this project within the framework of values-research, conceptual issues arising from conflicting theories of knowledge, need summarisation.

2.1.1 Origin of the term "value"

German philosopher Rudolf Hermann Lotze (1817 - 1881) was the first to use "value" in its modern sense. (For an examination of the word's etymology, see
Rescher’s bibliography, 1969, and C. A. Moore’s *Essays in East - West Philosophy*, 1951). Lotze borrowed the term from Economics, where it was widely used to denote the material or monetary worth of something. Lotze took the term out of a context in which value as a noun meant "worth" and as a verb "to estimate worth," there was no underlying intonation of goodness, truth or beauty (cf., Frankena 1967).

Lotze embellished the term from a defensive posture created by his protracted struggle with nineteenth century reductionistic, materialistic naturalism (Tillich 1959). "Value" was a suitable weapon in his arsenal because it enabled him to advance a dualistic concept of reality, one dimension of which was comprised of facts (being), the other values. Dualism, of course, had a long history stemming back into Greek philosophic and educational thought, as well as in post-classical periods of Western Civilisation. Lotze was at odds with the scientific, naturalistic view of the world which was gaining ascendancy in his day, and "value" in its embellished sense, captured the essence of a philosophic debate which had characterised much of Western thinking since the time of Plato and Aristotle.

According to R.B. Perry (1926), Hugo Muesterberg introduced the Lotze concept of "value" into American philosophic parlance following his appointment to Harvard in 1897; in England, G.E.Moore’s use of the term was particularly influential (Rescher 1969, p.50) although traditional terms like "good" and "right" remained more in vogue in educational circles (Frankena 1967, p.229).

The cluster of concepts which coalesced to form "value" in the wake of Lotze, included good, beauty, morality, truth, right, and worth, all of which represented a sense of what ought to be rather than what was, is or will be. The construct stood in conceptual contrast to "fact;" historically it lay in the "prescriptive" disciplines of ethics, religion and philosophy rather than the "descriptive," factual disciplines of mathematics, biology, physics, and chemistry (Pugh 1977).

Therefore, the tension, noted between two concepts of reality with their respective educational traditions - the one dominated by private, cognitive concerns, the other by public, non-cognitive concerns - demonstrates itself in the origin of the
modern term "value." When parents and social critics call for "values" in education, they are using a term whose linguistic origins reflect the broader philosophic issue at stake.

Lotze and his followers paid a high price for the concept they constructed: "Being and value had nothing in common: value had no being and being had no value" (Tillich 1959). The task today is to find a balance between the two and to harmonise two views of life which are essential for the well-being of people. Neither position seems able to compromise with one group holding that the "ought" cannot be derived from the "is" while the other group argues that what "is" cannot be derived from "ought." Meanwhile, collective experience argues for the necessity of both approaches.

The extension of "value" into the social sciences and humanities began in the early part of the twentieth century. Sociologists, like Znaniecki, used the term as early as the 1920s while psychologists, like Thurston and Allport, first employed the term in the 1930s (Kitwood 1976). It was during the 1930s that Allport, Vernon, and Lindzey first drafted their still popular *Study of Values* (1931), although "values" here represented more goal orientation and personal interest than the stronger moral imperative of "ought" which characterises later thinking (Levitin 1973).

During the 30s, 40s, and 50s, anthropologists and sociologists were the social scientists most inclined to work with the values construct and to develop it conceptually. Anthropologists used values when they analysed the relationship between culture and personality and when they examined the role of childrearing in emergent cultural patterns, while sociologists focused on the role of values in social *mores*.

Psychologists preferred tidier ancillary constructs like attitudes, motives and valences (Levitin 1973) primarily because the discipline was casting itself in the "scientific" mould where concern with what is excluded questions of what ought to be. They held values to be unobservable, outside the realm of empirical investigation (Hogan *et al.* 1978). More recently anthropologists have accepted this position and followed the lead established by psychologists (Richards 1970). Nevertheless, the term
is still widely used as any search of the literature will reveal. A recent ERIC document search (1995) revealed over 11,000 articles relating in some way to "value." Albert and Kluckholn's (1959) bibliography of significant literature dealing with values listed 43 pages of references concerned with values in Anthropology, 49 pages in Psychology/Psychiatry, 43 pages in Sociology, 20 pages in Political Science - Government, 20 pages in Economics, 74 pages in Philosophy, 11 pages in Humanities/Theology, and 10 pages in the Maths and Sciences. Clearly the concept of "values" is the focus of much scholarly attention.

2.1.2 Current Usage

Current definitions can be broken down into a number of broad, non-discreet categories. The most obvious way to categorise the definitions is by discipline according to the shades of meaning associated with the presuppositions inherent in theology, philosophy, psychology, sociology, and economics. Another approach is to categorise the definitions by linguistic usage as suggested by William Frankena (1967) who identified three linguistic dimensions, including the abstract noun, the concrete noun, and the verb.

In a short, seminal article published over thirty years ago, Franz Adler (1956; cf. also Levitin 1973) outlined another category of definitions reflecting philosophic orientations. One definitional cluster describes "eternal ideas" or absolutes, another finds a meaning for the term in objects, a third sees values as emerging from learned or innate preferences held by people, and a fourth equates values with actions.

2.1.3 Presuppositional considerations in a definition

A review of the term's origin and a summary of its usage1 indicates that basic epistemological and metaphysical questions must be raised and answered before a definition can be given. 'How do we come to know about values?' 'What is there in reality which gives rise to value?'

By assuming that people are capable of acquiring and holding a value, all of the definitions considered above make a major anthropological statement with clear

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1 See, for example, Frankena 1967; Adler 1956; Levitin 1973; Fallding 1965; Ryan 1985; Rescher 1969; Schneider 1980
metaphysical overtones. People are held to be reservoirs of value by disposition and, because they are human beings, they have needs and desires, wants and preferences. Values are the central, defining feature of the individual's world (Levitin 1973).

There is a dichotomous nature to the anthropological assumptions latent in modern definitions, a nature which closely parallels the dualistic sense of reality associated with the etymological origin of the concept "value." Once again, it is the material versus the immaterial, the physical versus the spiritual. Even if values originate in the material universe or express themselves in a physical world, they nevertheless reside in the immaterial and are not subject to empirical definition in the same sense that "facts" are.

To locate the anthropological assumptions about values within the non-material nature of "human being," is to accept the time honoured dualistic notion of reality; no fundamentally new anthropological theory needs to be formulated. Still, the anthropological assumption needs to be clearly stated because it adds force to the argument for the inclusion of values in education.

Epistemological questions naturally follow from the anthropological assumptions implicit in the definitions. "How do people come to know about values?" All theories of values education have to deal with this question although it is safe to say that few have actually specified the epistemological assumptions underpinning their theories. This situation appears to have arisen either because the assumptions were too contentious and liable to lead to outright rejection of the proposed method of values-education before its pedagogic advantages were seriously considered, or because the theorist was unaware of the epistemological assumptions which were made when the theory was formulated.

Having established the anthropological and ultimately metaphysical framework for "values," it is possible to outline a definition which can be consistently used in empirical research and which will be in keeping with scholarly definitions generally
accepted today. Without an articulation of the presuppositions, a beheaded definition results. No true testing of a theory of value change can be undertaken because the theory lacks a gravitational pull which brings order into the conceptual universe.

George Pugh's (1977), *The Biological Origin of Human Values*, provides a stimulating thesis for the origin of values and the way in which people come to know them. Pugh likens the human brain to a complex, "value-driven" computer decision-making system. Like the computer, he sees the brain selecting and choosing the "best" alternatives according to the criteria built into the system by the designer. Consequently, values are "an essential part of nature's system design for the brain." (p.6)

Pugh's computer model requires that the ultimate criteria for decision making needs to be put in place by the programmer or designer. With the evolutionary process in the role of system designer,

> It follows that evolution's 'behavioral plan' for each species must be defined in an underlying 'system of values' which is an essential part of the design of the brain. Assuming that this is true, then there must be an underlying system of 'innate' human values that motivated people to behave like people. (p.7)

Pugh believes "primary values" or innate values are therefore a part of essential reality and give rise to secondary values. The primary and secondary components taken together represent the human value system which "provides the ultimate criterion for all personal decisions." Below, under acquisition theories, the educational implications of this concept are explored. For the moment, it is only necessary to consider its significance within the framework of broad epistemological concerns.

Researchers who subscribe to Adler's third and fourth category of definitions (cf., Adler 1956) would undoubtedly question Pugh's conclusions, either because they feel he is seeking to answer a question for which there is no objective evidence, or because they do not consider the conclusions meaningful. Nevertheless, Pugh's contribution to the study of values does not lie in his acquisition theory, but rather in
his suggestion that human beings have evolved in a manner which predisposes them to valuing. In other words, it is human to value. Within the concept of "humanness" is the activity of valuing and to not value is to be something other than human.

The educational implication of this theory is immediately apparent. To truly educate a child, the values component must be addressed and to assume that students do not learn values while at school, or to assume the corollary, that 'it is best to delay values training until children get older when they can independently choose for themselves,' is to misunderstand what it is to be a human child. Learning values is as natural and inevitable as seeing the world in colour.

Paul Tillich (1959), writing from a different perspective, summed up this line of reasoning as follows:

...our knowledge of values is identical with our knowledge of man, of man not in his existential but in his essential, nature. (p.194)

In a recent article in the Journal of Moral Education, Harry Fernhout (1989) argued forcefully for the articulation of philosophic orientation points pervading values educational programming. He correctly argues that advocacy of a value's agenda is largely determined by the convictional core of the proponent. "Why do values at all?" is a logical question which can only be fully and honestly answered when philosophic questions are examined. He theorises that the ultimate concern, or the ultimate value of a person directs one's life by bringing fulfilment and meaning to it. At the centre of every person's Weltanschauung is faith, that is "trust in and loyalty to" the ultimate value. (p.188) "What is it," asks Fernhout, "that justifies or grounds our pre-reflective confidence?" (p.192) For some it will be the worth and dignity of people, while for others the worth and dignity of people is not an End in itself but rather related to God or Deity who gives people dignity as bearers of Transcendent Value. The point here is not to establish which description of worth and dignity is correct but rather to point out that both interpretations have their orientation in a faith core.
2.1.4 A working definition

What is the nature of values? The answer lies in one's metaphysic orientation. For some, the nature of values will include innate or Absolute qualities implanted by the designer (the natural evolutionary process or by the Transcendent Being). For others, values are simply behavioural patterns or learned preferences.

For those who accept that values thinking is part of the essential human design - as I do - then the role of values in education is justified on two accounts. On the one hand, values in education are acceptable because they are inevitably a part of any educational endeavour. Furthermore, to acknowledge the role of values in the educational process enables the educator to fulfil the mandate to "truly" educate the child. For those who champion a mechanistic or naturalistic (evolutionary) origin for the human species and values, the line and force of the argumentation for values in education would be analogous to those who see a Creator active in human origins. The nature of absolutes or innate values would possibly be different but the essential potentiality to know about and to comprehend values would be comparable regardless of how the designer/Creator were conceived.

The purpose of this metaphysical digression has not been to find grounds for criticising or condemning one approach in preference for another, but to draw attention to the fundamental differences which exist and to argue for those calling for values in education to recognise their life orientations and to accept the right of those who have a different one to express theirs in a suitable manner. It is a call for a truly pluralistic society along lines suggested by Harry Fernhout (1989):

This idea of pluralism begins with the recognition that people in our society have different beliefs (faith orientations) and, in living out of these beliefs, wish to shape different patterns of life. A pluralistic vision of society should seek to reckon seriously with differences that go to the core of that which gives coherence to a way of life. Understood in this way, pluralism is a social vision which safeguards the free and integral expression of faith. It is an idea of society which recognizes the confessionally pluralistic nature of our times; it deals with and honours the reality of the side-by-side existence of different life perspectives in our society....(p.196)
This digression into the realm of metaphysics provides a clarification of the nature and role of values in education. Consequently, it also provides the substructure to a theory of value in which values education must be located.

The definition which follows emerges logically from the presupposition that valuing is an instinctive human trait and that to perceive values is to be acting naturally in the realm of ideas just like seeing in colour is natural in the physical world.

A value is a belief in the worth of something consciously or unconsciously expressed as a moral imperative (ought) or as a preference for; it originates through a natural valuating process which carries with it an innate perspective and superstructure originally deposited by the designing mechanism/Creator and which is built up and developed through interaction with life experiences until it becomes an integral part of personality.

2.2 Development of a value theory

Adler's four categories of definition accommodate the philosophic divisions inherent in the use of the term "value." The above definition seeks to ferret out the key elements from the various categories which are compatible with my presuppositions. Nevertheless, when it comes to empirically analysing value change in adolescents it is not enough to provide a theoretic framework for the investigation. Values as here defined manifest themselves in "concrete" ways which are subject to both measurement and understanding.

Milton Rokeach's (1968) theory of value provides a satisfactory bridge from the world of the metaphysical and theoretical to that of the empirical, where research can take place. Rokeach's theory is highly regarded and widely accepted because of its simplicity, its logical formulation, and its affinity with researchers working in all the social sciences.
2.2.1 Beliefs

Rokeach began construction of his theory by distinguishing between three related concepts which are often erroneously employed in an indiscriminate manner: belief, attitude, and value.

In Rokeach's scheme, the beliefs one acquires are systematically ordered into "architectural systems" characterised by describable and measurable qualities. Because not all beliefs are equally important, the individual orders them in a "central-peripheral dimension." The centrality of the belief's position in an individual's architectural system determines both the degree to which change will be resisted and the profundity of the consequences associated with any change. The more central the belief, the greater will be the repercussion of change.

The central tendency component of Rokeach's theory closely parallels the theories of other researchers in the field. In *Foundation for a Scientific Analysis of Value* (1951, 1973), Henk Mulder had earlier argued for a higher - lower classification of values in order to explain the significance of change in value positions for individuals. Quoting Scheler, Mulder observed that,

"Values appear to be 'higher' the more durable they are,...the less they partake of 'extensity' and divisibility,...the less they are 'grounded' in other values, the 'deeper' the satisfaction connected with sensing them,...the less feeling them is relative to the positing of certain substantial bearers of 'feeling' and 'preferring.'" (p.19)

The implications of this concept are significant. In order to explain a school's impact on student's values, it is not enough to ascertain that value change occurred. One must also seek to establish the significance of the change. Although in quantifiable terms a shift in a peripheral values could have the same numerical weight in terms of the "quantity" of school effect, the "quality" factor is, if anything, more important.

Rokeach went on to identify a congruity principle which has an equally important implication for value change in a school setting. According to him, the
closer a competing belief system is to the one held by the individual, the more likely it is that he/she will internalise the new system. This would mean that if a student was exposed to a value which competes with his/her own, the student would be more likely to adopt the new value if it was congruous with the one already held.

If Rokeach's congruity principle is accepted, then schools will be more likely to affect change in students whose value systems are congruent with theirs. It also follows that a school will be more effective if its values are congruent with the home and community it serves because the home and the community create a belief framework in the student which will predispose him/her to accept or reject what the school teaches. Conversely, if it is accepted that school's do foster values in students, then parents and the community would find it easier to engage in value transfer if their value systems were congruent with the school's.

2.2.2 Belief System

In the Rokeach theory, the total universe of one's beliefs is known as the belief system and it includes ideologies (the "organisation of beliefs and attitudes"), opinions, ("the verbal expression of some belief, attitude, or value"), and faith (beliefs accepted as "true, good, or desirable" regardless of what others believe or objective evidence), as well as attitudes and values.

To firmly locate values in the belief structure, it is necessary to distinguish them from related constructs. An attitude is a "package of beliefs" interconnected by assertions that some characteristic of the object or situation is true or false, desirable or undesirable. Attitudes, therefore, are clusters of beliefs rather than some irreducible element of personality; it follows, therefore, that not all beliefs are attitudes.

Values differ from attitudes in that they represent a single belief which "transcendently guides actions and judgements" across object, situation, or goal, to "ultimate end-states of existence" without being attached to any specific attitude. Values are centrally located beliefs either concerned with obligatory behaviour (ought/ought not) or concerned with the worth of end-state existence. These beliefs, or abstract ideals, represent ideal modes of conduct or ideal ultimate goals. Moreover, a
value, unlike an attitude, is an imperative to action, not only a belief about the preferable but also a preference for the preferable (Lovejoy 1950). Finally, a value, unlike an attitude, is a standard or yardstick to guide actions, attitudes, comparisons, evaluations, and justifications of self and others. (p.160)

Attitudes and behaviours flow from underlying values making value a more economic term to work with than attitude. In Rokeach's words, "An adult has tens or hundreds of thousands of beliefs, thousands of attitudes, but only dozens of values." (p.124) Working on the premise that values are the core of the belief structure, it is clear that the role of the school would be very significant in the life of a child if it really did impact the pupil in his/her values domain.

2.2.3 A taxonomy of values

Rokeach divided values into two categories. One group, which relates to desirable modes of conduct such as honesty and obedience, he called "instrumental" values, while the other, which related to desirable end states such as happiness and peace, he labelled "terminal" values. The two are interrelated in the sense that the instrumental values are the means of attaining the terminal. The Rokeach hierarchical structure can be summarised as follows:

...two separate value systems may be posited -instrumental and terminal-each with a rank-ordered structure of its own, each, no doubt, functionally and cognitively connected with the other, and both systems connected with many attitudes towards specific objects and situations. (p.161)

Rokeach's classification system has the advantage of simplicity and comprehensiveness with its location of a value system within a belief-attitude-opinion-faith matrix. Furthermore, its grounding in a central tendency principle and its employment of a congruity principle make the entire theory impressive both in the breadth of issues covered and in its suitability to the world of empirical research. Furthermore, it overarches the various disciplines from economics to ethics and psychology thereby reducing the "buzzing, booming confusion of reality" (William James in Wirt 1988) into coherent categories.
For these reasons, Rokeach's approach has much to offer and the empirical research which follows is based in part on the instrument he developed to identify values held by individuals. His definition is compatible with the one outlined above, although there are ramifications for Ultimate Reality which Rokeach leaves unstated. Rokeach adopted a definitional position reflecting Adler's third category which means that he believed values were imbedded in belief structure which arose from one's idiosyncratic interaction with culture and society (Minton and Schneider 1980). Therefore, something becomes valuable when an individual accepts it as desirable through a process governed by congruence and central tendency.

If one accepts that the human being is predisposed by the designing mechanism/Creator to view the world in values, then the possibility of innate or absolute values emerges. Idiosyncratic interaction with culture and society give rise to values because a person naturally sorts information in a way that values unavoidably materialise. Rokeach did not ask the question, 'Why do people organise their belief system around values, that is, around concepts of conduct and end states?' It was enough for him that they did.

This pragmatic solution to a controversial and contentious issue is acceptable given the objectives of his research. His model can be used in this study because the question at hand asks how schools impact students in the values domain. The metaphysical dimensions of the values-in-education issue become significant when subsequent questions are raised such as, 'Should schools influence value formation in children?' Rokeach's truncated axiology is a good place to begin when asking the question, 'Do value changes occur and, if so, in what direction and under what circumstances?,' but it is not appropriate for studies which question whether values should or should not be taught.

2.2.4 Alternative taxonomical approaches

It is normally at the taxonomical level of value theory that educational practitioners become involved. A sorting out of values along a continuum of significance and according to some ranking principle allows teachers, curriculum
experts, and administrators to set objectives which undergird a philosophy of education. In the process, definitional issues are normally ignored.

The concept of a taxonomy is important in an analysis of value change because the measurement of change in one value often becomes the measurement of change in a series of interrelated values. One cannot evaluate or measure without understanding the relationship which the values hold to each other.

Rokeach's bi-polarization of values into instrumental and terminal categories is similar to that taken by a number of other researchers in the field, although there is a wide divergence of opinion on classification schemes, as one might suspect given the multitude of definitions which clutter the field.

Rescher's 1969 comprehensive summary of classification schemes brings order into an otherwise confusing array of taxonomical alternatives. He defines his first group of taxonomies according to the subscribership. This results in taxonomies which express values in such ways as personal, professional, vocational, and national values (e.g., Morris 1956).

Rescher's second group of taxonomies are based on the idea that object determines the value. These taxonomies make reference to "thing" values (purity, speed), individual/personal values (bravery, intelligence), environmental values (beauty), group values (trust, respect), and societal values (justice, equality). A third way of viewing and organising values lies in the benefits offered by the value and a fourth in the purpose that is served when the end state of the value is realised.

A fifth category of taxonomies defines the relationship between the subscriber and the beneficiary and leads to a classification of self-oriented values (e.g., success, comfort, privacy) and other-oriented values with this latter group of values being subdivided into parochial values (family-, profession-, nation-, or society-oriented values) and people-oriented values (aesthetic, humanitarian values).

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3 Rescher suggests the formula "value for X purposes" be used to identify values in this category.
Finally, values can be classified according to the relationship of one class of values to another. In this interpretation of values, instrumental (means) values are subordinated to more fundamental values and serve a facilitating role for self-sufficient, intrinsic, or end values. Rokeach's instrumental and terminal values are one example of this type of classification.  

Rescher's survey of value classification schemes clarifies the ways in which values can be linked to each other. When values are observed and measured within a taxonomical orientation it must be remembered that the arrangement of values in the measuring instrument assumes a certain relationship between values. The degree and nature of value change could appear differently if an alternative taxonomy was used. Although it is only possible to consider two or three taxonomical approaches in a doctoral research project, ideally many instruments should be used, each reflecting a different taxonomical scheme in order to get a broader picture of the value shift.

2.3 The acquisition of values

An analysis of value change is really an analysis of values in transition. Earlier it was argued that people are naturally endowed with a valuing facility so that the acquisition of values is seen to be a natural phenomenon. This assumption provides an axiological "First Cause" but the reasons why personal value systems uniquely develop remains to be established. Many values education programmes have suffered because little thought was given to the way in which values are internalised. Elaborate lesson plans and expensive teaching aids cannot compensate for an understanding of forces at play in the student's conscious or unconscious decision to adopt a value.

Are values grasped through an irrational, emotional, intuitive process or are there over-riding cognitive factors at work in a predominantly conscious and rational decision? Are some values apprehended differently than others? Is it possible to separate out the parasitical qualities operating in value formation? That is, can the actors which give rise to values, support, nourish and carry them, be separated from the values themselves?

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4 See also Pugh 1977; Mulder 1951, 1973; Catton 1959; Levitin 1973; Ormell 1993; Straughan 1993.
Three learning theories dominate current interpretations of value acquisition: the Psychoanalytic Theory, the Social Learning Theory, and the Cognitive Developmental Theory. Although these three approaches clearly dominate the field, moral philosophers continue to look for alternative ways to explain the way in which values are formed "in character." For example, Rose's (1992) perceptual-experiential approach borrows elements from all three theories. William Belanger (1993) created an elaborate multidimensional and seemingly mechanistic model which he hoped would describe all the ways in which values are imparted in a school setting. His model has the advantage of crossing over the theoretical lines distinguishing the three dominant acquisition theories at the practical level where theories become strategic programmes.

2.3.1 Psychoanalytic Theory

Freud and his psychoanalytic successors seek to map out the interior of the unconscious where irrational impulses supposedly dominate human nature. The task of society, and the school system as one of its agents, is to impose controlling restraints on this primordial behaviour. The cornerstone of their value acquisition superstructure lies in the development of self-discipline. Freud's tripartite psychological model, including the id, with its raw, animalistic urges, the ego, with its perception of reality as the governing force, and the superego, with its agent of restraint, holds that value formation is initiated in the superego.

Given the critical role of parents in the development of the superego, it is not surprisingly that the parents' perception of "value" is extremely important to the child and in many respects the child's value perceptions are the embodiment of his/her parents. So strong is parental influence in Freud's theory that even later modifications to the parental position are seen as essentially cosmetic. Consequently, schools and teachers play decidedly secondary roles in value formation. As Ryan (1985) observed in his summary of Freud's pedagogic import, "Teachers can serve as models for the best in a child's parents and augment an already internalised parental view" (p.3409).

By way of contrast, Social Learning and Cognitive Developmental theories offer schools a more significant role in the development of values.
2.3.2 Social Learning Theory (SLT)

Because the SLT and the Cognitive Developmental Theory offer formal educational institutions a more meaningful role in the development of values than does the psychoanalytic theory, it is not surprising that educators have been attracted to them. SLT roots lie in the work of empiricists dating back to John Locke who used the analogy of the *tabula rasa* to describe how society uses sense perception to write into the child's mind all he/she ever learns, including his/her concept of value. Those who hold to the designing mechanism/Creator model of value origins would argue that the blank slate was at least an impressionable slate and not a impenetrable piece of marble. Impressions could be made - impressions which by nature were value oriented.

Society in the Lockian sense refers to everything and every one in a person's empirical world, including nature, the family, the church, the community, and the state. These social forces come to bear on the *tabula rasa* in a variety of ways with values being inscribed through means which include direct teaching, modelling/imitation, expectation and experience. The enculturation process undoubtedly begins at home in routine activities of feeding, dressing, and putting to bed, so that the child is conditioned to believe and behave in a culturally approved way.\(^5\)

The primary objective of this research project is to ascertain whether or not schools have a significant impact in the lives of their students. The evidence which emerges indicates that the impact is significant, thereby lending support to the Social Learning Theory. The most significant agents of change in this study were people as the social learning theory would predict. These agents operated in school-based roles which were distinct and specific to the school. If the results had shown little or no

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\(^5\) Coleman's (1961) argument that young people develop a separate set of values different from their parents and in opposition to older age groups was rejected by Leslie (1981) as American 'pluralist' ideology. Coleman's thesis, if accurate, would weaken the argument that families have a dominating influence on children. Citing additional research, Leslie concluded that adolescents did not have value patterns significantly different from their parents and those differences which did occur were better explained in Leslie's view, by emergent cultures associated with social class and economic orientation. Many have argued over the role of the family in value formation. For example, see Hanson and Ginsburg (1988) who accepted the SLT explanation that much of the value formation process had already occurred by the middle teen years (p. 342).
school influence then it would have lent support to critics of the Social Learning theory who would question the ability of non-familial forces to impact children.

2.3.2.1 A role for the school

This thesis asks a question which is at the heart of the Social Learning theory: Are schools, as the theoretical embodiment or microcosm of society, important agents in value teaching? Emile Durkheim (1973) observed that "the family is too small and too personal a unit to reflect the whole of the social system" (quoted in Ryan 1985, p.3408). This leaves a significant role for other social institutions to play in the formation of value character (Hemming 1995). Once the basic premise of the SLT has been accepted, it becomes necessary to isolate the various agents which influence value formation. Independent variables need to be carefully defined and extraneous elements controlled for if the impact of a single agent is to be quantitatively assessed and evaluated. An example of the inter-relatedness of the various agents in an educational setting is found in the study of Sandra Hanson and Alan Ginsbury (1988) who sought to establish that high school achievement was directly related to the values held by the teenager. They discovered that individual value orientation cannot be taken in isolation because the values of a student's friends are also significantly related to a student's achievement. For example, they felt that a friend's estimation of the value of post-secondary education had a "net value" of three fourths of a year's education on a student.

2.3.2.2 Precipitating change

It follows from Rokeach's taxonomy that value change occurs either directly or derivatively. For example, a change in the fate of a terminal value would create a significant derivative or ripple effect throughout the taxonomy and would be particularly noticeable in subordinate instrumental values. New information, ideological and political change, 'erosion' induced by boredom, disillusionment, and reaction, "or any number of changes in the wide sweep of society" can theoretically cause direct value transfer (Rescher 1969, pp. 116-118).
But why would new information, political change, or technological innovation bring about value change for one person and not another or affect one person in a unique manner? The relative contributions of the various determinants of value appear to vary with the individual, suggesting that there are elements within both the environment and within the individual which influence value acquisition. On the one hand, early childhood experiences act as a highly complex filter moulding the perceptions of later life into positions unique for every individual. This idea is reflected in Ausubel's theory of subsumption which holds that new values must be potentially meaningful if they are to be subsumed into an existing network. The pre-disposition to acceptance is a basic feature of personality (in Williams 1985, p.87).

William Catton (1959) offered a slightly different interpretation in what could be called the "value-space" theory. He believed that the attractiveness of a value was directly proportionate to its physical, social, and time "proximity" to the valuer. Earlier it was noted that Rokeach had postulated that values were potentially accepted according to the principles of central tendency and congruity. This congruity principle parallels Ausubel's subsumption theory.

All three of these theories - the subsumption/congruity, value-space, and central tendency theories - suggest that the individual and the environment operate in a bi-directional manner where there is interaction and mutual influence (cf., Ryan and Lickona 1987). Personality and environment are thus interdependent variables affecting the behaviour of the person.

It would be simplistic to assume that values are simply imposed on individuals without a personalised process of negotiation operating in the life of each child (Leslie 1981; Schiller 1921; Mandelbaum 1975,). In their eagerness to identify factors in the environment which give rise to learning, SL theorists have tended to overlook the filter of individual personality. For example, William Gnagey (1981), citing research done by Duke (1978), noted that researchers had looked for the causes of student misbehaviour in the performance of teachers (Kauffman 1977), peer groups (Palonsky
school systems (West 1975), in the deviant's families, (Duke and Duke 1978), and in society (Havighurst 1974). He concurs with Duke that it is time to hold the students responsible for their own actions and to focus on personal characteristics that might influence their behaving and misbehaving. (p.45)

A balance between a position which argues for society over against individual personality was suggested by Rokeach (1968) who wrote that, while personality factors will give rise to variations in individual value systems, cultural, institutional, and social forces will nevertheless restrict such variations to a reasonably small number of dimensions. (p.161)

When asking the question, 'How do schools impact students' values?,' it is not enough to understand how the school itself operates as an independent variable in a milieu of other independent variables. One must also investigate the role personal characteristics, such as emotional constitution and "will," play in determining which values are accepted, modified, or rejected.

2.3.3 Cognitive Developmental Theory (CDT)

The emphasis of the SLT is on prosocial behaviour learned through an interaction with the social environment. Cognitive developmentalists, while accepting the importance of learning through interaction with the social environment, shift the focus of attention away from behaviour to thought process. This is in part a reaction against the SL theorists who advocate behavioural codes (i.e., a value system - note Adler's fourth category of definitions) without a suitable explanation for the behaviour that is expected. Over the last twenty years there has been a discernible increase in interest in developing a values education programme which would offer rationally defensible explanations for prescribed behaviour (Fisher 1994). The theoretical groundwork for this approach was laid by Jean Piaget and subsequently developed by prominent psychologists like Lawrence Kohlberg.

2.3.3.1 Kohlberg

Lawrence Kohlberg (d.1987) of Harvard University found in Piaget's work the source of inspiration for his influential six stages of moral judgement. During the 1960s Kohlberg sought to defend Piaget's approach while modifying it to bring greater
focus to social and personality development (Rest 1989; Roebben 1995; Kavathatzopoulos 1991).

Kohlberg's antagonists were the SL theorists led by B.F. Skinner who was arguing that speculations on inner cognitions were unscientific and irrelevant. Kohlberg, following Piaget, was influential in raising the profile of the individual's subjective or inner understanding of values (cf., Rest 1989). He reasoned, along with other cognitive psychologists, that highly personalised cognitions had to be present in the form of intervening variables if one was to explain the 'stage-like' phenomena present in value oriented behaviour.

Kohlberg's emphasis on cognitive meaning structures, as opposed to behavioural response structures, stemmed from his use of moral dilemmas which distinguish between "action choices (behaviour level), reasons (meaning level) and ways of thinking (structure level)" (Boom 1989). The response of individuals to the dilemmas becomes the basis for an interpretation of the person's moral development.

Working in sympathy with the principle of congruity/assumption, Kohlberg believed that children move into the subsequent valuing stage if they have been stimulated in the direction of the new stage. He reasoned that people only move vertically through the hierarchy if they are predisposed to the new position. Alien patterns are rejected (Kohlberg 1971).

Kohlberg believed that moral judgements are ultimately based on concepts of justice. Through the Moral Judgement Interview, he outlined dilemmas which he believed revealed underlying principles of justice. For example, in the well known Heinz dilemma, Heinz discovered that his wife was terminally ill with cancer and that her only hope for survival was a prohibitively expensive drug. Heinz was forced to decide whether to break the law, steal the drug and save his wife's life, or obey the law and let her die. Kohlberg felt that responses to dilemma's like this provided insights into a moral reasoning process based on a concept of justice.⁶

⁶ Kohlberg's use of justice reminds one of Adler's "category three" definition of value which was characterised by the "ought."
Detailed descriptions of Kohlberg's six stages of development are readily available and are not directly relevant to this study. It should be noted that stages are not equivalent to particular age levels. Kohlberg did make reference to 'age norms,' however, suggesting that children ages 4-10 usually reflected the pre-moral level of reasoning while school-attending adolescents normally reflected a morality of conventional role conformity. Value positions associated with stages five and six are virtually non-existent in children under eighteen years of age (see Beck 1989). Consequently, an assessment of value change in teenagers would be an assessment of value change in individuals who normally score at stages three and four in Kohlberg's scheme. Furthermore, one should anticipate little fundamental change. Edelstein (1988) pointed out that socio-moral development measured in Piagetian stage growth is slow, something less than one stage for every three years of childhood.

2.3.3.2 Assessing Kohlberg's contribution

There is an extensive research tradition which embodies Kohlbergian principles and his ideas have penetrated the theoretical and practical sides of values education, particularly in North America. A brief evaluation of his work is necessary before the features relevant to this study can be established.

If a researcher's influence is measured by the criticism levelled at his/her work, then Kohlberg has been exceptionally influential over the last twenty years. As an individual, he appears to have been a remarkable man possessed with a high degree of personal integrity and affability (cf., Rest's tribute, 1989). Personal qualities aside, it remains to be seen how durable his ideas will be in the face of a barrage of criticism levelled at this theory, criticism not only about his research design, but also about his philosophic orientation, his conceptual framework, his definitions, and his conclusions.

Kohlberg recognised the limitations of his early samples (60s, 70s) and the frailty of the bold claims he had made in spite of a paucity of empirical data (Rest 1989). He and his colleagues at Harvard made a concerted effort in later years to improve the data collection techniques and to fill in the empirical gaps which undermined the general theory (Colby et al. 1987).
Welcome though these attempts have been, they fall short of resolving all the critical questions about methodology. The continued reliance on moral-decision making episodes poses a problem of relevancy: 'How adequately do dilemmas reflect real life situations?' Value oriented behaviour is not a theoretic construct but real life experience. Kohlberg himself came to distinguish between aretaic and deontic judgements, where aretaic judgements referred to decisions made in an actual situation while deontic judgements referred to judgements about ideals in hypothetical situations, and he acknowledged that his dilemmas evoked deontic type judgements (Rest 1989). Kohlberg saw the deficiency of this approach and devoted considerable energy to resolving the problem of interaction in the "real" world. Nevertheless, it is hard to escape the fact that values are variously expressed in real life situations by equally mature people as the situation demands (Kitwood 1988).

The reservations about Kohlberg's instrumentation and data collection techniques appear almost superficial next to some of the definitional and philosophic questions raised by others, particularly by those outside the field of educational psychology. H. Fernhout, in his article "Moral Education as Grounded in Faith" (1989), probes the metaphysical foundations of Kohlberg's theory and concludes that he and Kohlberg have different "faith orientations" which means that Kohlberg's model, regardless of how satisfying it is for some people, is unsuitable for him.

Fernhout goes back to the question, 'Why be moral at all?' and concludes, as Kohlberg did, that the answer ultimately requires a religious (faith) interface (Fernhout 1989, p. 187 citing Kohlberg). The question also raises additional questions about human nature, and meaning and purpose in life, which are likewise faith questions and "the dynamics of ultimate concern" (Tillich in Fernhout 1989, p.188). Therefore, while Kohlberg attempted to develop an educational programme which was secular, non-sectarian, and non-indoctrinating, it emanated from- and was grounded upon - the idea of the ultimate worth and dignity of people. This was Kohlberg's "bottom line." His theory of justice flows from his conviction that "the rationally autonomous person is both the criterion for and determiner of morality" (Fernhout 1989, p.193).
Fernhout, who wrote from a religious (Christian) perspective, accepted that this grounding was satisfactory for many in Western society and he was prepared to affirm Kohlberg's right to live by his convictions. At the same time, he asked that the tradition of tolerance esteemed in our pluralistic society be extended to those who believe as he did and who wished to educate their children accordingly. In contrast to Kohlberg, he believed that,

the worth of persons is an important line in the whole sum of things, but it is not the bottom line, and thus not the ultimate bedrock of morality either (p.193).

Social scientists are more likely to question Kohlberg's constructs of "morality" and "development" than they are his philosophic presuppositions. For example, critics have questioned whether Kohlberg's notions of morality were not more a factor of his Western Weltanschauung than some universal moral standard (Williams 1985, p.84).

Djilali Bouhmama (1984) studied the moral judgements of forty children from two cultures using Kohlberg's moral development model. The investigation, based on a limited sample of forty children equally split between Algeria and the United Kingdom, and between girls and boys fourteen and fifteen years of age, showed significant differences commensurate with cultural and religious backgrounds. His findings bring into question Kohlberg's hypothesis that the values he identified were universals and that development would not be significantly impacted by culture or religion. Bouhmama concluded,

we cannot apply Kohlberg's principles of morality without reference to a definite context....[T]he relationship between the cultural values and the child's stage of moral development is significant and cannot be neglected. (p.131)

His findings correspond to those described by several other researchers who have endeavoured to test Kohlberg's hypothesis in non-Western cultures.7

Research like Bouhmama's has encouraged various people to suggest that the key concept in the moral development construct is not justice but something else. For example, filial piety may be at the core of Oriental development, obedience at the core of Mormon development, and "care" at the core of feminine development (Rest 1989).  

7 For a critical review of the literature on cross-cultural studies, see C. P. Edwards (1981).
This last one is particularly interesting because of the controversy which has surrounded it. Carol Gilligan (1982) believed that the origin of a distinctive feminine moral orientation was found in the traditional role females have played in society. Because the principal female activity throughout history and in virtually every culture has been the care of children, she felt female morality stemmed from care for others and centred around,

the understanding of responsibility and relationships, just as the [male's] conception of morality of fairness ties moral development to the understanding of rights and rules.\(^8\)

In the face of these criticisms, it would appear that elements in Kohlberg's moral construct need revision. The "developmental" side of his theory has also come under criticism (cf., Boom 1985). Several years ago Kohlberg recognised that his criterion of "structured wholeness" was not derived from empirical research but was an a priori assumption. This led him to redefine elements in his developmental stages. In spite of these revisions, questions still remain. Are all the features of all the stages now correctly identified? Are there other stages still to be identified (e.g., a stage seven)? Must development always be uni-directional and irreversible? Is development always "sequential?"

Furthermore, the stages may really not be indicators of moral development at all. T. J. Mark (1982) has argued that religious thinking may be more related to language skill than to cognitive awareness of the issues. If he is correct, then the same question could be asked of the Kohlbergians, 'Can cognitive development be disassociated from language development?' Moran and Joniak (cited in Walker et al. 1984) found that "stage" cues, such as vocabulary and syntax, confounded the results of experiments in one of the Kohlbergian genre of measurement techniques, namely Rest's Defining Issues Test.

In a carefully constructed rebuttal to Moran and Joniak, Walker, de Vries, and Bichard of the University of British Columbia (1984) argued that hierarchical stages exist and that language skill is not a predictor of moral development in the Kohlbergian

\(^8\) As quoted in Thomas 1989, p. 62; see also Sichel 1985.
sense. They rejected Moran and Joniak's thesis on methodological grounds noting that flaws in the design vitiated their conclusions. Their own carefully constructed experiment provided support for the contention that Kohlbergian stages were more than statements of language facility.

Nevertheless, if language skill is seen to be correlated with cognitive ability, it would follow that there would be some correlation between morality and language development as both abilities have a common source. Richard Hanks (1985) reinforced the argument that Kohlbergian morality is a function of intelligence in his study of mentally and educationally backward children. He found that children with this deficiency demonstrated a moral judgement retardation equivalent to their mental/educational retardation. Hanks interpreted this to mean that intellectual ability determined the quality of moral judgements and therefore had a direct bearing on morality itself.

This line of reasoning has led many to reject Kohlberg's approach as too "narrow." There must be factors other than human reason which lead to morality. For example, what role, if any is there for personality, for emotions and for will in moral judgement? Others have asked, 'What correlation is there between moral reasoning and moral action?' (Ormell 1993; Williams 1985; Straughan 1993; Blasi 1980).

Kohlberg was aware of these concerns and not dogmatic that the six stages revealed the only component of morality. His successors have continued to ask,

What else is there besides six stages, and what are the relations between these six stages and moral motivation, or ego strength, or moral identity - or whatever else there might be? How do these components interact in ways that give rise to moral behaviour? (Rest 1989, p. 87)

In the 1980s Kohlberg was addressing these questions through a "just community approach" to moral education. Individuals were encouraged to hone problem-solving skills through motivational, behavioural, and cognitive interaction with the 'community.'

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9 See Roebben 1995; Sageb 1980; Kitwood 1988; on the contributions of R.S. Peters who argued for a broadening of perspective along these lines, see Bernadette Tobin 1989.
Kohlberg's central concept of "stage" has also undergone severe criticism. Developmental psychologists no longer accept as tenable the stage theory of cognitive development; sequence is now the preferred term. Reflecting this trend, some of those with whom Kohlberg worked have moved away from a strict adherence to stage theory:

...there are many new ways of depicting the storage of knowledge and the construction of perception, and new ways of representing how decision-making is carried out. Piaget and Kohlberg portrayed cognitive operations and structures in terms of stages, but we should be open to alternative ways of portraying cognitive operations and structures (Rest 1989, pp., 89; see also Hanks 1985; and Williams 1985).

2.3.4 Conclusion

Evidence from research conducted over the last fifty years indicates that individuals come to hold values and internalise them under the influence of the environment. This does not necessarily preclude the existence of "innate" or inherited disposition and the role it would exercise in value formation; rather, it emphasises the point that the environment plays a key role in the value formation process. People acquire values as they receive information, observe the values in behaviour, mature through experience, and are faced with societal expectations. These constraining and modifying environmental forces are screened by a personality which has interacted with society. Changes which occur in value positions are in accordance with the centrality of the new value, its congruity with the pre-existent value system, and the "distance" the valuer is from the new value. Furthermore, an analysis of change will have to include an analysis of the role the individual's conative, cognitive, and emotive aspects of personality play in the rejection, modification, and adoption of the value.

2.4 The school setting

Schools are "value-laden" institutions. Recent studies in school effectiveness, such as Mortimore and team's *School Matters*, have recognised this and sought to assess its effects. Mortimore believed that schools have an impact on pupils' values and that the impact varied across schools. Ben-Peretz and Kremer (1982) felt that

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their study of Israeli schools implied the existence of a significant variance in a school's ability to transmit both terminal and instrumental values.

These studies and others which are reviewed in Chapter 3 establish that there are elements in the school environment which do influence value formation but the extent and nature of the influence awaits thorough investigation (Kitwood and Smithers 1975). The government assumes the potency of the school and in the 1992 Education Act required that inspectors identify "what schools do to 'promote the social, moral, spiritual and cultural development of pupils'" (in Trainor 1995, p.7). Accepting as a hypothesis for this thesis the concept of schools as effective agents in value formation is, therefore, in line with the evidence provided by earlier empirical research and in agreement with many axiological statements as well as with government assumptions. The task at hand is to define, quantify, and explain aspects of the school's impact.

Once the basic premise of SLT has been accepted as a theoretic starting point for empirical research, then it follows that all those elements in society which are empirical in nature, have at least the potential to be effective in influencing value formation. To ask the question, 'What impact does a school have on value formation?' is really to ask how the various elements in the "environment" including, for example, the hidden and overt curriculum, classrooms, administrative structure, management style, school policies, student intake, and the physical facilities, come to bear on an individual's values.

2.4.1 Values education in schools

In view of the school's perceived efficacy, it is surprising that there are not many values-education programmes. SL theorists generally reject values educational programming, preferring an informal curriculum located in the atmosphere of the school, because value content in a formal curriculum is problematic. A list of problems would include the "mature" and tentative nature of the subject (e.g., see D.Z. Phillips in Gardner 1982); the fragmented nature of a pluralistic society (e.g., Sagab 1980); the sceptre of indoctrination (e.g., Kitwood and Smithers 1975; Hare 1987; Wilson and
Cowell 1987; Ryan 1985; Purpel and Ryan 1975; Dalton et al. 1982; Oser 1986); the feeling that values education belongs in socialisation agents like the church or family (e.g., MacMillan 1988); and the feeling teachers have that they are not competent to enter an area “sages fear to tread” (Purpel and Ryan 1975). Cognitive Developmentalists have circumvented these problems by shifting the focus on value learning from content to structure. They would argue that the more ambiguous approach of the SL theorists leaves too much to chance, and avoids a responsibility and opportunity afforded the school. They prefer a method of direct intervention on the cognitive side of valuing. Perhaps the three most common CD models are values clarification, value analysis (see Fraenkel in Ryan 1985); and Kohlbergian style moral development programmes.

Each of these cognitive approaches has been the subject of considerable criticism. What follows is a very brief summary of the main problems usually associated with the cognitive method.

**What is the essence of value development?**

1. The CD approaches stress structure, or how a person comes to and holds a value as opposed to what he/she actually believes. What is the benefit of this? "What, if any, moral progress can a child be seen to have made in moving through some of Kohlberg's stages, if the views he holds are regarded as morally repugnant to the one who has assisted his movement?" (Joyce 1983).  
2. The CD models are too closely associated with cognitive process, meaning that moral development and achievement are closely connected with intellectual ability (Pring 1984, p.61). This seems to contradict a widely held belief

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11 See Dalton 1982; Lockwood 1978; Ryan 1985; Hare 1987; Barrow and Milburn 1986.

12 Clive Beck (1989) provides an interesting variant of this criticism. He argues that there is normally no improvement in morality after the age of eight. Children may be “as good at morals” as adults. Whole moral improvement is always possible, moral capacity, like the capacity to learn a second language, does not improve with age. Ryan & Lickona (1987) likewise feel that children often demonstrate a 'purer' moral quality than adults. These articles argue that, while the valuer does develop, so does the standard by which he/she is assessed. Improvement is measured against a shifting rather than stationary standard. Critics following this line of reasoning would not describe change as improvement. When one rejects the irreversible hierarchical stage model, it becomes possible to see that the over-all impact of a school on a child could be negative. True development in the sense of improvement would require that esteemed values be upgraded in all dimensions of personality, including the cognitive, conative, affective, behavioural domains.
that what people do is at least as accurate a reflection of value attachment as is the thinking process. If development in a value position is a thought process, how do thinking and acting interrelate? (3) Values are held and subject to change in all dimensions of personality; what a person should feel, what a person should do, and what a person should be, are all as important as what a person should think (Wilson and Cowell 1987; Roebben 1995).

Are values relative? (4) The attempt to be broadminded and non-indoctrinating has resulted in value relativism which holds that one value is as good as another. This proposition is flawed because it reflects a value and consequently is self-contradictory (Gardner 1982). (5) Furthermore, these theories make a "fallacious jump" from 'There is a great variety of moral opinions' to the conclusion that 'one moral opinion is just as valid as any other (Gardner 1982). (6) Some of these theories (VA, VC) want children to decide which position they feel is most valid while at the same time holding that no position is morally superior. Therefore, they encourage "structurally" (as opposed to content) erroneous attitudes, for no value is superior to another (Gardner 1982). (7) There is an implicit contradiction in giving individual's the right to choose personal values without letting them create a moral environment in which to live them (Royce 1983). (8) All three of these approaches seek to counter indoctrination but in the process they create a negative view of 'open-mindedness' (Hare 1987). Open-mindedness does not mean one should reject the superiority of any and all values, but rather that one should respect the opinions of others while believing that some values are "better" than others and that these "better" ones are subject to change in the face of compelling evidence. (9) Indoctrination is not inevitable unless one considers all forms of values education indoctrination. If some value positions can be presented to children in non-indoctrinating ways, as values clarification, values analysis, and moral development programmes suggest, then why cannot specific morals be taught directly in non-indoctrinating ways? (Royce 1983). (10) If the process (values clarification, values analysis, moral development) does not produce a desirable content, what justification can there be in using it? (Royce 1983). Some value
positions, such as discrimination on the basis of sex or race, are not considered acceptable in our society so it is difficult to esteem a value process which could produce value positions which do not reflect these "universal," non-relative values (Higgins 1987).

Are these models effective? (11) How are students to be motivated to make principled value choices? Such an activity is in itself a reflection of a love for learning or 'truth' which has to be "taught." (12) Empirical evidence suggests that the intervention programmes envisioned here are only capable of creating small shifts in values thinking over long periods of time. The gains seem modest considering the effort that is expended (Ryan 1986; Leming 1981). (13) Gains which do take place are often attributable to factors which have nothing to do with the intervention programme offered (cf., Rest and Thoma 1985 and Schlaefli et al. 1985). (14) If a process approach produces conflicting results, then it is "inadequate," if it fails to exclude any value position, it is "useless" (Royce 1983). (15) If students are not taught values by the people who truly love and care for them, namely parents and teachers, then they will inevitably be exposed to values from an impersonal, insensitive, and potentially hostile world (Royce 1983).

2.4.2 Direct transmission of values

These criticisms have led teachers either to avoid explicit value training or to carry on with more traditional approaches. The integrity factor associated with conscious efforts to teach values has some appeal because values are passed on through the 'front door' rather than through an unconscious 'back door.'

In this approach, teachers, in conjunction with parents and the community, select values for overt teaching on the basis of some criteria of worthiness, desirability, or rightness. Using a set-of-values approach, the entire school's atmosphere is 'climatized' with the values and students are routinely exhorted to adopt the values which the teachers are modelling by precept and example. Special attention is usually made to bolster the effectiveness of the overt curriculum with a congruent hidden
curriculum through the careful screening of teachers, restrictions in student intake, and the development of particular school policies.

This approach is difficult to implement in a public school setting where agreement on the values to be taught is normally not possible. Furthermore, it runs a higher risk of indoctrination than do the previously reviewed methods of values education and, although some may argue that indoctrination into "truth" is to be commended, nevertheless, the effect of graduating students incapable of critical reflection in a dynamic, and crisis oriented world, is not an attractive one (cf., Fairweather 1995; Barrow 1995).

Even the goal of safely transferring values to the next generation may be an illusory one when powerful agents in society are acting at cross purposes to the subculture cloistered in the school. As Edwin Cox (1988) put it, "the implicit education that comes from living in a morally pluralistic society will negate the explicit moral teaching of the school community." Finally, those who hold to a direct transmission mode still need to ask the basic question, 'How do schools impact children?' Some methods which appear attractive and theoretically sound may produce unintended values, hence the aphorism, 'values are caught, not taught.'

The two schools which formed the basis for this study represent different approaches to values education. The one school, the American International High School (AHS), took a social learning theory approach. The other, The Religious International High School (RHS), took a direct transmission approach. They were chosen, in part, because they represent the two principal approaches to the teaching of values in an educational setting.

2.5 Holding a value

Section One above dealt with the question, 'What is a value?' With the answer to this question in hand, it was possible to raise the question, 'How are values acquired?' (Section 3) and 'How are values acquired in a school setting?' (Section 4) This section asks the question, 'What does it mean to hold an acquired value?'
Earlier it was noted that a strict interpretation of SLT would leave one with the expectation that individuals exposed to the same social environment would come to value in the same way. Genetic research and psychological theory both suggest that features in individual 'personality' act as an important filter in what is believed. Consequently, what is needed is

...an approach which draws on both sociological and psychological insights, which takes individuality fully into account, and which sees the person not as an isolated organism, but in a social context. (Kitwood 1976, p.83)

Kitwood went on to speak of values as beliefs "woven into the fabric of human life" (p.88). He argued that every individual held values in a unique way and that efforts to assess value change must avoid simplistic, uni-dimensional methods.

It should also be noted that values are held in conjunction with the roles people play (e.g., a loving spouse can also play the role of an improvident parent; see Williams and Williams 1970), in the context of past experience, in congruence with shared perspectives (e.g., personal performance dictated by the opinions of others), in light of a future objective in view (e.g., a prisoner may decide to 'go straight' upon release from prison), in accordance with personal identity (e.g., the martyr cannot define him/herself apart from the value), and in internal equilibrium (e.g., values are attached to each other so that violation of one brings feelings of guilt, anxiety, despondency, etc.).

Those who assume that holding a value is equivalent to acting in a particular manner obscure the sophisticated nature in which values are attached to personality. If people always carried through on their expressed wishes, then there would be little controversy about measuring a held value, but experience testifies that such is not the case:

'Between principles and practice, ideal and fulfillment, there will in any normal morality be a gap....[T]his gappiness is an essential feature of the moral life, and is made manifest in the tension which may exist prior to action between principle and desire' (Neil Cooper quoted in Straughan 1983, p.188).
If the existence of a "gap" means that behavioural evidence for a value does not always exist, or that, if it does exist, its meaning is potentially misleading, then how does one determine if a value is held?

Ryan and Lickona (1987, p. 21) have developed an "integrative" model of a moral agent. Three components - knowing, affect, and action - interplay with each other in the context of a moral environment. A slightly modified version, diagrammed below as Figure 2.1, illustrates how the integrations are conceptually linked:

![Figure 2.1](image)

<table>
<thead>
<tr>
<th>Knowing</th>
<th>Action</th>
<th>Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Knowledge of values</td>
<td>1. Will</td>
<td>1. Identification with the value</td>
</tr>
<tr>
<td>2. Value reasoning</td>
<td>2. Competence</td>
<td>2. Attraction to the value</td>
</tr>
<tr>
<td>3. Decision-making</td>
<td>3. Habit</td>
<td>3. Commitment to the value</td>
</tr>
<tr>
<td>strategies</td>
<td></td>
<td>4. Conscience</td>
</tr>
<tr>
<td>4. Imagination</td>
<td></td>
<td>5. Empathy</td>
</tr>
<tr>
<td>5. Judicious judgement</td>
<td></td>
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</tr>
</tbody>
</table>

The interactive view of human valuing is a middle-of-the-road compromise combining the SLT concept of societal impact on the tabula rasa with elements in psychological thinking which describe a role for "personalism." It also takes a sophisticated approach to locating a value within the complex construct of personality.
This last point needs clarification if it is to provide a theoretic grounding for measurement methodology.

2.5.1 Domains of personality

The role of reason is a key one in value formation (Peters in Tobin 1989, p.19; Blasi 1980). Those in the cognitive developmental tradition see it in such a dominating role that other locations of value are relatively insignificant or non-existent. The cognitive side of personality provides unity to the otherwise disparate elements in personality and is really the central location of the value. That is, will, behaviour, and emotion lead to or follow from the cognitive throne room (e.g., Peters in Tobin 1989). How does one ‘know’ what course of action to take without first having some cognitive awareness of it? How can a person become emotionally attached to a value, or will to behave according to its dictates, if it is ‘unknown?’ A values-information base must be resident in personality before other dimensions can attach themselves to the value.

There appears to be empirical evidence for the centrality of cognition in value holding. For example, McNamee (1978) and others (cf., Kohlberg's investigation of the Milgram experiments) have found that cognitive development as measured in Kohlbergian stages was correlated with behaviour.

To suggest that the cognitive domain is the principal reservoir for a value is one thing, to argue that the size of the reservoir determines the essence of value holding or some ‘developmental stage,’ is quite another. As Walter Percy put it in The Second Coming, bright and well-adjusted students “‘all get As, yet flunk ordinary living’” (as quoted in Coles 1987, p.viii). For some investigators, therefore, the acid test of value disposition is action. Ultimately and finally the value is perceived to be held if it is acted upon (e.g., Blasi 1980; Ormell 1995).

Critics of this interpretation point out that a behavioural approach obscures the role of habit, skill, general disposition, physical characteristics, and a host of motivational factors which all appear to have a hold on the value (e.g., Straughan 1995). Undoubtedly, there are instances when individuals do not act in accordance
with what they believe. Kitwood referred to a form of this failure when he noted that people hold values in conjunction with the roles they play. People are often seen performing in ways contrary to their own value system in order to fulfil the expectations of others.

Ryan and Lickona believe that the "gap" between knowing and acting is spanned by the bridge of attraction, commitment, empathy, and conscience. While the cognitive developmentalists would argue that the size of the cognitive reservoir influences behaviour, those who hold to the integrated view would be more inclined to argue that the tenacity with which a value is held lies in "essential self" (Blasi) and is found in the affective side of personality. Emotion, then, acts as a facilitator for action (Roebben 1995; Hemming 1995).

One can imagine situations where reason "knows" what to do, and "emotions" provide a positive feeling for what ought to be done, and yet the action is not forthcoming. The confused picture which emerges was poignantly described by St Paul:

...what I want to do I do not do, but what I hate I do....I have a desire to do what is good, but I cannot carry it out. For what I do is not the good I want to do; no, the evil I do not want to do - this I keep on doing....What a wretched man I am! Who will rescue me from this body of death? (Romans 8)

The apostle described this missing moral ingredient in theological terms as the law of sin and death. In psychological thinking today the final stakeholder in personal value holding is the will, the "action-engendering element" (Tobin 1989) which translates understanding and emotional response into conduct. Some, such as Ryan and Lickona (1987) and Putnam (1995), have even argued that cognitive processes are influenced by the will which supplies the very 'energy' necessary to think through an issue and to act morally. Like reason, will can take the magisterial throne and dictate to the emotions and determine a course of behaviour.

Unless all these intraorganismic variables are accounted for, an assessment of value attachment will be deficient. Mark Twain provided amusing, insightful summary

13 On the distinction between 'emotion' and 'cognition' see Tobin's' 1989 analysis of R.S. Peters; also Kitwood 1988.
of the problems associated with identifying the location of a value in Huckleberry Finn’s dilemma, You Can’t Pray a Lie:

YOU CAN’T PRAY A LIE

I about made up my mind to pray, and see if I couldn’t try to quit being the kind of a boy I was and be better. So I kneeled down. But the words wouldn’t come. Why wouldn’t they? It warn’t no use to try and hide it from Him. Nor from me, neither. I knowed very well why they wouldn’t come. It was because my heart warn’t right; it was because I warn’t square; it was because I was playing double. I was letting on to give up sin, but away inside of me I was holding on to the biggest one of all. I was trying to make my mouth say I would do the right thing and the clean thing, and go and write to that nigger’s owner and tell where he was but deep down in me I knowed it was a lie, and he knowed it. You can’t pray a lie - I found that out.

So I was full of trouble, full as I could be: and didn’t know what to do. At last I had an idea; and I says, I’ll go and write the letter - and then see if I can pray. Why, it was astonishing, the way I felt as light as a feather right straight off, and my troubles all gone. So I got a piece of paper and a pencil, all glad and excited, and set down and wrote:

Miss Watson, your runaway nigger Jim is down here two mile below Pikesville, and Mr. Phelps has got him and he will give him up for the reward if you send. Huck Finn.

I felt good and all washed clean of sin for the first time I had ever felt so in my life, and I knowed I could pray now....

I took it up, and held it in my hand. I was a-trembling, because I’d got to decide, forever, betwixt two things, and I knowed it. I studied a minute, sort of holding my breath, and then says to myself:

"All right, then, I'll go to hell" - and tore it up.

It was awful thoughts and awful words, but they was said. And I let them stay said; and never thought no more about reforming. I shoved the whole thing out of my head, and said I would take up wickedness again, which was in my line, being brung up to it, and the other warn’t. And for a starter I would go to work and steal Jim out of slavery again; and if I could think up anything worse, I would do that, too; because as long as I was in, and in for good, I might as well go the whole hog.14

2.5.2 An integrated model

Assessing the impact of school on an individual's valuing process cannot be done without addressing the value location in personality. The cognitive, affective, conative, and behavioural dimensions are all theoretically susceptible to the school's influence and quite possibly in unique ways. It is not enough to measure how a school

14 From The Adventures of Huckleberry Finn (Twain 1970, pp.149-51).
impacts a student behaviourally or even cognitively, because values are held in a more sophisticated manner than such an approach implies (Straughan 1983, 1993; Kitwood 1988).

Investigators who have examined the relationship between cognition and action have suggested ways of making the prodigious task more manageable (e.g., Blasi 1980; Roebben 1995; Hemming 1995). The principle of trait consistency maintains that values held cognitively will also be held emotionally and behaviourally. Stages of development have been demonstrated to correlate with behaviour so there appears to be a degree of consistency across the domains of personality. However, uncertainty remains as 'to what degree the principle of trait consistency is operative and under what circumstances?' Although this issue is not the focus of study in this research project, it is relevant to it. Assessing and explaining a school's impact in the value's domain cannot be done without an examination of the points of interface which only an integrated model of value holding provides.
CHAPTER THREE: Value Change in an Effective School Climate

This research project raises the question of the nature and extent of a school's impact on students' values. Chapter Two reviewed a selection of the most relevant literature dealing with values. Out of it emerged a theory of value change. Chapter Three reviews the literature on school effectiveness and sets out a theory which permits the development of a research model which addresses the question of a school's impact in the values domain.

3.1 Overview

Educators have clung to several sacrosanct assumptions, including a belief in the educatability of children, a belief in the benefit of universal access to education, and a belief in the ability of educators to independently manipulate a host of variables which correlate with a child's success. Logical and laudable though these assumptions may be, they nevertheless imply a potency in formalised education which needs empirical justification.

Peter Mortimore and team's decision to entitle their school effectiveness study, School Matters (1988), was a symbolic statement to a sceptical research community that schools are potent and that the school a child attends does make a difference. If Professor Mortimore had made a similar pronouncement fifty years ago, it would have gone unnoticed. In fact, to have believed otherwise would have been analogous to believing flat earth statements.

A review of previous research in the field necessarily begins with a cautionary note. A subject as diffuse as school effectiveness spans an intimidating breadth of literature. It is unlikely that any single researcher could completely familiarise him/herself with the range of methods, theories, models, procedures, and outcomes associated with the subject in its broadest definition. It is equally unlikely that the final word is about to be written on a contentious issue such as school effectiveness.

What is necessary, therefore, is to identify and describe the principal features in the construct's current landscape in such a way that a satisfying theory emerges which is capable of generating fruitful, testable, and coherent conclusions (cf. Keeves 1988).
Much of the controversy surrounding school effective research can be traced directly to the manner in which researchers have employed the term and careful attention is given here to establishing a clear and logical definition which is consistently employed in the design and data collection model.

Research designs are grounded on the philosophic suppositions latent in definitions. The more complex the design, that is, the more variables and mediating conditions accommodated in the design, the more rigorously definitions must be applied. Unfortunately, this has not been the pattern in much of "effectiveness" research and contradictory and unrelated conclusions have resulted. Researchers have reacted to this condition by "hiving off" into secluded research areas where they work without the benefit of cross-pollination and with all the problems of autarky. A disjointed, incompatible body of research is the result.

It seems unlikely that any research project will harmonise the designs, methods, and conclusions littering the school effectiveness field, at least in the near future. This does not preclude significant research in school effectiveness, but it does mean that studies like this one need to proceed with caution and a sense of humility in the hope that a fresh approach will clarify rather than cloud the picture of school effectiveness.

There is general consensus in effectiveness research that a school's affective impact is mediated principally through the environment or "school climate" (e.g., Edmonds 1979, Sagor 1981, Moos 1979). As noted earlier, social learning theory suggests that every facet of school life is potentially significant for the student. To predict a child's success, whether in personal or relative terms, one must examine the environment in which potential success is cultivated. It would be impossible to predict individual functioning without analysing social settings which are capable of producing differential effects. As Rudolf Moos (1979,p.3) put it,

Conclusions about the influence of different environments vary, but all authors agree that the social-ecological setting in which students function can affect their attitudes and moods, their behavior and performance, and their self-concept and general sense of well-being.

This project, which analyses value change in school-attending adolescents, examines the relationship between a school's climate (i.e., its environment) and a
student's value change. Do school climates foster value change, as social learning theory hypothesises? If so, in what ways, how, and to what degree? Are some climates more conducive to value change than others? This last question reflects a belief that some schools possess climates which are more potent than others, or more potentially effective than others, thus locating this project in the larger research domain of school effectiveness (cf., Strivens 1985, p.46).

Chapter Three provides an explication for the line of reasoning outlined above and sets forth a school effectiveness theory which undergirds the research to follow. Particular attention is given to the identification of connecting pathways between the fruitful constructs of value-change, school effectiveness, and school climate. In cursory form, the argument proceeds as follows:

i. Social environments have the potential to create "value change"
   - the school has a social environment (viz., climate) which has the potential to create "value change"

ii. Social environments vary according to constituent traits
   - schools vary according to constituent traits

iii. Some social environments are more likely to create change than others (e.g., according to the principle of central tendency)
   - some schools are more likely to create change than others

iv. Schools which create change have an "effect" on students
   - some schools have a greater impact on students than do others or make more efficient use of their resources and are therefore said to be "effective schools"

3.2 Contextualizing the concept of school effectiveness

Throughout history educators have sought to improve their understanding of the teaching process and to encourage "effectiveness." The contemporary preoccupation with defining and creating "effective schools" is not exclusively a modern enterprise even though current methodological approaches give it a modern aura. Scholars reviewing effectiveness literature typically begin with events in the 1960s thereby implying that whatever preceded this period was either irrelevant or inconsequential.

What makes this blinkered approach particularly puzzling is that conclusions arising from current research are analogous to what educators over the centuries have held to be true. Not surprisingly, people have asked how it is that,
studies leading to such commonplace, if not banal, generalities can be viewed
as a major break through in educational research (Tomlinson in Mackenzie
1983, p.5).

Others have expressed amazement that the principles of effectiveness had ever
been forgotten (Anderson 1990), but in their fascination with new designs and models,
researchers have run the risk of ‘missing the forest for the trees.’ There is no harm in
re-discovering effectiveness principles (in fact, the process provides gainful
employment for many in the research community), but the focus of research needs to
shift to the application of over-arching principles.

For example, cumulative wisdom, often treated as though it were “folklore,”
suggests that leadership in social institutions is important, and that diverting energy
from a stated goal leads to inefficiency. A principle such as this one can be empirically
re-tested for verification purposes, although it seems reasonable to assume that
research which focuses on application of these principles in unique educational settings
holds more promise for educational improvement than does the search for new
principles.

There seems to be a tendency in the effective schools research community to
look for breakthroughs in the quest for effective solutions to persistent problems1 but,
unlike technologically based sciences which are gripped in an “information revolution,”
the social sciences and education are progressing at an evolutionary rather than a
revolutionary pace. Investigations which centre on dimensions of personhood are
more likely to yield useful conclusions on the application side of research rather than
on the discovery side.

Over the last thirty years, effectiveness research has expended considerable
energy on the re-testing of traditional (forgotten?) principles of educational success. In
some cases, when innovative methodological approaches were employed, the results
appeared to confound conventional wisdom and a reactionary period ensued. A brief
survey of the literature serves to illustrate this point.

1 Cf., below 3.6.1 “Criticism of school effectiveness research.”
3.2.1 Background to the 1960s

Educational research, as a distinct academic discipline, has demonstrated a natural affinity for the social sciences, especially psychology and sociology. As methodological approaches changed in these ancillary disciplines, they had a ripple effect in education. Furthermore, it is not unusual to see guiding issues in one discipline reflect themselves in another. For example, when psychologists committed themselves to the time-honoured quest of developing the individual child to his/her fullest capability, education followed suit.

In the pre 1960s period, there was a common assumption amongst educators that society would reward the school graduate with a position commensurate with demonstrated ability and performance. Because the school provided all children with an equal opportunity for advancement, they were theoretically free to move through the social hierarchy as they desired. Socialist politicians and radical members of the British upper class were amongst the first ardent supporters of the idea that formalised education could eradicate a host of social problems and enlighten the individual (Miller 1983).

Such optimism did not seem justified. Well-known personal success stories along the lines described by Horatio Alger appeared to substantiate the belief that everyone could "make it" if they took the opportunities available to them. Sociological research consistently demonstrated the ethereal nature of this unbridled optimism (Miller 1983) but it was not until well publicised events like Sputnik and racial desegregation in the United States, and class issues in Great Britain received public attention that lack of confidence in schools as an effective institution of social change surfaced.

Schools did not exist in a vacuum, however. Other social institutions, such as the church and the family, appeared to be likewise ineffective and in need of reform if they were to deal with problems ranging from psychiatric disorder and drug abuse to unemployment and civil disobedience.
During the 1950s and 60s it appeared that an 'expansion in provision,' including better facilities, better salaries, more teachers, shorter working hours and newer textbooks, held the key to the invigoration of the school as a socialising agent. Politically, reform ideas found expression in Johnson's 'Great War on Poverty' and the Labour Party's democratic socialism. With the benefit of hindsight, these liberal programmes appear naive and quixotic. Few today would suggest that structural changes to an education system could in and of themselves result in profound social restructuring.

Given socio-political interests in education and the generally pessimistic findings in sociology, confrontation was inevitable. The often cited Coleman et al. (1966) *Equal Educational Opportunities Study*, Jencks et al. (1972) *Inequality: A Reassessment of the Effect of Family and Schooling in America* in the United States and the Plowden Report in Great Britain did precisely this. Earlier sociological work had suggested that family background and personality characteristics determined school achievement but it was not until these studies were published that the battle lines were drawn in the educational research community (Brookover 1982; Miller 1983). These reports became indispensable reference tools for those attacking society's traditional faith in schools. Rather than initiating the effective schools debate, Coleman-Jencks and Plowden crystallised the issues. Consequently, researchers today often begin their analysis of effective schools by arguing for or against the Coleman-Jencks/Plowden interpretation (Ralph and Fennessey 1983; cf., Mortimore 1995).

Briefly stated these reports established that home background variables were the principal predictors of success at school, and that schools only differed insignificantly when socio-economic and aptitude inputs have been properly controlled.

Schools bring little influence to bear on a child's achievement that is independent of his background and general social context...this very lack of an independent effect means that the inequality imposed on children by their home, neighbourhood and peer environment are carried along to become the inequalities with which they confront adult life at the end of school. For equality of educational opportunity must imply a strong effect of schools that is independent of the child's immediate social environment, and that strong independence is not present in American schools (Coleman et al. 1966, as quoted in Lezotte 1989, p.816).
Coleman and company have been criticised on many levels but the durability of the Coleman thesis suggests that its major tenet, namely that schools are socially impotent when viewed apart from pupil composition, is accurate. Sensitive perhaps to the possibility of a negative self-fulfilling prophecy ensuing from his work, Coleman later acknowledged that there were differential schools effects. In an unduly cautious statement prefacing his more recent extensive study of high school achievement, Coleman et al. wrote:

Yet despite this evidence that schools do make a difference, not much is known about what characteristics of schools affect achievement. Far more is known about those characteristics of schools that make little or no difference (Coleman, Hoffer, Kilgore 1982, pp.xxvi,xxvii).

3.2.2 School effectiveness research 1970s - 1990s

Coleman's "glimmer of hope" for effectiveness research is an acknowledgement that criticisms have not gone unheard. Guarded though his statement is, it reflects a growing consensus throughout the research community that there is an important role for the school to play and that the role can be played better in some schools than others. Not surprisingly, a positive psychological atmosphere is now discernible in schools where educational practitioners have grasped the import of the fact that "school matters."

While "effectiveness" has become a buzz word in educational circles, the empirical research into school level effectiveness is relatively limited and has suffered from inbreeding. As Ralph and Fennessey (1983) put it,

those who write about effective schools show...a high degree of 'incestuousness' - that is, reviewers refer to earlier reviews as if they were evidence...[and] the self-congratulatory tone of these reviews sometime approaches the intensity of evangelism (p.690).

Harsh though this criticism is, there is truth in it and it forcefully argues for new and innovative approaches.

Studies in the last twenty years have sought to avoid the problems associated with the Coleman genre of research. They have attempted to resolve problems of definition, to look innovatively at cognitive outcomes, to include evaluations of non-cognitive school outcomes (cf., Madaus 1979; Lezotte 1989; Miller 1983), to
incorporate a host of school variables, particularly, micro process variables rather than stock inputs (cf., Sirotnik 1985; Jansen 1995; Gray 1981; Brown 1975), to evaluate effectiveness at various levels in the school organisation (cf., Gray 1981), to adopt new theoretical and methodological perspectives (cf., Luecke and McGinn 1975), to evaluate those things a school seeks to teach through multiple outcome measures (cf., Mortimore 1994; Rutter et al., 1979), and to locate over-arching principles which produce beneficial results at the local school level. These trends reflect a maturing in the field of school effectiveness research and they help to bring order and freshness into a research tradition which has lacked direction and cohesion, two qualities which, ironically, are closely associated with “effectiveness.” In 1985 David Reynolds summarised the situation this way:

School differences research is, then, a sort of fledgling, still seeking the intellectual status that has been associated with the dominant individualizing paradigm and still not completely convincing the wider educational research community that it has the potential to make a major contribution to knowledge (p. 6).

A decade later the effective schools research “movement’ is no longer “a sort of fledgling” (Jansen 1995). A voluminous literature and a transnational impact on governmental educational policies is indicative of a mature research field. Recent emphasis has been on the practical application of effectiveness characteristics (Tibbitt, Spencer, Hutchinson 1994) although, in many cases, this remains an illusive goal. Research in the 1980s seemed to suggest there was a “formula” for school effectiveness (Bennett 1992; Rossmiller and Holcomb 1993; cf., Jansen’s 1995 critique). Today, this Holy Grail quest has run its course (Bangs 1995; Creemers and Reynolds 1989) and there continue to be calls for either a complete rejection of the research methodology (Jansen 1995) or a merger of it with other approaches, most notably the school improvement research tradition which focuses on the ways in which
a changing school improves its quality rather than focusing on correlates of attainment and performance (Tibbitt, Spencer, Hutchinson 1994).

3.3 Conceptualising school effectiveness

The logical place to begin construction of a school effectiveness theory is with a definition of "school effectiveness." While it is evident that there is a need for a clear, comprehensive, functional definition, the task of creating one is not easy and generally speaking, avoided. As a result school effectiveness is "one of the most pervasive yet least delineated constructs in the study of organisations" (Goodman and Pennings in Hoy and Ferguson 1985, p. 117).

Three related terms are used interchangeably in the literature: school effects, school effectiveness, and effective schools. The first of these, school effects, usually carries with it the idea that schools have a variety of influences on a student. School effectiveness is used in two ways, either in a broad sense to refer to all studies which deal with the impact of schools on students, or in a more narrow sense to refer to evaluation of an intended outcome. For example, a study in school effects would include a cataloguing of the learned behaviours, attitudes, and beliefs a student acquired while in school. A school effectiveness study would evaluate how well the school "taught" the learned behaviour, attitude, or belief.

The third affiliated term, effective schools, is a comparative term, that is, it suggests that a comparison has occurred between two or more entities. A study in school effects would list, describe, analyse, or evaluate a school's effects; school effectiveness would evaluate how well a school produced the effect, and a study in effective schools would ask whether a school's performance in creating the effect was equally effective for all students in the given school or whether the school was more efficient at creating its effect than was another similar school (cf. Lezotte 1989; and Edmonds 1979).

If these lines of demarcation are not clearly drawn before the investigator embarks on his/her study, confusion is inevitable. Even when the terms are clarified significant problems remain. For example, "school effects" studies often give the
appearance of a "Holy Grail" quest (Bosker and Scheerens 1989, p.743). When can one rest assured that all effects have been isolated?

However, most of the problems associated with effectiveness studies relate to the coupling of “effectiveness” with “school.” Lessons from the failure of others provides a set of guidelines for those seeking to investigate aspects of the school effectiveness construct. First, a distinction needs to be made between comparative or external definitions of effectiveness and those which are self-descriptive and internally generated. Second, effectiveness can only be evaluated once student backgrounds have been accounted for (Ralph and Fennessey 1983, et al.). Third, effectiveness fluctuates from year to year and studies measuring it must be sensitive to irregularities over time (Gray and Jones 1985; Bosker and Scheerens 1989; Reynolds 1985; Ralph and Fennessey 1983; Purkey and Smith 1982). Fourth, effectiveness normally varies across levels in a school organisation. Any statement of effectiveness must carefully identify the level at which the evaluation has taken place. For example, a truly "effective school" could be defined as one that produces gains in the classrooms, as well as at all grade levels and for all students. On the other hand, to say that a school is "ineffective," could obscure the fact that the school may be very effective at levels not considered in the study (Cuttance 1985; Reynolds and Reid 1985; Ralph and Fennessey 1983).

Fifth, evaluation of school effectiveness should be related to outcomes associated with schooling. Not all schools have the same goals or prioritise common goals in a similar fashion. What enlightenment has taken place when one declares a school to be "ineffective" if the effect was never intended? Furthermore, to restrict evaluation of effectiveness to a narrow agenda of developmental or academic outcomes creates an unwarranted impression that the school's over all effectiveness has been measured. Generally speaking, most effectiveness studies have ignored important behavioural and affective school outcomes thereby employing the evaluative term "effective" before it is justified. This study is an example of one which attempts to probe non-cognitive school effects in order to help educators acquire a more
comprehensive understanding of school effectiveness (on the need for this approach see Lezotte 1989; Galloway 1986; Cuttance 1985: Mortimore et al. 1988; Cuban 1983; Anderson 1990).

Sixth, "effectiveness" is a multi dimensional construct. One scholar has identified thirty variables associated with organisational effectiveness alone (Campbell in Hoy and Ferguson 1985). If educational goals are ambiguous, how much more so will be the criterion of measurement? Most research projects have confined themselves to prominent, quantifiable variables, but to say that a school is categorically "(in)effective" when many pertinent variables have not been assessed is presumptuous (Gray and Jones 1985,).

Seventh, the perception of effectiveness varies within and between schools. What is effective for boys may not be for girls. What is effective for older pupils may not be effective for younger ones. What is effective for students from disadvantaged backgrounds may not be effective for students from advantaged backgrounds. Furthermore, what students consider effective may not be, according to teachers or administrators, and vice versa. The same pattern could repeat itself among external interest groups like parents, LEA boards, and the public at large. Finally, what may be a very effective school for many individuals may not be effective for the hypothetical average child (Anderson 1990; Ouston and Maughan 1985; Rowan, Bossert, and Dwyer 1983; Hoy and Ferguson 1985; Reynolds and Reid 1985; Cuttance 1985; Rutter et al. 1979; Mortimore et al. 1988; Rutter 1983).

In summary, therefore, seven questions need to be asked when the term "effective" is used in conjunction with school based research: 1) Effective in what terms? 2) Effective under what conditions? 3) Effective at what time? 4) Effective at what level? 5) Effective for what purpose? 6) Effective according to what criteria? and 7) Effective for whom? Clearly, "effectiveness" is a fluid and flexible concept and both the degree and nature of effectiveness will vary according to the context in which it is used.
In this project, effectiveness is treated as a multifaceted construct: "school effects" refers to the impact a school has on a student; "school effectiveness" designates the entire area of research except when the syntactical context clearly indicates a school's efficiency at accomplishing an objective is in view; "effective schools" describes schools where students perform better than expected. More specifically, the school effects dimension of this project answers the question, 'Did the schools which were selected for study foster value change?' and if so 'in what ways?' The school effectiveness dimension of the study asked 'Why did the schools have the impact they did?,' 'What features in the climate fostered the value change?,' and 'Were these features used as effectively as they could have been?' The third dimension of the school effectiveness construct, the "effective schools" idea, asked comparative type questions: 'Was one school more likely to create value change than the other?' and 'Why did some students show a greater propensity to value change than did others in the same school environment?' To opt for a simple, monolithic concept of school effectiveness might theoretically enhance clarity but the price would be too high. Rather than unnaturally restrict the construct, its breadth and depth were explored.

3.4 Creating a school effectiveness research design

Designs are grounded on suppositions latent in the key terms they embody. It is evident from the foregoing discussion of "effectiveness" that any school effectiveness design will have to be particularly sensitive to contextual issues and highly resilient in the face of changing, multifarious circumstances. The other key term in the "school effectiveness" construct is "school."

3.4.1 Defining "school"

Impressions of a school can be misleading. Research designs which assume the school is a unidimensional, monolithic institution fail to uncover levels of effectiveness in schools. Theoretically schools are hierarchical institutions, meaning that students are grouped into classes, classes into grades, grades into schools, and schools into local education authorities. Managerially speaking, students are

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2 The intention of the two site study which follows was to define some parameters of value change. The two schools were chosen because they had different value agendas so comparison was infrequent.
responsible to teachers, teachers to administrators, administrators to the public represented by Boards, and Boards to government agencies. It is well known that aggregation of data collected at one level and applied to another can lead to a distorted picture of effectiveness, but it would be a mistake of equally serious consequence to assume that these theoretical levels are discrete. The various components in the hierarchy share characteristics of juxtaposed components at different levels and there are many lateral relationships which confound the hierarchical chain of being. Tim Packwood's (1980) discussion of adult relationships in the hierarchy is illustrative of the complex relational web that constitutes the school. He identified managerial assistant relationships, co-ordinating relationships, monitoring relationships, collateral relationships, and service-giving relationships.

Not surprisingly, there are few educators today who view schools as strictly hierarchical entities characterised by purely authoritarian and rational properties. In David Reynolds words, "schools may be more anarchic, heterogeneous and loosely coupled than had been formerly thought" (1985, p. 7; see also Goldstein 1984, and Scheerens and Creemers 1989). Schools, therefore, may be defined as hierarchical institutions but with the proviso that the hierarchy is perceived to be complex and dynamic, and that the various levels are multifaceted, loosely coupled, and quite capable of anarchical relationships (Mackenzie 1983; Purkey and Smith 1985; Strivens 1985; Bell 1980; Brookover 1982).

3.4.2 Issues in school effectiveness designs

The gravitational pull of this project is the question, 'How do schools impact adolescents values?' To answer the question, a three dimensional design is needed. One dimension accommodates the value change construct, another dimension accommodates the effective schools construct, and a third dimension accommodates the school climate construct which mediates the other two constructs.

Given the definitions accepted above, it is logical to expect that a suitable research design would be sensitive to contextual issues, dynamic situations, multidimensional frameworks, and flexible relationships. Furthermore, the design should
impose some sense of order on the factors under analysis and situate observed variables in a logically conceived scheme. In proposing a model, it should be remembered that the very existence of several commonly used school effectiveness research designs suggests that no one approach has proven to be entirely satisfactory.

Peter Cuttance (1985) has categorised school effectiveness designs as input-output, organisational, institutional, or exemplary. His schema will serve as a frame of reference for the ensuing discussion although, for reasons which will become apparent, his latter three categories are subsumed under a separate heading called "process" designs.

3.4.3 Design alternatives: input/output

Attempts to explain school effectiveness in the 1960s operated from an approach usually designated as the "input-output" design. Effectiveness was defined in economic terms and the school resembled a factory production line with stock resources entering and assembled products exiting. The higher the production rate and the lower the cost, the more effective the school was seen to be.

These "production function" studies (Dreeben and Thomas 1980), such as the Coleman Report, identified the key inputs into the factory as pupil-teacher ratio, expenditure on textbooks, teacher training, experience and salary, school facilities, and per pupil government expenditure. Once home background influences were eliminated from the equation, these stock resources were found to have little to do with the quality of the product which emerged when product quality was held to be attainment on a standardised test of verbal and mathematical ability (Cuttance 1985; Reynolds and Reid 1985). There was no question that some students did better than others but the input-output research design attributed the cause to home and background influences which preceded the schooling experience.

This design suffers from many of the problems associated with an inadequate conceptualisation of "school effectiveness." Because the results threatened the educational establishment and confounded conventional wisdom a flurry of research
activity ensued and the design was generally replaced with others deemed to be more satisfactory.

The input-output design ran into difficulty on both sides of the model, that is, on the input and the outcome sides. Evidence soon appeared which attributed differential school effects quite distinct from home backgrounds. The input-output design had demonstrated that stock inputs were not the cause of school's impact on students so new designs were needed to isolate those factors in the school setting which emerged as causing schools to differ in their output.

On the other hand, it was readily apparent that the output in this early design was far too limited and improperly measured. If outcomes were taken to represent a school's effectiveness, then it was imperative that the indicators of outcome directly relate to the goal's of the school.

Underlying the selection of outcome measurements is the issue of values. Whose goal's are to be taken as THE appropriate outcome? The board's? The teacher's? The administrator's? The student's? The general public's? The input-output design tended to select an outcome (achievement on standardised tests) which did not correspond to the objectives of most schools (i.e., teachers and administrators). As Ouston and Maughan (1985, p.32) pointed out: "there is little point in using performance on a Latin test as a measure of outcome if a school does not teach Latin."

Many researchers have called for the evaluation of outputs which reflect the aims of most schools. For example, most schools have behavioural goals, attitudinal goals, and social functioning goals, as well as scholastic achievement goals (Rutter 1983; Mortimore et al. 1988; Wilcox 1985; Cuban 1983; Ouston and Maughan 1985; Ouston 1981). This research project's focus on value change reflects the need to assess a non-cognitive area of school impact.
3.4.4 Design alternatives: process design

Researchers developed new frameworks to avoid the difficulties of the input-output model primarily caused by the faulty conceptualisation of "school effectiveness." Both "schools" and "effectiveness" were too narrowly defined and too removed from reality to cope with the complex issue of school effectiveness. Process designs, as they are usually called, accept the broad and flexible reality of the school effectiveness construct.

If differential school effects cannot be explained by "economic and direct policy related variables" (Cuttance 1985), how can they be explained? The most satisfying answers lie in the process of schooling. More recent designs have been constructed to capture the processes in schools and, in doing so, they come to view the school not as an autonomously managed production unit in which all pupils receive a uniform input of resources which then have the same productive effect...but rather as a unit which is constrained by the organisational and institutional structure in which it is set and by its own internal social organisation and structure. The question asked in these frameworks is, where in the schooling system should we expect to find the most significant differences? (Cuttance 1985, p. 18)

Rutter et al.'s (1979) Fifteen Thousand Hours has served as a model for many subsequent studies (Mortimore 1995). In this study, a variety of school based outcomes were held to be affected by school processes independent of intake characteristics. By re-directing research attention to school processes, Rutter et al. and those using this design ran the risk of confusing the issue even more with the use of yet another loose term, "process." Rutter et al. (p. 106) defined process as "those features of the social organisation of school life which create the context for teaching and learning." This appears to be unnecessarily vague and without explication, not particularly helpful. Others have suggested that process refers to the way in which resources are used in the school (Dreeben and Thomas 1989) or the counterpart of content (Jones 1985). In general, most researchers appear to use process to refer to the manner in which variables in the total learning environment come to bear on those who operate in the environment. Such an "airy" definition leaves it up to the individual researcher to determine whether significant school effects can be found in school
"process" variables - variables as diverse as teachers, students, the curriculum, the administration, school policies, or any conceivable complex combination of these and other factors (cf., Young 1985). In short, there is neither a generally accepted listing of school process factors associated with outcomes, nor a clear perception of how these factors come to bear on students to create an effect (Reynolds and Reid 1985; see also Rutter et al. 1979, p.43). Consequently, it is imperative that researchers working with this design present a careful description and theoretical justification for the school processes which are thought to influence outcome.

3.4.5 Process design: exemplary schools model

Of the process models, the exemplary schools model is the most closely associated with the input-output design. Exceptional or outlier schools are those which have a high effectiveness rating calculated by comparing the predicted score for pupils in a school with the actual score, once background characteristics have been accounted for (Cuttance, 1985). Effectiveness is thought to be discernible when the high scoring exemplary school is compared to the low scoring school.

Process variables are used to explain the differential scores, hence its classification as a process design. Nevertheless, this approach shares many of the weaknesses associated with the older input/output design. For example, the exemplary schools approach tends to utilise a narrow definition of "exemplary" because it assumes that all pupils are uniformly affected by variables omitted from the design. Furthermore, it makes little provision for differential effects in the school's hierarchical levels and complex relationships, and it also runs the risk of finding exemplary schools by chance, that is, effectiveness could become "an artefact of the model and data employed" (Cuttance 1985). This is particularly true in small samples where statistical principles indicate that outliers will exist for purely statistical reasons (Rutter 1983).

Others have criticised the approach for over emphasising the differences between extremes without attention to average schools where comparison should be made (Galloway 1986), for undue focus on a few types of urban elementary schools (Purkey and Smith 1982; Reynolds and Reid 1985), for the "disembodiment" (Gray
of schools created by the equating of the hypothetically ‘typical’ school with actual idiosyncratic schools (cf., Fetler and Carlson 1985), and for its limited range of outputs.

During the 1970s the exemplary schools model was particularly popular but its deficiencies appear to have led to its decline (Miller 1985). Like the input/output design exemplary schools have worked with unnatural constraints on the key terms which circumscribe the design: “effectiveness” and “school.” The two designs which have most fully accommodated the complex meaning of the "school effectiveness" construct are what Cuttance calls the institutional and organisational designs.

3.4.6 Process design: institutional model

The institutional model works on a premise that the school's effective process occurs at the various institutional levels within a school. By this Cuttance means that system wide categories, such as grade level or curriculum programming produce differential effects when compared to the same institutional categories in other educational settings. Each institutional category provides the student with a decision-making framework and a negotiated role to play. Desirable outcomes are defined through consensus by those who play a role in the institution, although extra-system inputs, such as background and ability, are also significant.

The advantage of this approach is that it allows for effectiveness to be defined contextually and is appropriate for the subgroup under study. In its most popular form, programme evaluation studies, the institutional model has been well received, both because its methodology has been commendable, and because findings are generally consistent (Purkey and Smith 1982).

Its two principal faults appear to be less serious than those which plague the two previously mentioned designs. By defining effectiveness internally, that is within the institution, this model does not pay enough attention to external interest groups which have a stake in the institution. In other words, the definition of effectiveness should be responsive to non-institutional demands (Scheerens and Creemers 1989). Secondly, this design is limited in what it can say about school-wide effectiveness, and
it has even less to say about the issue of effective schools. Those who wish to get a
global picture of a school's effectiveness will be disappointed with this design because
it does not embody the school system, but cuts across it. Consequently, it can indicate
that one school is more effective than another in a given institutional category but it
cannot deduce from this that one school is generally more effective than another. For
political reasons, this fact represents a drawback.

3.4.7 Process design: organisational model

The fourth category of design takes a global perspective of the school. In
keeping with the definition suggested above, the school is seen either as a hierarchical
organisation with vested sublevels (pupils in classes, classes in grades, grades in
schools) or as a loosely coupled, semi-anarchical organisation. Outcomes are
attributable to the school's form and operation, which, in turn, are derived from
organisational structure (Cuttance 1985).

The input/output design was found deficient because it conflated the school's
organisational structure to one level thereby ensuring that it would fail to take account
of the school effect found between organisational levels. Positive school effects at one
level can be statistically offset with negative school effects at another leaving the
impression that a school is ineffective.

The organisational design overcame this problem and appeared to yield such
promising results that quasi formulae for school effectiveness have developed (see
below). Classroom level factors were found to be particularly valuable explanatory
variables, probably because classrooms were "closer" to the outcomes measured
(Scheerens and Creemers 1989). Nevertheless, the quasi formulae are now considered
to present only a partial view of effectiveness, and there is a general consensus that no
single model will adequately capture all the criteria associated with organisational
effectiveness (Scheerens and Creemers 1989).

The quasi formulae violate the principles of the widely accepted "contingency
theory." Effectiveness, according to this theory, is defined by the degree to which the
organisation adapts to contextual conditions. A set formula like the nine factor
formula described below runs the risk of ignoring local conditions and makes no allowance for powerful contingency factors which are only partially under the control of the organisation (school) itself.

3.5 Data collection and measurement

It would be logical to proceed directly from a discussion of the design to questions of data collection and measurement with specific reference to variables and instruments. However, in order to complete a review of theoretical issues in school effectiveness, this section examines general concerns related to data collection and measurement in school effectiveness research before proceeding to a detailed explanation of the design used in this research project.

Just as the research design cannot be considered apart from the key definitions which undergird it, so too measurement principles must be derived from the theory implicit in the design. There are three substantive questions in data collection which need addressing. They are concerned with an appropriate selection of variables which yield data, with the length of time needed to collect the data, and with the organisational level at which the data is gathered. In short, data collection questions deal with the "where," "when," and "what," ("who") of data. Measurement questions deal with the "how" of data acquisition and analysis, and the research design asks the "why" question and provides meaning to the ancillary questions.

3.5.1 Variables: type and range

At some point in the investigation, a researcher must decide what he/she is going to accept as observable evidence of effectiveness (Lezotte 1989). This is a deceptively difficult procedure because often not all the factors relevant to effectiveness are known before the investigation begins. As Peter Woods (1987, p.303) put it, some school settings have an "insatiable appetite." Measurement models which rely on quantifiable techniques of data collection are particularly vulnerable to deficiency in this area.

Stephen Raudenbush (1989) has argued that a simple model that selects a potpourri of variables in a variety of settings could provide the researcher with a
relatively clear picture of effectiveness. Certainly it would appear that the idea that all variables need to be identified and assessed places researchers on an unjustified Procrustean bed, particularly in light of the fact that research has demonstrated the tendency of effectiveness to coalesce in variables (e.g., Mortimore et al. 1988).

Furthermore, effectiveness is not restricted to one variable so that omissions do not de facto mean that the results are spurious. It is probable that the more comprehensive the variable range, the richer the data will be, but a prudent selection of relevant, representative variables should ensure that an accurate assessment of effectiveness is made.

3.5.2 Variables: control

One of the most perplexing issues in effectiveness research has been the difficulties arising from multicollinearity of internal and external variables (Brookover 1982; Cuttance 1985). No model would be complete without background control factored in. Logically, background measurements should occur prior to school process data collection or the school's effect will be underestimated (Jansen 1995; Cuttance 1985). Controlling at this level is as difficult as it is critical and many researchers have sought for more effective ways to "tease out" background effects (Mortimore et al. 1980; Reynolds and Reid 1985; Gray and Jones 1985; Cuttance 1988; Keil 1985; Ouston and Maughan 1985).

Socio-economic status, pupil age, parental and pupil values, religious affiliation, and previous academic achievement are examples of background variables which have the potential to exert a significant influence on the student during the period in which the school is being assessed. In Michael Rutter's (1983, p.12) words, "No school is an island."

It is one thing to acknowledge the existence of extraneous variables, and quite another to control for them in conditions where a true "scientific" experiment is not possible. Furthermore, there are so many potentially relevant variables that researchers run the risk of being overwhelmed by a compulsion to over control. Peter Cuttance (1985) has suggested that researchers select variables which demonstrate an observable
affect on the outcome. If there is no discernible or theoretical influence, then there is no need for control.

3.5.3 Level of analysis

Schools have been variously described as hierarchical organisations, as systems with ‘nested layers,’ as ‘loosely coupled’ organisations, and as ‘anarchical’ institutions. Each level or relationship in the organisation carries with it distinctive characteristics which have the potential to produce an effect and to make a school (in)effective.

Just as one cannot realistically expect to evaluate all variables, one should not expect to evaluate every level or relationship conceivable. Consequently, the researcher is continually faced with a tension between demands for breadth and depth in data collection. An effort was made in this research project to identify several appropriate levels for data collection.

Recent effectiveness studies have tended to collect data stratified at the level of the individual student, the classroom, the school, or some combination of the three (Creemers and Reynolds 1989). Logical arguments can be presented for a choice of any one of the levels. In the case of the individual student, it would seem probable from a theoretical standpoint that school effects could be most precisely measured with the student as the unit of analysis (Burstein 1980; Hoy and Ferguson 1985). Furthermore, the raison d'être of schooling is individual learning so effectiveness at this level is particularly germane to the research area (Cuttance 1986). In the final analysis, parents are more concerned with the school's effectiveness for their particular child than they are for the "average" child. Consequently, the question at this level becomes, 'How would a specific pupil perform in a given school' (Cuttance 1985, p. 163). The value of calculating school means for comparison purposes loses its significance when viewed from the perspective of the unique child.

For teachers, classroom level analyses tends to be the most relevant and a number of studies have demonstrated that variation at the micro level is more pronounced than at the school/macro level or, to put it another way, variance within
schools is greater than variance between schools (e.g., Rowan, Bossert, Dwyer 1983; Galloway 1995; Reynolds and Reid 1985; Jansen 1995).

3.5.4 Period of data collection

The last data collection issue to be considered deals with the length of time required to obtain meaningful information about the variables. Most research on school processes has been short-term, that is, research based on cross-sectional or panel collection models. In situations where short-term collection is the only feasible option, there are techniques which allow for the capturing of dynamic process components (see Cuttance 1985), but these unrealistically assume that the school system is in equilibrium. The preferred approach is one which leaves enough time for the process variables to demonstrate an ordering of their dynamic, interactive qualities. Inferences from short term studies need to be cautiously interpreted:

Studies which are of a longitudinal design can make stronger statements than cross-sectional studies about change over time and about causal structures which may have generated the data. Cross-sectional studies can only describe relationships in the system at a particular point in time and must assume that the system is in a state of equilibrium if they are to generalize to other points in time (Cuttance 1985, pp.165,6; for a similar assessment see Raudenbush 1989, p.721; Luecke and McGinn, p.347).

Consequently, a number of major studies have incorporated longitudinal dimensions in their design (e.g. Rutter et al. 1979, and Mortimore et al. 1988), and many others have emphasised the critical need to model processes over a prolonged period of time (e.g., Anderson 1985; Purkey and Smith 1982: Genck 1983; Raudenbush 1989). In the case of this research project, one site was studied over the course of a year while the other was studied over the course of two years.

For some school effectiveness researchers, the developing statistical sophistication evident in the data analysis in recent research represents the light at the end of a methodological and conceptual tunnel because it holds the promise of identifying stronger and more enduring school effects (Raudenbush 1989). For others, its glamour is less alluring. As David Galloway (1986, p.8) put it, "There is a real danger that school effectiveness research may run into a cul-de-sac of ever-increasing methodological and statistical complexity."
Galloway's cautionary note is justified, particularly in light of the fact that innovative solutions to long-standing problems of school policy and practice have yet to emerge from this approach. New statistical methods appear to bring with them new restrictions and new uncertainties while yielding results which are essentially the same as those generated by other methods. Consequently, it is inappropriate to view a multilevel logarithmic technique as a white knight in shining armour. It should rather be seen as another valuable technique in a long list of techniques which, when taken together, provide researchers with the methodology needed to establish a meaningful picture of what it means for a school to be effective.

3.6 Research findings

School effectiveness research has yet to gain wide acceptance as a legitimate area of independent educational research. Currently it is uncomfortably situated between or within larger research traditions such as school policy and administration, and school evaluation. One reason for its ambivalent role in the larger researcher community is undoubtedly due to the problems associated with the construct itself. Consequently, a host of methodological difficulties have confounded and obscured its findings.

3.6.1 Criticisms of school effectiveness research

Throughout this review, problems of school effectiveness research have been identified and discussed in their appropriate contexts. Before proceeding to a short summary of research findings, it would be helpful to throw the positive features of the research into relief by cataloguing a number of the current difficulties facing school effectiveness researchers. Among these problem are the need to 1) broaden samples to include more "typical" rather than "average" schools, 2) examine effectiveness as a many faceted construct, 3) control for the multicollinearity of intertwined factors, 4) correct particular problems unique to each data collection procedure, 5) make allowance for the highly complex, semi-irrational nature of the "school" organisation, 6) broaden definitions of outcome, 7) pay closer attention to what other researchers have discovered using a variety of methodologies, 8) provide designs capable of
generating conclusions which are applicable in local settings, 9) incorporate a variety of methods (triangulation) over time (longitudinal) as checks against observer bias and uncontrolled variables, and, above all, 10) to approach school effectiveness with reasonable expectations:

...ultimately human development in its most important respects probably will always continue to defy measurement, much as human nature will always remain to some extent mysterious (Genck 1983, p.26).

3.6.2 General research conclusions

Thirty years of "formal" school effectiveness research has led to a general picture of effectiveness. Although this is not the place for a thorough review of the findings, a sketch is sufficient to establish the features of the school effectiveness concept.

One of the truly global findings is that effectiveness is contextually based and that each school needs to develop self-evaluation and implementation procedures suitable for the unique circumstances of the local setting (Sirotnik 1985; Lezotte 1989). The relevance and meaning of effectiveness principles are determined in local settings and through a process of appropriation (Edmonds 1979; Mackenzie 1983; Lezotte 1989).

So we are back to where we started: A lot of good stuff is known about improving teaching and learning but it is darn complicated, difficult to replicate, and highly dependent upon specific contextual circumstances in different districts and at different schools. (Sirotnik 1985, p. 138)

What are the generally accepted over-arching principles? Walberg's (1984) nine factor list coupled with Purkey and Smith's summary provide a list of qualities which consistently reappear as potent predictors of effective schools:

1) strong leadership
2) high expectations

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3 Additional critical details can be found in Purkey and Smith 1982, 1983, 1985; Rutter 1983; Ralph and Fennessey 1983; Reynolds and Reid 1985; Gray and Jones 1985; Reynolds and Sullivan 1981; Cuban 1983; Rowan, Bossert, and Dwyer 1983; Mackenzie 1983; Cuttance 1985a,b; McNamara 1988; Gray 1981; Jones 1985; Miller 1983. See also Jansen 1995 for a comprehensive list of eleven standard criticisms of effective school research.

4 1982,1983,1985: for similar summaries, see also Bickel 1983; Edmonds 1979; Rowan, Bossert, Dwyer 1983; Rossmiller and Holcomb 1993; Scheerens and Creemers 1989; United States Department of Justice 1986
3) clear goal conception
4) effective staff training
5) regular monitoring of student progress
6) safe, comfortable, positive environments
7) motivated and committed teachers
8) adequate time spent in learning with task and skill orientation
9) high quality of instruction

Earlier it was noted that formulas like the 9 factor list have created controversy because of the irrelevance they appear to have at the local level. In order to evaluate school effectiveness in the affective domain - which this thesis seeks to do through an examination of issues related to value change - these overarching principles of effectiveness need to be assessed and defined in the local school setting (cf., Jansen 1995, p. 187).

Significantly, the factors associated with effective schools are normally under the school's control. This authenticates the belief that the school is an important, accountable participant in school effectiveness: the organisation is not a helpless victim of its circumstances but a potentially active agent of change.

How great an effect can these predictors have on a school? The input/output model, which essentially ignored process variables, suggested the maximum school effect was about 5 points (one third of a standard deviation for pupils - Jencks et al. 1971 in Gray 1981, p.63; cf. Fraser 1989 whose meta analysis found the size of the effect to be 0.4 standard deviations). One might ask with justification what five points or 1/3 of a standard deviation would actually mean for the individual child; the implication from Jencks' work is that the effect is negligible.

Fraser (1989), however, felt .4 of a standard deviation was significant and Genck's (1987) study of school districts left him with the impression that the effects were as substantial as one year of achievement by the age of 14. Others have concurred with Genck's assessment of what are allegedly (statistically) insignificant effects (Reynolds and Reid 1985; Bosker and Scheerens, 1989). Lorin Anderson (1990) speaks of school differences relevant to student progress as something less than 30%. Even if this is a ceiling figure, it could hardly be described as inconsequential.

Furthermore, the effect referred to in these studies is restricted to the cognitive domain. How significant is the effect of schools on non-cognitive outcomes? The
values change construct defined in chapter two theorises that values are held across domains so that schools would need to demonstrate effectiveness in both cognitive and non-cognitive ways if they are to be an important contributor to value change in adolescents.

School effectiveness research clearly indicates that schools are potent across domains and that it is reasonable to expect value change to occur in a multidimensional fashion because of the nature of a school's impact. A number of important studies, such as David Galloway's investigation of disruptive behaviour in Sheffield secondary schools, suggest that "schools would appear to have a much greater influence, for better or worse, on their pupils' behaviour than on their attendance and examination results" (Galloway et al. 1986, p.6; see also Galloway 1981; 1982; 1985; Ouston 1986). Furthermore, the school's impact on behavioural patterns carries over into non-school contexts. Just as the school's academic (cognitive) influence is felt in a variety of settings, such as future employment, so too is the school's influence on behaviour (Galloway 1982). In comparative terms, the influence is as great or greater than catchment area factors (Galloway, 1990).

The affective dimension of a student's personality is likewise subject to school influence. It is generally acknowledged that a pupil's personal feelings of adequacy, self-worth, and confidence are either nurtured or battered in the school setting. This research project provides a needed examination of a neglected area by focusing attention on an important aspect of personality development, namely, value change.

The fact that these conclusions arise from studies using different research designs and "conflicting" paradigm orientations serves to strengthen the veracity of the findings (Rutter 1983). The "success" of students can be attributed to their internal motivation, will and desire, to their natural ability, to their family background, to their friends and acquaintances, and to their association with a wide variety of cultural institutions, not least of which is the school they attend.
3.7 School Climate

Schools matter - they are important in the lives of children. And, the impact of the school is comprehensive. While non-cognitive outcomes appear to be at least as responsive to school influence as are the more widely recognised academic outcomes, researchers have tended to ignore them. There are several reasons for this.

First, the primary function of a school is usually thought to be cognitive training, so it is natural that the initial focus of effectiveness study would be in this vital area. Second, it is generally accepted that a school effective in transferring academic knowledge and skill, will also be effective in generating other positive outcomes. Empirical evidence substantiates this. For example, Brookover (in Rutter 1983) found that school climate and academic achievement were "significantly associated." Using a negative metaphor, one could say that once the "disease" is caught, the whole body is infected.

Third, measurements of non-cognitive dimensions tend to be more complicated and less conclusive than those of cognitive outcomes. This is particularly true if a school's cognitive impact is equated with performance on a standardised test of aptitude or achievement. By contrast, the process factors linking school to affective or behavioural outcomes are comparatively obscure.

Nevertheless, if non-cognitive school effects - including value change - are to be understood, then researchers must isolate and measure these processes. Furthermore, it was argued above that value change occurs within the context of the "environment," so it is to the school environment, or climate, that one must turn for an assessment of school impact on values.

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5 Cf. the following for similar results Rutter et al. 1979; Purkey and Smith 1982, but see Holmes 1985 for a contrary opinion and Pierce 1994 for the deleterious effects a climate can have on achievement for at risk students while simultaneously having a positive effect on other students. Galloway's study of four "effective" schools included one which was ineffective in terms of exam results.
3.7.1 A rationalisation for the use of school climate in an effectiveness study

There are a number of compelling reasons for correlating value change with a school climate construct imbedded in school effectiveness research. First, school climates differ from each other. If they were similar, there would be no point in examining them for differential effects. But, as Jencks put it, "'Some schools are dull, depressing, even terrifying places, while others are lively, comfortable and reassuring'" (in Williams and Batten 1981, p.1; see also Purkey and Smith 1985; Anderson 1985). If climates differ and in differing differentiate schools along the 'effective school' line, then climates are an important process factor in general school effectiveness and a natural correlate of a value change outcome.

Second, the concept of school climate is compatible with the definition of a school as a dynamic "loosely coupled system," which is not comprised of discrete, autonomous variables, but of a web of characteristics uniquely interconnected (Purkey and Smith 1983). The constructs of "school organisation" and "climate" are congruent.

Third, school climate is a construct worth investigating because it is subject to the manipulation of those who operate within it. School climate is created by a blending of many external and internal variables to create a particular "feeling." Individuals in the school - pupils, teachers, secretarial staff, administrators - all have a significant, independent role to play in climate formation (cf. Young 1985). In short, those in the climate both create and experience the climate in a recursive fashion that leaves individuals both responsible for and subject to the climate. This is a significant supposition because there is little point in undertaking research which is irrelevant or impractical. If a school is unable to implement change, then the research only "benefits" a self-serving research community.

Fifth, research indicates that school climate "works" as an initiator of behavioural and affective change (Austin Holowenzak 1985; Rutter et al. 1979; Walberg in Fraser 1989; Anderson 1982; Fraser 1989; Keil 1985).
The children learn to behave in ways that the people with whom they interact and who are important to them expect and define as appropriate and proper for them. Individual students thus come to perceive the norms, expectations, values, and beliefs that are considered relevant for them as they interact with others in the social system of the school (Austin and Holowenzak 1985, p.69).

Social learning theory and empirical evidence suggest that to understand a school's climate, is to understand the principal way in which schools initiate affective and behavioural change.

3.7.2 Conceptualising school climate

Tempering these claims of significance is a disturbing definitional question: What is "climate?" Educators have used an interesting array of imaginative terms to describe the climate construct, terms such as ecology, milieu, environment, ethos, culture, morale, setting, tone, ambience, and atmosphere (cf. Fraser 1989). In spite of the confusion created by these primarily metaphoric representations, there is a surprising concurrence on the central concepts associated with climate. Common usage today holds "climate" to be multifaceted, to reflect intuitive rather than empirical perceptions, to recognise that people's sensations of the phenomenon are clearer than their understanding of it, and that these sensations revolve around perceptions of values, beliefs, norms, roles, attitudes, and behaviours (Anderson 1982, 1985; Chittenden 1993; Finlayson 1987). This perception of "climate" argues persuasively for its role in any analysis of value change in school-attending adolescents.

It should be noted, however, that not all researchers are comfortable with the term. D.S. Finlayson (1987), for example, believed that many researchers have been enamoured with the semantic appeal of "school climate," and have used the term as a catch-all phrase for a reality perceived in empirical (i.e., non-constructionistic) terms. The penchant for statistical models has resulted in a "symbolic depersonalization of participants" which is counter productive (pp.170,1). Finlayson's preferred solution was an expanded, less restrictive metaphor which gives more meaning to the participants' school experience. In his view, the new metaphor would allow for a 'constructionist' view which could account for
the interactional, organizational and cultural processes in the course of which the meaning systems used by the members are collectively built up and, in turn, maintain those processes (p.163).

Finlayson's doubts about the climate metaphor serve to demonstrate the shortcomings of the construct, although his implication that "climate" necessarily inhibits creative thinking and artificially circumscribes reality, appears unjustified. It is interesting to note that Finlayson does not offer an alternative metaphor, unless his passing reference to a "symbolic culture" (p.172) is intended to fulfil this role. Until a more suitable metaphor is available, "climate" remains the preferred term with the understanding that constructionist concerns need to be acknowledged.

3.7.3 Issues of theory in school climate

Earlier it was argued that school effectiveness research is best approached from a process theory of school organisation. The theory, methodology, and instrumentation of school climate is compatible with effectiveness research which uses the process approach (Anderson 1982).

Given the conceptual difficulties associated with school climate, it is not surprising that a plethora of climate types exist in the literature, if not in the schools. Carolyn Anderson (1982, 1985) lists over twenty-five "types" of climate in the literature including coherent and non-coherent (Wynne), open, closed, autonomous, controlled, familiar and paternal (Halpin and Croft), student, teacher and principal (Brookover), practical, community, awareness, propriety, and scholarship (Sinclair), robust and non-robust (Willower and Licata), academic emulation, intellectualism-estheticism, cohesive, egalitarian estheticism, scientism, humanistic, excellence (McDill, Rigsby, Meyers), positive and negative (Epstein and McPartland), and social and academic (Anderson).

In order to increase the attractiveness of this rather unappetising smorgasbord, five key questions need to be answered: 1) How does school climate theory interact with school effectiveness theory? 2) What taxonomical arrangement can be applied to the construct to evoke cohesion and meaning? 3) What variables are relevant for school climate investigation? 4) What level of analysis or unit of measurement is appropriate for this construct given the cautionary principles previously mentioned? 5)
Whose perception of climate is suitable in a study of school effectiveness? With answers to these questions in hand, it is possible to proceed to a discussion of data collection models and to the establishment of suitable instrumentation.

3.7.4 An interactive theory of school climate and school effectiveness

The process theory of school effectiveness perceives schools as cultural systems with a highly complex school/non-school relationship. Student outcomes, whether cognitive or non-cognitive, emerge from a school's processes in such a fashion that different social environments are likely to engender a variety of outcomes (Anderson 1982).

The input/output design concentrated on measurements of ability and SES. On the other hand, process designs shifted the focus to "social system and cultural variables" while not denying a role for ecological elements, like resource availability and the school's physical features. Therefore, school climate, as conceptualised above, is a principal aspect in school process and a natural correlate of school effectiveness process designs.

3.7.4.1 Taxonomical arrangements

School climate is a broad construct, essentially circumscribing the "total environmental quality" of a school. However, a number of taxonomical arrangements, including popular ones by Moos (1974), and Insel and Moos (1974), take a narrower definition which is unsatisfactory when all the process factors in the school are under consideration. Consequently, the preferred approach is a modified amalgam of taxonomies based on the work of Tagiari and Moss (in Anderson 1982).

Climate can be divided into four categories. Three of the four fall under the general heading of "organisational" climate and refer to features in the school ranging from physical variables (ecology), to individual background characteristics (milieu), and variables associated with formal and informal rules operating in the school (social system). Standing in contrast to organisational climate is atmospheric climate which is concerned with cultural variables, that is, with variables reflecting norms, belief system,
values and meanings. Table 3.1: “School Climate Taxonomy” provides a visual conceptualisation of the taxonomy.

Table 3.1: “School Climate Taxonomy”

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational</td>
<td>1. Ecology</td>
<td>1. Physical/material variables - external to participants</td>
</tr>
<tr>
<td>Climate</td>
<td>2. Milieu</td>
<td>2. Variables that represent individual background characteristics</td>
</tr>
<tr>
<td></td>
<td>3. Social system</td>
<td>3. Variables derived from patterns of rules of interaction</td>
</tr>
<tr>
<td>Atmospheric</td>
<td>4. Culture</td>
<td>4. Variables reflecting norms, belief systems, values, cognitive structures,</td>
</tr>
<tr>
<td>Climate</td>
<td></td>
<td>and meanings within the school</td>
</tr>
</tbody>
</table>

The advantage of a taxonomy is that it creates a classification structure based on similarities. It does not, however, provide an explanation for categorical relationships or for the emergence of outcomes associated with the system's operation. Such explanations follow from a closer examination of the variables described in the taxonomy.

3.7.4.2 Variables interacting in school climate

The concept of climate becomes operational if links can be specified in a comprehensive model (Anderson 1982). Given the definitions and taxonomical arrangement outlined above, three models emerge which could be used to connect the variables in a manner which would lead to meaningful conclusions. The additive model assumes that each variable operates separately and directly to produce an outcome. The impact of climate is thus the cumulative effect of the various independent variables considered in the equation. Additive models have the advantage of simplicity and researchers favouring regression analysis surveys have generally demonstrated a preference for this approach. On the other hand, the model appears to put unnatural constraints on reality by not allowing related variables to interact in a sophisticated and intricate manner.

Mediated models are more sensitive to this phenomenon and allow for a relationship to be built up between distal variables and more proximal ones. Even

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variables normally thought of as distal can be effectively mediated to create a significant impact on outcome. For example, an ecological (distal) variable, such as the open classroom, could be effectively mediated through a cultural (proximal) variable, such as increased cohesion, to create a positive cognitive outcome. A distal variable of background attitude could affect school outcome through a linkage which sees parents' attitudes affecting the teacher's attitude, the teacher's attitude affects the student's attitude, and student's attitude (proximal variable) affects his/her outcome. It is equally possible that parental attitudes influence student attitudes, which in turn influence teacher attitudes, and so on.

Because variables in each category, have the potential to be both proximal and distal, to be both direct and indirect influences on outcome, many researchers have adopted an interactive model for school climate. This model theorises that both direct and mediated school climate influences are bi-directional (Anderson 1982). Rudolf Moos (1979) provided a compelling summary of the ways in which a variety of climate variables can simultaneously interact as affects and effects. He concluded that the atmospheric dimension of the climate appears to be the major mediator of the other categories (ecology, milieu and social system).

The input/output school effectiveness design has yielded results which indicate that ecological factors (i.e., factors associated with physical/material variables) have little direct effect on outcomes. The interactive model of school climate would suggest that such a finding obscures the mediating influence of other variables, particularly those associated with atmospheric climate or culture. School climate theory, therefore, argues for a process design in school effectiveness research.

Even though a researcher may possess satisfactory definitions and appropriate designs based on a school effectiveness/school climate theory which corresponds to reality, there remain problems which must be resolved. What outcomes are most sensitive to which climate variables? Which school variables most influence climate and why? In this project, value change is seen as an outcome so the question becomes, 'How sensitive is value change to climate variables?' If it is accepted that climate
creates value change, it still needs to be established which school climate variables are most operative in the change process and why? While the research findings from this project do not answer these questions, they do clarify the nature and function of school climate.

3.7.4.3 Perceptions of school climate

Just as school effectiveness in the organisational process design makes allowance for the school as a multiple level construct, so too does the school climate taxonomy presented as an interactive model. But whose perception of climate is, in fact, THE climate? At the school level, it could be argued that the students are the best source of information for a description of the climate because as a group they are the most 'ubiquitous.' Countering this argument would be one which emphasises the need for a less subjective interpretation. Previous experience tends to create "a halo effect" in which perceptions of one variable influence perceptions of other variables" (Anderson 1985).

But objective measures are not entirely satisfactory, partly because they are incapable of reflecting behaviour which is unobservable to the uninitiated, and partly because it is difficult to establish a truly objective perception. For example, could administrators, parents or school boards give an accurate, objective description of a classroom?

Reflecting the thoughts of several other climate researchers, Anderson (1985) has suggested that both the subjective and objective perspectives could be included in climate assessment. Fraser's (1989) assessment of research findings indicates that personal environment fit (preferred climate) is an important predictor of achievement in affective cognitive domains. Objective perceptions of climate are undoubtedly valuable, but the personal perception is generally preferable because it is a proven predictor of outcome, it is more efficient than other observation techniques, it is a perception based on a broad range of experiences over time as opposed to the snap shot view of objective observers, it is a composite perception and not just that of a single or small group of external observers, it is the determinant of behaviour
(perception controls response), and it is typically more closely associated with outcomes than are directly observed variables (Fraser 1989).

Whose view of the climate is accurate? There is no simple answer to the questions just as there is no simple answer to the similar questions asked in the school effectiveness construct, 'effective for whom?' For this reason, this thesis explores multiple perspectives of climate including those of the teachers, the students and the parents.

3.7.4.4 A blended school effectiveness - school climate research design

An analysis of the school effectiveness research tradition revealed that a process design was the most appropriate approach for research which intended to assess effectiveness. It was necessary to blend the school effectiveness and school climate designs into an integrated design which could provide a pathway of effect between the school and a student's values.

In Figure 3.1, the four taxonomical dimensions are shown to be interacting to create the school climate, that is the atmospheric and organisational climate. Figure 3.2 shows the adaptation of the model to a school effectiveness design where the outcome represents goal attainment. Both figures are the work of Carolyn Anderson (1982).

3.7.4.5 Quantitative data collection

There are a number of popular instruments with psychometric properties available for the measurement of school climate. Among the best known are Halpin and Croft's (1963) *Organizational Climate Description Questionnaire*, Stern's (1961) *High School Characteristic Index*, Anderson and Walberg's (1974) *My Class*

Epstein and McPartland's (1976) Quality of School Life represented a departure from earlier instruments in that it was only concerned with student self-reported perceptions rather than with those observed by others (Anderson 1985, p.102). Furthermore, the Quality of School Life had the advantage of exploring three of four taxonomical levels comprising school climate as defined in this study: milieu, using the variable of satisfaction, social system, using the variable of reactions to teachers, and culture, using the variable of commitment to work. Trevor Williams and Margaret Batten's The Quality of School Life (1981) was a secondary school adaptation of the earlier, popular McPartland and Epstein instrument, and is a principal instrument used in this investigation. The seventy-one item test provided a thorough examination of the taxonomical categories culture and social system.

3.7.4.6 Assessing the findings of school climate research

This thesis hypothesises that value change occurs in adolescents when they interact with their environment. Because the school is one of the environments in which adolescents spend much of their time, it has the potential to influence student values. This assumption was re-enforced by a literature review of relevant research which indicate that schools make a significant difference in all aspects of their students' lives and some schools more so than others.

Effective schools literature points out that the area of the school most likely to demonstrate an influence on values is the school's environment, here referred to as climate. Of all the constructs associated with the school, the climate construct most completely encapsulates what social learning theorists would consider to be the locus of school effect on values. If data collection techniques were sophisticated enough, it
could be argued that school climate, by definition, would be THE source of a school's impact on values. For the moment, however, climate research is in its conceptual infancy and no design or data collection methodology exists which can isolate or fully circumscribe school climate.

Is school climate likely to be a potent predictor of school effectiveness and hence the school's ability to impact values? Research findings indicate that climate is potent in the cognitive domain. For example, one measure of school climate found that "climate" accounted for 40% of the variation in student achievement (Kelley, 1981; see also McDill and Rigsby 1973; Rutter et al. 1979; note however, Strivens 1985, p.48).

Nevertheless, until researchers are able to work with a clearer, universally accepted, and "accurate" definition of climate and its precipitating variables, sweeping generalisations about its potency will remain unconvincing. This project accepts on theoretical grounds that school climate is the logical dimension in which to discover value change. It remains to be seen how satisfactory a representation of the "school" climate, as here defined, really is. The results which emerge show that there is a clear correlation between school climate and value change but these correlations are based on definitional assumptions.

In summary, therefore, this project clarifies the role a school plays in promoting value change through its "climate." The findings do not prove the effectiveness or ineffectiveness of the school but they do clarify and substantiate the nature and extent of the effect, and the suitability of theoretical suppositions and methodologies associated with school effectiveness.
PART THREE: METHODOLOGY

CHAPTER FOUR: Research Design

4.1 Paradigm issues

The two preceding chapters described the nature and significance of the problem associated with value learning in schools. The design of the research project, which follows, describes the type of data required to address the problem of value change in students by relating why a particular type of data was chosen and how it was obtained, analysed, and applied to the central and subsidiary questions which guide the thesis.

Methodologically the design features a two site, longitudinal case study which utilises survey data to explain theoretical formulations and to provide useful ideas for school practitioners. On the theoretical level, the conclusions provide empirical evidence for a value theory and model of effective schooling, while on the practical level the conclusions provide insights both for those constructing values educational programming and for those responsible for policy formation in schools.

Stated in other words, the purpose of assessing value change is to describe a process in such a way that theorists can obtain evidence for propositions, while practitioners can obtain information which will enable them to better understand the limits and potentialities of the school as a facilitator of change, in general, and of values, in particular.

Most research designs are carefully constructed within a particular paradigm which reflects the researcher's biases or philosophic orientation. The common approaches are usually described as the deductive, inductive, and the inductive-deductive. Much has been written about the merits of these various lines of inquiry.

Social scientists have traditionally taken the position that human beings are either mechanically controlled by the environment or initiators of their own action (Cohen and Manion 1980, 1985; Keeves 1988). This dichotomy surfaced above in the discussion on the acquisition of values with strict behaviourists believing that the environment wrote values directly on to the tabula rasa while others rejected this
thesis and argued that the filter of personality determined the nature of the values which were held. The dichotomy is also reflected in the broader issue of the role of values education in the school.

Generally speaking researchers working in the maths and sciences have argued for an empirical understanding of reality and an empirical approach to research, while scholars working in the arts and humanities have argued for a humanistic understanding of the world and a naturalistic approach to research. Educational researchers have found themselves caught between these two centres of gravity.

Dilthey (d. 1911) is often credited with being the first to draw attention to an important distinction in the two research traditions. He felt the humanities were in pursuit of *Verstehen*, while the sciences were in pursuit of *Erklären*. A hundred years after he made this distinction, considerable debate remains over the advisability of dividing research into competing paradigms with varying epistemological assumptions and ethical predispositions (Cohen 1985; Hammersley 1986, 1995; Husen 1988; Winchester 1988). Nevertheless, the two approaches still predominate and have been variously defined. For example, the empirical approach has been described as scientific, quantitative, positivistic, hard (Winchester 1988), mechanistic, rationalistic, value-free, operational (Smith 1987), hypothetico-deductive (Husen 1988), neo-positivistic (Husen), clear cut, idealistic, mind-dependent, psychostatistical, functional, and stimulus-response (Hammersley 1983). In contrast, the naturalistic approach has been described as qualitative, humanistic, artistic, critical, realistic (Smith 1987), interpretive (Husen 1988), context sensitive, natural (Burgess 1985), complex, soft (Winchester 1988), and idiographic (Keeves 1988).

Understanding and explaining value change in the context of a school cannot occur within the exclusive domain of either of these two paradigms. Its complexity and the nature of the ideas associated with the constructs require the insights which both paradigms offer. Unshared hypotheses and methodological incompatibility should not preclude a ‘touchstone’ which brings a coherent, epistemological unity to the research field (Walker and Evers 1988, p.28).
In this project, these two approaches are seen as complementary rather than competitive, and the choice of the approach taken was a matter of appropriateness or fitness for the problem under investigation (e.g., Bryman 1984). In other words, bias or philosophic orientation did not consciously dictate the use of the quantitative approach. Such a methodological position is in keeping with a growing consensus of opinion which advocates a conciliatory stance on paradigm issues and rejects the fractured dichotomy view both because it introduces an irrelevant framework into specific research projects and because it inhibits the discovery of fresh insights and understanding (e.g., Burgess 1985; Hammersley 1983, 1986, 1995; Keeves 1988; Husen 1988; Cuttance 1985; Clive 1995; Maras 1995; Denzin 1988; Pumfrey 1995). Both paradigms represent a valid and useful way of looking at value change. Methodological monism presents too limited a perception of reality.

To my way of thinking, reality is multi-dimensional and its essence is best understood in the fusing of epistemological approaches or at least in the acceptance that the various perceptions need to be held in "critical" balance. When both positivists and phenomenologists present convincing, if contradictory evidence, then one has either to assume that one approach is in error or that two different dimensions of reality are being described - reality is not fully comprehended by either paradigm. In this thesis, therefore, both visions of reality are seen to yield conclusions, inferences, implications, and hypotheses which are helpful and necessary. A quantitative approach was taken because the thesis question lies in the area of explanation rather than understanding. The techniques used are suitable to the question under investigation and carefully constructed to meet paradigmatic demands.

4.2 An emergent theory

Wilcox (1982) suggests that school ethnographies have provided compelling evidence that schools are agents of cultural reproduction. According to this vision, the "school" is not seen as an autonomous institution standing aloof from society and capable of improving or transforming it. On the contrary, the school is often portrayed as a blind and unconscious instrument of cultural tradition unwittingly manipulated by
the pervasive and overpowering influence of the hidden curriculum. Not everyone accepts this portrayal of the school in spite of the evidence the ethnographies have provided. It could still be argued that a principal agent of change in society could and should be the school. New governmental policies arise from the belief that the school system is not perpetuating the values it should and that the school is capable of swimming upstream against the cultural flow.

By analysing the process of value change as it occurs in the school, this thesis has implication for the larger question of the role of the school in society. Is it submerged within the culture - not just tainted with the culture but identical with it - or is it capable of stepping outside of its cultural skin and affecting change contrary to the value structure of the students who come to it and the surrounding culture? When students come with a value system incongruous with the school's, does value change occur and under what circumstances? If a school were to hold values counter to the surrounding culture, does it have the potential to affect change?

If students change fundamental values held in their home, their church, or in their non-school peer group while attending a particular school, it would follow logically that the school was a potent, autonomous value transmitter.

4.3 Data sources

A two site, two year, longitudinal case study was used to investigate issues surrounding value change in school attending adolescents. The sites were chosen in part because they were accessible and their boards agreed to the study, and in part because of their striking similarities and salient differences. In practical terms, the two schools were located within a two hours drive of each other which permitted regular and easy contact. Access was not a significant issue because I was the principal of one of the schools (designated below as RHS) and known to the other school. However, it
was the unique qualities of the two schools which made them particularly suitable for comparison and contrast. They were not chosen because they were “typical” or “normal” (although in many respects they appeared to be typical of schools in their area) but because they represented two distinct approaches to values education and were thus capable of establishing a fuller explanation of the school’s impact than would be possible of “typical” schools. The intention was to examine a spectrum of values education approaches so contrasting approaches needed to be explored.

The schools shared a number of important features which permitted comparison as well as contrast. They had approximately the same enrolment, their perspectives were multi-cultural although they were predominantly American, the parents were working internationally, the schools were well established (over 30 years old), they operated with small class sizes and low student-teacher ratios, they were both university preparatory schools, and, in their promotional literature, both expressed an interest in training the “whole” student.

By way of contrast, their constituencies and their philosophic orientations were very different. One served an upper middle class clientele, the other a middle class. Most importantly, one sought to teach a long list of (religious) values in an overt, direct way while the other made few references to specific values or gave few public statements about how these values might be learned in the school. Consequently, the one school was designated “Religious High School” (hereafter RHS) and the other “American High School” (hereafter AHS).

An analysis of the two school’s promotional literature, a review of the material contained in their accreditation Self Studies, as well as interviews with teachers, parents, and students, indicated clearly that RHS and AHS differed in the values they sought to teach and in the manner in which they sought to do the teaching. The two
sites together represented a spectrum of value positions; they provided the situations/environment necessary to describe, evaluate, and explain key aspects of value change in schools. Nevertheless, even taken together, the two sites had their limitations. For example, both were international schools filled with students who likely portrayed the value change process in fuller colour than would students in a more stable environment. This could, of course, be construed as a significant advantage because the process of change was, theoretically, more dynamic than in most national school settings.

A comprehensive, accurate definition and explanation of the value change process in a school setting needed to encompass the perceptions and opinions of as many participants in the value change process as possible. Therefore, the opinions, perceptions, and recollections of students, staff, and parents were surveyed at both sites. Each group was considered capable of providing a unique, intimate, personal, and highly relevant perspective on the value change process. Together these participants in the school community shed light on the Value Change-Effective Schools (VCES) phenomenon, augmenting and complementing the insights which each provided. The intention was not to compare the school communities, although that occasionally occurred. Rather, the schools, with their contrasting philosophies, were chosen deliberately in order to explore the parameters of value change. It is through the various surveys' clarification of principle and application to theory that the schools' idiosyncratic natures become relevant to the broader school community.

4.4 Theoretical rationale for the data collection methodology

The research procedure emerged from a review of the literature on school effectiveness and value change and was constructed in such a way as to fit into the schedule, budget, and geographic constraints of an active school head. It was
implemented over a two year period, September 1990 to June 1992. With a few exceptions, the original quantitative methodology was pursued as it was envisaged before the data collection began.

A series of value change propositions was postulated and placed in the role of “foreshadowed questions.”

1. All humans value
2. Values change
3. The more central a value is in one's belief system, the greater will be the repercussion of a change in the value
4. The closer a competing value is to the one held by the individual, the more likely it is that he/she will internalise the new value
5. When one value changes, it has a derivative effect on one's belief system
6. Values must be potentially meaningful if they are to be internalised
7. Individual personality acts as a filter of values
8. Value change is not equivalent to moral "development"
9. Values are held interactively across the domains of personality (i.e., cognitively, affectively, conatively, and behaviourally) in unique and idiosyncratic ways
10. The interactive process of value change follows a pattern of trait consistency
11. Values are learned in social environments
12. Schools, as a social environment, influence value formation
13. Elements in a school's environment influence value formation in unique and disparate ways
14. Some school environments are more conducive to value change than others
15. Some schools are more effective in creating a climate for value change than are others
16. The interactive model of school climate conceptualises the complex dynamic process associated with value change in a school setting

These value change propositions represent a synthesis of the major conclusions in Chapter Two where questions were raised about the definition, acquisition, and holding of a value, as well as about the nature of values education in schools. The last five propositions are different from the previous eleven in that they focus on the school as the medium of value change and give rise to a significant subsidiary question: ‘Does the school as a social environment have power to influence value formation?’

The research design was based on an interface of the value change propositions and the effective schools model described in Chapter Three. Table 4.1 sets out the Value Change-Effective Schools Model (VCES). The numbers in the model show the theoretical location of the value change propositions which are listed below it for
reference. The model was used as the theoretical basis for the creation of four instruments which assessed the perspectives of parents and students (and teachers to a limited degree) at RHS and AHS over a two year period.

Table 4.1: "The Values Change/Effective Schools Model (VCES)

<table>
<thead>
<tr>
<th>Determinant: input and process</th>
<th>Outcome: goal attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>atmospheric climate</td>
<td></td>
</tr>
<tr>
<td>culture</td>
<td></td>
</tr>
<tr>
<td>#3a,4a,6a,11,13,16</td>
<td>#1,3b,4b,6b,7a,9a,10a,13,16</td>
</tr>
<tr>
<td>#13,15,16</td>
<td>#11,12,13,14,15,16</td>
</tr>
<tr>
<td>#2,3c,4c,5,6c,7b,8,9a,10b</td>
<td></td>
</tr>
<tr>
<td>culture: norms, beliefs, values, meanings, cognitive structures (input and process)</td>
<td></td>
</tr>
<tr>
<td>milieu: individuals background characteristics (input)</td>
<td></td>
</tr>
<tr>
<td>ecology: physical variables (input and process)</td>
<td></td>
</tr>
<tr>
<td>social system: formal/informal rules (process)</td>
<td></td>
</tr>
</tbody>
</table>

Value Change Propositions

#1 All humans value
#2 Values change
#3a Individuals prioritise their values into hierarchical systems
#3b Students bring their personally prioritised, hierarchical systems into the schools with them
#3c Changes at the core of the system have major repercussions
#4a Values compete with each other
#4b Personal systems are more malleable at some points than others
#4c New values will most likely be similar to the old ones
#5 When one value changes, it effects others
#6a As #4a; collective meanings exist in groups
#6b As 4b
#6c New values will be meaningful if they are internalised
#7a Individual personality acts as a filter of values
#7b New values will reflect personality
#8 Value change is not equivalent to moral development
#9a Each person holds values uniquely and across the domains of personality
#9b New values will also be held uniquely and across the domains of personality
#10a Values are held interactively according to trait consistency
#10b New values held interactively according to trait consistency
#11 Values are learned in social environments
#12 Schools are social environments which influence value formation
#13 All the elements in a school's environment influence value formation in unique and different ways
#14 Some school environments are more effective at creating change than are others
#15 Some school's are better at creating dynamic environments than are others
#16 The interactive model of school climate conceptualises the dynamic process associated with value change in a school setting
Table 4.2: Summary of the survey instruments and their administration

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
<th>Respondents</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS Parent Survey&lt;sup&gt;1&lt;/sup&gt;</td>
<td>locally developed; two parts</td>
<td>AHS parents</td>
<td>Spring 1992</td>
</tr>
<tr>
<td>RHS Parent Survey&lt;sup&gt;2&lt;/sup&gt;</td>
<td>locally developed; three parts</td>
<td>RHS parents</td>
<td>Spring 1991</td>
</tr>
<tr>
<td>AHS Student Survey&lt;sup&gt;3&lt;/sup&gt;</td>
<td>locally developed; Rokeach Value Survey</td>
<td>AHS students (teachers)</td>
<td>Fall 1991</td>
</tr>
<tr>
<td></td>
<td>locally developed; Rokeach Value Survey, Williams and Batten School Life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RHS Student Survey&lt;sup&gt;4&lt;/sup&gt;</td>
<td>locally developed; Rokeach Value Survey, Rest Defining Issues Test, Allport et al. Study of Values</td>
<td>RHS students (teachers)</td>
<td>Fall 1990</td>
</tr>
<tr>
<td></td>
<td>locally developed; Rokeach Value Survey, Williams and Batten School Life</td>
<td>RHS students</td>
<td>Spring 1991</td>
</tr>
<tr>
<td></td>
<td>locally developed; Rokeach Value Survey, Williams and Batten School Life</td>
<td>RHS students</td>
<td>Spring 1992</td>
</tr>
</tbody>
</table>

Table 4.2 provides a summary of the instruments and their administration at the two sites. Details of their construction and administration are given below in the appropriate chapters. In general, however, it should be noted that each of the questions in the surveys was linked both to a particular value change proposition and to a section in the effective schools model. That is, all the surveys sought to clarify the association amongst the various input-process-outcome factors which the VCES model suggested were important. Therefore, each item in a given survey was linked both to the value change propositions and to the effective schools model which they theoretically informed. Tables 4.3 and 4.4 below illustrate how this was done for the

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<sup>1</sup> See Appendix One.

<sup>2</sup> See Appendix Two.

<sup>3</sup> See Appendix Three. For the Rokeach value survey see page 290 for procedures relating to the values and to page 388 for a list of the values which constitute the survey.

<sup>4</sup> See Appendix Four.
AHS spring parents survey. The letters and numbers refer to items in this particular survey (cf., appendix three).

Table 4.3: “Item Construction-Value Change”

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All humans value</td>
<td>B36-39 (with A)</td>
</tr>
<tr>
<td>2. Values change</td>
<td>B17, B20-22, B32, B33</td>
</tr>
<tr>
<td>3. The more central a value is in one's belief system, the greater will be the repercussion of a change in the value</td>
<td>B36-41 (with qual)</td>
</tr>
<tr>
<td>4. The closer a competing value is to the one held by the individual, the more likely it is that he/she will internalise the new value</td>
<td>B15</td>
</tr>
<tr>
<td>5. When one value changes, it has a derivative effect on one's belief system</td>
<td></td>
</tr>
<tr>
<td>6. Values must be potentially meaningful if they are to be internalised</td>
<td>B15</td>
</tr>
<tr>
<td>7. Individual personality acts as a filter of values</td>
<td>B14, B30, B36-39</td>
</tr>
<tr>
<td>8. Value change is not equivalent to moral 'development'</td>
<td></td>
</tr>
<tr>
<td>9. Values are held interactively across the domains of personality (i.e., cognitively, affectively, conatively, and behaviourally) in unique and idiosyncratic ways</td>
<td>B24, B28, B29, B35</td>
</tr>
<tr>
<td>10. The interactive process of value change follows a pattern of trait consistency</td>
<td></td>
</tr>
<tr>
<td>11. Values are learned in social environments</td>
<td>B16</td>
</tr>
<tr>
<td>12. Schools, as a social environment, influence value formation</td>
<td>B17, B19, B22, B26, B27, B32, B33, B34</td>
</tr>
<tr>
<td>13. Elements in a school's environment influence value formation in unique and disparate ways</td>
<td>B1-8, B18, B20-22, B25, B31</td>
</tr>
<tr>
<td>14. Some school environments are more conducive to value change than others</td>
<td>B9</td>
</tr>
<tr>
<td>15. Some schools are more effective in creating a social environment climate for value change than are others</td>
<td>B40 - 43</td>
</tr>
<tr>
<td>16. The interactive model of school climate conceptualises the complex dynamic process associated with value change in a school setting</td>
<td>B9</td>
</tr>
</tbody>
</table>

Table 4.4: “Item Construction-Effective Schools Model”

<table>
<thead>
<tr>
<th>Determinant: input and process</th>
<th>Outcome (goal attainment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>atmospheric climate culture</td>
<td>Part A, B10,14,30</td>
</tr>
<tr>
<td>organisational climate milieu</td>
<td>B1,11</td>
</tr>
<tr>
<td>ecological system</td>
<td>B2-8, 16,18, 20,21,22,24, 28,31</td>
</tr>
<tr>
<td>social system</td>
<td>B9,17,19,27,32,33,34</td>
</tr>
</tbody>
</table>

Tables 4.3 and 4.4 illustrate the effort which was made to ensure that the items in the surveys were based on a theory which empirical research suggested was
appropriate. Most of the items were generated specifically for these surveys, although a number of well known questionnaires dealing with value change and school climate were used to explore particular facets of value change in schools. As was stated earlier, details of instrument construction and administration are included below in the “methods” chapters of Parts Four (Parent Surveys) and Five (Student Surveys).

The VCES model, upon which the instruments were based, holds that the determinants of value change are the input and process factors. Two categories of environments or “climates” are held to exist in an institution like a school. These climates are created by the culture, milieu, ecology, and social system of the school. Input and process factors - the determinants of the outcome - are seen as interactive and the lines between them blurred even though they can usually be distinguished conceptually. Even the line between "determinate" and outcome is blurred, as value change proposition #16 suggests. For example, in the RHS parents survey it was observed that the parents' perception of the outcome was correlated with their perception of the effectiveness of the process factors. A regression analysis suggested that perceptions of effectiveness in process could be predicted on the basis of perceptions about outcomes. “Outcome,” therefore, is not to be seen in factory terms in this model.

Students were the main focus of attention in the longitudinal studies. The three phase panel study of students at RHS included a battery of surveys administered over a two year period. The AHS two phase study was patterned after the two year longitudinal study at RHS which was already underway when the AHS study began. It included an early fall and late spring battery of surveys. As the two longitudinal studies progressed elements of the surveys were redesigned to facilitate coding and analysis and to reflect lessons learned from each administration of a survey.
The staff surveys were done in conjunction with the student surveys. While there was a longitudinal nature to the staff studies in the sense that teachers had the option of completing the surveys in the fall and/or spring of the school year, the primary concern was to obtain a "snap shot" of opinions and perceptions. The same was true of the parent surveys which were administered in the late spring at both sites. The staff surveys included a battery of instruments each with several parts, whereas the parents received only one instrument with multiple parts. This single instrument reflected aspects of the various instruments which were used with both the students and the staff so that each group surveyed was exposed to the full range of the VCES model.

4.5 Data analysis

A frequency study was completed on all the items in the various surveys. Additionally, items which yielded nominal data were analysed with crosstab tables and appropriate statistics. When nominal or ordinal level data emerged and the frequencies were excessively low, the items were "collapsed" in order to clarify the interpretation of the results. Items which were reverse coded to reduce problems associated with those who tended to agree or disagree with everything, were "corrected" to allow for comparison and correlation.

Relationships between nominal and ordinal data were explored through the use of contingency tables, chi-square, and Cramer's $V$. Relationships between items yielding ordinal data were analysed using Spearman's rho as well as Mann-Whitney's U, Kruskal-Wallis' $H$, or Friedmans' two-way analysis-of-variance. Pearson's $r$ and regression were used with interval level data or with ordinal data which had been combined to form indices. Factor analyses were used to confirm item groupings established by theory and to reduce the number of items to a more manageable number. As a general rule, when analysis included data at two levels, the test which was appropriate for the lower order of data was used.
4.6 The role of the researcher

Although the role of the researcher is particularly critical in qualitative studies, it remains an issue in quantitative research as well. Preconceptions and biases influence the interpretation of the data and can even determine what is held to be "data." Jarvie (1969/1982), and Hammersley and Atkinson (1983), building on the work of Junker (cf., *Current Anthropology*, vol 10, no.5, 1969, pp. 521-522), describe a continuum of roles ranging from the detached and objective to the involved, subjective, and empathetic. At one end of the continuum, the researcher, works within the organisation in a clearly defined, existing role, while at the other end of the spectrum the researcher is entirely independent and has no interaction with the subjects.

This two site case history began its longitudinal study at RHS where I was in the role of school principal. After the first year of data collection I moved into the role of assistant director of the institution, before assuming the directorship a year later. Much has been written about the problems a native researcher experiences due to "immersion," "macro-blindness," and "over rapport." In a qualitative study these problems are particularly acute. My full participant, native status meant that I influenced the RHS environment and was in turn influenced by it. In the purported words of Margaret Mead,

> If a fish were to become an anthropologist, the last thing it would discover would be water (Spindler and Spindler 1982, p. 24).

> If the director of an institution is not said to be immersed in the school's culture, who is? The old adage has some truth: 'the greater the degree of participation, the more predictable the answers will be.'

This is much less likely to occur in the non-participant role which I played at AHS. Students in this school were theoretically more likely to take a reflective look at the question, and save their prescriptions and polemics for a more politically sensitive ear. If the researcher has no influence over the forces which are brought to bear on the student's life, then it is unlikely that he/she will be the object of conscious manipulation through the answers which are given. The difficulties associated with the participant role were at least partly offset by the advantages it provided at RHS. There I was able
to bring the time and material resources of the institution to bear on the issues embodied in the thesis. For example, in the case of the value survey used with RHS students, the entire school participated and few questions were asked. It was the "kind of thing" that RHS did quite regularly. In my estimation, the participants completed the survey without objection because of the unembarrassing nature of the survey, because anonymity was assured, because a "low-key" approach was used, because the students were briefly informed that the survey would enhance general knowledge about valuing in schools, and because the respondents knew the study had import beyond RHS. Actually, most participants expressed only a passing interest in the reasons for the survey, and those who did were primarily adults who were either interested in the "values issue" and wanted to discuss the content of the survey with me, or they wanted to know whether the survey was for the benefit of the school or for my own research. In this latter group of four or five teachers, I could not tell whether loyalty to me or to the school was a factor in their willingness to participate so I informed them that the survey served a dual purpose. The explanation appeared satisfactory and the surveys were completed without objection.

In retrospect, my role as RHS principal had no discernible bearing on the results of the survey if the comments, facial expressions, and actions of the RHS participants were an accurate reflection of inner feelings. Nevertheless, it would be naive to assume the roles I played had no bearing on the outcomes, as an incident at AHS made clear. One teacher at AHS returned a blank survey with the words "I DO NOT WANT TO HELP SOMEONE GET A PHD" scrawled across the top. How many others felt this way and to what degree did their attitude influence their answers? It was a sobering statement which made it clear pleasant smiles and professional courtesy could mask a resistant, uncooperative spirit. While the statement was disconcerting, it did have a positive effect in that it created an awareness of the dangers associated with an uncritical interpretation of the data.

Over the two year period of the case study I kept a detailed journal of my actions and perceptions. Additionally, I had extensive interviews with a cohort of
twelve students at AHS and thirty-seven grade twelve students at RHS. I also compiled a comprehensive file of documents ranging from official publications and report cards to alumni letters and discipline records. These sources of qualitative data will be used in further study focusing on the meaning of value change. For this thesis, however, these sources served a valuable purpose by providing information which could be used to make the surveys more relevant and comprehensible to the respondents. For example, in the AHS parent survey (cf., appendix one) all the questions in Part B were grounded in the VCES theory but written in a form which reflected information gained from the interviews.

Operating in two sites with two roles over two years was methodologically sound but strenuous. For example, there were practical problems related to travel, cost, and schedule; there were supervision problems related to the distribution, collection, and coding of surveys; there were ethical problems created by dramatic value change which occurred during incidents which were at times illegal (e.g., drug experimentation, a notorious “swamp” party in which the police became involved, and several attempted suicides including one in which I was required to wrestle the knife out of the hand of a student who was seeking to drain her sacrificial blood into jars for her three friends); there were family strains created by six years of holidays, weekends, and evenings devoted to the thesis; and there were entry problems at AHS where periodic visits required the performance of re-entry rituals which were both stressful and annoying - yet necessary, if I was to have access to the data I needed. One comment from an AHS teacher, which was made at the end of the year, suggests that my efforts to establish an unobtrusive role were not entirely successful. In her words, “I never knew how to treat you.”

In summary, the case study approach created complex problems while simultaneously providing rich, variegated, relevant data.

4.7 Validity and reliability

The conclusions drawn from this study will only have relevance to a context other than the case study itself if the data is both valid and reliable. Neither school in
the case study was chosen on the basis of probabilistic sampling. Therefore, the conclusions are generalised to other schools on the basis of careful logic. Like Wolcott, who expressed "no great concern" for the identification of the "typical" principal, this thesis does not seek to find or describe the “typical” school but to find ways in which the students and their schools are representative of other schools (Wolcott 1973, p. 57).

The conclusions of this thesis are transferable to a wider educational context because other schools are experiencing issues related to value change; they can come to an understanding of their own unique events through a comparison of their experiences with those of RHS and AHS. Furthermore, generalisation will be possible because the emergent “value change - effective schools” theory allows other researchers to verify the findings.

Generalisability, therefore, does not rest on the creation of causal statements, but on the basis of analogous events which are comparable in some way and open to translation from one site to another. But for this objective to be realised, the conclusions must emerge from a design and instrumentation which demonstrates both reliability and validity. The methodology chapters in Parts Four, Five, and Six each address specific issues of validity and reliability as they relate to the instruments in the section. However, at this point several general observations need to be made.

4.7.1 Internal validity

Validity can be subdivided into two broad categories - internal validity, with its overriding question, ‘How does one know that the instrument actually measures what it says it measures?,’ and external validity, which asks ‘How can the researcher be certain that the results are applicable in another setting?’

Internal validity was strengthened by comparing, contrasting, and identifying inconsistencies and similarities in the results obtained from the different respondent groups. Validity came, therefore, through the corroboration of evidence from the various data sources. Construct validity was obtained in part by carefully correlating the evidence to the theoretical paradigm.
Another method of assuring validity was to use the technique of 'respondent validation.' The students, staff, and parents were asked the same question in two or three different ways to ensure that there was a consistent pattern to the responses. The respondent validation technique confirmed the accuracy of details and verified information which was known independently of the questionnaire (e.g., through the schools’ Self Studies). The two site, two role approach operated as another technique ensuring validity. In a sense, a 'macro-cross validation' took place.

Another method of strengthening validity was borrowed from the qualitative research tradition as suggested by LeCompte and Goetz (1982). They recommended that enough time be spent in the field in order to reduce "artificial responses" (p. 46). At RHS, this criteria was met with ease. The same was true at AHS where monthly visits were made in addition to week long periods of time in the school. This ensured that enough time was spent on site to eliminate superficial impressions which would have seriously affected item validity in the questionnaires.

As a corollary of this, the time spent at AHS enhanced the internal validity of the instruments at RHS. While enough time is needed at a site, too much time at one could create a situation where the researcher is unable to maintain enough distance to be objective. This problem was potentially more serious at RHS than the lack of time was at AHS. LeCompte and Goetz's (1982) solution was to plan "periodic temporary withdrawals" from the site in order to de-familiarise one's self from the field (p.47). Frequent, and at times prolonged visits at AHS, provided an essential change of scenery from RHS and they had a detoxifying effect.

A final approach to enhanced internal validity has already been described above under the issue of generalisability. A design which incorporates three respondent groups and a battery of surveys administered over two years has built into it a natural means of assessing validity. By writing items in all the surveys with the VCES model in view the emergent theory is assessed from a variety of angles. Where there is an examination of the same proposition using a different respondent group and a different
instrument, the degree of convergence can be established through the principle of triangulation. In those cases where convergence occurred, validity was confirmed.

4.7.2 External validity

External validity in the context of this thesis refers to the extent to which the constructs "value change" and "school effects," as well as the sixteen propositions are applicable across groups. This study seeks the translation of its conclusions to other settings so there is a need to demonstrate the ways in which this unique case study is relevant to other cases, that is, the task is to identify and describe features of the value change phenomena which are relevant to other school environments.

External validity will be strengthened if the study group matches other groups in salient ways. Factors such as educational background, gender, age, and racial composition are readily available population characteristics which can be used to aid in cross-group comparison. These, and similar population delineators, were developed in the study with the intention of establishing details of the selection process which will help others relate to the conclusions.

A second characteristic enhancing external validity occurs when the unique historic experiences of the school under investigation are muted or eliminated. The two site approach allowed for the most eccentric features of the two groups to be ferreted out. As has been stated above, the setting effect, or reactive observer effect, created by my role in the schools had the potential to limit this project's comparability. There is no question that my role as a full participant at RHS would have been problematic if the investigation at RHS was not restricted to areas where the precise role of the researcher was not a significant issue.

The fourth factor limiting external validity is defined by Cook and Campbell as "the extent to which abstract terms [and] generalisations...are shared across times, settings, and populations" (in LeCompte and Goetz 1982, p.53). On one level, it would certainly appear that the constructs of "value change" and "school effectiveness" are not idiosyncratic to the groups under examination. Previous research and theory both indicate that the constructs are valid for cross-group comparison. By establishing
clear, foreshadowed categories for the constructs, the likelihood that they will only be intelligible in the sites under study has been reduced.

4.7.3 Reliability

Not all forms of reliability are significant. For example, Kirk and Miller (1986) speak of a "quixotic reliability" which occurs when a single method of data collection yields consistent results but, upon scrutiny, the results prove to be "trivial and misleading." In this two site, longitudinal study with multiple sources of data there appears to be little likelihood of obtaining such a superficial form of reliability.

"Diachronic reliability" occurs when observations are consistent over time, as in a test, re-test scenario. There are several instances where this form of reliability is demonstrated. Internal reliability was assessed through the consistency of the characteristics which emerge from the various instruments. Many of the techniques listed above under validity also confirmed reliability.

A repeatedly stated objective of this research project is the desire to explain a complex process and to make the explanation relevant to other school settings. It is doubtful that a high degree of external reliability in the experimental sense of the concept can be achieved because of the uniqueness and complexity of the issue, but an accurate analysis of the constructs and their premises, and the employment of a design which stresses flexibility and breadth in its method of data collection should ensure a satisfactory degree of external reliability. Considerable time has been spent (Chapters Two and Three of the thesis) delineating the constructs of "value change" and "school effectiveness," defining key terms and premises, and analysing theories which inform the research project so that replication would be possible and this thesis could serve as a model for future study.
Part Four: Results - The Parent Surveys

CHAPTER FIVE: Methods and the Parent Surveys

Chapter Four set out the methodology for an investigation of value change in schools using a two site case study. Part Four is divided into three chapters which summarise and interpret the data obtained from two parent surveys, one at AHS the other at RHS. Chapter Five sets out the methodology of the parent surveys, Chapter Six presents the results, and Chapter Seven discusses the significance of the findings.

5.1. AHS parent respondents

Parents have a unique and valuable perspective on the changes which their children experience. Unlike teachers and administrators, they have the advantage of seeing the process over an extended period of time and of being able to contextualise the changes in light of their children's development from infancy. Furthermore, because of their parental love and their desire to receive quality service for taxes or fees paid, they often consciously evaluate the performance of their children's school. Therefore, soliciting their opinions about the school's role in value formation was both natural and logical.

5.1.1 AHS parent survey procedure

In the introductory May 1991 interview with the AHS Head, the school was informed that the parents were considered a vital source of information which needed to be explored through a survey. Early in 1992, the Head was once again approached with the idea of surveying the parents and permission was granted.

All AHS parents were sent a copy of the survey ("American High School Parent Survey 1992;" see Appendix One) and seventy-five responded out of a possible 158 (47%). A year earlier when the school sent out a survey to its parents as part of a
re-accreditation process, only one third responded. In an effort to improve the return rate, a self-addressed, stamped envelop was included. This feature, and the nature of the survey itself, likely accounted for the improved response rate. Although a higher return rate was desired, several factors argue for the usefulness of the data which was obtained. Most importantly, a frequency study which was done on the demographic items verified that the 47% who did respond reflected essential characteristics of the entire parent population in terms of their occupation, salary, citizenship, and gender.

The AHS Parent Survey was drafted in the Spring of 1992 and sent to the Head and his administrative team for comment and approval. Two administrators at RHS were also asked to read it critically and to make suggestions. The administrative team at AHS returned the draft with a recommendation that question #5 (income levels) be re-scaled and a request that a question which asked parents if they wished to collaborate with the school in goal-setting be deleted. Their suggestions were incorporated into the final copy of the survey. The cover letter linked the survey to the school's on-going effectiveness campaign and was set in the context of the school's publicly stated determination to improve service to its parent constituency.

The survey was posted in the third week of May. The secretaries at AHS collected the returned envelopes and passed them on by the end of June 1992. Both the administrator who was designated as the intermediary for this project and the school secretary responsible for final delivery of the surveys expressed surprise at the relatively "good" response rate.

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1 Self Study 1991 Section A, page 4. The AHS Self Study was an important source of qualitative data. It was a five binder collection of staff, student, and parent opinions on the life and organisation of the school.

2 For details, see Chapter Six "AHS parent profile."
5.1.2 AHS parent survey construction

The survey was divided into two parts. Part A featured typical demographic items such as age, gender, citizenship, length of time in the host country, family income, number of children, and marital status, all of which could theoretically influence the parents' value orientation and shape their expectations of the school. These input items were located in the milieu dimension of the school's organisational climate as defined by the VCES model.

Part B dealt primarily with school issues and sought to assess various aspects of school effectiveness and the value change process. It also included several questions which were intended to increase the appeal of the survey to the AHS constituency. Most of the statements in this part elicited responses ranging from "Strongly Agree" to "Strongly Disagree" or "A" (Excellent) to "F" (Poor).

While the content of the items in Part B corresponded to the propositions undergirding the VCES model, this section also reflected information obtained from frequent visits to the school during the 1991-1992 school year. For example, the statements in items B27, 32-34 dealt with citizenship, self worth, tolerance, and participation and were all based on frequently "stated" values which the AHS staff claimed to be teaching. In Table 5.1 the items are linked to the value change propositions which they theoretically inform while in Table A 5.2 the items are placed in the effective school's model which was described in chapter three.

5.1.3 AHS parent survey data analysis

The demographic descriptors in Part A generated a mixture of nominal, ordinal, and interval data. The data in Part B was essentially ordinal although the last

3 Cf., items B10, B11, B12, B13, B27, B32, B33, B34, B40-43.

4 Gender, citizenship, occupation, marital status, and grades.
### Table 5.1: “Item Construction-Value Change”

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All humans value</td>
<td>B36-39 (with A)</td>
</tr>
<tr>
<td>2. Values change</td>
<td>B17, B20-22, B32, B33</td>
</tr>
<tr>
<td>3. The more central a value is in one's belief system, the greater will be</td>
<td>B36-41 (with qual)</td>
</tr>
<tr>
<td>the repercussion of a change in the value</td>
<td></td>
</tr>
<tr>
<td>4. The closer a competing value is to the one held by the individual, the</td>
<td>B15</td>
</tr>
<tr>
<td>more likely it is that he/she will internalise the new value</td>
<td></td>
</tr>
<tr>
<td>5. When one value changes, it has a derivative effect on one's belief</td>
<td></td>
</tr>
<tr>
<td>system</td>
<td></td>
</tr>
<tr>
<td>6. Values must be potentially meaningful if they are to be internalised</td>
<td>B15</td>
</tr>
<tr>
<td>7. Individual personality acts as a filter of values</td>
<td>B14, B30, B36-39</td>
</tr>
<tr>
<td>8. Value change is not equivalent to moral ‘development’</td>
<td></td>
</tr>
<tr>
<td>9. Values are held interactively across the domains of personality (i.e.,</td>
<td>B24, B28, B29, B35</td>
</tr>
<tr>
<td>cognitively, affectively, conatively, and behaviourally) in unique and</td>
<td></td>
</tr>
<tr>
<td>idiosyncratic ways</td>
<td></td>
</tr>
<tr>
<td>10. The interactive process of value change follows a pattern of trait</td>
<td></td>
</tr>
<tr>
<td>consistency</td>
<td></td>
</tr>
<tr>
<td>11. Values are learned in social environments</td>
<td>B16</td>
</tr>
<tr>
<td>12. Schools, as a social environment, influence value formation</td>
<td>B17, B19, B22, B26, B27, B32, B33, B34</td>
</tr>
<tr>
<td>13. Elements in a school's environment influence value formation in</td>
<td>B1-8, B18, B20-22, B25, B31</td>
</tr>
<tr>
<td>unique and disparate ways</td>
<td></td>
</tr>
<tr>
<td>14. Some school environments are more conducive to value change than</td>
<td>B9</td>
</tr>
<tr>
<td>others</td>
<td></td>
</tr>
<tr>
<td>15. Some schools are more effective in creating a social environment</td>
<td>B40 - 43</td>
</tr>
<tr>
<td>climate for value change than are others</td>
<td></td>
</tr>
<tr>
<td>16. The interactive model of school climate conceptualises the complex</td>
<td>B9</td>
</tr>
<tr>
<td>dynamic process associated with value change in a school setting</td>
<td></td>
</tr>
</tbody>
</table>

### Table 5.2: “Item Construction-Effective Schools Model”

<table>
<thead>
<tr>
<th>Determinant: input and process</th>
<th>Outcome (goal attainment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>atmosphere</td>
<td>B9, 17, 19, 20, 21, 22,</td>
</tr>
<tr>
<td>climate</td>
<td>24, 28, 31, 2732, 33, 34</td>
</tr>
<tr>
<td>culture</td>
<td></td>
</tr>
<tr>
<td>milieu</td>
<td>B12, 13, 15, 23, 25,</td>
</tr>
<tr>
<td></td>
<td>26, 29, 36-41</td>
</tr>
<tr>
<td>organisational climate</td>
<td>Part A, B10, 14, 30</td>
</tr>
<tr>
<td>milieu</td>
<td>B1, 11</td>
</tr>
<tr>
<td>ecology</td>
<td>B2-8, 16, 18, 20, 21, 22,24,</td>
</tr>
<tr>
<td>social system</td>
<td>28, 31, school impact</td>
</tr>
</tbody>
</table>

| few questions yielded nominal data. Several items were grouped together to create multi-item measures thereby increasing the number of categories in the ordinal data. When this was done the variables were treated as interval in nature. |

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5 Age, income, and years in the host country.

6 Number of children and number of years in school.
All the data was initially summarised in frequency tables which revealed meaningful patterns warranting further investigation. Correlational analyses followed. In the case of nominal data, contingency table analysis was used in conjunction with the chi-square as a test of significance. Spearman's rho and Kendall's tau, together with their significance tests, were used with ordinal data, and Pearson's *r* was used with interval or quasi interval level variables. Factor analyses were undertaken on Part B. All statistics were computed with SPSSx and unless otherwise stated, the default option was used for dealing with missing data. This meant that statistics in the descriptives command were based on the number of valid cases for the variable under analysis.

The reliability of the survey was satisfactory.\(^7\)

5.2 RHS parent respondents 1991

The AHS Parent Survey had a counterpart at RHS. Once again, parents, with their longitudinal perspective, their vested financial interest, and their emotional attachment to their children, were seen to represent a rich, evaluative source of information about many aspects of schooling relevant to the VCES model. The intention was not to compare parents and schools, although that occasionally occurred. Rather schools with contrasting philosophies were deliberately chosen in order to explore the parameters of value change.

All the parents of children enrolled at RHS were sent a copy of the "1991 RHS PARENT SURVEY" (Appendix Two). In addition to explaining details related to the return of the survey, time constraints on it, and its guarantee of anonymity, the covering letter set out the purpose for the survey:

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\(^7\) Part A: 9 items; number of cases = 62; reliability coefficient: alpha .7307. Part B: 25 items; number of cases = 62; reliability coefficient: alpha .8426. The factor analyses of Part A indicated there were three underlying dimensions in the nine items. As a result, Cronbach's alpha was somewhat below the target .8000. In Part B, the factor analysis suggested that there were no underlying dimensions and the alpha score was consequently higher. Cf., Bryman and Cramer 1990, p. 71.
The faculty and staff of RHS seek to work in partnership with parents in the education of their children. In an effort to more fully understand the wishes and perspectives of our partners [i.e., the parents of our students], we would like to ask that you complete the enclosed survey... The survey is intended to elicit information which will inform us as we plan policies and procedures for our Religious High School.

The respondents were encouraged to see the survey as part of the school's effort to improve its effectiveness and to work with parents. Like AHS, RHS had recently completed an accreditation Self Study and the survey sought to build upon the parent contact made earlier.

In 1991 there were 141 families with children enrolled at RHS. Seventy-nine (56%) "principal respondents" returned forms with all three parts completed. Sixty-two (46%) of the spouses returned Part C as requested. Because there were 5 single parents, the number of spouses was 136. This meant there was a total survey population of 277 for Part C and a response rate of 51% \((79 + 62 = 141)\) which was comparable to the 47% response rate at AHS. Once again, the 50% return rate was considered acceptable even though the target response rate was 70% because it was possible to verify that the respondent group was representative of the parent population.\(^8\)

The length of the survey, its complex and occasionally convoluted nature, and the lack of a stamped, returned envelop all mitigated against a higher return rate. While it was a practical impossibility to supply return stamps to parents living in more than twenty countries, many of the other problems could have been anticipated and addressed.

5.2.1 RHS parent procedure

The survey became cumbersome and convoluted partly because of "freeloading" on the part of several members of the RHS Administrative Team who requested that issues of interest to them be included in the survey. As a result, a long middle section (Part B), devoted to issues which were tangential to this study, was added to the survey. Fortunately some of the items in Part B became useful although most were concerned with policies and procedures uniquely relevant to RHS.

\(^8\) For details, see Chapter Six "RHS parent profile."
Once permission to survey parents was received, a draft was circulated to the school administrators for evaluation and comment. Nothing substantive was forthcoming although two individuals thought that it would take longer than 15 or 20 minutes to complete. When the resident administrator submitted his suggestions for a "Part B," it became evident that the survey would be long and detailed.

Experience made it clear that a complete re-writing should have occurred. Fewer items should have been included and a simpler approach taken. For example, the focus should have been restricted to the "first child." Good intentions to please others and a desire to be comprehensive made the survey tedious. Only three respondents actually commented on the survey's length but a reduced response rate in Part C, Sections 3 and 4 suggest that fatigue set in.

As a result these sections need to be interpreted cautiously. In retrospect, it is surprising that so many parents submitted a completed survey. What is more, quite a few went on to write paragraph length comments on subjects which arose in the survey. This suggests that many parents were interested in the content of the survey and were willing to work with it in spite of its shortcomings.

The Communications Department at RHS reviewed the survey and offered stylistic suggestions before it went to press. It was then mailed with report cards at the end of the third quarter. The last responses were returned by the end of June. A follow-up letter reminding parents of the need to return the survey would have helped to improve the response rate but the need for such a letter did not become apparent until it was too late in June to write it.

5.2.2 RHS parent survey construction

The survey was divided into three parts. Part A provided data which established demographic categories for the parent's age, citizenship, occupation, salary, educational background, number of children, reasons for enrolling the child in the school, perception of the child's willingness to attend the school, expectations of the child's academic achievement, as well as the grade level of the child and his or her
residential status at the school. Each question sought to explore a factor which the school effectiveness literature suggested could have a bearing on value change at RHS.

Parents with children in the elementary programme were also included in this study, partly to satisfy the interest of other administrators and partly to provide a contrast to the perceptions of parents with older children in the school. Consequently, some of the items reflected the perspectives of parents whose interests and experience lay with pre-adolescent children. If the survey had been sent only to parents with adolescent children, these items would have been easier to interpret but at the cost of an interesting point of comparison.

Part B reflected issues unique to the residential programme. Items which probed behavioural expectations and the values which were associated with them are included in the discussion which follows. For example, parents were asked if they felt their child should be permitted to wear clothes which reflected an anti-Christian message or whether boys should be permitted to wear earrings. Responses to questions like these provided an insight into the link between the behavioural and cognitive holding of a value.

Part C was comprised of four sections. Sections one and two listed 33 statements dealing with values at RHS. They were written with the VCES model in mind. Section 3 listed 32 "terminal" and "instrumental" values. Parents were asked to indicate how important the values were to them and how effective the school was at teaching them. The fourth section in Part C asked parents to rank in importance the school agents which appeared to have positively (list one) and negatively (list two) influenced their child's values while they were enrolled at RHS. The agents were suggested by the literature on effective schools. Finally, provision was made for parents to submit written comments if they wished.

Table 5.3 summarises the theoretic connection between the items in the survey and the propositions which emerged in the review of the literature on value change. Table 5.4 summarises the theoretic connection between the items in the survey and the
model of effective schools which emerged in the review of the effective school's literature.

Table 5.3: “Item Linkage to the Value Change

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All humans value</td>
<td>Part A</td>
</tr>
<tr>
<td>2. Values change</td>
<td>A3, C1.10, C2.3, 4, 7,8</td>
</tr>
<tr>
<td>3. The more central a value is in one's belief system, the greater will be the repercussion of a change in the value</td>
<td></td>
</tr>
<tr>
<td>4. The closer a competing value is to the one held by the individual, the more likely it is that he/she will internalise the new value</td>
<td>C1.1, C2.1,2,5, C3</td>
</tr>
<tr>
<td>5. When one value changes, it has a derivative effect on one's belief system</td>
<td></td>
</tr>
<tr>
<td>6. Values must be potentially meaningful if they are to be internalised</td>
<td>C1.1,5,6,8, C2.5, C3</td>
</tr>
<tr>
<td>7. Individual personality acts as a filter of values</td>
<td>Part A</td>
</tr>
<tr>
<td>8. Value change is not equivalent to moral ‘development’</td>
<td></td>
</tr>
<tr>
<td>9. Values are held interactively across the domains of personality (i.e., cognitively, affectively, conatively, and behaviourally) in unique and idiosyncratic ways</td>
<td>B18, B19, B21, C1.11, C2.3,6</td>
</tr>
<tr>
<td>10. The interactive process of value change follows a pattern of trait consistency</td>
<td>B18+19+21 with C, C1.12,13,16,22,23</td>
</tr>
<tr>
<td>11. Values are learned in social environments</td>
<td></td>
</tr>
<tr>
<td>12. Schools, as a social environment, influence value formation</td>
<td>C1.3,25, C2.7,8</td>
</tr>
<tr>
<td>13. Elements in a school's environment influence value formation in unique and disparate ways</td>
<td>A13, C4 all</td>
</tr>
<tr>
<td>14. Some school environments are more conducive to value change than others</td>
<td>C1.2,3,9,10, C1.17, C1.19,21,24, C2.3, C3 all</td>
</tr>
<tr>
<td>15. Some schools are more effective in creating a social environment climate for value change than are others</td>
<td>C1.15, C2.7,8</td>
</tr>
<tr>
<td>16. The interactive model of school climate conceptualises the complex dynamic process associated with value change in a school setting</td>
<td>A10, C1.4,7,13,15, C1.18,20, C2.4, C4</td>
</tr>
</tbody>
</table>

Table 5.4: “Item Linkage to the Effective Schools Model”

<table>
<thead>
<tr>
<th>Determinant: input and process</th>
<th>Outcome (goal attainment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>atmospheric climate culture</td>
<td>C1.4, C1.10, 25, C2.3,4,6-8, C3 School</td>
</tr>
<tr>
<td>milieu</td>
<td>C1.7</td>
</tr>
<tr>
<td>organisational climate ecology</td>
<td>B18-21, C1.5,6,11, 15,19,20-24, C4</td>
</tr>
<tr>
<td>social system</td>
<td></td>
</tr>
<tr>
<td>Part A, C2.5</td>
<td></td>
</tr>
</tbody>
</table>
5.2.3 RHS parent data analysis

As in the case of the AHS parent survey, Part A produced a mixture of nominal, ordinal, and interval data. Part B and C produced ordinal data. When the items were grouped together to form indices they were treated as interval level data. Following a frequency study of all the items, the nominal data was analysed with crosstab tables and appropriate statistics. Tables with an excessive number of cells with five or fewer cases were collapsed whenever possible.

Correlational analyses were used to establish the existence and nature of relationships with all ordinal and interval level data. Significant differences between items were investigated using the Kruskal-Wallis (K-W) $H$ and the Mann-Whitney $U$.

The Pearson product-moment correlation was used with interval level data and the Spearman rank correlation coefficient was used with data which did not satisfy the normality criterion. In cases where the data was at two levels, the test which was appropriate for the lower order of data was used.

The reliability of the survey was satisfactory.

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9 That is, citizenship, occupation, reason child was sent to RHS, willingness of child to attend, importance of various factors when considering enrolment, and residential status.

10 That is, age, income, years of education, child's grade level.

11 That is, number of children, years in school.

12 Among those re-coded were citizenship 1=1,2=2,3,4,5,6,8,10, and 11=3 other (Europe); missionary occupation 1=1, 2=2, and 3,5,6,7,8,9,10,11=3 (other, more than one), 99=12 (non-missionary); non missionary occupation 1,2,3,4,5,6,10,12=1 (non missionary), 99=2 (missionary); salary 1=1,2=2,3=3,4,5=4 ($50,000+); education 3=9 (missing, other), 4=4 (1-4 post secondary), 5=5, 6=6; number of children 1=1, 2=2, 3=3, 4,5=4 (four or more); first child's enrolment 1=1,2=2, 3=3, 4,5,6=4 (four to six years), 7,8=7 (more than six). The complete list is not provided here because of its length. Items were also re-coded to create uniform direction.

13 The K-W is similar to the Mann-Whitney $U$. They are considered to be more powerful than the median test which simply takes into account the number of scores above the median. The $H$ statistic, in contrast, combines and ranks all the cases, including ties which are assigned average ranks. The ranks of each group are them summed and the Kruskal-Wallis $H$ statistic is computed from the sums. It is considered to have approximately a chi-square distribution under the hypothesis that the various groups have the same distribution. Norusis 1988, p.129.

14 Question 10 Part A: number of items 11, cases 63, alpha .6349; question 11 Part B evaluating films: number of items 7, cases 63, alpha .8488; Part C Section 1 questions 1-26, number of items 26, cases 110, alpha .8620.
CHAPTER SIX: Parent Survey Results

6.1 Parent profiles

Chapter 6 begins with a frequency study which provides a profile of the parents and demonstrates the representativeness of the respondents. It then proceeds to an extensive correlational study of the items in the parent surveys using crosstab tables and non-parametric and parametric statistical tests. A brief explanation of the principal components analyses provides validation for the indices which are included in the VCES model.

The VCES model is used throughout as a framework for summarising the findings of the surveys. Relationships in organisational climate, including milieu, ecology, and social system are explored first. Relationships in atmospheric climate/culture follow, while those related to goal attainment-outcome are examined last.

6.1.1 AHS parent profile Part A, Items 1-10

Virtually all the respondents at AHS (76%) were 40-49 years old with a few more mothers responding than fathers (54% mothers, 46% fathers). Only a handful of the respondents indicated they were divorced (3%) or separated (1%) so gender bias was minimal.

Western Europeans (46%) and Anglo Americans (28%) comprised about three-fourths of the respondents. The Japanese with 10%, the Israelis with 6%, and the Eastern Europeans with 4% were the other countries or regions with significant representation in the survey. The occupation of the principal wage earner was either professional (42%) or business related (58%). No parents were involved in manual labour and over 75% had incomes in excess of US $100,000. Most families were not two income families.
Eighty percent of the parents had only one child enrolled in the school, but 19% had two and one parent had three. Over one third of the respondents (39%) were parents of children who were in their first year at AHS. Another 23% had their child or children enrolled for a total of two years while 39% had a child or children enrolled for 3 or more years. Thus, the respondents represented a cross section of parents with short and long term relationships with the school.

These descriptive statistics were in line with the population as a whole and they substantiated the representativeness of the respondent group. The school’s Self Study completed a year earlier revealed that 2.2 years was the average stay for a student at AHS and that 38.6% of those enrolled in 1991 were in their first year. The short period of enrolment was to be expected given the mobility of the parents: 21% had lived in the host country for one year or less and another 40% had lived in the country for only two to four years. However, the one year or less group was evenly balanced in the sample by those who had lived in the host country for nine or more years (21%).

The parents who responded had students distributed quite evenly across the grade levels from a low of 10% for a given year in school to a high of about 15%. This, too, paralleled the enrolment statistics available in the Self Study which showed a spread of 5% from the class with the lowest enrolment to the class with the highest.

In summary, the demographic descriptors indicated that the sample was representative of the parents at AHS. They also provided a profile of the AHS “parent” as a highly mobile, young to middle age adult with a high income derived from a white collar job and possessed with a “western” but international outlook.

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1 Self Study, Section A, p. 37.
6.1.2 RHS parent profile (Part A)

Like the parents at AHS, the majority of the parents at RHS fell into the 40-49 year old category (56%). At RHS, however, more parents fell into the younger (25%) or older age category (19%). The citizenship status of AHS parents was international and divisible into three geographic regions of the world whereas the parents at RHS were predominantly North American (77%). Only one in six was a European (15%). The rest were either dual citizens or citizens from other parts of the world. These figures conform to a well-established enrolment pattern at RHS and confirm the representativeness of the respondents from the perspective of citizenship.

Although item A3 was poorly constructed, it revealed that most of the RHS respondents were individuals who had lived in Europe for more than five years: while they were North American by citizenship, most had lived abroad for a considerable period of time. This was seen to be important because of the possibility that long term exposure to another culture could result in value transformation (propositions 2-5).

RHS had a policy which permitted 20% of its students to be non-missionary. This ratio had been adhered to for over two decades. In the case of the respondents, 80% were missionaries, 20% were non-missionaries. This precise paralleling of the school's enrolment argues strongly for the "occupational" representativeness of the survey sample.

Unlike AHS, RHS parents were clearly “middle class” as defined by salary. Ninety percent of the AHS parents had incomes exceeding US $70,000 compared to 5% at RHS. Fifteen percent of the RHS respondents reported incomes below US $20,000, 43% reported incomes between $20,000 and $30,000, and 32% reported incomes between $30,000 and $49,000.

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2 Seventy-six percent at AHS.
Lower middle income levels were not indicative of a low level of educational attainment at RHS. Slightly over one-third of the respondents reported more than 6 years of post secondary education. Another 29% indicated they had 5 or 6 years of post secondary education and an additional third indicated they had 1 to 4 years of post secondary training. Only 4% of the parents indicated they had received no education beyond the secondary level. In short, the respondents were a well-educated, modestly paid group of parents. The income and educational figures confirmed what was generally known about the parents of RHS children.

RHS parents tended to have relatively large families. Twenty-five percent reported families with four or more children. The typical family had two (34%) or three (34%) children. Parent mobility was similar to that found at AHS. Thirty-eight percent of the RHS respondents had enrolled their child in the school for one year or less, a figure which was identical to AHS and which reflected a striking similarity between the two schools.

Because this study focused on value change in adolescents, and some non-adolescent children were represented by the RHS parent respondent group, it was important to know how many of the “first child” statistics were based on children who were actually adolescents. Summarising the data from item A8b, it is apparent that 20% of the respondent parents had children in the elementary programme, 17% had children in the middle school (grades 7,8) programme, and 63% had children in the high school programme. Therefore, a minimum of 80% of the "first child" statistics, which formed the basis for much of the analysis in this study were for children in the
adolescent age group. The response profile on this item provides further evidence for the representativeness of the sample.

Fifty-seven percent of the respondent parents said their children were in residence at RHS (A13). In 1990-91 52% of the RHS student body was in residence, while the rest were in homes with their parents. This means that the respondent parents were representative of the parent population in the areas of occupation, citizenship, income, grade levels of their children, and domiciliary arrangements. However, because the target group was the parents of adolescent children, the items were mildly biased towards the perspective of parents with younger children.

In summary, the RHS parents were similar to the AHS parents in that they were highly mobile and young to middle age. Unlike the parents at AHS, however, they tended to be middle class, to be less homogeneous in terms of their age and income, and more homogeneous in terms of their occupation and citizenship.

6.2 The VCES Model

As was stated earlier, appropriate tests were used with nominal, ordinal, and interval level data to determine statistical significance and the strength of the relationship in the VCES model. A frequency distribution was obtained for each of

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3 Actually the figure is undoubtedly higher than 80% because first child statistics would have included graduates of RHS. In item A8b, 22% of the parents indicated that the "first child" was not applicable. For an unknown number, the first child had already left RHS and was attending college elsewhere. Item A9 indicated that only 5% (4, N=75) of the parents said that the reason for sending their first child to RHS was "not applicable." This suggests that a significant majority of the 22% who listed the grade level of the first child as "not applicable," did so because their first child was no longer at RHS, but had been at one time. Therefore, 80% in the adolescent category represents a conservative estimate of the number of children in the "first child" statistics.

4 Bryman and Cramer (1990) suggest there are times when ordinal data can be treated as interval. "When a variable allows only a small number of ordered categories...each of which comprises only either four or five categories, it would be unreasonable in most analysts' eyes to treat them as interval variables. When the number of categories is considerably greater...each of which can assume sixteen categories from 5 to 20, the case for treating them as interval variables is more compelling...[I]n this book it is proposed to reflect much of current practice and to treat multiple-item measures...as though they were interval scales." (pp 65,66)
the items in the surveys and extensive correlation analysis was undertaken when the
data warranted it. Highlights of the findings are reported below.  

A number of indices were created and treated as interval level data. Thirteen
principal components analyses were performed on various aspects of the RHS data and
two were done on the AHS data. These analyses were used to establish the validity of
indices which emerged from the theory undergirding the VCES model. Furthermore,
they provided an opportunity to explore conceptual linkage among the various items in
the survey.

Each of the principal components analyses followed standard procedure
(Norusis 1988; Bryman and Cramer 1990). A correlation matrix was established and,
in all cases, there were significant correlations between the items which justified
proceeding with a principal components analysis. Communality and eigenvalues were
examined and the factors rotated to maximise their loading. Both common rotation
methods - the orthogonal and oblique - were calculated using SPSSx. The meaning of
the factors was determined by the items which loaded most highly on them. While
convention accepts loadings as low as .3, .5 was the normal exclusion point in these
studies. The pattern matrix produced by the oblique rotation was used to interpret the
factors. Table 6.1 provides a summary of the RHS indices which emerged from the
principal components analyses and Table 6.2 lists the indices which were created on
the basis of theory alone. The two AHS indices are discussed below in conjunction
with points which are pertinent to them.

5 Cross-tabulation analysis together with the chi-square test of significance and the Cramer $V$
measurement of a relationship's strength was used with items involving nominal level data. Where
necessary and whenever possible the items were collapsed to reduce the likelihood of multiple cells
with frequencies below 5.
<table>
<thead>
<tr>
<th>RHS survey location</th>
<th>interpretation of index</th>
<th>factor</th>
<th>item loading on the factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VCES location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A10</td>
<td>RHS overt school purpose organisational climate-milieu</td>
<td>factor 1</td>
<td>importance of social setting .73148</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>importance of philosophy .72450</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>importance of spiritual .69616</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>importance of extracurric. activities .66067</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>importance of curriculum .61687</td>
</tr>
<tr>
<td>A10</td>
<td>cultural coping skills organisational climate-milieu</td>
<td>factor 2</td>
<td>importance of North America .90094</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>importance of English .86011</td>
</tr>
<tr>
<td>A10</td>
<td>pragmatic considerations organisational climate-milieu</td>
<td>factor 3</td>
<td>importance of location .86106</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>importance of finances .40891</td>
</tr>
<tr>
<td>Part C section 1</td>
<td>monitoring progress social system</td>
<td>factor 7</td>
<td>monitors academic development -.86189</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>monitors moral development -.40752</td>
</tr>
<tr>
<td>Part C section 1</td>
<td>high expectations atmospheric climate</td>
<td>factor 2</td>
<td>high academic expectations .77793</td>
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<td></td>
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<td>high non-academic expectations .78542</td>
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<tr>
<td>Part C section 1s</td>
<td>school processes 1 essentially atmospheric climate</td>
<td>factor 1</td>
<td>academic skills emphasised .77605</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>staff motivated, committed .77135</td>
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<td></td>
<td></td>
<td></td>
<td>values are taught .64478</td>
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<tr>
<td></td>
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<td>curriculum impacts values .57364</td>
</tr>
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<td></td>
<td></td>
<td>RHS consistently adheres to its values .44931</td>
</tr>
<tr>
<td>Part C section 1s</td>
<td>school processes 2 essentially atmospheric climate</td>
<td>factor 2</td>
<td>enough time on values -.82498</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>monitors academic development -.53289</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>monitors moral development -.49224</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>strong leadership in the school -.32826</td>
</tr>
<tr>
<td>Part C section 2s</td>
<td>school outcome outcome/goal attainment</td>
<td>factor 1</td>
<td>positive values learned .74078</td>
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<tr>
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<td></td>
<td></td>
<td>student did well academically .60180</td>
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<td></td>
<td></td>
<td></td>
<td>positive value change attributable to RHS .86138</td>
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<td></td>
<td></td>
<td>behaviour has changed due to RHS .74206</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>negative values were not learned .49129</td>
</tr>
<tr>
<td>Part C section 3a</td>
<td>other world values atmospheric climates</td>
<td>factor 2</td>
<td>salvation .92073</td>
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<td></td>
<td></td>
<td>love of God .91859 wisdom .66050</td>
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<tr>
<td>Part C section 3a</td>
<td>this world values atmospheric climate</td>
<td>factor 3</td>
<td>recognition .84564 beauty .77949</td>
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<tr>
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<td></td>
<td></td>
<td>health .57155</td>
</tr>
<tr>
<td>Part C section 3b</td>
<td>others oriented values atmospheric climate</td>
<td>factor 1</td>
<td>loving, responsible, self-controlled, obedient, co-operative, helpful .64000 - .89600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>capability .89198, intelligence .83267</td>
</tr>
</tbody>
</table>

Strictly speaking indices such as "school processes 1," created by the combining of items which were justified in theory and confirmed by principal components analysis, are ordinal in nature. Nevertheless, most researchers accept such variables as equivalent to interval level data.
Table 6.2 Indices created by theory

<table>
<thead>
<tr>
<th>survey location</th>
<th>interpretation of index</th>
<th>survey items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VCES location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Part C</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>section 1</strong></td>
<td>staff models values-</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>atmosphere and social system</em></td>
<td>staff supports school's values C1.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>actions are consistent with beliefs C1.11</td>
</tr>
<tr>
<td><strong>Part C</strong></td>
<td>school is consistent</td>
<td></td>
</tr>
<tr>
<td><strong>section 1</strong></td>
<td><em>atmospheric climate</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>value system does not change yearly C1.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>school consistently adheres to its values C1.9</td>
</tr>
<tr>
<td><strong>Part B</strong></td>
<td>behaviour reflects inner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>values-<em>social system</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hair should be worn as student wishes C1.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>boys can wear earrings C1.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hair style indicates spirituality C1.21</td>
</tr>
<tr>
<td><strong>Part C</strong></td>
<td>effective communication</td>
<td></td>
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<tr>
<td><strong>sections 1,2</strong></td>
<td><em>atmosphere and social system</em></td>
<td>clear public statements about values C1.6</td>
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<tr>
<td></td>
<td></td>
<td>parent understood all the school's values C2.1</td>
</tr>
<tr>
<td><strong>Part C</strong></td>
<td>school monitors development</td>
<td></td>
</tr>
<tr>
<td><strong>section 1</strong></td>
<td><em>atmospheric climate</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>regularly monitors academic development C1.22</td>
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<tr>
<td></td>
<td></td>
<td>regularly monitors moral development C1.23</td>
</tr>
<tr>
<td><strong>Part C</strong></td>
<td>RHS school impact</td>
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</tr>
<tr>
<td><strong>section 2</strong></td>
<td><em>outcome/goal attainment</em></td>
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<tr>
<td></td>
<td></td>
<td>changes due to RHS were positive C2.4</td>
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<tr>
<td></td>
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<td>marked behaviour change due to RHS C2.3</td>
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<tr>
<td><strong>Part C</strong></td>
<td>understand and support</td>
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</tr>
<tr>
<td><strong>section 2</strong></td>
<td>school's values-<em>atmospheric climate</em></td>
<td>parents understand RHS' values C2.1</td>
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<tr>
<td></td>
<td></td>
<td>parents endorse all values taught C2.2</td>
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</tbody>
</table>

A comprehensive Pearson $r$ correlation study was done with these indices as well as with the two interval level input items "age" and "salary." The Spearman rho was also randomly used as a reliability check to counter arguments which could arise about the nature of the data. Only two disagreements on significance emerged between rho and $r$. Consequently, the correlation picture was clear whether the data was held to be ordinal or interval. The indices and their correlation coefficients are listed in Tables 6.3,4,5 and categorised as "input," "process," and "outcome."

While the correlation coefficient provided a useful tool for analysing the strength of a relationship, it was unable to make a prediction on the likely value of a dependent variable. Regression is the most widely used technique for obtaining information on the character of a relationship. A regression of fourteen relationships based on the indices which emerged from the principal components analyses permitted several simple predictions to be made about the situation at RHS. A scattergram revealed that seven of the relationships were both significant and demonstrated a homoscedastic dispersion. The results are included in the discussion which follows.
Table 6.3: "Input indices correlation (Pearson r) in the RHS Parent Survey."

<table>
<thead>
<tr>
<th>INPUT INDICES</th>
<th>$r$ * $p&lt;.05$; ** $p&lt;.01$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. others oriented values with... (N=122)</td>
<td></td>
</tr>
<tr>
<td>1.1 self help values</td>
<td>.2385*</td>
</tr>
<tr>
<td>1.2 school is consistent</td>
<td>-.2628*</td>
</tr>
<tr>
<td>1.3 other world values</td>
<td>.5949**</td>
</tr>
<tr>
<td>1.4 understand and support school's values</td>
<td>-.2182*</td>
</tr>
<tr>
<td>2. other world values with... (N=123)</td>
<td></td>
</tr>
<tr>
<td>2.1 others oriented values</td>
<td>.5949**</td>
</tr>
<tr>
<td>2.3 self help values</td>
<td>.3958**</td>
</tr>
<tr>
<td>3. behaviour reflects inner values with... (N=59)</td>
<td></td>
</tr>
<tr>
<td>3.1 school processes 2</td>
<td>.4018*</td>
</tr>
<tr>
<td>3.2 pragmatic considerations</td>
<td>-.5080**</td>
</tr>
<tr>
<td>3.3 school is consistent</td>
<td>-.4979*</td>
</tr>
<tr>
<td>3.4 staff models values</td>
<td>.4152**</td>
</tr>
<tr>
<td>3.5 school processes 1</td>
<td>-.3427(rho)</td>
</tr>
<tr>
<td>4. RHS overt purpose with... (N=65)</td>
<td></td>
</tr>
<tr>
<td>4.1 outcome</td>
<td>-.4067*</td>
</tr>
<tr>
<td>4.2 school processes 2</td>
<td>-.6057**</td>
</tr>
<tr>
<td>4.3 staff models values</td>
<td>-.4268**</td>
</tr>
<tr>
<td>5. self help values with... (N=73)</td>
<td></td>
</tr>
<tr>
<td>5.1 others oriented values</td>
<td>.2385*</td>
</tr>
<tr>
<td>5.2 other world values</td>
<td>.3958**</td>
</tr>
<tr>
<td>6. salary with... (N=119) mean=2.3529; sd=.8496</td>
<td></td>
</tr>
<tr>
<td>6.1 staff models values</td>
<td>-.3254**</td>
</tr>
<tr>
<td>7. age with... (N=79) mean=2.9367; sd=6668</td>
<td></td>
</tr>
<tr>
<td>7.1 outcome</td>
<td>.3310*</td>
</tr>
<tr>
<td>7.2 school is consistent</td>
<td>-.4146*</td>
</tr>
<tr>
<td>7.3 understand and support school's values</td>
<td>-.2914*</td>
</tr>
<tr>
<td>8 effective communication with... (N=116)</td>
<td></td>
</tr>
<tr>
<td>8.1 outcome</td>
<td>.3910**</td>
</tr>
<tr>
<td>8.2 school processes 1</td>
<td>.2789*</td>
</tr>
<tr>
<td>8.3 school processes 2</td>
<td>.5652**</td>
</tr>
<tr>
<td>8.4 RHS overt school purpose</td>
<td>-.3962**</td>
</tr>
<tr>
<td>8.5 school is consistent</td>
<td>.3180**</td>
</tr>
<tr>
<td>8.6 staff models values</td>
<td>.3491**</td>
</tr>
<tr>
<td>8.7 RHS school impact</td>
<td>.2418*</td>
</tr>
<tr>
<td>8.8 understand and support school's values</td>
<td>.7553**</td>
</tr>
<tr>
<td>8.9 school monitors development</td>
<td>.3606**</td>
</tr>
<tr>
<td>9. understand and support school's values (N=109)</td>
<td></td>
</tr>
<tr>
<td>9.1 outcome</td>
<td>.4994**</td>
</tr>
<tr>
<td>9.2 school processes 1</td>
<td>.4052**</td>
</tr>
<tr>
<td>9.3 school processes 2</td>
<td>.6210**</td>
</tr>
<tr>
<td>9.4 RHS overt school purpose</td>
<td>-.4325**</td>
</tr>
<tr>
<td>9.5 others oriented values</td>
<td>-.2182*</td>
</tr>
<tr>
<td>9.6 school is consistent</td>
<td>.4467**</td>
</tr>
<tr>
<td>9.7 staff models values</td>
<td>.5047**</td>
</tr>
<tr>
<td>9.8 RHS school impact</td>
<td>.3290**</td>
</tr>
<tr>
<td>9.9 school monitors development</td>
<td>.2813**</td>
</tr>
<tr>
<td>9.10 age</td>
<td>-.2914*</td>
</tr>
</tbody>
</table>
Table 6.4: "Process indices correlation (Pearson \( r \)) in the RHS Parent Survey."

<table>
<thead>
<tr>
<th>PROCESS INDICES</th>
<th>( r ) * ( p&lt;.05; ** p&lt;.01 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 school processes 1 with... (N=61)</td>
<td></td>
</tr>
<tr>
<td>1.1 outcome</td>
<td>.4413**</td>
</tr>
<tr>
<td>1.2 school processes 2</td>
<td>.5339**</td>
</tr>
<tr>
<td>1.3 school is consistent</td>
<td>.6506**</td>
</tr>
<tr>
<td>1.4 staff models values</td>
<td>.4864**</td>
</tr>
<tr>
<td>1.5 understand and support school's values</td>
<td>.4052**</td>
</tr>
<tr>
<td>1.6 school monitors development</td>
<td>.2816*</td>
</tr>
<tr>
<td>1.7 behaviour reflects inner values</td>
<td>-.3427(rho)</td>
</tr>
<tr>
<td>2. school processes 2 with... (N=60)</td>
<td></td>
</tr>
<tr>
<td>2.1 outcome</td>
<td>.6506**</td>
</tr>
<tr>
<td>2.2 school processes 1</td>
<td>.5339**</td>
</tr>
<tr>
<td>2.3 behaviour reflects inner values</td>
<td>.4018*</td>
</tr>
<tr>
<td>2.4 RHS overt school purpose</td>
<td>-.6057**</td>
</tr>
<tr>
<td>2.5 school is consistent</td>
<td>.4344*</td>
</tr>
<tr>
<td>2.6 staff models values</td>
<td>.5600**</td>
</tr>
<tr>
<td>2.8 RHS school impact</td>
<td>.4348**</td>
</tr>
<tr>
<td>2.9 understand and support school's values</td>
<td>.6210**</td>
</tr>
<tr>
<td>2.10 school monitors development</td>
<td>.8689**</td>
</tr>
<tr>
<td>3. school is consistent with... (N=74)</td>
<td></td>
</tr>
<tr>
<td>3.1 school processes 1</td>
<td>.6506**</td>
</tr>
<tr>
<td>3.2 school processes 2</td>
<td>.4344*</td>
</tr>
<tr>
<td>3.3 behaviour reflects inner values</td>
<td>-.4979*</td>
</tr>
<tr>
<td>3.4 others oriented values</td>
<td>-.2628*</td>
</tr>
<tr>
<td>3.5 understand and support school's values</td>
<td>.4467**</td>
</tr>
<tr>
<td>3.6 age</td>
<td>-.4146*</td>
</tr>
<tr>
<td>4. school monitors development with... (N=106)</td>
<td></td>
</tr>
<tr>
<td>4.1 outcome</td>
<td>.4011**</td>
</tr>
<tr>
<td>4.2 school processes 1</td>
<td>.2816*</td>
</tr>
<tr>
<td>4.3 school processes 2</td>
<td>.8689**</td>
</tr>
<tr>
<td>4.4 staff models values</td>
<td>.2501*</td>
</tr>
<tr>
<td>4.5 RHS school impact</td>
<td>.2832**</td>
</tr>
<tr>
<td>4.6 understand and support school's values</td>
<td>.2813**</td>
</tr>
<tr>
<td>5 staff models values with... (N=113)</td>
<td></td>
</tr>
<tr>
<td>5.1 outcome</td>
<td>.4462**</td>
</tr>
<tr>
<td>5.2 school processes 1</td>
<td>.4864**</td>
</tr>
<tr>
<td>5.3 school processes 2</td>
<td>.5600**</td>
</tr>
<tr>
<td>5.4 behaviour reflects inner values</td>
<td>.4152**</td>
</tr>
<tr>
<td>5.5 RHS overt school purpose</td>
<td>-.4268**</td>
</tr>
<tr>
<td>5.6 RHS school impact</td>
<td>.3469**</td>
</tr>
<tr>
<td>5.7 understand and support school's values</td>
<td>.5047**</td>
</tr>
<tr>
<td>5.8 school monitors development</td>
<td>.2501*</td>
</tr>
<tr>
<td>5.9 salary</td>
<td>-.3254**</td>
</tr>
</tbody>
</table>

Table 6.5: "Outcome indices correlation (Pearson \( r \)) in the RHS Parent Survey."

<table>
<thead>
<tr>
<th>OUTCOME INDICES</th>
<th>( r ) * ( p&lt;.05; ** p&lt;.01 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. outcome with... (N=77)</td>
<td></td>
</tr>
<tr>
<td>1.1 school processes 1</td>
<td>.4413**</td>
</tr>
<tr>
<td>1.2 school processes 2</td>
<td>.6506**</td>
</tr>
<tr>
<td>1.3 RHS overt school purpose</td>
<td>-.4067*</td>
</tr>
<tr>
<td>1.4 staff models values</td>
<td>.4462**</td>
</tr>
<tr>
<td>1.5 RHS school impact</td>
<td>.7730**</td>
</tr>
<tr>
<td>1.6 understand and support school's values</td>
<td>.4994**</td>
</tr>
<tr>
<td>1.7 school monitors development</td>
<td>.4011**</td>
</tr>
<tr>
<td>1.8 age</td>
<td>.3310*</td>
</tr>
<tr>
<td>2. RHS school impact with... (N=83)</td>
<td></td>
</tr>
<tr>
<td>2.1 outcome</td>
<td>.7330**</td>
</tr>
<tr>
<td>2.2 school processes 2</td>
<td>.4348**</td>
</tr>
<tr>
<td>2.3 staff models values</td>
<td>.3465**</td>
</tr>
<tr>
<td>2.4 understand and support school's values</td>
<td>.3290**</td>
</tr>
<tr>
<td>2.5 school monitors development</td>
<td>.2832*</td>
</tr>
</tbody>
</table>
6.2.1 Organisational climate - input and process determinants

Principle findings relevant to organisational climate are summarised under the headings “milieu,” “ecology,” and “social system,” which are the three distinct categories of organisational climate.

6.2.1.1 Organisational climate: milieu

The demographic descriptors in Part A of both surveys provided a summary of most of the milieu inputs although several noteworthy input items appeared later in the surveys. Items in the milieu category also appear below in association with other items in the VCES model because, as a general rule, they were analysed in light of school processes and outcomes.

1 Children’s attitudes towards enrolment

A complete Spearman rho analysis of all the items in the AHS Survey, Part B, pointed out that “the child’s willingness to attend AHS” was a particularly “inactive” item with only 4 significant correlations. By way of contrast, the process item “my child enjoys AHS” was significantly related (p<.05) to 24 of a possible 33 items and was the most frequent correlate in the section.

Parents paid more attention to the willingness of older children to attend RHS than they did to younger children. Sixty-nine percent of parents with 15-18 year olds said their child’s willingness to attend was very important compared to 11% with children 6-12 year olds.7

Parents at AHS were confident their children wanted to attend AHS. At RHS the willingness of the child to attend the school was implied rather than directly stated. The evidence suggests that RHS parents probably took the child's willingness into

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6 Milieu: defined as individual background characteristics; primarily input in nature.

7 Cramer's $\chi^2 = 25.74430$, 9 DF, N=72.
account before he or she was enrolled. Only nine percent of the parents indicated the willingness of the child to attend RHS was "unimportant" or "very unimportant" to them, while 23% indicated it was "important" and 52% said it was "very important."  

.2 Income

Some statistically significant relationships were anticipated amongst the various input items themselves. For example, at AHS there was a significant relationship between age and income. At RHS, however, there was no significant correlation between age and salary (A5). This may seem illogical but the lack of correlation argues for the validity of the survey instrument because it reflects the way in which salaries were paid in this mission's community. Income levels were not commensurate with the length of employment nor with promotions related to job performance.

At RHS, where income levels (A5) varied considerably, 14 of the 35 items in Part C sections 1,2 were found to be inversely associated with income. Eight of these relationships exceeded rho=-.2000. Higher incomes were associated with an increased assurance that the staff supported the values of the school (rho=-.3620), that RHS provided its students with a safe, comfortable, positive environment (rho=-.2220), that the administration effectively communicated RHS' values (rho=-.2186), that RHS was consistent in its beliefs (rho=-.2077), that values and beliefs were well known (rho=-.2795), that the staff was motivated and committed (rho=-.2519), that

---

8 If the parents at RHS followed through on their intention to enrol the child providing the child wished to attend the school, then 75% of the students would have attended of their own volition. In a more direct statement at AHS, 73% of the parents said their children wanted to attend AHS.

9 If the income item had offered sufficient categories for higher income earners, the correlation would possibly have been higher (rho=.2485, N=60, p=.028). As it is, the result demonstrated the predictive validity of the item.

10 Spearman's rho=-.1026, N=64, p=.420.

11 Typically N=106-114, p<.05. Inversion occurred because Part C sections 1,2 had "strongly agree" as #1 and A5 had $50,000+ as #5.
values were taught at RHS (\(\rho = -0.3644\)), and that RHS did a good job of training its staff (\(\rho = -0.2983\)).

3 Grade level of the child

Parents who had older children in RHS (A8b, grade level) were parents who felt that their child had not learned a lot of "negative" values at RHS (\(\rho = 0.2867, p<0.05\)). A crosstab study confirmed this. While the majority of parents in all grade categories said "yes, their child had learned positive values," parents with their first child in high school were more convinced of it than were parents whose first child was in the middle school. Parents of elementary children were even more sure than parents of high schoolers with 90% "agreeing" (50% "strongly agreeing") that positive values had been learned. Item C2.8 reversed the question and asked parents if their children had learned a lot of "negative" values at RHS. A similar pattern of agreement emerged although in this case the parents of middle schoolers were more strongly agreed than the parents of high schoolers (29% to 12%) that a lot of "negative" values had not been learned.

When RHS parents evaluated the stability of the value system from year to year (Q10) parents of middle school children were more "undecided" (23%) or claimed they had no basis for observation (46%) than did high school parents (16% and 32% respectively). Middle school parents were likewise more undecided (31%) than high school parents (11%) that their child's values closely reflected the school's (C.5). Conversely, parents of high schoolers were more sure that their first child's values closely reflected the school's than were middle school parents (80% to 62%). Parents
with the first child in the elementary programme were most certain that the child's values were reflected (100%).

A moderately strong relationship was found between the grade level in school and the type of movies parents permitted their children to watch in a theatre. Sixty-seven percent of parents did not permit their elementary age children to go to the theatre or if they did to watch anything but "G" rated movies. The "G" rating was only applied to 29% of middle schoolers and 27% of high schoolers. No statistical significance was found between the grade level of the first child in RHS and the reasons for sending the first child to the school as stated in A9, or the importance finances, academics, school philosophy, and social opportunities played in the decision to enrol the child at RHS. However, more than half the parents of secondary students grades 7-12 indicated the location of the school was "very unimportant" to "somewhat important."

.4 Age

The age of the respondent at RHS (A1) was found to be significantly related to only two of the twenty-five key items examined in Part C. The two exceptions were “the system changed yearly" (\(\rho = -0.2761, N=73, p=0.009\)) and “the facilities reflected the school’s values” (\(\rho = 0.2329, N=69, p=0.027\)). “Age” and “the number of years

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12 All correlations here and in the rest of the section were significant at the .05 level with \(N=121-127\) and Cramer’s \(V \leq .2\) to \(V \leq .3\) unless otherwise stated.

13 Cramer’s \(V = 0.51811, p < 0.00110, \chi^2 = 53.95599, 21 \text{ DF}, N=67\); note: most of the cells had less than the recommended frequency of 5. Both these correlations have "face validity."

14 This was an important series of correlates given the "tainting" of the sample by those parents with the first child in the elementary programme. It indicated a solidarity with parents of older children on key issues.

15 Location was more important for parents with elementary children. \(\chi^2 = 21.03099, 12 \text{ DF}, p=0.04993, \text{ Cramer's } V = 0.31646, N=70.\)
lived in the host country” was also significantly related. Because parents were frequently re-assigned to another country by their companies and promoted on the basis of ability or skill rather than seniority (age), the normally strong correlation one would expect to find in a school was suppressed. That is, the weak nature of the correlation was predictable and the response confirmed the item’s validity.

One would expect to find a moderate to strong relationship between the age of the parents and the level of the first child in school. Such was the case. There was also a weak relationship between the age of the parents and the level of post-secondary educational training they had received.

The age of the parents was positively related to the “outcome” index which measured goal attainment. Younger parents were associated with agreement that outcomes had been positive ($r = .3310$, $p < .01$) while older parents were associated both with a belief that the school was consistent (“school is consistent” index $r = -.4146$, $p < .01$) and with a supportive, understanding attitude towards the school’s values (“understand and support school’s values” index $r = -.2914$, $p < .01$).

5 Occupation

Of the two sites studied, RHS provided the greatest contrasts in terms of occupation. A crosstab study revealed that there was no significant difference between “missionaries” and “non-missionaries” in most input items. However, one significant difference associated with occupation was the emphasis the non-missionary placed on

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16 Spearman’s rho = .3421, N=70, p=.002.

17 Spearman’s rho = .4801, N=77, p<.001.

18 Spearman’s rho = .2309, N=72, p=.025.
the social dimension of the school. Another significant difference was predictable. Over half the non-missionaries earned in excess of $50,000 while only 2% of the missionaries did.

Parents classified as "missionaries" comprised a mixed vocational group. Item A4a explored the relationship between the various vocations and other items in the survey. No correlation existed between the vocations and the ten items in A10 which influenced the parents' decision to enrol the child. Similarly, missionary vocations were not significantly associated with the grades expected of children or the parents' education, salary, and age.

Some staff at RHS contended that the behaviour of the students (e.g., Part B) reflected the vocation of the parents. By this they seemed to mean that missionaries and non-missionaries had different behavioural standards for their children. No statistically significant association was found within the mission's community itself on items from Part B. Missionary administrators, church planters, consultants, and teachers all expressed attitudes and espoused standards which were similar. Likewise, there was little association between behavioural expressions of a value (Part B) and the general occupational categories of missionary and non-missionary. The only exception was in the matter of wearing T-shirts emblazoned with "non-Christian" messages. Non-missionary parents were associated with a higher degree of permissiveness than were missionaries.

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19 Thirty-one percent of both occupational groups thought that the social dimension was "unimportant" but 53% of the missionary group thought the social was "important" whereas 46% of the non-missionary group thought it was "very important" (p=.03398).

20 Cramer's $V^{'}.63688$

21 Because of the cell frequency problem the item was collapsed into three categories: church planter, administrator, other.
The occupational categories were more frequently associated with process and outcome items in Part C in the RHS survey. As a group, non-missionaries felt more strongly that values were taught at RHS although they also felt they had less basis for observation. Both groups agreed that RHS had a safe, comfortable, positive environment but non-missionaries felt more strongly that this was so. The non-missionaries also felt more strongly that students received a high quality of instruction at RHS but, as in the case of C1.3, they were inclined to reserve judgement ("undecided"). This pattern repeated itself in C1.18 which asked if RHS devoted enough time to teaching academic skills. While a higher percent of non-missionaries "strongly agreed," a higher percent were also uncertain.23 Finally, non-missionaries (A4) were more associated than missionaries with a strong belief that RHS monitored the students' academic achievement, and that it had a clear concept of its goals and objectives.24

6 Citizenship

A crosstab study at RHS found that citizenship was only significantly related to two principal input items. Specifically, there was a significant difference in the way RHS parents regarded the North American culture and curriculum in the school. Parents from Europe were much less attracted to the North American culture than were North Americans. Item A10 "citizenship" was collapsed into three groups: American, Canadian and European/Other. About half the European/Other group indicated the North American culture was "very unimportant" whereas Americans

22 Non-missionaries: 38% approved, 56% disapproved and did not permit; missionaries: 91% disapproved and did not permit. Cramer's $V = 0.37134$, $\chi^2 = 10.89385$, 2 DF, $p = 0.00431$; N=79.

23 "values are taught at RHS" with "non missionaries" $V = 0.35022$, $p = 0.02676$, $\chi^2 = 9.19891$, 3 DF, N=75; "safe, comfortable environment" with "non missionaries" $V = 0.34013$, $p = 0.03574$, $\chi^2 = 8.56071$, 3 DF, N=74; "high quality of instruction" with "non missionaries" $V = 0.38014$, $p = 0.01264$, $\chi^2 = 10.83783$, 3 DF, N=75; "enough time emphasis on academic skills" with "non missionaries" $V = 0.37161$, $p = 0.03101$, $\chi^2 = 10.63319$, 4 DF, N=77.

24 A4 by C1.22 ("occupation" with "monitors academic progress"): $V = 0.37477$, $p = 0.00137$, $\chi^2 = 32.02330$, 12 DF, N=76.

A4 by C1.21 ("occupation" with "clear goals and objectives") $V = 0.32431$, $p = 0.02047$, $\chi^2 = 23.97970$, 12 DF, N=76.
tended to say it was "important" (46%) and Canadians saw it as neither very important nor very unimportant.  

The RHS curriculum, which was Canadian, was also more important to the North Americans. Seventy-five percent of the Europeans/Other felt the Canadian curriculum was "unimportant" or "somewhat important" but only 25% of Canadians and Americans agreed with this low rating. The RHS European/Other parents were thus expressing a sentiment analogous to that of the AHS European parents (B13). Seventy-one percent of the AHS parents did not send their child to AHS because it was "American" whereas 72% of the North Americans said that was a reason they chose AHS.

While all RHS parents agreed that the quality of instruction was high (C1.16), Americans and Canadians were more sure about this. A significant group of Europeans/Others were "undecided."  

A correlational study was done to discover if "country of long term residence" had associations similar to citizenship. These studies were undertaken based on the theory that values are susceptible to change in social environments. Several items focusing on behaviour were correlated with long term residence in three countries where a considerable number of the RHS parents indicated they had lived five or more years.

No significant association was found between long term residence in these countries and permission to wear a short skirt (B2,18), to attend movies with nudity in them (B2,11.1), to watch a particular rating of a movie (B2,7), to wear anti-Christian emblems on T-shirts, to wear hair as one wished, or to wear earrings as a boy. Nor was there a significant relationship between country of long term residence and the


26 Cramer's $V = .35411$, $p = .00189$, $\chi^2 = 17.05351$, 4 DF, $N = 68$.

27 That is, 31%: $V = .32819$, $p = .01294$, $\chi^2 = 16.15636$, 6 DF, $N = 75$.
view that hair was a sign of spirituality (B2.21), or the importance ascribed to North American cultural and spiritual opportunities afforded by the school.

In contrast to "country of long term residence," citizenship (A2) (Americans, Canadians, Europeans/Others) was significantly correlated with movie ratings parents permitted their child to watch, with nudity and sex in movies, with skirt length, with T-shirt messages, and with hair style issues. In the case of nudity in movies, Europeans saw this as relatively less important than did North Americans. Canadians, too, were less concerned about it than were Americans.

A similar pattern was discernible in evaluating a movie with "sex" in it. A clear majority in each of the three citizenship groups saw sex as a "very important" issue (ranging from 67% to 86%) but the Europeans had the greatest number who scored it a 3 or lower (23% to 8% for the Canadians and 5% for the Americans). Europeans/Others were also the least likely to prohibit the wearing of T-shirts with anti-Christian symbols. Canadians on the other hand were most likely to see hair as reflecting "inner spirituality" and Americans were the least likely.

.7 Domicile

Parents who boarded their children in the RHS' residences were more inclined to see the school as regularly monitoring their child's "moral development" than were parents with children at home (C1.23). Sixty-three percent of the parents with residence children "agreed" (51%) or "strongly agreed" that the school was doing this whereas only 33% of parents with children living with them felt this way and 54% were undecided. Both groups of parents agreed that RHS was consistent in its beliefs, that the facilities reflected RHS' values, and that the staff was motivated and

28 Cramer's V =.32993, p=.02009, $\chi^2$ 15.02180, 6 DF, N=69.

29 Europeans scored 61% to 77% for Canadians and 94% for Americans; Cramer's V =.27215, p=.01971, $\chi^2$ 11.70243, 4 DF; N=79.

30 For Canadians, 67% agreed as compared to 47% for Europeans/others and 33% for Americans. Only 17% of Canadians disagreed compared to 48% of Europeans/others and 51% of Americans. Cramer's V =.36734, p=.01545, $\chi^2$ 18.89153, 8 DF, N=70.

31 Cramer's V =.34079, p=.00719, $\chi^2$ 24.15693, 10 DF, N=104.
committed. However, parents with children in the RHS residence were not as sure that their children entered the school with values like RHS (C2.5).32 Perhaps this was because of their heightened awareness that RHS was monitoring "moral development": being a participant in a 24 hour a day, total care programme may have sensitised them to their differences. The unremitting behavioural monitoring (i.e., the residential rules) may have brought into question cognitively held values as well.

Some residential staff at RHS expressed concern that they held up the "standards" while home parents "let their kids get away with murder." In short, they felt there was a double standard in the school community. This perception was analogous to the supposed dichotomy between the standards of the missionary and non-missionary parent. Given the same array of behavioural expressions of values, (T-shirts, hair standards, earrings, nudity in movies, skirt lengths, and ratings of movies permitted) only one significant association was found to exist on the basis of the child's residence, namely, the length of skirt parents permitted. Interestingly, this was the area often specified by the residence staff as proof that they "held the line."

8 Gender

In an effort to see if RHS mothers were more inclined to be permissive than fathers the same questions were correlated with the gender of the parents. There was no association between gender and movie ratings and movie themes, in hair issues, in earrings for boys, in T-shirts, and in skirt lengths. In fact, in some cases such as T-shirt messages and earrings for boys, there was almost complete agreement in the way the genders viewed the issue.33

This pattern of non-association reflected itself in other input items in the survey. However, there was a weak correlation between gender and the importance placed on spiritual opportunity when enrolling the child.34 Opportunity for spiritual

32 "entered with values like RHS" with "living arrangements" Cramer's $\chi^2$ 12.71668, 6DF, N=102.
33 Cramer's $V$ .03297; p>.9.
34 $\chi^2$ 7.40804, Cramer's $V$ .32531, p=.02462.
growth was more important for mothers with 77% indicating the spiritual dimension was "very important" compared to 46% for the fathers. Gender was also significantly related to the amount of education the parent had.

Mothers and fathers were equally sure that RHS shared their values although fathers were particularly associated with a strong belief that this was true. At the same time fathers were definitely more "undecided" about the school's consistency or felt there was "no basis for observation." They also felt more strongly that there were values taught in the school of which it was unaware.

.9 Parents' education

Another item which often separates parents along socio-economic lines is education. Of the fourteen relationships explored at RHS only three were found to be significant at \( p < .05 \). Higher educational levels were associated with the belief that the school had high expectations, that the values and beliefs were well known, and that enough time was spent on developing academic skills. However, no significant correlation was found between parents' education and the importance ascribed to the social environment, the importance of the North American cultural experience, the grade level of the first child, the number of years the first child had been in attendance, or the salary.

.10 Years child enrolled

Of the non socio-economic input factors studied as part of the milieu organisational climate, the number of years the first child had spent in RHS (A8a), the grade level of the child (A8b), and the reason the parents sent the child to the school (A10) proved to be the most interesting. Longer periods of enrolment for the first

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35 Gender with "RHS shares my values:" Cramer's \( \chi^2 \) \( .24605, p=.04375 8.11228, 3DF, N=134. \)

36 Gender with "RHS is consistent:" \( \chi^2 \) \( .27331, p=.04027 10.00929, 4DF, N=134. \) Gender with "unknown values taught:" \( \chi^2 \) \( .31679, p=.02389 12.94596, 5DF, N=134. \)

37 CI.12: academic rho=-.2727, N=71, p=.011; non-academic=-.2220, N=65, p=.038.

38 As in the relationship between salary and age, salary and training were not related in the mission's community.
child were associated with all the following convictions: that the system did not change yearly,\(^{40}\) that there were high academic expectations,\(^{41}\) that enough time was devoted to teaching academic skills,\(^{42}\) that the first child had done well academically,\(^{43}\) and that the first child had entered with values like RHS.\(^{44}\)

A crosstab study of ten items in Part C revealed that there was a significant association between the number of years the first child had been at RHS and "RHS shares my values," (C1.1) "the staff are motivated and committed" (C1.19), and "RHS has a clear concept of its goals and objectives" (C1.21).\(^{45}\) In the case of C1.9, 10, 20, parents whose first child was in his/her first year at RHS were associated with "no basis for observation" in all three of the items.\(^{46}\) This speaks for the face validity of the questions because one would expect first year parents to feel less qualified to assess staff training, consistency over years, and changing value systems. The responses of parents with longer exposure to the school showed no discernible pattern. It seems that by the end of the second year parents had formed their opinion about these matters.

This did not mean there were no other differences between parents whose first child had been at the school for a year or less and those whose child had been there two or more years. A crosstab study examined C1.8 ("the values and beliefs of RHS are well known to the community"), C1.23 ("RHS regularly monitors its students' moral development"), C2.5 ("my child first attended RHS with a value system which

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\(^{39}\) In these analyses significance was set at \(p<.01\) unless stated otherwise and \(N=119-125\) except in A10 where only "principal respondents" could be included and \(N=65-69\).

\(^{40}\) C1.10: \(\rho=-.4413, N=119, p<.001\). (re-coded)

\(^{41}\) C1.12: \(\rho=-.2476, N=126, p=.003\).

\(^{42}\) C1.18: \(\rho=-.1697, N=116, p=.034\).

\(^{43}\) C2.6: \(\rho=-.3149, p<.001\).

\(^{44}\) C2.5: \(\rho=-.2859, p=.001\).

\(^{45}\) All relationships \(p<.05\); Cramer \(V\) of .2 to .3.

\(^{46}\) From 49% to 63%; \(N=119-125\); Cramer \(V\) .2 to .3 except Q10 .38125.
closely reflected the schools"), and C2.6 ("academically my child has done well at RHS"), and in each instance there was a weak but significant relationship between the length of time at RHS and agreement with these statements.47

A long term relationship with RHS was associated with a parental conviction that the school's values were well known to the entire RHS community (C1.8). Again, this is what one would anticipate if the item was valid. Longer exposure to the school was also associated with an "undecided" feeling about RHS' regular monitoring of moral development (C1.23) although "no observation" was cited in other categories and makes the interpretation difficult. Finally, a long term relationship with RHS was associated with the parents' belief that their child had done well. First year parents were the most unsure of their children's achievement with 32% "undecided" and 9% in disagreement. This compared to 100% of the 6+ year parents who "agreed" or "strongly agreed" that their child had done well academically at the school. First year parent ambivalence about academic achievement was paralleled by an uncertainty concerning the affinity of their child's values and the school's (C2.5). First year parents were the only ones to "disagree" (15%) that their child's values were similar to RHS' at entry, and they were also the most "undecided" (20% to 13% for the next group).

11 Indices

The Spearman non-parametric rank correlation test was used to explore the relationship between a number of items in Part A with the indices described above in Tables 6.1,2. As was already noted there was essential agreement between the rank correlation and the Product Moment Correlation Coefficient. The Spearman rho was preferred in the correlations with Part A because ordinal data was once more clearly involved. Six items from Part A were correlated with the indices and no moderate or strong correlations were found. Indeed educational level (A6), the grade level of the child (A8b), the willingness of the parents to take into account the child's desire to attend RHS (A11), and the grades expected (A12) were all found to be insignificantly

47 In all cases, $r$ was less than .3, N=119-125, p<.05.
related to the key indices "school processes 1," "school processes 2," and "outcome."
The exceptions to this pattern were the number of years the first child had been in the
school (A8a), salary, and age. In the case of years at RHS, longer exposure to RHS
through the length of time the first child had been enrolled was associated with a
stronger positive feeling about "school processes 1."48

6.2.1.2 Organisational climate: ecology 49

Facilities AHS

The majority of parents at AHS felt the school’s facilities were “poor” to “fair.”
Only 5% thought they were “very good” or “excellent.” Items 40 and 41 asked AHS
parents what should be done if the school unexpectedly found additional revenue.
Fifty-nine percent thought the money should be spent on "facilities," 16% thought it
should be spent on the academic programme, and 9% suggested the tuition rate should
be lowered. Given that 57% of the parents believed the facilities were in need of
improvement (B1), this hypothetical allocation of discretionary funds was logical and
argues for the validity of the items. The high esteem parents had for academics (B4,
B12) was also reflected in the suggestion from 16% of the parents that the academic
programme should receive the funding even though the facilities were inadequate.
Item B41 reversed the scenario and asked parents where cuts should be made if funds
unexpectedly decreased by 25%. Only 3% of the parents suggested cuts should be
made in the facility’s budget line and no parent suggested a reduction in funds allocated
to academic programming.

48 Pearson r=-.4219, p<.05. Part A is reversed scored.

49 Ecology: defined as physical variables; input and process in nature.
observation." There was no significant relationship between the feeling parents had that the facilities reflected the school's values (C1,Q7) and the child’s domiciliary arrangements. In other words, parents who sent their child away to the school's 24 hour care programme were no less likely to see the institution's values reflected in the physical facilities than were parents whose children lived at home and daily commuted to the school. A belief that the facilities reflected the school's values was significantly associated with an endorsement of all values learned at RHS.  

6.2.1.3 Organisational Climate: Social System

1 Parents feel positive about AHS

There were many indications that parents at AHS felt positive about the school. Table 6.6 provides a summary of items B1-9 which depict this. Correlations with these items follow below under specific school factors in the social system and elsewhere in the VCES model.

<table>
<thead>
<tr>
<th>Item</th>
<th>School Factor</th>
<th>Excellent/ Very good</th>
<th>Satisfactory</th>
<th>Fair/poor Improve</th>
<th>No Op</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Facility</td>
<td>5.4%</td>
<td>36%</td>
<td>56.7%</td>
<td>1.4%</td>
<td>74</td>
</tr>
<tr>
<td>2</td>
<td>School Board</td>
<td>59.7%</td>
<td>23%</td>
<td>2.8%</td>
<td>13.9%</td>
<td>72</td>
</tr>
<tr>
<td>3</td>
<td>Administration</td>
<td>76.7%</td>
<td>19%</td>
<td>4.1%</td>
<td>0</td>
<td>73</td>
</tr>
<tr>
<td>4</td>
<td>Academic prog</td>
<td>79.8%</td>
<td>15%</td>
<td>5.5%</td>
<td>0</td>
<td>74</td>
</tr>
<tr>
<td>5</td>
<td>Teachers</td>
<td>81.7%</td>
<td>13%</td>
<td>1.4%</td>
<td>2.8%</td>
<td>71</td>
</tr>
<tr>
<td>6</td>
<td>Counselling</td>
<td>41.1%</td>
<td>27%</td>
<td>20.6%</td>
<td>11.0%</td>
<td>73</td>
</tr>
<tr>
<td>7</td>
<td>Extra-curricul</td>
<td>45.8%</td>
<td>36%</td>
<td>15.3%</td>
<td>1.4%</td>
<td>72</td>
</tr>
<tr>
<td>8</td>
<td>Support Staff</td>
<td>70.3%</td>
<td>21%</td>
<td>2.7%</td>
<td>5.4%</td>
<td>74</td>
</tr>
<tr>
<td>9</td>
<td>Overall grade</td>
<td>75.0%</td>
<td>23%</td>
<td>1.4%</td>
<td>0</td>
<td>72</td>
</tr>
</tbody>
</table>

2 AHS Board

High approval for the school board was associated with a high approval rating for other "social system" factors including the administration (rho=.5170, N=62, p<.001) and the academic program (rho=.5599, N=62, p<.001) as well as with the school’s “overall grade” (rho=.6024, N=61, p<.001).

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50 Spearman's rho=.2284, N=119, p=.006.

51 Social system defined as formal/informal rules; process in nature.
.3 Administration

Convergence existed between B3 and B31. If the AHS instrument was valid, one would expect such items which measured similar concepts to be answered in similar ways. Item B3 asked parents to indicate their feelings about the administration of the school on a 6 point scale; item B31 asked parents to indicate the confidence they had in the administration of a 5 point scale. The results confirmed a positive feeling about the school's leadership. Higher scores for the administration were particularly associated with a high "overall grade" for AHS (rho=.5076, N=71, p<.001) and a high score for the academic programme (rho=.5268, N=72, p<.001).

At RHS, parents saw administrators as effective communicators of the school's values. The school was known to "make frequent and clear statements about the institution's values and what it stood for." Not surprisingly, therefore, the parents also felt the values and beliefs of the school were well known in the RHS community (C1.8). Only 2% of the RHS parents felt there was not strong leadership while 80% thought there was; 14% were undecided and 5% claimed "no basis for observation." This was analogous to AHS (B31) where 89% expressed "confidence" in the administration with 5% disagreeing and 5% expressing no opinion.

.4 Behavioural expectations and expressions

The methods AHS used to teach at least outward conformity to its values were not thought of as highly as were other elements in the school's processes. While AHS parents agreed the consequences for misbehaviour were appropriate (B28-72%), 20% of them expressed "no opinion" about the statement and 8% disagreed even though they thought behavioural expectations were high (B24-80%). There was clearly a

52 Seventy-five percent "agreed" or "strongly agreed;" 5% "disagreed."

53 Seventy-three percent "agreed" or "strongly agreed;" only 2% "disagreed."

54 Sixty-seven percent "agreed" or "strongly agreed;" only 3% "disagreed." The rest indicated they had "no basis for observation" (11%) or were "undecided" (19%).
more favourable opinion about the expectations for good behaviour than there was for
the consequences of misbehaviour. A belief that there were high behavioural
expectations was most closely associated with a belief that there was good leadership
at AHS (rho=.5169, N=67, p<.001).

Part B in the RHS survey elucidated parental feelings about the relationship
between cognitively held values and behaviour. In RHS item B11 parents were asked
to rate the importance of nudity, language, violence, sex, subject matter, the occult,
and New Age in their evaluation of a movie. Table 6.7 lists the seven evaluation
criteria, their mean scores, and their standard deviations.

<table>
<thead>
<tr>
<th></th>
<th>occult</th>
<th>sex</th>
<th>nudity</th>
<th>New Age</th>
<th>subject</th>
<th>language</th>
<th>violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.83</td>
<td>4.71</td>
<td>4.47</td>
<td>4.46</td>
<td>4.07</td>
<td>4.06</td>
<td>4.04</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>.62</td>
<td>.66</td>
<td>.88</td>
<td>.83</td>
<td>.97</td>
<td>.92</td>
<td>.88</td>
</tr>
</tbody>
</table>

Parents were most unified and concerned about the occult and sex and less concerned
about a movie's subject matter, language, and violence.

RHS parents were also asked if they permitted their son or daughter to wear T-
shirts with "anti-Christian" messages emblazoned on them. Three percent said "yes,
this was up to the child," 14% said "yes, but I do not always approve," and 84% said
"no." In regards to boys' grooming, parents were given a list of seven statements and
asked to indicate on a scale of 1 to 5 if they "strongly agreed" (1) or "strongly
disagreed" (5) with the statement. Sixty percent of the parents felt hair should not be
worn any way the student wished and another 25% strongly concurred with this. Only
14% "agreed" or "strongly agreed" that boys should have the prerogative to wear their
hair as they wished. It was an issue about which parents were highly opinionated: only
1 of the respondents (N=72) expressed "no opinion."

When these items depicting a behavioural expression of a value were correlated
with other items in the model it became apparent that a pattern existed between
outcomes and behavioural value holding patterns. There was a statistically significant
(p<.05), but rather weak relationship between items C2.5 ("first entered with values
like RHS") and B2.18 ("short skirt lengths permitted:" V.32572), between C2.1 ("I have a clear understanding of the values RHS is teaching my child") and B2.20 ("permit posters emblazoned with anti-Christian slogans:" V.39566), between C2.7 ("first child learned a lot of positive values at RHS") and B2.20 ("permit posters emblazoned with anti-Christian slogans:" V.37929), and between B2.11 ("nudity permitted in movies") and C1.1 ("RHS shares my values:" V.32599), C1.3 ("values are taught at RHS:" V.60534), C1.16 ("RHS offers a high quality of instruction:" V.33025), and C1.22 ("RHS regularly monitors academic development:" V.34547).

No statistically significant correlation (p<.05) existed between the degree to which parents were sensitive to their children's desire to attend RHS (A11) and their feelings about such lifestyle issues as violence, nudity, and sex in movies (B2.11-1,3,4), the acceptance or rejection of rock music, a willingness to let the child wear his hair the way he wished, and the belief in the spiritual nature of hair style. Similarly, parents educational level, age, and their willingness to consider the child's desire to attend RHS were not significantly correlated with lifestyle issues.55

However, there was a weak but significant relationship between the grade level of the first child and the importance ascribed to evaluating a movie on the basis of its sexual content. Higher grade levels were associated with a belief that sexual content was a less critical criterion for evaluating a film. A similarly inverse relationship existed between the grade level of the first child and parental permission to wear hair as the child wished.56 Both these correlations have face validity. As children matured rules became less restrictive.

Generally speaking the enrolment criteria of finances, school philosophy, social climate, and spiritual opportunities were not significantly correlated with behavioural expressions of a value. However, there was a noteworthy exception to this trend. Three of these four had a negative correlation with the belief that hair style revealed a state of inner spirituality (B2.21-5). Strong parental feelings about the importance of

55 That is, censorship based on nudity and violence, boys' earrings, and rock music.

56 Spearman's rho = -2911, N=71, p=.014.
Three of these four had a negative correlation with the belief that hair style revealed a state of inner spirituality (B2.21-5). Strong parental feelings about the importance of school philosophy, about the positive social climate, and about the spiritual opportunity in the school were associated with a strong conviction that "hair style reflects inner spirituality." That is, the parents who sent their children to RHS for philosophic reasons were the parents who saw a spiritual dimension to lifestyle issues.

The correlational picture within RHS Part B itself was clouded. Twenty-three relationships were explored amongst the behavioural expressions and about half of them were found to be statistically insignificant. The strongest correlation of the eleven significant relationships (p<.05) was associated with the importance parents attributed to evaluating a movie on the basis of sex and nudity. As one would expect there was a moderately strong relationship between those who felt nudity was important in evaluating a movie and those who felt sex was. Other relationships which were moderate to moderately weak in strength were "nudity" and "sex" with "hair as the student wishes," "violence" with "sex," and "hair reflects spirituality" with "earring." In this latter case the correlation was inverse (rho=-.4161): a strong parental feeling that boys should not be permitted to wear earrings was associated with a belief that hair style reflected inner spirituality. Below, under the section detailing the parents' value profiles, it becomes clear that parents shared an underlying cognitive structure (e.g., the importance of love for God and salvation) but it demonstrated itself behaviourally in disparate and contradictory ways.

Several items from Part B were treated as though the data from them was ordinal in nature. This permitted a study of them using the Spearman rho non-parametric test. Those correlations which exceeded .4000 are listed in Table 6.8.

These same items from RHS Part B were then correlated with all the items in

57 Spearman's rho= -.2579 to -.3299, N=64-66, p<.05.
58 Spearman's rho= .6118, N=69, p<.001.
59 Spearman's rho=.30 to .42, N=65-70, p<.01.
RHS Part C sections 1 and 2. Seventy-nine correlations emerged with \( \rho > .2000 \) but only 7 exceeded \( .3500 \) \( (p < .05) \). These were “censor nudity” with “student did not learn negative values at RHS” \( (-.3817) \), “evaluate subject of the movie” with “facilities reflected values” \( (-.3570) \), “censor New Age” with both “staff were motivated and committed” \( (-.3852) \) and “student did not learn negative values at RHS” \( (-.3794) \), “hair should be worn as wished” with “unknown values were learned at RHS” \( (.4388) \), “hair style reflects spirituality” with both “facilities reflect RHS’ values” \( (.4044) \) and “actions and beliefs consistent” \( (.4110) \).

<table>
<thead>
<tr>
<th>Item</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>censor violence</td>
<td>censor language, New Age</td>
</tr>
<tr>
<td>censor sex</td>
<td>censor nudity, New Age, occult, language; “anti-Christian” T-shirts</td>
</tr>
<tr>
<td>censor occult</td>
<td>censor New Age, sex</td>
</tr>
<tr>
<td>censor New Age</td>
<td>censor nudity, violence, sex, occult</td>
</tr>
<tr>
<td>“anti-Christian” T-shirts</td>
<td>censor nudity, sex, “anti-Christian” posters*</td>
</tr>
<tr>
<td>“anti-Christians” posters</td>
<td>censor nudity, T-shirts*</td>
</tr>
<tr>
<td>earrings for boys</td>
<td>hair reflects spirituality</td>
</tr>
<tr>
<td>hair should be short</td>
<td>hair should be natural</td>
</tr>
<tr>
<td>censor nudity</td>
<td>“anti-Christian” posters, T-shirts, censor New Age, sex</td>
</tr>
<tr>
<td>censor language</td>
<td>censor violence, sex</td>
</tr>
<tr>
<td>hair should be natural</td>
<td>hair should be short</td>
</tr>
<tr>
<td>hair reflects spirituality</td>
<td>earrings for boys</td>
</tr>
</tbody>
</table>

Table 6.8: “Relationships in Part B”

\[ \rho = .4000-.7000; * \text{denotes } \rho > .7000; p < .05 \]

The index “behaviour reflects inner values,” which emerged from the principal components analysis and which encompassed the concept of behavioural value holding, was significantly correlated with “school processes 2” \( (r = .4018, p < .05) \) meaning that parents who felt strongly about the importance of behavioural manifestations were associated with positive feelings about processes in RHS. They were also the parents who were associated with a belief that RHS was not consistent (“school is consistent” index \( r = -.4979, p < .01 \)).

.5 Attractive social environment

Belief that AHS had an attractive social environment was most closely associated with the parents’ belief that their child was enjoying AHS \( (\rho = .6175, \)
that parents liked the teachers teaching (\(\rho=.4376, N=67, p<.001\)), that the school prepared students for the future (\(\rho=.4328, N=64, p<.001\)), and that self worth was developed (\(\rho=.4052, N=63, p<.001\)).

.6 Staff training

In areas where one would expect parents to have some uncertainty, there was. RHS item C1.20 provided an example of this predictive validity. It asked parents if they thought RHS did a good job of training its staff. Fifty-two percent were "undecided" or indicated they had "no basis for observation."60 "The endorsement of all values learned at RHS" was significantly associated with the belief that the staff had been well trained.

.7 Evaluation of value transmitters

It was speculated that if parents were pleased with the values learned at AHS they would also be satisfied with the principal transmitters of those values. Items B20-22 evaluated the "delivery system," that is, the transmitters who formed a key part of the school's values climate. Table 6.9 summarises the parents' feelings about three key transmitters and points out that parents were as pleased with the "delivery system" as they were with the values which were learned. Parents liked the teachers' teaching (B18; 93%) and the values they taught the students (B20; 84%).61

Table 6.9: "AHS Sources of Value Transmission"

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>12.2%</td>
<td>11.1%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Agree</td>
<td>71.6%</td>
<td>70.8%</td>
<td>58.1%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1.4%</td>
<td>2.8%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1.4%</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>No Opinion</td>
<td>13.5%</td>
<td>15.3%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Valid</td>
<td>74/75</td>
<td>72/75</td>
<td>74/75</td>
</tr>
</tbody>
</table>

60 Thirty-eight percent "agreed" that the school trained its staff well, 10% "disagreed" or "strongly disagreed."

61 Thus, an illustration of congruent validity.
Fathers who responded were somewhat more inclined to feel teachers had positively influenced their children's values than were mothers (90% male; 77% female) and were more likely to have an opinion about the teachers' role in influencing their children's values (10% undecided to 20% for mothers). North Americans were the most positive about the influence of teachers although there was a positive rating in each citizenship group leaving the general impression of a concordant and favourable perception of the teachers' role in the school.

The three items, "teachers positively influence values" (B20), "policies positively influence values" (B21), and "peers positively influence values" (B22), were combined to form the index "AHS school impact" (sources of school impact on values) which was based on theory. It was correlated with a "values taught at AHS" index which was also created on the basis of theory and supported by a principal components analysis.\(^2\) However, the index "AHS school impact" was not significantly related to "responsible to teach more values" (B26) or with "AHS educational philosophy similar to mine" (B15) but it was with "income."\(^3\)

In the final section of the RHS survey parents were given a list of ten agents of change which the school effectiveness literature suggested would play a significant role in creating an effective or ineffective school.\(^4\) Parents were asked to rank the ten agents according to the positive and negative influence they had on their child's value formation at RHS. Some parents only ranked one or two agents and left the others blank. Others wrote in comments like, "There are no real negative influences," or "We think RHS is doing a good job." As a result, out of a possible 141 respondents, the

---

\(^2\) Pearson's \(r = .5607\), significant LE .01 2-tailed. See below section 6.2.3.6 "Values taught well at AHS" for a fuller explanation of the AHS indices "AHS school impact" and "AHS taught values."

\(^3\) Pearson's \(r = -.3688\) significance LE .01 2-tailed.

\(^4\) The residential nature of RHS was taken into account and two additional agents of change were included: the residential staff and the English language church.
number of valid cases in the first question ranged from 69 to 110 and in the second question from 27 to 57.

The poor response rate in this section was particularly disappointing because the results which emerged were interesting and worthy of thorough investigation. Table 6.10 presents a ranking of "the positive agents" of value change according to their mean scores. The negative agents were not studied because the response rate was below 50%.

Table 6.10: "Positive agents of value change"

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Stn Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>teachers</td>
<td>1.88</td>
<td>1.9</td>
</tr>
<tr>
<td>residential staff</td>
<td>3.32</td>
<td>2.1</td>
</tr>
<tr>
<td>peer group</td>
<td>3.60</td>
<td>2.3</td>
</tr>
<tr>
<td>church</td>
<td>4.07</td>
<td>2.1</td>
</tr>
<tr>
<td>administrators</td>
<td>4.82</td>
<td>2.3</td>
</tr>
<tr>
<td>extracurricular</td>
<td>4.93</td>
<td>2.3</td>
</tr>
<tr>
<td>school policies</td>
<td>5.52</td>
<td>2.3</td>
</tr>
<tr>
<td>hidden curriculum^5^</td>
<td>6.97</td>
<td>2.7</td>
</tr>
<tr>
<td>textbooks</td>
<td>7.01</td>
<td>1.9</td>
</tr>
<tr>
<td>physical facilities</td>
<td>7.99</td>
<td>2.3</td>
</tr>
</tbody>
</table>

8 Monitoring progress

An examination of items RHS C1.22,23 revealed a consistency in the way parents responded to the survey. Parents were impressed with RHS' academic reputation and standards. This carried over into its monitoring of the students' academic progress. Responses to item C1.22 indicated that 91% of the parents either "strongly agreed" (15%) or "agreed" (76%) that the school regularly monitored students' academic development. By contrast, item C1.23 revealed that only 53% of the parents either "strongly agreed" (10%) or "agreed" (43%) that the school regularly monitored students' moral development, which was analogous to the most frequently mentioned reason parents gave for sending their children to RHS. The positive

^5 Hidden curriculum was defined as unstated, often unintended or unrecognised influences.
assessment of academia deteriorated to relative uncertainty and ambivalence when the focus was turned to the moral and spiritual.

The monitoring index ("monitoring progress"), which emerged from the principal components analysis of Part 3, was associated with the "outcome" index ($r=.4011$, $p<.01$), both process indices ("school processes 1:" $r=.2816$; "school processes 2:" $r=.8689$, $p<.01^{67}$), the modelling index ("staff models values:" $r=.2501$, $p<.01$), the understanding and support for the school’s values index ("understand and support school's values:" $r=.2813$, $p<.01$), and the school impact index ("RHS school impact:" $r=.2832$, $p<.01$).

6.2.2. Atmospheric climate/culture - input and process determinants

1 Children’s attitude towards school

A complete Spearman rho analysis of all the items in the AHS Survey, Part B, pointed out that the child’s willingness to attend AHS in the first place was particularly “inactive” with only 4 significant correlations. By way of contrast, the process item “my child enjoys AHS” was the most frequent correlate in the section. It was significantly related to 24 of a possible 33 items. Table 6.11 categorises the items as “very active” to “very inactive” depending on the number of other items with which they were significantly correlated in the rho matrix. The items most closely associated with a belief that “my child enjoys AHS” were a belief that school policies positively influenced the child (rho=$.7011$, $N=60$, $p<.001$), a belief that the child’s individual needs were recognised (rho=$.6188$, $N=72$, $p<.001$), and a belief that tolerance was learned at the school (rho=$.6177$, $N=67$, $p<.001$).

---

66 Twenty-nine percent of the parents declared themselves "undecided" and another 15% claimed they had "no basis for observation." This compares to 4% who were "undecided" about the monitoring of academic development and 3% who said they had "no basis for observation." In both cases a very small group disagreed (3%-4%). Taken by itself, the results from this item could simply mean that parents were unsure of the construct involved or that their information sources did not include insights into this dimension of school life. However, given the answers to other questions related to this area and the fact that the spiritual dimension was of primary importance to these parents, such an explanation appears to be simplistic.

67 N.B., “school processes 2” includes both items comprising “monitoring progress .”
Parents of children in both schools held positive views of their schools which they felt were shared by their children. If the AHS parents were correct, their children were even happier about the school than they were. Most of them wanted to go to AHS in the first place (73%) and when they got there the parents felt they enjoyed it (94%). While the responses to these two questions suggest a concurrent validity in the items, a basic question remains about the accuracy of the parents’ perception. How informed and realistic were the parents on this point? Was it possible that only 4% of the students were not enjoying their AHS experience?

### Table 6.11: “AHS Spearman rho correlation frequencies in Part B (33 items)”

<table>
<thead>
<tr>
<th>Very active items</th>
<th># of correlations</th>
<th>Active items</th>
<th># of correlations</th>
<th>Inactive items</th>
<th># of correlations</th>
<th>Very inactive items</th>
<th># of correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>child enjoys AHS</td>
<td>24</td>
<td>board</td>
<td>15</td>
<td>high behaviour expectations</td>
<td>10</td>
<td>child wanted to go</td>
<td>4</td>
</tr>
<tr>
<td>tolerance</td>
<td>23</td>
<td>teachers positive influence</td>
<td>15</td>
<td>extracurricular activities</td>
<td>8</td>
<td>facilities</td>
<td>3</td>
</tr>
<tr>
<td>developed</td>
<td>23</td>
<td>administration</td>
<td>14</td>
<td>policies positively influence</td>
<td>8</td>
<td>convenient location</td>
<td>2</td>
</tr>
<tr>
<td>cares what child</td>
<td>22</td>
<td>overall grade</td>
<td>14</td>
<td>influence</td>
<td></td>
<td>American school</td>
<td>2</td>
</tr>
<tr>
<td>thinks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>teaches good</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-worth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>developed</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>future oriented</td>
<td>20</td>
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<td>19</td>
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<tr>
<td>recognised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>academic prog</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>social environment</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>responsible for</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>more values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parents of children in both schools held positive views of their schools which they felt were shared by their children. If the AHS parents were correct, their children were even happier about the school than they were. Most of them wanted to go to AHS in the first place (73%) and when they got there the parents felt they enjoyed it (94%). While the responses to these two questions suggest a concurrent validity in the items, a basic question remains about the accuracy of the parents’ perception. How informed and realistic were the parents on this point? Was it possible that only 4% of the students were not enjoying their AHS experience?

### .2 Parents’ educational philosophy similar to the school

A conviction that AHS’s education philosophy was similar to the parents' was associated with a belief that the teaching was positive (rho=.4818, N=57, p<.001), that
the school prepared students for the future (rho=.5680, N=63, p<.001), and that the school had an attractive social environment (rho=.4029, N=60, p<.001).

In Part C parents were asked a wide range of questions about RHS which were similar, although more comprehensive, than those asked of parents at AHS in Part B of their survey. The parents at AHS indicated a solidarity with the school's philosophy and endorsed the values it sought to teach. The parents at RHS were, if anything, even more enthusiastic in their endorsement of the school's values. When asked if "RHS shares my values" (C1.1), fully 94% said they "agreed" (71%) or "strongly agreed" (23%). No one disagreed. The belief that the school shared the parents' values was significantly correlated with 5 of the items in Part B and with the effectiveness rating the school received in teaching the terminal values _love of God and piety._

.3 Desire for values teaching

Even though parents felt good values were taught at AHS (item B17 - 87% of the parents "agreed" or "strongly agreed"), the majority (59%) did not want the school to assume a greater responsibility for teaching "proper values" to their children (item B26). However, the feeling was somewhat muted. Only 3% of the parents felt strongly that the school should not take on more responsibility.

Cross tabulation and the chi-square significance tests found no significant relationship between AHS demographic descriptors A1, A2, A4, A6, A7, A8, A9 and the parents' desire to have the school take on a greater responsibility to teach values. Generally, milieu inputs in the VCES model were not associated with a willingness or lack of willingness to have AHS assume more responsibility for the teaching of values.

There were several exceptions to this trend, however. While all the parents felt comfortable with AHS's philosophy (B15), Europeans and North Americans were particularly associated with a reticence to see the school assume more responsibility for values education. It is interesting to note, as Table 6.12 points out, that AHS called itself "American" yet non-Americans were more willing than Americans to see AHS
take an active role in the teaching of values (which presumably would be American in orientation). The second exception was income (A5; see Table 6.13). Parents with lower incomes were more interested in the school assuming an increased responsibility for the teaching of values to their children. The third exception was the age of the child enrolled in the school (rho=.3516, N=60, p=.003; see Table 6.14). This relationship raised the possibility that parents with younger children may be particularly associated with a desire to have a school assume a more active role in the teaching of "proper values" to their children. Further study needs to be done to see if parents of young adolescents feel a greater need for support in the teaching of values than do parents of older adolescents.

A significant negative relationship existed between the outcome item “tolerance was taught” and the belief that AHS should assume more responsibility for teaching values (rho=-.5011, N=61, p<.001). Parents who felt that tolerance, as one of the key values the school claimed it wanted to teach, was not taught, were associated with the belief that AHS should assume more responsibility for teaching values. Similarly, higher scores for the academic program were associated with a feeling that the school should not assume more responsibility for teaching values (rho=-.4118, N=64, p<.001).

Table 6.12: “Teach more values by citizenship”

<table>
<thead>
<tr>
<th>Citizenship</th>
<th>Agree, Strongly Agree</th>
<th>Disagree, Strongly Disagree</th>
<th>No Opinion</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>US, Canada</td>
<td>0%</td>
<td>84%</td>
<td>16%</td>
<td>19</td>
</tr>
<tr>
<td>West Europe</td>
<td>19%</td>
<td>69%</td>
<td>13%</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
<td>56%</td>
<td>28%</td>
<td>17%</td>
<td>18</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 18.09891 \quad p=.00118 \]
Table 6.13: “Teach more values by income”

<table>
<thead>
<tr>
<th>Income (A5)</th>
<th>Agree, Strongly Agree</th>
<th>Disagree, Strongly Disagree</th>
<th>No Opinion</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 130.</td>
<td>40%</td>
<td>27%</td>
<td>33%</td>
<td>15</td>
</tr>
<tr>
<td>130,000</td>
<td>20%</td>
<td>73%</td>
<td>7%</td>
<td>45</td>
</tr>
</tbody>
</table>

χ² = 11.77297, p = .00278, ρ = .3355, p = .008

Table 6.14: “Teach more values by child’s grade in school”

<table>
<thead>
<tr>
<th>Child’s grade in school</th>
<th>Agree, Strongly Agree</th>
<th>Disagree, Strongly Disagree</th>
<th>No Opinion</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 7-10</td>
<td>35%</td>
<td>54%</td>
<td>11%</td>
<td>37</td>
</tr>
<tr>
<td>Grades 11,12</td>
<td>17%</td>
<td>61%</td>
<td>22%</td>
<td>18</td>
</tr>
<tr>
<td>Two or more</td>
<td>0%</td>
<td>87%</td>
<td>13%</td>
<td>15</td>
</tr>
</tbody>
</table>

χ² = 9.10423, p = .05855

.4 Reasons for enrolling the child

Eighty-eight percent of the AHS parents agreed that they sent their child to AHS because it had a good academic reputation (B12). Less than 5% disagreed. By contrast, when asked if they sent their children to the school because it was an "American" school, only 47% said "yes" and 43% said "no." A substantial group in the school were not looking for the inculcation of “American” values.

The number of years in the host country was "positively" related to the decision to enrol a child at AHS because it was an American school. That is, a recent arrival in the host country was particularly associated with a desire to send students to AHS because it was an American school.

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68 "Academics" could be seen as an "American" value although in this context “American” was intended to represent a cluster of attitudes and values which lay in the affective domain rather than cognitive. The respondents appear to have interpreted the item as it was intended.

69 Spearman's ρ = .2855, N=69, p=.009.
At RHS the reasons for sending a child to the school were explored in greater detail. RHS Part One item 9 presented parents with a list of eleven reasons for sending their children to RHS. When forced to choose the MOST important reason, parents most frequently selected the alternative, "RHS offered my child a chance to grow spiritually" (23%). The religious element predominated. The use of the English language (11%) and the North American cultural environment (11%) were also of primary importance to a significant number of parents. On the other hand, no parent listed their primary reason for sending their first child to RHS as its financial attractiveness, its extracurricular options, its attractive curriculum, or its pedagogic style. The "other" category (25%) was comprised almost exclusively of parents who improperly scored the item by selecting two or more reasons. These parents were consistent in following the pattern established by those who chose one reason as instructed.

Parents who selected "an opportunity for my child to grow spiritually" as the most important reason for sending their child to RHS were the parents who were associated with a strong agreement that RHS shared their values (C1.1). Those who thought the spiritual dimension was unimportant (ranked 1-3 out of 5) were the parents associated with indecision (43%) about whether RHS shared their values. The more important the spiritual dimension was in sending their first child to RHS, the more likely parents were to agree that RHS shared their values (Eta with "importance spiritual" dependent .52148).

A similar pattern repeated itself with C2.2,3,6,9,11. Parents who sent their child to RHS for its spiritual dimension were associated with a belief that the school was consistent in its beliefs (C1.2), that values were taught (C1.3), that the publications made frequent and clear statements about the institution's values and what it stood for (C1.6), that the school consistently adhered to its values, even in times of adversity (C1.9), and that RHS's actions were consistent with its beliefs (C1.11). For example, in the case of C1.6, parents who held the spiritual dimension to be a relatively unimportant enrolment factor (1-3 with 5 as very important) were 86% "undecided" or
felt they had "no basis for observation." By way of contrast, parents who said the spiritual was "important" were in agreement that the school made frequent and clear statements about its values (74%) while those who said the spiritual was "very important" were 81% in agreement that the school made frequent and clear statements about the institution's values and what it stood for.

Parents who rated the spiritual dimension as unimportant (1-3) were 100% sure the staff was motivated and committed (C1.19) while those who rated the spiritual dimension as "important" (4) or "very important" (5) were more "undecided" (26%) or claimed "no basis for observation" (9%).

Although all respondents felt changes due to RHS's influence were positive, those who saw the spiritual dimension for sending their children as "very important" (5) were associated with a strong conviction that the change had been positive.70 Parents who saw the spiritual dimension as relatively unimportant (1-3) were more sure that the change attributable to RHS had been positive (71%) than were those who saw the spiritual as "important" (4: 33%).71

Item A10 was similar to A9. Here RHS parents were asked to rate all the reasons for sending their child to RHS on a 5-point scale of "very important" to "very unimportant." Fully 80% of the parents felt that academics were important (60%) or "very important" (20%). Only 3% said they were "unimportant" or "very unimportant." This corresponded to the response at AHS where 87% of the parents agreed (74% strongly) that they had sent their child to AHS "because it had a good academic reputation" (B30). Only 4% of AHS the parents "disagreed" or "strongly disagreed" with the statement. Ninety-six percent of the RHS parents believed the school had high academic expectations (32% "strongly agreed"). Item C1.16 rephrased the question and asked parents if students received a high quality of instruction at RHS. Eighty-nine percent indicated "yes" and only 2% answered in the

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70 Thirty-three to 0% for those scoring 4 or lower.

71 All relationships in this item study were significant $p<.05$, moderately correlated with Cramer $V$.33 to .45, and $N=65-69$, unless otherwise stated.
negative. The academic function of the school was very important to parents in both schools.

The various factors influencing the parents' decision to enrol the child are summarised in Table 6.15.

<table>
<thead>
<tr>
<th></th>
<th>philosophy</th>
<th>social</th>
<th>spiritual</th>
<th>extracurricular</th>
<th>curricular</th>
<th>pedagogy</th>
<th>English</th>
<th>NAM culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>v. unimportant</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>6%</td>
<td>2%</td>
<td>3%</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>neutral</td>
<td>4%</td>
<td>1%</td>
<td>3%</td>
<td>10%</td>
<td>2%</td>
<td>6%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>important</td>
<td>21%</td>
<td>28%</td>
<td>8%</td>
<td>31%</td>
<td>31%</td>
<td>40%</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>v. important</td>
<td>30%</td>
<td>48%</td>
<td>26%</td>
<td>40%</td>
<td>53%</td>
<td>39%</td>
<td>32%</td>
<td>35%</td>
</tr>
</tbody>
</table>

The school's philosophy of education, the opportunity it provided students to "grow spiritually," and its use of English were each rated by more than 40% of the parents as being "very important" in the decision-making process. In the case of the spiritual growth opportunity, 61% rated this as "very important," which was considerably higher than the 44% rating accorded the next highest reason (philosophy of education).

The reasons why parents sent their children to RHS and the importance ascribed to the reasons were thought to be important factors in influencing the value formation which would take place in the school (propositions # 4,6). Two reasons for sending children to RHS (the importance of "preparation for North America" and the importance of an "opportunity to grow spiritually") were correlated with a wide variety of items using the non-parametric test to reveal significant relationships.

No significant relationship was found to exist between the importance ascribed to the North American cultural opportunities at the school and any of the prominent enrolment factors except the importance of English (rho=.5631, N=67, p<.001). There was a weak correlation between the importance of finances and the importance of North American culture (rho=.2610, N=67, p=.016) which reinforced the impression derived from the crosstab study that pragmatic considerations such as finances, location, and North American preparation for future jobs, were more important to
some parents than they were to others. There was no significant relationship between
the importance ascribed to the North American culture and the grades expected of the
first child (A12), the number of children the parents had (A7), the parents' salary, or
the parents' years of post secondary education (A6).

Item A10.6 ("spiritual opportunity") was moderately correlated with the
importance placed on the school's philosophy\textsuperscript{72} and on its attractive social
environment.\textsuperscript{73} However, "spiritual opportunity" was not significantly correlated with
preparation for North American culture, the age of the respondent (A1), the grade
level of the child (A8b), the grades expected on the report card, the education and
salary of parents, the importance of English, or the number of children (A7). This
suggests there was an affinity between the philosophic-religious factors for sending a
child to RHS just as there was between the pragmatic considerations factors.

Parents who placed an increased emphasis on the importance of spiritual
opportunities at RHS were associated (p<.05) with 23 items in Part C sections 1 and 2
including, most noticeably, a belief that the curriculum had an impact (rho=\textsuperscript{-4313}),
that the school was consistent (rho=\textsuperscript{-4235}), that their values were shared by the
school (rho=\textsuperscript{-4031}), that there were positive changes attributable to RHS (rho = \textsuperscript{-
.3945}), that the staff was motivated and committed (rho=\textsuperscript{-3912}), and that there was a
marked behaviour change due to the RHS impact (rho=\textsuperscript{-3618}).

These studies used rank correlation to measure the relationship between
variables that were ordinal in nature or which combined ordinal and interval data.

\textsuperscript{72} Spearman's rho=.4401, N=68, p<.001.

\textsuperscript{73} Spearman's rho=.4686, N=69, p<.001.
Several methods are available to explore differences between variables to establish the way in which respondents differ in respect to a particular variable.

The Kruskal-Wallis $H$ (K-W) one-way analysis of variance was used to test for differences between the various items in Parts A, B, and C. The K-W, which is an extension of the Mann-Whitney $U$ test, combines all cases from the groups and ranks them with average ranks assigned for ties. The resulting statistic has essentially a chi-square distribution and assumes the groups have the same distribution. In the study used here the "corrected" chi-square statistic and significance level were used because the correction took into account rank ties.

An example drawn from a study of A10.6 ("importance of spiritual opportunities in sending a child to RHS") with Part C illustrates how this test complements the crosstab and rank correlation studies. Parents were divided into three groups, those who saw the importance of spiritual factors as "very important" (#5), those who saw it as "important" (#4), and those who saw it as "somewhat important to unimportant" (#3). The mean rank of each group was then computed together with the number of valid cases, the chi-square statistic, the significance level, and the correction for ties. Sixty-nine differences were explored with Part C1.1 "RHS shares my values. The parental group which felt the spiritual factors were "very important" scored a mean rank of 31, while those in group #4 scored 38.03 and those in group #3 scored 51.36. Therefore, parents who felt the spiritual dimension was very important for enrolment were associated with a strong belief that the school shared their values. As in the case of C1.1 with A10.6, the K-W found a significant difference in the responses to C1.2,4,6,7,19,22,23 and C2.1,4 based on item A10.6 ("spiritual

\footnote{#3 had been re-coded to included original responses of 1,2,3 because there were few respondents in these lower categories.}
opportunity") thereby confirming the pervasive and dynamic role "spiritual
opportunity" as the primary reason for attending RHS had in the VCES model.75

Over 400 K-W tests were run on Parts A, B, and C with 56 proving to be
statistically significant. The results which emerged served to confirm the results of
other tests which were run on the data. A further in depth analysis of the reasons
parents sent their children to the school follows in the next sections which looks at the
reasons from the perspective of the parents’ value profile.

The index “RHS overt school purpose,” which emerged in the principal
components analysis and which embodied the spiritual-philosophic reasons parents sent
their child to RHS, was negatively correlated with the indices “outcome” (r=-.4067,
p<.01), “school processes 2” (r=-.6057, p<.01), and “staff models values ” (models
values r=-.4268, p<.01) meaning that parents who enrolled their children for overt
spiritual-philosophic reasons were associated with the view that the school processes
and outcomes were positive and a belief that the staff was modelling RHS’ values.

.5 AHS’ parent value profile

Items 36-39 in the AHS survey asked parents to choose the values they felt
were either the most important (B36,38) or the least important (B37, B39) for AHS
to teach or model. The list followed the Rokeach scheme of terminal (B36,37) and
instrumental values (B38,39)76 although the selection of values was modified to reflect
the values one was likely to hear addressed in the AHS context. The results are
summarised in Tables 6.16 and 17.

75 Part C was structured so that "strongly agree" was #1 and "strongly disagree" was #5. The chi-
square value was 6.7948 and the significant level .0335. Corrected for ties the chi-square was
10.7592 and the significance level .0046.

76 See below Chapter 11 for a summary of the Rokeach instrument.
There was congruence on what was least important in the list. Four fifths of the parents rated beauty and piety as "least important" and none of them rated these two values as "most important." Four values were selected as "most important" by 12% or more of the parents for a combined total of 85%. Only 5% of the parents listed these four values as "least important." Congruence is further illustrated by noting that 29% of the AHS parents felt a sense of purpose was "most important" and no one felt it was "least important." The same was true for values which were rated negatively. Forty-nine percent felt beauty was "least important" and no one felt it was "most important." In summary, parents of children attending AHS shared a common values orientation. Not only did they overwhelmingly support the statement, 'AHS educational philosophy is similar to mine' (B15-82%), they also identified a narrow range of values as most and least important to them.

Table 6.16: “Parents Rating of Terminals”

<table>
<thead>
<tr>
<th>Terminal value</th>
<th>B36 Percent rating most important</th>
<th>B37 Percent rating least important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect</td>
<td>28%</td>
<td>1%</td>
</tr>
<tr>
<td>Wisdom</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Friendship</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Inner Harmony</td>
<td>15%</td>
<td>4%</td>
</tr>
<tr>
<td>Health</td>
<td>3%</td>
<td>49%</td>
</tr>
<tr>
<td>Justice</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Beauty</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Equality</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Freedom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piety</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Order</td>
<td>29%</td>
<td>7%</td>
</tr>
<tr>
<td>Sense of Purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>2%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 6.17: “Parents Rating of Instrumentals”

<table>
<thead>
<tr>
<th>Instrumental values</th>
<th>B38 Percent rating most important</th>
<th>B39 Percent rating least important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Capability</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Cleanliness/neat</td>
<td></td>
<td>19%</td>
</tr>
<tr>
<td>Courageousness</td>
<td>43%</td>
<td>16%</td>
</tr>
<tr>
<td>Tolerance</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Creativeness</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obedience</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committed to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>excellence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>4%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Most milieu input items were not associated with the values AHS parents indicated were most or least important to them. These included "age" (A1),

Valid 72/75 | Valid 73/75 | Valid 75 | Valid 69-75
“occupation” (A4), “income” (A5), “the total years of enrolment” (A7), “marital status” (A8), and “years in the host country” (A9).

However, several milieu input items were significantly related to items B36,37. There was a significant relationship between the most important value and the parent's country of citizenship (A3). Europeans and North Americans rated a sense of purpose higher than did parents from the rest of the world who opted for a variety of values. Respect had an appeal which transcended citizenship, as Table 6.18 indicates.

Table 6.18: “Important values by citizenship”

<table>
<thead>
<tr>
<th>Citizenship</th>
<th>US/Canada</th>
<th>Other</th>
<th>West Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>respect</td>
<td>32%</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>wisdom</td>
<td>5%</td>
<td>11%</td>
<td>19%</td>
</tr>
<tr>
<td>inner harmony</td>
<td>5%</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>purpose</td>
<td>53%</td>
<td>0%</td>
<td>28%</td>
</tr>
<tr>
<td>other</td>
<td>5%</td>
<td>39%</td>
<td>19%</td>
</tr>
<tr>
<td>N</td>
<td>19</td>
<td>18</td>
<td>32</td>
</tr>
</tbody>
</table>

$\chi^2 = 18.76761 \quad p = .01615$

Parents with two children enrolled in the school were less likely to be associated with respect and wisdom than were parents with one child. In turn, parents with two children favoured inner harmony and a sense of purpose (cf., Table 6.19).

Table 6.19: “Important values by number of children”

<table>
<thead>
<tr>
<th>Number of children at AHS</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>respect</td>
<td>31%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>wisdom</td>
<td>16%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>inner harmony</td>
<td>7%</td>
<td>39%</td>
<td>100%</td>
</tr>
<tr>
<td>sense of purpose</td>
<td>22%</td>
<td>46%</td>
<td>0%</td>
</tr>
<tr>
<td>other</td>
<td>24%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>N</td>
<td>55</td>
<td>13</td>
<td>1</td>
</tr>
</tbody>
</table>

$\chi^2 = 21.07973 \quad p = .00694$

The age of the child enrolled in the school was also found to be significantly related to the most important value chosen by the parents. Parents with younger children in the school tended to be parents who advocated a greater role for the school
in values training. These parents, together with those who had only one child, were associated with a higher ranking for respect (cf., Table 6.20).

No significant relationship was found to exist between the personal quality AHS parents felt was "most important" (B38) and "age" but comparison of the qualities which received the highest ratings revealed a difference based on gender. Mothers were focused on such values as responsibility and commitment to excellence while ignoring capability. Fathers rated responsibility highest but many designated capability and tolerance as the "most important."

Table 6.20: "Most important value by grade in school"

<table>
<thead>
<tr>
<th>Most important value</th>
<th>7 to 10</th>
<th>11/12</th>
<th>2+children</th>
</tr>
</thead>
<tbody>
<tr>
<td>respect</td>
<td>35%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>wisdom</td>
<td>14%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>inner harmony</td>
<td>8%</td>
<td>6%</td>
<td>40%</td>
</tr>
<tr>
<td>sense of purpose</td>
<td>22%</td>
<td>22%</td>
<td>47%</td>
</tr>
<tr>
<td>other</td>
<td>5%</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td><strong>37</strong></td>
<td><strong>18</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 22.13595 \quad p=.00467 \]

The empty cell problem plagued the statistical significance tests associated with both B37 and B38. The problem could have been avoided if the items had been constructed differently. Nevertheless, the response pattern addresses some common gender stereotypes. For example, mothers were more associated than fathers with cleanliness as the "least important quality" (16% for men, 32% for women), while men were more likely to consider love as the "least important quality" (32% to 13% for women).

Europeans were more inclined to consider love and commitment to excellence as "least important" (both 25%) than were North Americans (16% and 5% respectively). On the other hand, North Americans selected courageousness (11%) and intelligence (16%) as least important while Europeans felt they were relatively more important. Even though the respondent group was representative of the entire parent population, these results only described the situation at AHS in 1992. One could not extrapolate details from this to other years. For example, it would seem
unreasonable to think that half a dozen Japanese respondents reflected the value orientation of all the Japanese who sent their children to the school over the years.

Looking at the "least important quality" from the perspective of occupation, one notes that 38% of the professionals thought cleanliness was "least important" while only 14% of the business people agreed. On the other hand, 27% of the business people thought commitment to excellence was "least important" while only 8% of the professionals thought so.

As was noted above, parents of both sexes at AHS agreed that unexpected revenue should be spent on facilities (B40: 67% male, 57% female) and both agreed money should not be spent on school promotion if shortages arose (B41: 47% men, 46% women). Similarly, all AHS parents regardless of citizenship felt additional spending should be focused on improving physical facilities. Reductions in spending showed a North American penchant for extra-curricular activities. Only 5% of North Americans favoured cutting extra-curricular activities if money became short, compared to 38% of Europeans who favoured it. This was the same number of Europeans who advocated curtailing promotion (38%) while 68% of North Americans saw this as the first area to cut spending. There was no significant correlation between income levels, age, or years in the host country and the way in which parents thought the school should save money if it became necessary.

This hypothetical scenario provided further evidence of a harmonious values orientation amongst the AHS parents. Differences existed which could become theoretically divisive in stressful times, such as a budget shortfall, but even then one could imagine considerable solidarity. The scenario did not explore emotional commitment to these (cognitively) held values.

6 RHS' parent value profile

RHS parents were given two lists of values based on Rokeach's terminal and instrumental values and asked to indicate on a scale of 1 to 5 how important they felt each value was. Then they were asked to evaluate the effectiveness of RHS at teaching these values using the same 1 to 5 scale. Some modifications were made to
fit the RHS context but in general the lists were very similar to those developed by Rokeach.

Evidence of testing fatigue emerged in this part of the survey. The number of valid cases in Part C, sections 1,2 never went below 130 and was typically 135 out of 141 possible. With section 3 the highest number of valid cases was 130 but the typical number dropped to the mid 120s for lists one and two (parents' values) and around 115 for lists three and four (assessment of the school's effectiveness in teaching the values).

In Tables 6.21,22 the values were ranked according to their mean score. The importance parents placed on the value is listed in the left column and their assessment of the school's effectiveness is in the right column.

<table>
<thead>
<tr>
<th>Terminal Values</th>
<th>Personal Rating Mean</th>
<th>Rating of School Mean</th>
<th>Personal Rating Stand. Deviation</th>
<th>Rating of School Stand. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>love of God</td>
<td>4.92</td>
<td>4.19</td>
<td>.43</td>
<td>.75</td>
</tr>
<tr>
<td>salvation</td>
<td>4.29</td>
<td>4.36</td>
<td>.47</td>
<td>.71</td>
</tr>
<tr>
<td>respect</td>
<td>4.72</td>
<td>3.78</td>
<td>.56</td>
<td>.91</td>
</tr>
<tr>
<td>wisdom</td>
<td>4.58</td>
<td>3.76</td>
<td>.61</td>
<td>.77</td>
</tr>
<tr>
<td>sense of purpose</td>
<td>4.41</td>
<td>3.93</td>
<td>.71</td>
<td>.73</td>
</tr>
<tr>
<td>friendship</td>
<td>4.32</td>
<td>3.92</td>
<td>.66</td>
<td>.79</td>
</tr>
<tr>
<td>justice</td>
<td>4.29</td>
<td>3.65</td>
<td>.70</td>
<td>.81</td>
</tr>
<tr>
<td>inner harmony</td>
<td>4.20</td>
<td>3.58</td>
<td>.86</td>
<td>.82</td>
</tr>
<tr>
<td>order</td>
<td>4.01</td>
<td>3.72</td>
<td>.74</td>
<td>.77</td>
</tr>
<tr>
<td>joy (happiness)</td>
<td>3.99</td>
<td>3.58</td>
<td>.75</td>
<td>.75</td>
</tr>
<tr>
<td>production</td>
<td>3.97</td>
<td>3.87</td>
<td>.68</td>
<td>.66</td>
</tr>
<tr>
<td>(involved)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>piety</td>
<td>3.93</td>
<td>3.56</td>
<td>1.01</td>
<td>.89</td>
</tr>
<tr>
<td>equality</td>
<td>3.91</td>
<td>3.70</td>
<td>.93</td>
<td>.73</td>
</tr>
<tr>
<td>health</td>
<td>3.84</td>
<td>3.56</td>
<td>.69</td>
<td>.73</td>
</tr>
<tr>
<td>freedom</td>
<td>3.75</td>
<td>3.43</td>
<td>.87</td>
<td>.75</td>
</tr>
<tr>
<td>recognition</td>
<td>3.36</td>
<td>3.51</td>
<td>.79</td>
<td>.73</td>
</tr>
<tr>
<td>beauty</td>
<td>3.27</td>
<td>3.29</td>
<td>.86</td>
<td>.70</td>
</tr>
</tbody>
</table>

The reasons parents sent their children to the school and the values milieu that the child had in his/her home were two theoretically important input factors. In an effort to better understand this, a correlational study was done between the 32 values in Part C, section 3 and Part A9 ("identify the MOST important reason you sent you first child to RHS").
It was stated above that Part C section three, which was to have provided insight into this area, suffered from a low response rate. It is worth noting, however, that the "principal respondents" who filled out the complete RHS survey, including Parts A, B, and C, did not suffer the same degree of fatigue in Part C, section 3 as did the spouses who only completed Part C. Sixty-four to seventy of the seventy-nine "principal respondents" completed section 3.

Table 6.22: "Parental values and school effectiveness"

<table>
<thead>
<tr>
<th>Instrumental Values</th>
<th>Personal Rating Mean</th>
<th>Rating of School Mean</th>
<th>Personal Rating Stand. Deviation</th>
<th>Rating of School Stand. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>loving</td>
<td>4.66</td>
<td>3.80</td>
<td>.54</td>
<td>.77</td>
</tr>
<tr>
<td>responsibility</td>
<td>4.63</td>
<td>4.01</td>
<td>.55</td>
<td>.78</td>
</tr>
<tr>
<td>self-controlled</td>
<td>4.58</td>
<td>3.73</td>
<td>.62</td>
<td>.83</td>
</tr>
<tr>
<td>obedient</td>
<td>4.52</td>
<td>3.85</td>
<td>.68</td>
<td>.96</td>
</tr>
<tr>
<td>co-operative</td>
<td>4.45</td>
<td>3.99</td>
<td>.64</td>
<td>.73</td>
</tr>
<tr>
<td>helpful</td>
<td>4.39</td>
<td>3.92</td>
<td>.61</td>
<td>.71</td>
</tr>
<tr>
<td>commitment</td>
<td>4.17</td>
<td>3.96</td>
<td>.73</td>
<td>.81</td>
</tr>
<tr>
<td>courage</td>
<td>3.97</td>
<td>3.66</td>
<td>.69</td>
<td>.75</td>
</tr>
<tr>
<td>creative</td>
<td>3.93</td>
<td>3.61</td>
<td>.66</td>
<td>.80</td>
</tr>
<tr>
<td>future (goal)</td>
<td>3.92</td>
<td>3.83</td>
<td>.69</td>
<td>.77</td>
</tr>
<tr>
<td>capable</td>
<td>3.89</td>
<td>3.81</td>
<td>.65</td>
<td>.66</td>
</tr>
<tr>
<td>clean/neat</td>
<td>3.88</td>
<td>3.83</td>
<td>.61</td>
<td>.68</td>
</tr>
<tr>
<td>independent</td>
<td>3.88</td>
<td>3.64</td>
<td>.71</td>
<td>.80</td>
</tr>
<tr>
<td>intelligent</td>
<td>3.60</td>
<td>4.04</td>
<td>.74</td>
<td>.71</td>
</tr>
<tr>
<td>individualistic</td>
<td>3.34</td>
<td>3.38</td>
<td>.80</td>
<td>.81</td>
</tr>
</tbody>
</table>

Table 6.23 sets out the values most associated with the reason parents sent their child to RHS.

Table 6.23: "Parents rating of values with reasons for sending their child to RHS"

<table>
<thead>
<tr>
<th>Reason for sending child to RHS</th>
<th>Values particularly associated* with the reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>finance</td>
<td>joy</td>
</tr>
<tr>
<td>location</td>
<td>none</td>
</tr>
<tr>
<td>academics</td>
<td>piety purpose respect</td>
</tr>
<tr>
<td>philosophy</td>
<td>respect</td>
</tr>
<tr>
<td>social environment</td>
<td>health salvation</td>
</tr>
<tr>
<td>spiritual opportunity</td>
<td>salvation respect wisdom friendship inner harmony</td>
</tr>
<tr>
<td>extracurricular</td>
<td>purpose piety order production</td>
</tr>
<tr>
<td>curricular</td>
<td>justice piety purpose inner harmony friendship</td>
</tr>
<tr>
<td>pedagogy</td>
<td>wisdom</td>
</tr>
<tr>
<td>English language</td>
<td>purpose production piety</td>
</tr>
<tr>
<td></td>
<td>production health recognition beauty</td>
</tr>
<tr>
<td></td>
<td>none</td>
</tr>
</tbody>
</table>

*rho = .2000 to .3500, p<.05
The importance of the spiritual opportunity was clearly the most active correlate among the values held by parents (9). A similar study done with the school’s effectiveness rating revealed that the importance of the social environment and the importance of the spiritual opportunities were the most active correlates with effectiveness perceptions (14 correlates each).

In order to see if the grade level of the child was associated with a variance in parental values five values were selected and all showed a weak but significant correlation between the grade level of the first child and the importance parents placed on the value in question.77 The nature of the ratings also testifies to the face validity of this section. For example, one would expect that parents with teenagers would more highly value future/goal orientation. Table 6.24 provides evidence that they did.

Table 6.24: "Importance of future, goal orientation by age of the child"

<table>
<thead>
<tr>
<th></th>
<th>Elementary School</th>
<th>Middle School</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Most important</td>
<td>10%</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>4 important</td>
<td>30%</td>
<td>46%</td>
<td>68%</td>
</tr>
<tr>
<td>1-3 unimportant</td>
<td>60%</td>
<td>31%</td>
<td>11%</td>
</tr>
</tbody>
</table>

The pattern repeated itself with purpose, piety, production/effectiveness, and individualism. In all these cases, parents with a first child in the elementary school saw these values as less important than did parents in the other school divisions. Equally pronounced was the trend of parents with the first child in the middle school to rate these values as “most important” (5). Middle school parents were the most likely to rank all five values “most important.”

The RHS staff stated frequently that they felt there was a difference in attitude and behaviour between students who lived at home with their parents and those who lived in the RHS residences. An examination of the relationship between the rating home and residence parents gave the values in Part C section 3 indicated that there was a very limited correlation between home and residence parents.78 A sample of seven

77 N=115 to 118, p<.05, Cramer’s V.2 to .3.

78 Unless otherwise stated, p<.05, N=95-99, Cramer’s V.22 to .35.
values was chosen and correlated with the residential status of the first child. In most cases, no significant relationship was established. For example, the values *salvation* and *love of God* were both held to be "very important" (5) by 96% of all parents regardless of the domicile arrangement. Similarly, no discernible difference was noted with *purpose* and *responsibility*. However, parents with children at home rated *respect* higher than did parents with children in residence (96% to 68% scored 5). Parents with children at home also had a greater interest in *creativity*.

Gender was weakly associated with the way in which values were viewed. For example, fathers were associated with higher ratings for *freedom* while mothers were associated with higher ratings for *obedience*. These two associations serve to identify another source of value differentiation in the school setting. The response rate prohibited a full investigation of the role gender may have played but it did reinforce the impression obtained from the AHS survey that modest differentiation occurred along gender lines.

Citizenship was also correlated with three representative values - *salvation*, *respect*, and *sense of purpose* - and was found to be weakly associated with all three. Ninety-eight percent of Americans and 100% of Canadians scored "salvation" as "very important." By way of contrast, 67% of the Europeans scored it as "very important" while 27% scored it as "important" and 7% as a "somewhat important." In the case of *wisdom*, the Americans (69%) and the Canadians (67%) scored it "very important" while only 23% of the Europeans did so. However, Canadians and Americans were not necessarily alike. In the case of *a sense of purpose*, all three groups viewed the value differently with 77% of Canadians, 54% of Europeans, and 37% of Americans scoring it "very important." These results reinforced the impression obtained from the AHS survey that value differentiation occurred along citizenship lines.

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79 "Gender and freedom:" N=122, p<.05, Cramer's $V$.28515.

80 "Gender and obedience." N=126, p<.05, Cramer's $V$.28151.

81 N=70-73 out of 75, p<.05, Cramer's $V$.32-.38.
In another attempt to define the role of the socio-economic input into the VCES model, 5 values in section 3 were correlated with the two occupational categories.\textsuperscript{82} Wisdom, health, salvation, creativeness, and future goal orientation were chosen as the target values.

Missionaries were considerably more "decisive" in their rating of salvation and wisdom than were non-missionaries.\textsuperscript{83} On the other hand non-missionaries rated health (42\% to 7\%), creativity (50\% to 10\%), and future goal orientation (36\% to 17\%) more highly than did missionaries. Missionaries were decisive when it came to their core values. However, as the correlation study substantiates, the core values the missionaries internalised left them less positive and less decisive than the non-missionaries (high salaried parents) about a number of processes and outcomes in the VCES model.

There were many weak relationships amongst the values listed in section 3. In column one of the section the parents rated how important each of the 17 values was to them. Those with moderate to strong associations are listed below in Table 6.25 where \(\rho=0.4000\) to \(0.7000\).

Table 6.25: "Statistically significant relationships amongst the terminal values"

<table>
<thead>
<tr>
<th>Value</th>
<th>Values associations ((\rho=0.4000) to (0.7000); (p&lt;.05))</th>
</tr>
</thead>
<tbody>
<tr>
<td>salvation</td>
<td>love of God</td>
</tr>
<tr>
<td>respect</td>
<td>wisdom, friendship</td>
</tr>
<tr>
<td>wisdom</td>
<td>respect</td>
</tr>
<tr>
<td>friendship</td>
<td>respect, joy, equal, justice</td>
</tr>
<tr>
<td>love of God</td>
<td>salvation</td>
</tr>
<tr>
<td>inner harmony</td>
<td>sense of purpose, equality, freedom, justice</td>
</tr>
<tr>
<td>beauty</td>
<td>recognition, health</td>
</tr>
<tr>
<td>purpose</td>
<td>inner harmony, production, order</td>
</tr>
<tr>
<td>recognition</td>
<td>beauty</td>
</tr>
<tr>
<td>joy</td>
<td>friendship, equality, freedom, health, justice</td>
</tr>
<tr>
<td>equality</td>
<td>friendship, inner harmony, justice, order, piety, health, freedom</td>
</tr>
<tr>
<td>freedom</td>
<td>inner harmony, joy, equality, health, justice</td>
</tr>
<tr>
<td>health</td>
<td>beauty, joy, equality, freedom, order, production</td>
</tr>
<tr>
<td>piety</td>
<td>equality, justice</td>
</tr>
<tr>
<td>order</td>
<td>equality, health, justice</td>
</tr>
<tr>
<td>justice</td>
<td>friendship, inner harmony, equality, freedom, piety, order</td>
</tr>
<tr>
<td>production</td>
<td>purpose, health, order</td>
</tr>
</tbody>
</table>

\(82\) Cramer's \(V\) .33 to .43, \(p<.05\), \(N=70-73\).

\(83\) Salvation #5 missionaries 97\%, non-missionaries 71\%; wisdom #5 missionaries 64\%, non-missionaries 42\%.

The values parents held to be most important including *salvation*, *respect*, *wisdom*, *love of God*, and *piety* (1 to 4) were the least likely to be correlated with items from Part C sections 1 and 2 and the significant relationships which did exist were with those items which were essentially process and outcome in nature. Values which had a lower rating such as *production* and *freedom* had many more significant correlations (10-12). Of the 96 significant correlations (p<.05) between the values in section 3 and the items in sections 1 and 2 where rho>.2000, only three exceeded -.3000. The items which were most frequently significantly associated with the rating parents gave the 17 instrumental values were “a safe positive environment,” which was correlated negatively with *inner harmony*, *purpose*, *recognition*, *justice*, and *production*, “enough time devoted to academic skill,” which was correlated with *wisdom*, *inner harmony*, *joy*, *justice*, and *production*, and “consistency in the face of adversity,” which was correlated negatively with *respect*, *friendship*, *equality*, and *order*.

Three value indices emerged in the principal components analysis of the value lists. “Other world values,” which encompassed values from the spiritual world, was most strongly correlated with “others oriented values” and “self help values.” Parents associated with a strong commitment to the spiritual world (“other world values”) were parents associated with a belief that rock music was evil (r=.3604, p<.05).

The altruistic index (“others oriented values”), encompassing values which were oriented towards other people, was associated with the “self help values” index (r=.2385, p<.01), with a feeling that the school was inconsistent (“school is consistent” index r=-.2628, p<.01), and with a feeling that the school’s values were not clearly understood and supported (“understand and support school’s values” index r=-.2182).

.7 School consistency

---

84 The index encompassing altruistic values: r=.5949, p<.01.

85 The index encompassing values which were concerned with personal well-being: r=.3958, p<.01.
Only 6% of the RHS parents felt the school was not consistent in its beliefs and another 11% were "undecided" but the majority (78%) felt the school was consistent even in "times of adversity" (C1.9). Similar results emerged from a study of item C1.10. When asked if the value system changed yearly, 44% disagreed, 12% "strongly disagreed," and 44% were "undecided" or felt they had "no basis for judgement." Parents also felt there was a consistency between what the school said it believed and its actions (C1.11).

The consistency index ("school is consistent") was closely associated with school processes. Parents who felt the school was consistent also tended to feel positive about school processes. Likewise, parents who felt the school was consistent were associated with a feeling that the school values were understood and supported ("understand and support school's values" $r=.4467$). Parents who were associated with a belief in the school's consistency were older parents ("age:" $r=-.4146$, $p<.01$) who held conservative positions on behavioural issues ("behaviour reflects inner values:" $r=-.4979$, $p<.01$).

.8 Summary

The two process indices properly belong in the atmospheric climate/culture division of the VCES model although two of the nine items comprising the index were in the organisational division of the VCES model. "School processes 1" was associated with the "outcome" index ($r=.4413$, $p<.01$), the other process index ("school processes 2:" $r=.5339$, $p<.01$), with consistency ("school is consistent:" $r=.6506$), with modelling ("staff models values:" $r=.4864$, $p<.01$), with understanding.

---

86 Three percent felt it was not consistent; 42% were "undecided" or felt they had "no basis for judgement."

87 Seventy-five percent "agreed" or "strongly agreed;" 6% "disagreed;" 19% were "undecided" or felt there was "no basis for judgement."

88 "School processes 1:" $r=.6506$ and "school processes 2" $r=.4344$; N.B., "school processes 1" shared an item with "school is consistent" ($p<.05$).
and support for the school's values ("understand and support school's values:" 
$r=.4052$, $p<.01$), and with the monitoring of development ("monitoring progress :" 
$r=.2816$, $p<.01$).

"School processes 2" was even more strongly associated with "outcome" 
$(r=.6506$, $p<.01$) and, as would be expected, with the monitoring of development 
("monitoring progress :" $r=.8689$, $p<.01$). It was also associated with the importance 
of the spiritual-philosophic reasons for sending the child to the school ("RHS overt 
school purpose:" $r=-.6057$, $p<.01$ reverse scoring), as well as with "school is 
consistent" ($r=.4344$, $p<.01$), with "staff models values" ($r=.5600$, $p<.01$), with an 
understanding and support for the school's values ($r=.6210$, $p<.01$), and with a belief 
that the school impacted the child ("RHS school impact:" $r=.4348$, $p<.01$).

A regression analysis of the relationship between "school processes 1" and 
"school processes 2" revealed that twenty-eight percent of the variance in "school 
processes 1" was explained by "school processes 2."\(^{89}\)

Most of the items in RHS Part C section 1 were related to atmospheric 
climate/culture. Therefore, all possible relationships within the section were explored 
in an extensive non-parametric correlation study. Most were found to be significant at 
the .05 level. Table 6.26 summarises the strongest relationships in which rho>.4500, 
$p<.001$.

The non-parametric study was extended to include all the items in RHS Part C 
sections 1 and 2 where atmospheric and organisational climate were correlated with 
outcomes. Of the 1024 relationships examined in this group, only 124 were not 
significant at the .05 level. Highlights are summarised in Table 6.27 where rho>.4500, 
$p<.001$.

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\(^{89}\) Thirty cases plotted; 141 unweighted. $r=.53388$. $r^2=.28502$. S.E. of est. 2.09977, 2 tailed sig. 
.0024. Intercept (S.E.) 4.60240 (1.56354) slope (S.E.) .47626 (.14255).
Table 6.26: "Relationships in Section One"

<table>
<thead>
<tr>
<th>Item</th>
<th>Relationship</th>
<th>rho</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHS shares my values</td>
<td>consistent in adversity</td>
<td>.4577</td>
<td>102</td>
</tr>
<tr>
<td>admin communicates well</td>
<td>consistent</td>
<td>.6478</td>
<td>129</td>
</tr>
<tr>
<td>staff motivated, committed</td>
<td>values are taught</td>
<td>.4627</td>
<td>131</td>
</tr>
<tr>
<td>strong leadership</td>
<td>curriculum impacts values</td>
<td>.4626</td>
<td>114</td>
</tr>
<tr>
<td>consistent in beliefs</td>
<td>school consistent</td>
<td>.5430</td>
<td>97</td>
</tr>
<tr>
<td>curriculum impacts values</td>
<td>well trained by school</td>
<td>.5957</td>
<td>94</td>
</tr>
<tr>
<td>PR is clear</td>
<td>clear goals and objectives</td>
<td>.4729</td>
<td>126</td>
</tr>
<tr>
<td>values well known</td>
<td>admin communications</td>
<td>.4943</td>
<td>109</td>
</tr>
<tr>
<td>safe positive environment</td>
<td>enough time on values</td>
<td>.4776</td>
<td>107</td>
</tr>
<tr>
<td>consistent in adversity</td>
<td>consistent values</td>
<td>.6567</td>
<td>98</td>
</tr>
<tr>
<td>monitors academic development</td>
<td>high quality of instruction</td>
<td>.5161</td>
<td>129</td>
</tr>
<tr>
<td>monitors moral development</td>
<td>clear goals and objectives</td>
<td>.4955</td>
<td>100</td>
</tr>
<tr>
<td>staff support values</td>
<td>monitors moral development</td>
<td>.4540</td>
<td>113</td>
</tr>
<tr>
<td>actions and beliefs consistent</td>
<td>enough time on values</td>
<td>.4859</td>
<td>123</td>
</tr>
<tr>
<td>values well known</td>
<td>consistent values</td>
<td>.5823</td>
<td>88</td>
</tr>
<tr>
<td>consistent in adversity</td>
<td>positive changes due to RHS</td>
<td>.5618</td>
<td>102</td>
</tr>
<tr>
<td>staff support values</td>
<td>positive changes due to RHS</td>
<td>.5163</td>
<td>101</td>
</tr>
<tr>
<td>strong leadership</td>
<td>behaviour change due to RHS</td>
<td>.4713</td>
<td>119</td>
</tr>
<tr>
<td>actions and beliefs consistent</td>
<td>understand values taught</td>
<td>.5240</td>
<td>122</td>
</tr>
<tr>
<td>enough time on values</td>
<td>endorse values learned at RHS</td>
<td>.4579</td>
<td>100</td>
</tr>
<tr>
<td>consistent</td>
<td>understood values taught</td>
<td>.4670</td>
<td>126</td>
</tr>
<tr>
<td>curriculum impacted value</td>
<td>positive changes due to RHS</td>
<td>.5459</td>
<td>124</td>
</tr>
<tr>
<td>admin communicates well</td>
<td>endorase values learned at RHS</td>
<td>.4867</td>
<td>107</td>
</tr>
<tr>
<td>consistent in adversity</td>
<td>behaviour change due to RHS</td>
<td>.5240</td>
<td>122</td>
</tr>
<tr>
<td>actions and beliefs consistent</td>
<td>understand values taught</td>
<td>.4713</td>
<td>119</td>
</tr>
<tr>
<td>enough time on values</td>
<td>understood values taught</td>
<td>.5302</td>
<td>101</td>
</tr>
<tr>
<td>staff trained well by RHS</td>
<td>understand values taught</td>
<td>.5361</td>
<td>125</td>
</tr>
<tr>
<td>clear goals and objectives</td>
<td>learned negative values</td>
<td>.4859</td>
<td>104</td>
</tr>
<tr>
<td>strong leadership</td>
<td>endorsed values learned at RHS</td>
<td>.4809</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>understood values taught</td>
<td>.4927</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>positive change due to RHS</td>
<td>.4534</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>endorsed values learned at RHS</td>
<td>.4955</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>understood values taught</td>
<td>.4629</td>
<td>124</td>
</tr>
</tbody>
</table>

Table 6.27: "Relationships in Sections One and Two"

<table>
<thead>
<tr>
<th>Item</th>
<th>Relationship</th>
<th>rho</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHS shares my values</td>
<td>endorse values learned at RHS</td>
<td>.4579</td>
<td>129</td>
</tr>
<tr>
<td>consistent</td>
<td>understood values taught</td>
<td>.4670</td>
<td>126</td>
</tr>
<tr>
<td>curriculum impacted value</td>
<td>endorse values learned at RHS</td>
<td>.5459</td>
<td>124</td>
</tr>
<tr>
<td>admin communicates well</td>
<td>positive changes due to RHS</td>
<td>.4867</td>
<td>107</td>
</tr>
<tr>
<td>consistent in adversity</td>
<td>behaviour change due to RHS</td>
<td>.5618</td>
<td>102</td>
</tr>
<tr>
<td>actions and beliefs consistent</td>
<td>understand values taught</td>
<td>.5163</td>
<td>101</td>
</tr>
<tr>
<td>enough time on values</td>
<td>endorsed values learned at RHS</td>
<td>.4713</td>
<td>119</td>
</tr>
<tr>
<td>staff trained well by RHS</td>
<td>understand values taught</td>
<td>.5302</td>
<td>101</td>
</tr>
<tr>
<td>clear goals and objectives</td>
<td>learned negative values</td>
<td>.4859</td>
<td>104</td>
</tr>
<tr>
<td>strong leadership</td>
<td>endorsed values learned at RHS</td>
<td>.4809</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>understood values taught</td>
<td>.4927</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>positive change due to RHS</td>
<td>.4534</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>understood values taught</td>
<td>.4955</td>
<td>128</td>
</tr>
</tbody>
</table>

6.2.3. Goal attainment - outcome

1. High overall grade

Parents were clearly supportive of AHS. Fully 75% of them felt the "overall grade" (item B9) of the school was "A" or "B," which was defined as "outstanding/excellent" or "very good." For these 'mobile, young to middle aged, high
income, white collar, international parents,' the academic features of the school were of pre-eminent importance. Even the strong negative feeling about the facility (57%) did not detract from the positive overall grade. Indeed, only 1.4% gave the "overall grade" a negative score (fair/poor/needs improvement) which meant the "overall grade" was tied for the lowest negative rating amongst the eight items in the section (see above Table 6.6).

A cross-tabulation study and chi-square significance test of all the items in Part A of the AHS survey found no significant relationship between the "overall grade" given to the school and age, gender, citizenship, occupation, income, the number of children in the school, marital status, and the grade level of the children.\(^90\) The "overall grade" was most closely associated with the scores on the academic programme (\(\rho=.5268, N=72, p<.001\)), and with the ratings given the board (\(\rho=.6024, N=61, p<.001\)) and the administration (\(\rho=.5076, N=71, p<.001\)).

Because of the importance parents ascribed to academics one would have expected that their child's academic achievement would reflect on the "overall grade" the parents gave the school. Such was not the case: the two outcomes were not significantly related. This may have been due to a "halo effect" which seems to have been present in the survey. AHS parents felt the school had high expectations. With this belief buttressing them, it would be logical to assume their children were doing as well as they could and should be, given AHS's "high standards."

A principal components analysis was carried out on AHS Part B, 1-9 and AHS Part B, 10-34 in an effort to reduce the items through the creation of indices which could be used with more powerful statistical tests. A principal components analysis extracted three factors with an eigenvalue exceeding 1.000. The first factor accounted for 37.5% of the total variance and all items loaded on to it in excess of .38087. The

\(^90\) In order to increase the reliability of the study, "overall grade" (B9) was collapsed into two categories "very good/excellent" and "poor to satisfactory." Items A1-9 were likewise collapsed (e.g., citizenship became Anglo-America, Western Europe and other, occupation became professional and other, income became below US $100,000 and above US $100,000, total years became 1,2 years and 3+ years). This ensured that most cells exceeded the minimum expected frequency of 5. (Cf., Bryman and Cramer, p.162).
varimax rotation converged in 5 iterations, the oblimin in 10. Table 6.28 presents the pattern matrix of the oblimin rotation.

Table 6.28: “Pattern Matrix Part B, 1-9”

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 Facility</td>
<td>.85566</td>
<td>-.04562</td>
<td>.20495</td>
</tr>
<tr>
<td>B6 Counsel</td>
<td>.63823</td>
<td>-.11554</td>
<td>.25526</td>
</tr>
<tr>
<td>B5 Teachers</td>
<td>.58398</td>
<td>.17085</td>
<td>.29717</td>
</tr>
<tr>
<td>B7 Extracurricular</td>
<td>.53016</td>
<td>.17254</td>
<td>.07618</td>
</tr>
<tr>
<td>B8 Support</td>
<td>.14623</td>
<td>.83941</td>
<td>.07348</td>
</tr>
<tr>
<td>B2 Board</td>
<td>-.11614</td>
<td>.80208</td>
<td>.07391</td>
</tr>
<tr>
<td>B4 Academic programme</td>
<td>.04178</td>
<td>-.06848</td>
<td>-.82835</td>
</tr>
<tr>
<td>B3 Administration</td>
<td>-.13050</td>
<td>.10910</td>
<td>.77478</td>
</tr>
<tr>
<td>B9 Overall grade</td>
<td>.28854</td>
<td>.02004</td>
<td>-.71429</td>
</tr>
</tbody>
</table>

Above it was noted that the overall grade of the school seemed to be most sensitive to items B3, 4, and 5 and rather insensitive to the other items. In other words, the school was given a "top mark" equivalent to the marks accorded these other three items even though facilities and extra-curricular activities were given poor or average marks. The principal components analysis bore this out. The four items with the highest loading on factor three were B3, 4, 5, and 9. In the case of B5 (teachers), this represented a secondary loading and fell just below the preferred acceptance level of .3000 (.29717). Nevertheless, the meaning of factor three appears to be associated with school features which are most directly responsible for the school being an "A" school.

Other than this, the meaning of the factors was not readily apparent from the items which loaded most highly on them. There was a moderate correlation between the factors themselves but the three factors were not significantly related to key items
in the survey.  

.2 Grades expected

Another often repeated comment around RHS was that "kids who attended RHS because they wanted to, did 'much better.'" The study at AHS indicated that the "much better" could be seen to include academic achievement. Parents who felt their children wanted to attend AHS (B14) were also expecting higher grades (B35) than were parents who felt their children did not want to attend the school, as Table 6.29 points out:

Table 6.29: "Grades expected by willingness of the child to attend the school"

| Child wanted to attend (B14) | Grades (B35) |   |   |   |
|-----------------------------|--------------|--|--|--|--|
|                             | As           | Bs | Cs, Ds | N |
| Agree (strong)               | 30%          | 50%| 20%    | 50|
| Disagree (strong)            | 18%          | 46%| 36%    | 11|

Spearman's rho=.2760, N=70, p=.010

Parents of RHS children had high expectations for their children. Forty-five percent expected their first child to receive all As or mainly As with some Bs. Another 42% expected their child to receive all Bs or mainly Bs with some Cs. Only 12% expected mainly Cs, and no one expected Ds although one parent indicated he/she had "very low expectations, or didn't care." Parental expectations were marginally lower for the second child. Thirty-four percent expected As or mainly As for the second child, 57% expected Bs or mainly Bs with some Cs, and 9% expected Cs with some Ds.

Parents who sent their children to RHS because it prepared them culturally for North America (A11) felt most strongly that their child had done well academically (C2.6) and had learned a lot of positive values (C2.7). Those who sent their child to

---

91 The oblique rotation by the oblimin method produced the following factor correlation matrix:

Factor 1 Factor 2 Factor 3
Factor 1 1.00000
Factor 2 .16199 1.00000
Factor 3 -.33000 -.30188 1.00000

92 This compares with 22% of the parents at AHS who expected mainly Cs and Ds.
RHS primarily for spiritual reasons were associated with an assurance that their child had done well academically.\textsuperscript{93}

Parents with children who were expecting Cs were most frequently associated with an opinion that their child had not learned a lot of negative values and that RHS had high academic expectations. However, not surprisingly, parents expecting Cs were also associated with the belief that their first child had not done well academically while at RHS. Similarly, parents expecting Bs were also less frequently associated with a strong conviction that their child had done well academically than were parents who were expecting As. However, there was not a clear distinction between grades expected and the feeling parents had that RHS had high non-academic expectations (C1,Q13).\textsuperscript{94}

One other correlation from this section is worth noting in part because it illustrates the survey's validity. There was a moderately strong correlation between the grades parents expected (A12) and their perception that their child had done well academically.\textsuperscript{95}

\section*{3 Good values are being taught}

It was also postulated that if AHS parents felt "good values" were taught at the school (B17) and that the teachers who taught them in their role as high profile

\textsuperscript{93} A.9 by C.2.6 (North American by academic achievement) $\chi^2 = 73.64256, \chi^2 = 73.64256, 32 DF, N=70$.

A.9 by C.2.7 (spiritual by positive values) $\chi^2 = 75.02081, 40 DF, N=71$.

\textsuperscript{94} A.12 by C.2.8 (grades expected by did not learn negative values) $\chi^2 = 17.99337, 8DF, N=57$, item C.2.8 was reverse coded to permit correlational analysis.

A.12 by C.1.13 (grades expected by high academic expectations) $\chi^2 = 11.69316, 6DF, N=58$.

A.12 by C.2.6 (grades expected by did not learn negative values) $\chi^2 = 20.15870, 6DF, N=55$.

\textsuperscript{95} C.2.6; rho=.5600, N=55, p<.001.
transmitters of values were positively influencing value formation in their children (B20), the parents would be open to having the school take on a greater role in values education and even encourage it. A cross-tabulation of B26 with B17 and B20 found that there was likely a significant relationship between these items but not of the nature which had been predicted. AHS parents thought teachers were doing a commendable job of teaching "good values," but they did not want them to assume more responsibility for teaching them, as Table 6.30 points out.

Table 6.30: “Teach more values by already teaching good values”

<table>
<thead>
<tr>
<th>B26 AHS responsible to teach more values</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teach values already (B17)</td>
<td></td>
</tr>
<tr>
<td>Agree, Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>Disagree, Strongly Disagree</td>
<td></td>
</tr>
<tr>
<td>No Opinion</td>
<td></td>
</tr>
<tr>
<td>Agree (strong)</td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>69%</td>
<td></td>
</tr>
<tr>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Disagree (strong)</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Even with positive feelings about the value training process and the school’s effectiveness, parents still did not want the school to become more involved in teaching values.

The belief that good values were being taught at AHS was most closely associated with the belief that the child was enjoying AHS (rho=.6505, N=65, p<.001), that AHS prepared students for the future (rho=.5681, N=64, p<.001), and that tolerance was developed (rho=.5527, N=62, p<.001).

RHS parents responded to C2.7,8 in a way which argues for their validity and reliability as well as for the validity and reliability of the other items in Part C, sections 1,2. One would expect a positive response to C2.7 and a negative response to C2.8.
given what parents had said in C2.4.\textsuperscript{96} Table 6.31 summarises the response frequencies for the items.

Table 6.31: "Positive and negative values learned at RHS"

<table>
<thead>
<tr>
<th>Child 1,2</th>
<th>A lot of positive values learned</th>
<th>A lot of negative values learned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C2.7</td>
<td>C2.8</td>
</tr>
<tr>
<td>strongly agree</td>
<td>21%</td>
<td>2%</td>
</tr>
<tr>
<td>agree</td>
<td>57%</td>
<td>7%</td>
</tr>
<tr>
<td>undecided</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td>disagree</td>
<td>3%</td>
<td>58%</td>
</tr>
<tr>
<td>strong disagree</td>
<td>1%</td>
<td>13%</td>
</tr>
<tr>
<td>no observation</td>
<td>2%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Seventy-eight percent of the RHS parents felt their children had learned a "lot" of positive values at RHS while 71% disagreed that their children had learned a "lot" of negative values. In both cases a modest group of parents were undecided (16%/18%) while an even smaller group thought they had not learned a "lot" of positive values (4%) or that they had learned a "lot" of negative values (9%). This was approximately the same percentage of parents who felt the school was doing a good job of teaching values although in these items the "no observation" response was lower.

Strong endorsement for all the values their child was learning at RHS (C2.2) was associated with a perception that their child had undergone positive changes which parents attributed to RHS (\(\rho=0.5283, p<0.05\)), that the first child had learned a lot of "positive" values at RHS (\(\rho=0.4464, p<0.05\)), that the parents understood the school's values (\(\rho=0.5658, p<0.05\)), that there were not negative changes attributable to RHS (\(\rho=0.4626, p<0.05\)), and that there was behavioural change attributable to RHS (\(\rho=0.3736, p<0.05\)).

\textsuperscript{96} In C2:4, 75% of the parents indicated the effect of RHS had been positive (20% "strongly agreed").
A belief that the first child had learned positive values was associated with a belief that the child had not learned negative values ($\rho=.3901$, $p<.05$), that there had been positive changes due to RHS ($\rho=.6949$, $p<.05$), that the first child had done well academically ($\rho=.4699$, $p<.05$), that the values were understood ($\rho=.4253$, $p<.05$), that all the values learned at RHS were endorsed ($\rho=.4464$, $p<.05$), and that there were behavioural changes attributable to RHS ($\rho=.6022$, $p<.05$).

Finally, a belief that the student had not learned negative values was associated with an endorsement of all the values learned at RHS ($\rho=.4626$, $p<.05$), with an understanding of the values at RHS ($\rho=.4621$, $p<.05$), with a feeling the changes at RHS had been positive ($\rho=.3574$, $p<.05$), and with a feeling that the values learned were positive ($\rho=.3901$, $p<.05$).

The perception that negative values had not been learned at RHS was the most active correlate with the behavioural dimension of value holding as illustrated by the items in RHS Part B. Twelve of the items in Part B were significantly associated with “negative values had not been learned at RHS.” This correlational feature should not obscure the most striking factor about the behavioural dimension. Virtually all of the items in Part C were significantly associated with items Part B.

.4 Future orientation taught

What AHS parents wanted for their children was academic training which could be used later in life and this was what they felt they were receiving. Ninety-three percent felt the school was preparing their child well for the future (B19). “I like teachers teaching” was most closely associated with the teaching of a particular value, “prepares for the future.”  

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97 Spearman’s $\rho = .5687$, $N=64$, $p<.001$. 

.5 Evaluation of AHS' effectiveness at teaching "good values"

A closer look at specific values espoused by AHS in its literature and its public forums (e.g., Open House, graduation, awards, assemblies) confirmed the positive feeling parents had about the school's effectiveness in the area of teaching "good values." Table 6.32 summarises the parents' feelings on seven statements which reflected the effectiveness of the school at teaching the values it publicly claimed it wanted to teach the students. It also compares the effectiveness of teaching specific values with the parents' feeling about the overall effectiveness of the school in teaching "good values" (B17).98

Table 6.32: "Parent evaluation of the values AHS sought to transmit"

<table>
<thead>
<tr>
<th>Item</th>
<th>Value transmitted</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Opin</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>delay gratification</td>
<td>32%</td>
<td>61%</td>
<td>1%</td>
<td>--</td>
<td>5%</td>
</tr>
<tr>
<td>23</td>
<td>diligence</td>
<td>17%</td>
<td>65%</td>
<td>9%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>27</td>
<td>citizenship</td>
<td>4%</td>
<td>54%</td>
<td>11%</td>
<td>1%</td>
<td>30%</td>
</tr>
<tr>
<td>29</td>
<td>individualism</td>
<td>20%</td>
<td>72%</td>
<td>7%</td>
<td>--</td>
<td>1%</td>
</tr>
<tr>
<td>32</td>
<td>self worth</td>
<td>17%</td>
<td>69%</td>
<td>7%</td>
<td>--</td>
<td>7%</td>
</tr>
<tr>
<td>33</td>
<td>tolerance</td>
<td>21%</td>
<td>63%</td>
<td>7%</td>
<td>--</td>
<td>9%</td>
</tr>
<tr>
<td>34</td>
<td>participation</td>
<td>15%</td>
<td>69%</td>
<td>13%</td>
<td>--</td>
<td>3%</td>
</tr>
<tr>
<td>17</td>
<td>all values</td>
<td>14%</td>
<td>73%</td>
<td>4%</td>
<td>--</td>
<td>10%</td>
</tr>
</tbody>
</table>

N=minimum 74/75
*The wording of the item reduced the tendency of the yeasayers to end up with an extreme score. The table reflects reversed scoring of the item.

To the degree that AHS items B19,23,27,29,32,33, and 34 accurately assessed parents' feelings about the teaching of specific values at AHS, it is apparent that the positive assessment of value teaching in general (B17) was reflected in the assessment of the school's effectiveness at teaching the specific values it publicly claimed to teach.

Thirty percent of the parents expressed "no opinion" about the school's effectiveness at teaching the value with the lowest approval rating ("citizenship"). Although frequent reference was made to this value, the high incidence of "no opinion" probably reflected the fact that the concept was poorly defined in the parents' minds.99

98 In some cases the values were deeply embedded in the statements (e.g., B23 'AHS asks my child to work too hard'=diligence) while in others the values were plainly stated (e.g., B33 'AHS effectively develops tolerance for others in my child'=tolerance).

99 Cf., Davies (1991) on the problematic nature of the "citizenship" construct.
.6 Values taught well at AHS

An index was created from the AHS data on the basis of the value change propositions. The four values "good citizenship" (B27), "self worth" (B32), "tolerance" (B33), and "involvement" (B34), were combined to form the index "values taught at AHS." It was not found to be correlated with "years in the host country" but it was negatively correlated with "income" (A5 collapsed) although the high degree of heteroscedasticity in the scattergram brought into question the use of the product moment coefficient.\(^{100}\) "Values taught at AHS" was not significantly correlated with "responsible to teach more values" (B26) but it was with "AHS educational philosophy is similar to mine" (B15).\(^{101}\)

A principal components analysis of AHS items B10-34 was undertaken to see if "values taught at AHS," which was created on the basis of theory, was justified given the parents' responses. The varimax rotation converged in 32 iterations. The first factor extracted had an eigenvalue of 5.98854 (24% variance). An examination of the Scree test showed that there was a steep slope after the first factor. Nine factors had an eigenvalue exceeding 1.0000. This was considered to be too many to be of help so no further analysis was undertaken. The index "values taught at AHS," as well as the index "AHS school impact," which was also created on the basis of theory, had some empirical justification, as is evident from Table 6.33.

<table>
<thead>
<tr>
<th>Factor 1 (&quot;AHS school impact&quot;)</th>
<th>Loading</th>
<th>Factor 4 (&quot;Values taught at AHS&quot;)</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;self worth&quot;</td>
<td>.91214</td>
<td>teaching positive</td>
<td>.73893</td>
</tr>
<tr>
<td>&quot;tolerant&quot;</td>
<td>.80022</td>
<td>policies positive</td>
<td>.61915</td>
</tr>
<tr>
<td>&quot;involvement&quot;</td>
<td>.26577</td>
<td>peer positive</td>
<td>.17976</td>
</tr>
<tr>
<td>&quot;good citizenship&quot;</td>
<td>.19399</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

.7 Evaluation of RHS' effectiveness at teaching good values

Above, in Tables 6.21,22: "Parental values and school effectiveness" the Rokeach style values were ranked according to their mean score. The importance

\(^{100}\) Pearson's \(r = -.3154\), 2-tailed significance .05.

\(^{101}\) Spearman's rho=.2879, N=45, p=.028
parents placed on the value was listed in the left column and their assessment of the school's effectiveness in the right column.

These tables indicate that RHS did not do as effective a job of teaching the values in the list as the parents felt it should have. This may provide an explanation for the ambivalence which appeared in item C2.3 where it was noted that most parents endorsed the values learned at the school but some were uncertain about "all" the values which were learned. Neither the mean scores nor the standard deviations suggest that there was a tension in the way parents viewed the values included in the list. The greatest spread of opinion was in piety which differed one full point (1.01); most deviations were in the .5 to .8 range.

It is noteworthy that parents tended to rate the school's performance according to the significance they personally attributed to the value. In C1.1, 94% of the parents said the school held their values. This can be illustrated at the level of specific values. For instance, when parents rated a value very highly they rated the school as being very effective at teaching it. When parents felt the values were not so important, the school's effectiveness rating was lower. There were several conspicuous exceptions to this trend. The most pronounced was in the instrumental value of intelligence which parents rated 14th out of 15th (i.e., not very important) but felt the school was doing a better job of teaching it than any other instrumental value. This provides additional evidence for the conclusion that parents held the academic dimension of the school in high regard.102

There were other less dramatic exceptions to the over general trend according the school a high effectiveness rating on values which the parents themselves felt were

102 The consistent pattern of responses on the academic issue attests to the reliability of this section of the survey which is particularly important because of the reduced number of valid cases.
important. Parents gave the school low scores for its teaching of the instrumental values of *loving* and *self-control/self-discipline* and terminal values *respect* and *wisdom*. Conversely, the parents gave the school relatively good marks for its teaching of *production* (i.e., effective, involved) and *equality*. The school came marginally closer to meeting parents' expectations in its teaching of instrumental values than it did in its teaching of terminal values.\(^\text{103}\)

The fact that the parents' effectiveness ratings were based on how important the value was to them obscures the fact that the gap between the values the parents believed most important and the school's effectiveness at teaching these values was actually greater than it was with those values which were held to be less important. That is, the more important the parents felt the values were, the more effective they felt the school was at teaching them but this effectiveness was not as close to what the parents felt it should have been as was the school's effectiveness at teaching less important values. Table 6.34 sets this out. The "differences in means" column depicts the difference between the means of the parents' rating of the value's importance and the parents rating of the school's effectiveness at teaching the value. All the mean scores of the ratings parents gave the various values were ranked from highest (most important) to lowest (least important). The ranking column in Table 6.34 shows the ranking the value's mean score had in the list of parents' assessment of the value's importance to them.

Table 6.35 summarises the "best" performance of the school considering the parents' personal value position.

\(^\text{103}\) The mean of the parents' means for terminal values was 4.14. The school's mean on the same list was 3.73 for a difference of .41. In the case of instrumental values, the mean of the parents' personal belief means was 4.12 while their perception of the school was 3.80 leaving a difference of .32.
To repeat, the values parents felt were most important were the ones they felt the school was doing the best job of teaching but this "good job of teaching" was furthest away from what the parents felt the school should be able to do. The values which the parents felt were relatively unimportant were the ones which they thought the school did not teach very well but what they did teach in this "unimportant" area was nearest to what the parents thought the school should be able to do.

One hundred thirty-three of the 544 effectiveness ratings parents gave the school on these seventeen terminal values (column two) had relationships which were significant (p<.05). Sixty-one of the relationships had a moderate to strong correlation with the items in Part C sections 1 and 2 (i.e., rho>-.4000, p<.05). *Salvation, order, and beauty* were unique in that they had no correlations in this range. *Respect, inner harmony* and *piety* were the values to have the most significant correlations (8,9).

### Table 6.34: "Greatest difference between parents' value holding and school effectiveness"

<table>
<thead>
<tr>
<th>Terminal Values</th>
<th>Differences in Means</th>
<th>Ranking of mean</th>
<th>Instrumental Values</th>
<th>Differences in Means</th>
<th>Ranking of mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. respect</td>
<td>.94</td>
<td>3</td>
<td>loving</td>
<td>.86</td>
<td>1</td>
</tr>
<tr>
<td>2. wisdom</td>
<td>.82</td>
<td>4</td>
<td>self-control</td>
<td>.85</td>
<td>3</td>
</tr>
<tr>
<td>3. love of God</td>
<td>.73</td>
<td>1</td>
<td>obedient</td>
<td>.67</td>
<td>4</td>
</tr>
<tr>
<td>4. justice</td>
<td>.64</td>
<td>7</td>
<td>responsibility</td>
<td>.62</td>
<td>2</td>
</tr>
<tr>
<td>5. salvation</td>
<td>.56</td>
<td>2</td>
<td>helpful</td>
<td>.47</td>
<td>6</td>
</tr>
</tbody>
</table>

### Table 8.35: "Least difference between parents' value holding and school effectiveness"

<table>
<thead>
<tr>
<th>Terminal Values</th>
<th>Differences in Means</th>
<th>Ranking of mean</th>
<th>Instrumental Values</th>
<th>Differences in Means</th>
<th>Ranking of mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. recognition</td>
<td>.15</td>
<td>16</td>
<td>intelligent</td>
<td>.44</td>
<td>14</td>
</tr>
<tr>
<td>2. beauty</td>
<td>.02</td>
<td>17</td>
<td>individualistic</td>
<td>.04</td>
<td>15</td>
</tr>
<tr>
<td>3. production</td>
<td>-.10</td>
<td>11</td>
<td>clean/neat</td>
<td>-.06</td>
<td>12</td>
</tr>
<tr>
<td>4. equality</td>
<td>-.21</td>
<td>13</td>
<td>capable</td>
<td>-.08</td>
<td>11</td>
</tr>
<tr>
<td>5. health</td>
<td>-.28</td>
<td>14</td>
<td>future (goal)</td>
<td>-.09</td>
<td>10</td>
</tr>
</tbody>
</table>

.8 Positive outcomes due RHS

Several items from Part B were correlated with Part C to see if the kind of behaviours parents permitted or expected were related in some way to outcomes seen at the school. For example, C2.4 "changes you have seen in your child which you attribute to the influence of RHS have been 'positive,'" was correlated with B2.21 "boys should be permitted to wear earrings" and with "hair should be worn any way the student wishes." In the case of the "hair" issue, there was a moderate correlation
between the behavioural expression of values and the outcome the parents perceived was due to the influence of the school. Parents who "strongly disagreed" with the statement that "boys should be able to wear their hair the way they want to" were associated with a strong conviction that they had seen positive changes attributable to the school. They were also less frequently "undecided" about the positive impact of the school. Conversely, parents who simply "disagreed" with the statement "that boys should be able to wear hair as they want to" were less sure that the changes they had seen at RHS were positive and considerably more were "undecided."

"Positive change attributed to RHS" was associated with the effectiveness rating of the terminal values respect, love of God, inner harmony, and piety. "The child learned positive values at RHS" was associated with the effectiveness rating of the terminal values respect, love of God, and inner harmony while "the child did not learn negative values at RHS" was associated with the effectiveness rating of the terminal values respect, inner harmony, joy, freedom, and justice.

A belief that positive values were learned at RHS was associated with a belief that parents understood RHS values (rho=.4622, p<.05), that they endorsed all the values learned at RHS (rho=.5283, p<.05), that there had been behavioural changes attributable to RHS (rho=.6154, p<.05), that the student did well academically (rho=.3949, p<.05), that positive values were learned at RHS (rho=.6949, p<.05), and that negative values were not learned (rho=.3574, p<.05).

9 Unknown values taught

Compared to parents with 3 or fewer children, RHS parents with 4 or more children were particularly associated with a feeling that there was no basis for the observation that "a lot of values are taught at RHS that the institution does not realise it is teaching" (C1.Q25).104 This same group of parents did not feel there was much of an opportunity to observe RHS' monitoring moral development (C1.23).105 It seems that more exposure to the school through the experiences of several children brought

104 Sixty-five percent for 4 children, 35% for 3 children, 27% for 2 children, and 20% for 1 child.

105 "No observation:" 33% for 4 or more children; 4% for the other categories.
with it a tempered view that parents could attribute much to "mysterious elements" in the school or that they could observe a key school process like the monitoring of moral development.¹⁰⁶

.¹⁰ Behavioural change

"Behavioural changes attributable to RHS" was associated with a parental understanding of the values (ρ=.3830, p<.05), an endorsement of values taught (ρ=.3736, p<.05), a feeling there had been positive changes at RHS (ρ=.6154, p<.05), and a belief that positive values had been learned at RHS (ρ=.6022, p<.05).

.¹¹ "School outcome" and "RHS school impact" indices

Parents who felt there had been significant, positive outcomes at RHS ("school outcome" index) were associated with a positive assessment of school processes ("school processes 1:" r=.4413, p<.01; "school processes 2:" r=.6506, p<.01). A regression analysis of the relationship between "school outcome" and "school processes 1" revealed that there was a small but significant shared variance (7%) in "school processes 1" on "school outcome."¹⁰⁷ Similarly, 42% of the variance in "school outcome" was explained by "school processes 2."¹⁰⁸ As a result, one could predict that on the basis of positive feelings about these categories of processes that there would be positive feelings about school outcomes. The reverse was also true. One could also predict a positive feeling about school processes if one knew that there were positive feelings about school outcomes.¹⁰⁹

¹⁰⁶ A7 by C1.25 (number of children by unknown values) V .34749, p=.03035, χ² 26.80701, 15 DF, N=74.
A7 by C1.23 (number of children by monitors moral development) V .33950, p=.00980, χ² 26.27962, 12DF, N=76.

¹⁰⁷ Seventy-eight cases were plotted. r=.2735  R squared .07480. S.E. of Est. 3.84006. Two-tailed sig. .0154. Intercept (S.E.) 10.08784 (1.30304). Slope (S.E.) .22092 (.08912).

¹⁰⁸ Thirty-seven cases plotted, 141 unweighted. r=.65061. r²=.42329. S.E. of Est. 1.38895. 2 tailed sig. .0000. Intercept (S.E.) 4.50203 (1.99920) Slope (S.E.) .39401 (.07774).

¹⁰⁹ "Outcome" on “school processes 1:” thirty eight cases plotted; 141 unweighted; r=.44130 r²=.19474 S.E. of est. 2.22364 2 tailed sig. .0055. Intercept (S.E.) 6.68881 (2.12006) Slope (S.E.) .55116 (.18679). “Outcome” on “school processes 2:” thirty-seven cases plotted, 141 unweighted. r=.65061. r²=.42329 S.E. of est. 2.29353. 2 tailed Sig. .0000. Intercept (S.E.) 2.37996 (2.03458) Slope (S.E.) 1.07433 (.21196).
The “school outcome” index was likewise associated with a belief that the staff modelled the school’s values (“staff models values” index $r=.4462, p<.05$), with a conviction that they understood and supported the school’s values (“understand and support school’s values” index $r=.4994, p<.01$), with a belief that RHS was monitoring development (“monitoring progress” index $r=.4011, p<.01$), and with parents who tended to be younger (“age” $r=.3310, p<.05$). A positive perception of “school outcome” was also associated with an ascription of increased importance of the spiritual-philosophic reasons for sending the child to the school (“RHS overt school purpose” index $r=-.4067, p<.01$, reverse scoring).

The other major goal/attainment index, “RHS school impact,” was closely associated with “school outcome” ($r=.7330, p<.01$) as well as with “school processes 2” ($r=.4348, p<.05$), “staff models values” ($r=.3469, p<.01$), “understand and support school’s values” ($r=.3290, p<.01$), and “monitoring progress” ($r=.2832, p<.05$).
CHAPTER SEVEN: Discussion of the parent surveys

The discussion in chapter seven follows the outline of the VCES model set out in chapter six. Organisational climate is discussed first, followed by atmospheric climate, and outcomes.

7.1 Organisational climate

7.1.1 Milieu

Standard milieu inputs, such as salary, educational background, and the age of the respondents, were not found to be active correlates with school processes and outcomes. Significant exceptions existed but these were surprisingly few, particularly as they related to issues relevant to value change. Inputs of a philosophic nature clearly overshadowed the significance of socio-economic characteristics in the correlation picture.

Before the survey was undertaken it was assumed that a child’s attitude towards enrolling in the school would be closely associated with a positive climate and goal attainment. Although there was evidence that the child’s willingness to attend the school was associated with an important outcome, namely academic achievement, the predominant impression emerging from the surveys was that the relationship to processes and outcomes was weak and infrequent. The correlations of a child’s willingness to enrol in the school stood in contrast to the many wide ranging correlations which existed between the child’s current enjoyment of the school (i.e., atmospheric climate) and processes and outcomes.\(^1\) However, it must be remembered that parents in both schools appeared convinced their children wanted to attend the schools. In order to claim with full confidence that the atmospheric characteristic of

\(^1\) There was a weak correlation between willingness to enrol and current enjoyment of the school. Spearman’s rho=.2182, N=74, p=.031.
happiness in the school is more typically associated with an effective school than is the organisational characteristic of a positive attitude before entering school, it would be necessary to study a school setting where students did not want to attend the school.

The grade level of the child proved to be an important milieu input in that it brought with it a distinctive which influenced the organisational climate. Those with younger children advocated the teaching of different values in the school than did those with older children and they had contrasting convictions of how important it was that values should be taught and how effective the school was at teaching them. Parents with young adolescents expressed the strongest desire for values to be taught and were the most unsure that outcomes were positive. These parents were also the most unsure that their child had entered with values like the school. This lends support to those who argue for the creation of distinctive programmes for children at various stages of development. The evidence here suggests that distinctive programming should also reflect distinctive parental aspirations. Further study is needed to see if the intensity with which parents hold a value "waxes and wanes" with the maturing of their children. It may be possible that people hold values in different ways as the individuals most closely associated with them go through the "passages of life."

The fact that parents appeared to change their values and their value expectations as their child matured lends credence to the belief that values can be changed at any time in life (proposition #2). However, this cannot be stated without qualification because the surveys also indicated that adults did not experience significant value change due to a prolonged stay in another country. It was speculated that prolonged exposure to another culture would result in discernible value shifts. This was not the case at RHS. While citizenship was associated with particular cognitive and behavioural value orientations, length of time in another country was
not. The RHS survey demonstrated that the region or area where the parents were raised had an enduring influence on their values and behavioural expectations. This reinforced the idea that core values were formed in childhood, presumably before one was old enough to live abroad as an expatriate. The values which did change with the maturation of children were essentially narrowly based and peripheral in nature.

Occupation is another milieu input frequently held to be associated with effectiveness and goal attainment. The processes and outcomes examined here did not bear this out although occupation was particularly associated with behavioural expectations of a value. Non-missionaries were generally more “permissive” than were missionaries even though their cognitive value holdings were similar. On the other hand, missionaries, who presumably were most identified with RHS’ purposes and objectives, were more critical about key process items. It appears that an increased sense of ownership of the school brought with it high expectations which the school was unable to fully meet.

Organisational climate was enhanced by interaction between the parents and the school. Parents who had a broad exposure to the school through the enrolment of more than one child or through the enrolment of a child for more than one year were associated with a higher effectiveness rating for the school, a positive assessment of the school’s impact, and a clearer sense that their values were shared by the school.

7.1.2 Ecology

Much remains to be explored in the ecology facet of the VCES model. It was clear that the majority of parents felt that a facility could reflect an institution’s values. In fact, the endorsement of all the values learned at RHS was associated with the belief that the facilities reflected the school’s values. An ethnographic study would be helpful in clarifying what this means.
At the same time, it was clear from the AHS site that the quality of the facilities was not associated with the school’s high rating. The overall grade of the school transcended the parents’ strong conviction that the facilities needed to be upgraded. Reflecting on responses from the two sites leaves one with the impression that facilities were not seen to be a key factor in “good education” but an advantageous asset which had the power to “facilitate” but not to create desired outcomes.

7.1.3 Social system

Positive ratings for school leadership were associated with a high esteem for the school and its programme. An effective administration was particularly associated with high behavioural expectations and clear public statements to the community about the school’s values, goals and objectives.

The role of the administration in value change should not be overestimated, however. Parents saw administrators as the least potent human agents of positive value change. School leadership had a key role to play in organisational climate but its association was linked to general processes and outcomes of an impersonal nature, with the noteworthy exception of behavioural standards.

The area of behavioural value holding proved to be one of the most interesting in the surveys. Both schools showed a remarkable unity and harmony on the cognitive side of value holding but when the behavioural dimension was explored inconsistencies and contradictions emerged. It was a dimension about which parents were highly opinionated and which differentiated them in many ways. That is, the tendency to positive and negative views of processes was often associated with the position parents took on behavioural standards.

Divisive tension would appear to be a logical corollary of such a situation, particularly if the behavioural pattern was linked to a “core value.” The RHS survey
allowed for an exploration of this interrelationship. Ninety-four percent of the parents said that the school shared their values. What did this mean behaviourally? To ascertain whether or not parents saw the hair issue as reflective of a value (i.e., a cognitively held value), parents were asked if they felt hairstyle reflected inner spirituality. Forty-one percent agreed (4% strongly) that it did while 44% disagreed (16% strongly). Therefore, while parents felt they had a common "values" bond with the school, it was evident that they did not agree on what the values would look like.

There were a number of other illustrations of this phenomenon. "Should hair be a natural colour?" Thirty-five percent "agreed" or "strongly agreed," 24% "disagreed." "Should boys be allowed to shave their heads?" Twenty-three percent "agreed," 39% "disagreed." "Should boys be permitted to wear their hair over the ear or collar?" Twenty-one percent "agreed," 53% "disagreed." Should students be permitted to listen to rock music? Forty-three percent agreed, 43% disagreed. Such dramatic divergence graphically illustrates the truth of proposition #9 - "Values are held interactively across the domains of personality in unique and idiosyncratic ways." The various details of grooming and music are trivial but they illustrate the problem schools have in teaching values in a manner which suggests there is an appropriate behavioural expression of the values. Further clarification through qualitative research is needed to ascertain the degree to which behavioural expressions of a value are actual expressions of the value held across domains and not merely expressions of conformity and rule-keeping.

Many behavioural expectations were shared by the parents. Nudity, sex and the occult were movie themes which all parents saw as taboo. So, too, were grooming
items like earrings for male students. But this agreement on behavioural values was clearly limited and appears to have raised an expectation that the school should be unified on all behavioural expressions. In a climate like RHS where values are close (proposition #4) and meaningful (proposition #6) and yet not completely uniform, particularly in a behavioural sense, value change could be anticipated. The outcome measures indicated that parents felt value change had occurred, thereby confirming proposition #12, but because of the tension which existed in the behavioural domain, parents were relatively unsure about RHS’ monitoring of moral development. Some children were undoubtedly changing in ways which seemed mysterious and incongruous to parents who felt the school held the same values they did.

The situation at AHS was not explored in the same detail as at RHS but even there it was evident that tension existed in behavioural expressions of a value. Of the process items examined at AHS, consequences for misbehaviour received the least enthusiastic rating from parents.

Clearly holding the same values “cognitively” did not mean the schools were harmonious and peaceful, particularly if parents felt deeply about the issue. It seems safe to conclude that it would be easier to administer a school where 94% of the parents believed the school’s behavioural standards were similar to theirs than a school where 94% indicated agreement on cognitively held values.

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2 RHS parents were virtually united in their opposition to this. Seven percent thought boys should be able to wear earrings while 29% expressed “no opinion” and 64% “disagreed” (36% strongly).

3 Schools, as social environments, influence value formation.

4 This was in contrast to the confidence they expressed in RHS’ monitoring of academic development.

5 The hidden curriculum was ranked second as an agent of negative change.
In reviewing these behavioural issues, it seems apparent that RHS' focus on them moved the school into a contentious area generally avoided by AHS. AHS parents did not want more values teaching. The school complied (shared this perspective) and limited its emphasis to a few universally accepted values with behavioural expressions generally ignored. The impression which emerged from visits to the school was of a lower environmental "temperature." By contrast the RHS community appeared to be a driven community with many stakeholders vying for the imposition of their behavioural expectations on the school. Rather than less teaching on values, the RHS parents saw problems in the school as a correlate of insufficient values teaching. This came in spite of (because of?) the fact that the school overtly sought to teach values in all dimensions of life.

Nevertheless, complete harmony did not appear to be a pre-requisite of effectiveness in values education. RHS was clearly very effective in the sense that it was definitely associated with positive value change. Propositions #4 and 6 appear to be crucial to effectiveness. These surveys suggested some tension was necessary for change to occur but it was a limited tension created by the competition of peripheral values which were meaningful and understood. One suspects from the evidence at RHS that if this criteria was not met the values change process would likely be a painful and (frequently) negative experience.

Many staff at RHS concurred with the principle that more values needed to be "taught," although exactly whose behavioural expressions of the values should be taught remained a point of discussion. Some parents seemed to have had an insatiable appetite for more values and expected the school to as well. Seventy percent of the parents agreed that RHS devoted enough time to teaching academics and another 13% "strongly agreed." This 83% approval rating, with only 14% "undecided" or feeling they have "no basis for judgement," contrasted sharply with the 59% approval rating (35% "undecided"/"no observation") given the same question on enough time devoted to the teaching of values. It is evident from this that the RHS parents stood in contrast to the AHS parents who did not want more time spent on teaching values.
It was noted above that administrators were not seen by parents as particularly effective agents of value change except perhaps in the area of behavioural modification. This should not obscure the fact that the effective agents of change in the school were people rather than programmes or facilities. Parents felt adults in the school environment had the greatest positive impact on their child, although the peer group was held to be more influential than high profile agents of direct value transfer such as the church. A similar picture emerged at AHS where it is tempting to see the teachers as the primary source of positive influence.\(^7\)

Negative agents of change were largely unexplored at RHS because of a poor response rate but even here it appears “people” were most influential, with “peers” being relatively more potent as instigators of negative change than they were of positive change. Similarly, at AHS peer influence received the lowest approval rating from the parents and the highest incidence of "no opinion."\(^8\)

The social dimension of the school proved to be the leading agent of both positive and negative change. Agents which were dynamic in one area were dynamic in the other although not necessarily in the same order. The church was last in terms of its negative impact but fourth in terms of its positive impact. School policies, extracurricular activities, textbooks, and facilities were all less influential than “people” in the school. This provides evidence for proposition #11 which holds that “values are learned in social environments.”

7.2 Atmospheric climate

One of the key correlates of positive processes and outcomes was the belief that the child was enjoying school. While the original attitude towards enrolling in the school was not clearly associated with a positive climate, as measured by the various

\(^7\) School policies had an approval rating second to the teachers and 20% higher than the peer group.
process items in these surveys, the attitude while in attendance was a high profile correlate. With the trend towards parental choice both of the site and nature of their children's education, further research needs to be done on the relationship between desired outcomes and the attitude of the parents and child towards enrolment in a particular school. In the student surveys which follow, students were asked to assess their parents’ happiness with the school. Results from these student surveys confirm what emerged here in that the students’ perception that their parents had positive attitudes about the school was likewise associated with positive opinions about school processes and outcomes. Further research should focus on a site where negative feelings about the school are well represented amongst both the parents and the students. Theoretically, if a trend is visible in schools with a positive ethos, it will be even more visible in schools with a negative ethos.

Parental conviction that their philosophy of education was similar to the schools was another key input correlate of a positive culture. It expressed itself in a number of ways but the first point of interest is that there was no statistically significant relationship between the parents’ feeling that the school's philosophy was similar to theirs and their age, their income level, their years in the host country, their gender, their country of citizenship, their occupation, the grade level of their children, or the number of children they had enrolled in the school. In other words, milieu input items did not have a significant relationship to the philosophic identity which parents had with the school.

Part of the philosophic orientation which parents shared with their school was the role they felt values education should play in the school. Once again, a parental desire to have more values taught was not based on milieu items. Citizenship was one exception to this trend (AHS) where North Americans and Europeans were not seen to
want more emphasis on values teaching in contrast to the wishes of parents from other areas. However, parents who felt one of the school’s stated value goals was not met (tolerance) advocated a greater emphasis on the teaching of values.

With the AHS parents approving of the values learned (87% approved) and of the way (sources) in which they were learned, it seemed logical to assume they would want the school to teach more values. However, the majority (63%) disagreed. The survey provided no explanation for this. One can speculate that parents saw values education as their responsibility and that they would have seen increased school involvement as an intrusion into their family affairs. One can also imagine that parents were happy with the status quo and did not wish to see an efficacious environment disturbed or that they feared the teaching of additional values would include unwanted values.

This last possibility is improbable, however, in light of the fact that 82% of the parents indicated AHS's values were similar to theirs and only 5% said they were not (B15). A follow-up study with parent interviews is needed to explore the reasons behind the parents' reluctance to see the school assume an even greater responsibility for an area in which they felt the school was operating effectively.

The reason parents sent their child to the school was another important correlate in atmospheric climate. If inculcation of spiritual values was what the RHS parents wanted, they were in agreement with the school’s stated purpose. Not surprisingly, these were the parents who felt that they were “one” with the school. This solidarity was associated with clearly communicated goals and objectives. Eighty-six percent of the parents felt they had a clear understanding of the values taught at the school. Not only did the parents feel the school's value position was
similar to theirs, they also felt the value message was consistent, clear, and comprehensible.

Almost all the parents felt that RHS impacted their child but those who said that they shared the school’s values and had chosen the spiritual dimension as the most important reason for enrolling their child in the school - thereby confirming that they shared the school’s orientation - were the parents who particularly thought the outcomes were positive. These parents were also those associated with the belief that the school was effective at creating behavioural change and that the staff was a good model of what RHS sought to teach. Parental endorsement of all the values learned at RHS was most closely associated with the parents’ belief that the school shared their values. Consistency in the school was most closely associated with a belief that the school’s values were understood.

Similarly, parental commitment to the school’s perceived values was strongly correlated with the perception that the school was effectively communicating its values \( (r=.7553, p<.01) \). If they liked the values they thought the school was teaching, they tended to see them as effectively communicated.

Summarizing these points, it would seem that effectiveness at values change in a school setting begins with, and is maintained by, consistency, clear communication of a school’s goals and objectives, comprehension of the school’s values, and a conscious, voluntary decision on the part of the parents to select the school on the basis of the information which they received. While the evidence here does not suggest causation, it definitely implies a sequence in which atmospheric inputs are in place when positive outcomes are expected.
As was stated earlier, both schools demonstrated a community values orientation. Parents agreed on the nature and importance of a core group of values. The two parental groups had distinct subgroups within them, but in general these effective schools were characterized by a values harmony and a consistency in the cognitive domain. Dormant differences existed which had the potential to create tension in the face of difficulties (e.g., budget shortfalls) but even in a crisis it appeared that there would be solidarity.

This study was based on the premise that parents sent their children to RHS for different reasons and that the reasons reflected their values. These values would, in turn, form part of the school's values environment, partly through the direct input of the parents and partly through the indirect input of their children. Above it was noted that the parents shared a common values orientation which was differentiated along behavioural lines and which appeared to create a tension conducive to change. There were other sources of differentiation which were associated with citizenship, occupation and gender. These sources of differentiation represented another, apparently safe, source of dynamic tension in the school. Value change proposition #4 implies the need for values alternatives to exist for change to take place.

In the case of AHS, the parents' strong endorsement for the school's philosophy, their ascription of a high overall grade to the school, their identification of the sources of value transmissions as positive, and their support for the overt values taught at the school all suggest that the school had found an effective balance between competing values and a shared values orientation.

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8 In the chapters which follow it becomes clear that the teachers and students shared the core values so it is possible to speak of "community values."

9 They can be labelled as "safe" in this context because parents believed positive change occurred.
Given the religious nature of RHS' philosophy and its stated religious "goals" one would expect to find the values at RHS and AHS dissimilar. Value change proposition #3 states, "the more central a value is in one's belief system, the greater will be the repercussion of a change in the value." Therefore, because the core values at RHS and AHS were different, one would expect their value profiles to be dramatically different. Although the survey instruments differed, it appears that the derivative effect was not as substantial as one might expect.\(^\text{10}\)

*Love of God* and *salvation* were firmly entrenched at the top of the RHS list. The highest ranking terminal values at AHS were a *sense of purpose, respect, inner harmony,* and *wisdom.* Contrary to expectation, parents at RHS ranked these AHS values near the top of their list as well with the notable exception of *inner harmony,* which was of intermediate importance to RHS parents. No parent at AHS chose *health, beauty, freedom, piety,* or *order* as their most important value. Likewise, at RHS *health, freedom,* and *beauty* were three of the four values rated least important. *Piety* and *order* were relatively more important at RHS than at AHS and *inner harmony* was relatively less important.

A similar picture emerges with the instrumental values: *responsibility,* *commitment to excellence, tolerance* and *capability* were chosen by the majority of parents at AHS as the most important values. At RHS *responsibility* was the second most important value based on a ranking of the mean ratings, and *commitment to excellence* seventh out of fifteen. *Tolerance* was not on the RHS list. The significant difference was in the relative importance of *love,* which was chosen by the second

\(^{10}\) AHS parents were not given the religious options RHS parents were, but it seems certain from the staff and student rankings (cf., the student survey chapter 9) they would not have ranked these first, as was the case at RHS. If *piety* is seen as a religious value, then *piety's* high score in the AHS parents' least important list reinforces the impression that the religious dimension was definitely less important at AHS.
largest group of parents at AHS as being "least important." For RHS parents, _love_ was the most important instrumental value. Other sizable groups of parents at AHS thought _commitment to excellence, cleanliness, and intelligence_ were least important. RHS parents agreed as far as their survey permitted.

When all significant correlations are taken into account, it becomes apparent that the values _salvation and love of God_ are unique in that their correlations were basically with themselves. _Respect,_ which had the next fewest items in correlation, had 10 significant associations. All the rest of the values in the RHS list had 12 to 14 which means that most of the ratings parents gave to the values were significantly linked to each other. _Salvation and love of God_ stood alone as core values. However, with the religious core values removed, the RHS and AHS profiles were quite similar, thereby suggesting that a radical change in core values may not have a substantial derivative effect in the cognitive domain.

In summary, the parent groups had some striking differences in one or two core values but the derivative effect on the other values was not so pervasive as to cause a radical re-ordering of many values close to the core. The evidence is, of course, restricted to a derivative effect in cognitive holding and is tentative due to incompatible features in the two surveys. From the analysis of RHS Part B, it appears likely that the derivative effect would have been more pronounced in the behavioural domain of value holding.

The primary reason chosen for sending a child to RHS - namely, the spiritual opportunity the school afforded - was clearly associated with more values than any other reason chosen by parents. In other words, the primary reason for sending a child to the school carried the largest value cluster. These values, in turn, carried with them behavioural manifestations which were often contradictory in nature. One suspects
that if parents sent their child to RHS for reasons which were not in keeping with the school’s goals and objectives, tension and disagreement would have degenerated into major conflict due to this cluster principle. Further investigation is needed to see if this principle is true in other settings, but if it is, schools will need to look carefully at the primary reason parents enrol their child in the school: if the reason is not in sympathy with the school’s primary goals and objectives, then the school runs the risk of slipping from healthy tension, which creates positive change, to conflict and discord, which breeds negative change because of the value clusters associated with the primary reason for enrolling a child in a school.

7.3 Goal attainment - outcomes

As in the case of process items in the atmospheric and organisational climate, outcomes were linked together in parents’ minds. For example, a parental belief that the school’s curriculum had impacted their child was most strongly associated with the belief there had been positive behavioural changes attributable to the school.

The overall grade at AHS was most closely associated with a strong endorsement of the academic programme and the ratings given the school leadership (board, administration). Opportunity for academic growth at AHS was analogous to opportunity for spiritual growth at RHS in the sense that it was a primary focus of the school. Therefore, the school’s overall grade appears to be linked together with positive feelings about leadership and agreement that the school was chosen because of its primary focus.

The belief that good values were taught at AHS was most strongly correlated with the belief that the child was enjoying the school. At RHS the belief that good values were learned was clearly intertwined with a general belief that outcomes had been commendable, that the school’s values had been understood, that there were not
negative changes attributable to RHS, and that there was behavioural change due to RHS. The belief that children had done well academically was correlated with an endorsement of all the values learned at RHS.

In summary, parents who felt the school had been effective in the values domain tended to be parents who understood and endorsed the school’s values, who felt their child was enjoying the school, who believed the school was a potent instigator of change, and who believed all the changes - including behavioural and academic as well as value - had been positive.

A favourable assessment of AHS’ effectiveness at teaching values was linked to its effectiveness at teaching the specific values it claimed to teach and which parents appeared to understand and support. The study at RHS amplified this. Parents rating of the school’s effectiveness at teaching values was coloured by the significance parents attributed to the value. If parents thought the value was important, they tended to think the school was effective at teaching it. If it is true that the school shared the parents’ values - as parents thought that it did - this is not a surprising conclusion because it would seem logical to assume that the school would teach best those things (values) which it felt were most important. Fortunately this coincided with the parents’ wishes.

When parents did not think the values were important, they lowered RHS’ effectiveness rating at teaching the values. This raises the question as to whether or not RHS was actually less effective at teaching relatively peripheral values. There was a significant exception in one value (intelligence), but the tendency to rate effectiveness as low for “unimportant” values raises questions about the objectivity of the parents’ assessment. However, if the school really did share the parents’ values and it, too, saw
the values as "unimportant," one could imagine that it would not be as effective at teaching them as it was at teaching the "important" values.

The results of RHS Part C section three argue for the designation of RHS as an "effective school" in the affective domain but it would be valuable to investigate further the relationship between effectiveness at teaching a value and the rating of the values' importance in the minds of the parents. It may be that a modified version of Part C section three of the RHS survey could become a simple instrument for other school's to use in their assessment of their effectiveness at teaching values.

The VCES model implies that there would be an observable change in the pupil if the school was "effective." Behavioural change attributed to the school was associated with an understanding of, and endorsement for, all the values taught in the school, together with several other outcome measures including the belief that values had been learned at RHS and that positive changes in general had occurred at RHS. In short, parents believed the school was dynamic and "effective" at creating positive value change.\(^{11}\)

The value change model states that the closer a completing value is to the one held by the individual, the more likely it is that he/she will internalize the new value and that values must be potentially meaningful if they are to be internalized (proposition #4). RHS CI.1.1 indicated that 94% of the parents felt they shared RHS's values. They also felt their children shared RHS' values upon entry (87% with 16% strongly agreeing), meaning they were only marginally less sure about their children than they were about themselves.\(^{12}\) As was stated earlier, if the parents' perception was accurate

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\(^{11}\) Twenty-one percent "strongly agreed" that they has seen a marked change attributable to the school, 42% "agreed," 10% "disagreed," 2% "strongly disagreed," 19% were "undecided," and 7% said they had "no basis for observation."

\(^{12}\) Nine percent were "undecided" and 4% "disagreed".
and the value change model correct, the students at RHS should have been open to value change in the RHS environment. New, competing values would have been "meaningful" and "close" to the students’ value positions because their basic values environment was shared by their parents and, as subsequent chapters point out, by their “school.” Given that parents reported positive values were learned at RHS and that there were discernible positive behavioural changes attributable to RHS, these value change propositions were confirmed by this study.

A closer look at associations with “behavioural changes were due to RHS impact” reveals that 15 school process associations in Part C section 1 exceeded rho=.2000 but were less than .4500 (p<.05). They included the following: values were taught, curriculum had impact, administration communicated clearly, beliefs and values were well known, consistency existed in the face of adversity, actions and beliefs were consistent, there was a high quality of instruction, enough time was spent on teaching values, the staff was motivated and committed, goals and objectives were clear, academic and moral development was monitored, and there was “strong leadership.” In short, behavioural changes were weak to moderately correlated with many processes especially consistency, communication, monitoring, “strong leadership,” and a motivated staff.

A more general perspective defined as “positive outcomes” was also associated with good modeling of values by the staff, with an understanding of, and support for, all values learned at the school, with monitoring, and with the spiritual reason for sending the child to the school which, as an enrolment factor, reflected an understanding of the school’s values. Similarly, the belief that there were “positive changes due to RHS” was associated with “RHS shares my values,” consistency, curriculum had impact, administration communicated clearly, values and beliefs were
well known, consistency in the face of adversity, consistency in actions and beliefs, staff was supportive of the school’s values, a safe and positive environment, enough time spent on teaching values, staff motivated, committed, and well trained, goals and objectives clear, moral development monitored, and strong leadership. The strongest correlations (p<.05) were with “strong leadership” (rho=.4534), clear goals and objectives (rho=.4320), consistency in adversity (rho=.4305), consistency in actions and beliefs (rho=.4352), and curriculum had impact (rho=.5618).

In parents’ minds, positive outcomes of a value’s nature were associated with a perception of pervasive consistency, strong leadership, motivated staff, clear, comprehensible communication, monitoring of student development, and a personal sense of assurance that their values were shared by the school.

Both RHS and AHS were “effective schools” in the sense that substantial and positive outcomes were specifically attributed to them by the parents. A fuller picture of effectiveness could have been drawn if a school, which was not seen by the parents to be effective, had been included in the case studies. Definitions and explanations are often clarified by articulation of the negative.

Perhaps the strongest statement about effectiveness to emerge from these surveys is that it is endemic to an institution and comprised of a complex web of inputs, processes, and outcomes. Although inputs tended to be relatively insignificant, there was a key role played by the parents’ philosophic disposition as reflected in their understanding of the school’s values and their decision to enrol their child in the school based on a voluntary commitment to the specific values’ orientation which the school had carefully developed and communicated.

Parents felt they had evidence their schools were a significant force for change and value transfer. To them processes and outcomes were clearly linked. About 90%
of the 1000+ relationships studied between processes and outcomes were significantly related and the evidence suggests that positive outcomes were associated with a vast network of positive school processes which lay within the school’s jurisdiction and within its power to modify and improve.
Part Five: - The Student Surveys

CHAPTER EIGHT: Methods and the Student Surveys

The two parent surveys - one at RHS, the other at AHS - provided a parental perspective on the value change process. The students and the staff of the schools were two other groups which furnished intimate, personal, and highly relevant perspectives. Together they shed light on the same Value Change/Effective Schools (VCES) phenomenon, augmenting and complementing the insights which the parents provided. Their perspectives were seen to be an integral part of an attempt to provide a relatively comprehensive and accurate definition and explanation of the value change process in a school setting. Students were the main focus of attention in the two school surveys although the staff participated at various points and their views are summarised and discussed below in chapters eleven and twelve (see also Appendices 3 and 4).

8.1 AHS student respondents

Access to AHS was described above in chapters four and five. Following a brief explanation of the research project to the faculty in August shortly before school opened, the Head and his staff agreed to allow me to distribute a student-staff survey in early September and in mid-May.

There were 193 students enrolled in September. One hundred seventy-nine completed the survey resulting in a 93% response rate. The high rate of return was attributable to the fact that time was set aside in the school schedule for its completion. The spring re-test was distributed to the students in mid-May one week after external exams were written and two weeks before the end of term. The response rate indicated that the survey should have been administered earlier because teachers were
not prepared to give up 30 minutes of class time with final school based exams only days away. A compromise was reached in which the surveys were begun in a normal 10 minute homeroom and then left with the students to complete.

Eighty-five students out of a possible 200 (43%) completed the spring survey. This poor rate of return made it necessary to ascertain to what degree and in what manner the spring respondent group was biased. Sixty-two of the 85 who wrote in the spring also wrote in the fall. Taking into account absentees and students who had moved during the year, this represented a fall-spring return rate of 33% (62 out of 187). The attrition rate was considered too high to permit a comprehensive analysis of the fall to spring transition. Various means were used to circumvent the problem but it remained an inescapable constraint. Scheduling the re-test earlier in the spring and within the school schedule would undoubtedly have improved the re-test response rate.

8.2 AHS student survey procedure and construction

The AHS survey was patterned after the two year longitudinal study at RHS which was already underway and which finished two weeks after the one at AHS. The questions in the AHS survey were refined and made easier to code than the earlier ones at RHS (Appendix 3).

Fall 1991

In the fall survey there were four sections. The first and fourth were completed by all the respondents in the school while the second was for "students only" and the third for "staff only." Section one, questions 1-6, focused on demographic descriptors which were used to define the population. Questions 7-17 included excerpts from the student handbook which represented attitudes or behaviours that embodied values the "school" wished to teach. Section two asked students several questions about their families as well as two general questions about the handbook. Section three re-
phrased the questions in section two in a manner which was appropriate for the teachers. The fourth section was the Rokeach *Value Survey* which is summarised and discussed below in chapter eleven. As a supplement to the fourth section, students and staff were asked to rate how much they "liked" the terminal values (1=like very much, 10=dislike very much) in an effort to capture a sense of the "feelings" dimension of value holding.

**Spring 1992**

The spring survey repeated the fall questions and added two additional sections. One of the new sections contained questions which were designed to create an interface between the value change propositions and the effective schools model. The *School Life Survey* comprised the other new section and it is discussed below in chapter twelve together with two other widely used surveys administered at RHS.

The value change propositions were interfaced with the effective schools model to create a value change/effective schools model (VCES) which was described in chapter four. Table 8.1 summarises the theoretic connection of the AHS survey items to the propositions in the value change theory and Table 8.2 presents the theoretic connection between the items in this survey and the effective schools model.

Following a frequency study of all the items, those which yielded nominal data were analysed with crosstab tables and appropriate statistics. In instances where the number of cases was excessively low, the items were "collapsed" to minimise problems associated with low cell frequencies. Items which were reverse coded to reduce problems associated with yeasayers were "corrected" to allow for comparison and correlation.

1 Cf., Table 4.1: "The Values Change/Effective Schools Model (VCES).
Table 8.1: "AHS items and the value change propositions"

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All humans value</td>
<td>F1.7-17, F2.7, F4; S1.5-14, S2</td>
</tr>
<tr>
<td>2. Values change</td>
<td>F1.7-17 with S1.5-14; F4 with S2</td>
</tr>
<tr>
<td>3. The more central a value is in one's belief system, the greater will be the repercussion of a change in the value</td>
<td>F4, S2</td>
</tr>
<tr>
<td>4. The closer a completing value is to the one held by the individual, the more likely it is that he/she will internalise the new value</td>
<td>F1.6, S1.29</td>
</tr>
<tr>
<td>5. When one value changes, it has a derivative effect on one's belief system</td>
<td>F4, S2</td>
</tr>
<tr>
<td>6. Values must be potentially meaningful if they are to be internalised</td>
<td>F2.7,8; S1,29</td>
</tr>
<tr>
<td>7. Individual personality acts as a filter of values</td>
<td>F1, F2.2-6, F3.1,2; S1.1-4; S1.15,16,21</td>
</tr>
<tr>
<td>8. Value change is not equivalent to moral 'development'</td>
<td>F5, S1.22, S3</td>
</tr>
<tr>
<td>9. Values are held interactively across the domains of personality (i.e., cognitively, affectively, conatively, and behaviourally) in unique and idiosyncratic ways</td>
<td>F4 with S2</td>
</tr>
<tr>
<td>10. The interactive process of value change follows a pattern of trait consistency</td>
<td>F5, S1.15; 22,23,28,30</td>
</tr>
<tr>
<td>11. Values are learned in social environments</td>
<td>S1.22, 23</td>
</tr>
<tr>
<td>12. Schools, as a social environment, influence value formation</td>
<td>F2.1, S1.23</td>
</tr>
<tr>
<td>13. Elements in a school's environment influence value formation in unique and disparate ways</td>
<td>S1.17-19</td>
</tr>
<tr>
<td>14. Some school environments are more conducive to value change than others</td>
<td>F3.3,4, S1.27</td>
</tr>
<tr>
<td>15. Some schools are more effective in creating a social environment climate for value change than are others</td>
<td>S1.24-26,28,30,S4</td>
</tr>
<tr>
<td>16. The interactive model of school climate conceptualises the complex dynamic process associated with value change in a school setting</td>
<td>S1.20, S4</td>
</tr>
</tbody>
</table>

N.B. F=fall survey F1-3 sections 1-3; F4 Rokeach F5 Rokeach feelings. S=spring survey S1 section 1; S2 Rokeach; S3 Rokeach feeling; S4 School Life

Table 8.2: "AHS items in the effective schools model"

<table>
<thead>
<tr>
<th>Determinant: input and process</th>
<th>Outcome (goal attainment)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>atmospheric climate culture</strong></td>
<td></td>
</tr>
<tr>
<td>milieu</td>
<td></td>
</tr>
<tr>
<td>F4; S1.4,20,21,27, S2, S3*</td>
<td>F1.1-6, F2.1-6, F3.1,2;  S1.1-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>organisational climate ecology</th>
<th>social system</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1.7-17, F2.7,8; F3.3,4</td>
<td>S1.5-14; S1.16-19; S1.24-26</td>
</tr>
</tbody>
</table>

* The School Life Survey

<table>
<thead>
<tr>
<th>culture: norms, beliefs, values, meanings, cognitive structures (input and process)</th>
</tr>
</thead>
<tbody>
<tr>
<td>milieu: individual background characteristics (input)</td>
</tr>
<tr>
<td>ecology: physical variables (input and process)</td>
</tr>
<tr>
<td>social system: formal/informal rules (process)</td>
</tr>
</tbody>
</table>

---

2 See below chapter 12.
As in the parents' survey, relationships between nominal and ordinal data were explored through the use of contingency tables, chi-square, and Cramer's $V$.

Spearman's rho, together with Mann-Whitney's $U$, Kruskal-Wallis' $H$, and Friedman's two-way analysis-of-variance were used with ordinal level data. Pearson's $r$ and regression were used with interval level data or with ordinal data which had been combined to form indices. As a general rule, where the data was at two levels, the test which was appropriate for the lower order was used. The Cronbach alpha tests revealed a satisfactory level of reliability in both surveys.\(^3\)

### 8.3 RHS student respondents 1990-92

The three phase panel study done at RHS over a two year period allowed for additional facets of the change process to be identified and analysed. As in the three other surveys, the RHS student survey was a survey of opinions about a specific school and a specific setting. The conclusions which emerge from the study illuminate and explain a theory of school effectiveness which is widely used today. It is through the survey's clarification of principle and application to theory that its idiosyncratic nature becomes relevant to the school community.

Details of access to RHS were described above in chapters 4 and 5. Because of my role as the school principal, I was able to construct the survey and distribute it as I deemed appropriate. The procedures for completing the survey were explained to the staff in the fall of 1990. Phase one of the survey was completed in the first week of October 1990 just after schedules had been finalised. All students grades 7 to 12 were surveyed. Teachers who had agreed to administer the survey were given copies of the booklets the day it was to be written. Students had one hour to complete the battery although about ten of them asked for additional time. The cover letter did not

\(^3\) Fall: #7 closed campus to #17 truancy - cases 168, items 11, alpha .7494; spring: #5 closed campus to #14 truancy - cases 80, items 10, alpha .7896; spring #21 think to #29 value similar - cases 79, items 9, alpha .7088.
specify that the principal had prepared the survey although it was made clear to all who asked that the principal was collecting the data. Anonymity was promised.

The teachers were asked to go over the instructions in the covering letter and to clarify procedural points if they were raised. Otherwise they were instructed not to give advice on the questions themselves. Several teachers responsible for students in the younger grades (7-8) indicated their students had difficulty understanding the Defining Issues Test (DIT) and the Allport-Vernon-Lindzey Study of Values. Because of their report and the high incidence of incomplete work at this level, these two instruments were discarded for grades 7 and 8. Otherwise, no problems were reported. The RHS students were familiar with questionnaires so the completion of this particular survey did not generate a great deal of discussion.

The response rate for the Fall 1990 survey was 159 out of 161 or 99%. This included the grade 7 and 8 students who did not complete all the sections. The spring 1991 response rate was 153 out of 153. When the Spring '91 survey was matched with the Fall '90 survey it was found that the response rate for the 1990-1991 year was 146 out of 150 (97%).

The spring 1992 re-take followed the pattern set in 1990-1991. Teachers who were able to devote a class period to the survey were asked to administer it to their students. Two teachers were needed per grade level. Once again, the entire student body was surveyed although one grade eleven section was missed because the teacher who organised the distribution of the surveys overlooked them and the mistake was not discovered until it was too late to have the missing group surveyed.

4 Grade 12: 36/36; Grade 11 33/33; Grade 10 32/34; Grade 9 32/32; Grade 8 11/11; Grade 7 15/15.
5 Grade 12 35/35; grade 11 32/32; Grade 10 32/32; Grade 9 31,31; Grade 8 10/10; Grade 7 13/13.
6 The differences occurred due to withdrawals, absences, and the enrolment of new students during the year. Grade 12 34/34 (one new student came during the year, one fall respondent left meaning that the response rate in both the fall and the spring was 36 but the possible fall - spring match was actually 34. All of the possible matches responded to the survey); Grade 11 31/31, Grade 10 28/32; Grade 9 31/31; Grade 8 10/10; Grade 7 12/12.
7 The principal group missing was a small section of the grade 11 class. This section was created in the fall by a timetable option exercised by the students. Grade 12 28/29; Grade 11 29/42; grade 10 31/33; grade 9 21/27.
the completion of the survey, teachers reported hearing a few comments like, "I remember this test" (referring to the Rokeach) but in general they felt the survey was completed as a "matter of course," or, as one teacher put it, "No complaints and no comments." Once again, the covering letter in the Spring 1992 survey did not mention that the survey had been prepared by the principal. One parent complained to the principal about the type of questions asked in one of the sections because she felt the survey “forced” her grade 11 daughter to choose values.

As in the case of the Spring '91 survey, it might have been preferable to have had the survey administered in the last week of May rather than the first week of June. Term end pressure was building and tension in the school due to exams and year-end activities appeared to be higher in early June than it had been in late May. However, in order to get results comparable to the Spring '91 survey, it was felt that the Spring '92 survey should be administered as close as possible to the same date.

The response rate for the Spring '92 survey was 110 out of 131 (84%). The grade 7 and 8 classes were not surveyed in Spring '92. Due to absences and enrolment changes (withdrawals and entrances) the total number of students who could have written the Spring '92 survey who also wrote the Fall '90 survey and the Spring '91 survey was 63 out of a possible 78 (81%). The response rate for those who completed the individual surveys as well as the rate for those who completed the longitudinal study was considered good.

8.4 RHS student survey procedure and construction

**Fall 1990**

The Fall 1990 survey contained four sections. Section one requested demographic information which was used for matching purposes as well as for important "input" information in the effective school's model. Section two was the Rokeach Value Survey which is summarised and discussed in chapter eleven. Two other widely used surveys were included in this initial battery. The Defining Issues Test (DIT) was used to explore the possible association between "moral development,"

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8 Grade 12 23/29; Grade 11 18/20; Grade 10 15/19; grade 9 7/10. These are Spring '92 grade levels.
as defined by Kohlberg-Rest, and the VCES model developed in this research project. The *Study of Values* sought to clarify whether personality orientation as described by Allport-Vernon-Lindzey was associated with the VCES model. Both of these instruments are described and discussed in chapter twelve.

**Spring 1991**

The Spring 1991 survey was identical to the Fall 1990 survey in sections one and two but sections three and four (*DIT, Study of Values*) were replaced with the Williams and Batten *School Life Survey*. This instrument was used because of its strong theoretical basis, because it encompassed a diverse number of features which are associated with school climates, and because it could be readily reduced to a single composite index which could in turn be correlated with factors in the VCES model. It, too, is described and discussed in chapter twelve.

Although section one (demographics) of the Spring 1991 survey was identical to section one of the Fall 1990 survey, students were only required to complete the first few questions which were needed to match the Fall surveys with those of the Spring. Two questions dealing with academic achievement (report card grades) and one with behaviour (detentions) were added in order to establish correlates with these outcomes.

**Spring 1992**

The Spring '92 survey was modelled on the Spring '92 survey at AHS. Both surveys tried to clarify the association among various input-process-outcome factors which the VCES model suggested were important. The RHS survey was redesigned for easier coding and shortened in order to reduce the perception which some might have had that it was a long survey and consequently "hard work." Part One asked for demographic information needed for matching and correlational purposes. Part Two included questions about the RHS handbook which explored the idea that students "held" the values "behaviourally" in a way which the school theoretically taught them.
to and approved. It also included sixteen questions dealing with student opinions about the year and their assessment of the school's effectiveness for them. Part Three was a repeat of the Rokeach Value Survey and Part Four was a repeat of the School Life Survey.

Table 8.3 sets out the theoretic role of the survey items in the value change model. These value change propositions were interfaced with the effective schools model described earlier to create the values change/effective schools model (VCES). Table 8.4 catalogues the fall-spring-spring survey items in a register according to their theoretic position in the effective schools model.

Following a frequency study of all items, those which yielded nominal data were analysed with crosstab tables and appropriate statistics. Where nominal or ordinal level data emerged and the frequencies were excessively low, the items were "collapsed" and items which were reverse coded to reduce problems associated with those who tend to agree or disagree with everything, were "corrected" to allow for comparison and correlation.

As in the other surveys, relationships between nominal and ordinal data were explored through the use of contingency tables, chi-square, and Cramer's $V$. Where there was ordinal data or ordinal data in conjunction with interval data, Spearman's rho was used as well as Mann-Whitney's $U$, Kruskal-Wallis' $H$, or Friedman's two-way analysis-of-variance. Pearson's $r$ and regression were used with interval level data or with ordinal data that had been combined to form indices. Factor analyses were used to confirm item groupings established by theory and to reduce the number of items to a more manageable number. As a general rule, where the data was at two levels, the test
which was appropriate for the lower order of data was used. Cronbach alpha tests indicated the survey's reliability was generally satisfactory.9

Table 8.3: "RHS items and the value change theory"

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All humans value</td>
<td>F2, F3, 1S2, 2S3</td>
</tr>
<tr>
<td>2. Values change</td>
<td>F2, 1S2, 2S3</td>
</tr>
<tr>
<td>3. The more central a value is in one's belief system, the greater will be the repercussion of a change in the value</td>
<td>F2, 1S2, 2S3</td>
</tr>
<tr>
<td>4. The closer a completing value is to the one held by the individual, the more likely it is that he/she will internalise the new value</td>
<td>F1.4, F1.10, 2S2.33</td>
</tr>
<tr>
<td>5. When one value changes, it has a derivative effect on one's belief system</td>
<td>F2, 1S2, 2S3</td>
</tr>
<tr>
<td>6. Values must be potentially meaningful if they are to be internalised</td>
<td>F1.4, F1.10, 2S1.3, 2S2.25</td>
</tr>
<tr>
<td>7. Individual personality acts as a filter of values</td>
<td>F1, F3, F4, 1S1, 2S1</td>
</tr>
<tr>
<td>8. Value change is not equivalent to moral 'development'</td>
<td>F3</td>
</tr>
<tr>
<td>9. Values are held interactively across the domains of personality (i.e., cognitively, affectively, conatively, and behaviourally) in unique and idiosyncratic ways</td>
<td>F2, 1S2, 2S3 cog, feeling, 1S1qaca, beh, 2S2.9-16</td>
</tr>
<tr>
<td>10. The interactive process of value change follows a pattern of trait consistency</td>
<td></td>
</tr>
<tr>
<td>11. Values are learned in social environments</td>
<td></td>
</tr>
<tr>
<td>12. Schools, as a social environment, influence value formation</td>
<td>F2, 1S2, 1S3, 2S3, 2S4, 2S2.9-33</td>
</tr>
<tr>
<td>13. Elements in a school's environment influence value formation in unique and disparate ways</td>
<td>1S3, 2S2.17-34</td>
</tr>
<tr>
<td>14. Some school environments are more conducive to value change than others</td>
<td>1S3, 2S2.34, 2S4</td>
</tr>
<tr>
<td>15. Some schools are more effective in creating a social environment climate for value change than are others</td>
<td>2S2.31, 2S2.32, 2S4 (91-92)</td>
</tr>
<tr>
<td>16. The interactive model of school climate conceptualises the complex dynamic process associated with value change in a school setting</td>
<td></td>
</tr>
</tbody>
</table>

N.B. F=fall survey F1-4 sections 1-4; 1S=spring survey 1991. 1S1-3 sections 1-3; 2S=spring survey 1992. 2S1-4 sections 1-4.

Table 8.4: "RHS items in the effective schools model"

<table>
<thead>
<tr>
<th>Determinant: input and process</th>
<th>Outcome (goal attainment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>atmospheric climate culture</td>
<td>organisationl climate culture milieu</td>
</tr>
<tr>
<td>F2, F3, F4, 1S2, 1S3*, 2S2.25, 31, 2S3, 2S4</td>
<td>F1, 1S1, 2S2, 2S1.24, 2S1.33</td>
</tr>
</tbody>
</table>

* The School Life Survey10

culture: norms, beliefs, values, meanings, cognitive structures (input and process)

milieu: individual background characteristics (input)

ecology: physical variables (input and process)

social system: formal/informal rules (process)

9 Spring 1992 #9 neat to # 16 dating - cases 102, items 8, alpha .8525; # 25 similar to # 33 values similar - cases 92, items 9, alpha .7141.

10 See below chapter 12.
CHAPTER NINE: Results of the Locally Developed Surveys

Chapter Nine summarises the results of two general surveys which examined student attitudes and opinions about their schools. The chapter begins with a profile of the respondents based on a frequency study of the demographic items and then proceeds to a summary of the most important results which emerged.

9.1 Student Profiles

9.1.1 AHS student profile

Approximately half the AHS student respondents were male (48.6%) with the 17 year olds representing the largest single group (24%) and 12 year olds the smallest (10%). Twenty-seven percent of the students were in their first month at AHS and another 20% had been in the school for only a year. Long term students were classified as those with attendance records of two years (24%), three years (14%), and four or five years (15%). Just under half the students were born in one of three countries or areas of the world: the United States (18%), Norway, Sweden, Finland (17%), and Switzerland (10%). The students had clearly been exposed to a variety of cultures. Forty percent indicated they had lived in two countries more than 6 months while another 34% said they had lived in three countries more than 6 months. Sixteen percent had lived in four or more countries.

AHS students were divisible into four main religious groups. Twenty-two percent claimed to be Roman Catholic, 27% Protestant, 22% a variety of other religions, and 29% professed no religion (24%) or indicated they "did not know" (5%). AHS students were clearly from the upper middle class. Fifty-one percent stated that

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1 Cf., the AHS parent survey in chapter six which confirmed this student profile.
their fathers were "executives," another 12% said they were engineers, 8% said they were business entrepreneurs, and 9% said they were business consultants. About half the students listed their mother's occupation as "homemaker" while 16% claimed she was "unemployed." These results were in line with information from the Self Study which pointed out that the host country rarely permitted spouses to work.

As one would expect from the AHS parent survey, 94% of the students indicated they were living with both parents. The majority had one sibling (53%) with only 10% reporting three or more brothers or sisters. This was about equal to the number who had no siblings (9%).

AHS Spring re-test

The low rate of response in the spring (43%) made it imperative that the composition of the respondent group be explored for bias. While no gender bias emerged (49% male), Table 9.1 demonstrates that there was a discernible age bias. Making allowance for birthdays over the school year, it is clear that younger students were disproportionately represented in the spring sample.

Table 9.1:
"Age profile of the fall and spring respondents."

<table>
<thead>
<tr>
<th>Age (spring)</th>
<th>% of total respondents Fall</th>
<th>% of total respondents Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>18(19)</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>17(18)</td>
<td>24%</td>
<td>16%</td>
</tr>
<tr>
<td>16(17)</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>15(16)</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>14(15)</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>13(14)</td>
<td>10%</td>
<td>16%</td>
</tr>
<tr>
<td>12(13)</td>
<td>10%</td>
<td>16%</td>
</tr>
</tbody>
</table>

There was also a discernible shift towards the student who had been enrolled for a shorter period of time. The percent of new student responses (spring: one year)
increased from 27% in the fall to 47% in the spring and second year students increased from 20% to 28%.

Consequently, the fall - spring comparisons which follow are qualified to reflect the possibility that differences were potentially attributable to age. The spring respondent group was apparently dissimilar in other ways as well. In the fall, the students were asked where they were born; in the spring they were asked their citizenship. Spring respondents were 42% Western European, 23% Anglo American, 1% Japanese, and 10% Indian. In the fall, 48% were born in Western Europe, 19% Anglo-America, 10% in Japan, and 1% India. The discrepancy could have been partly due to citizenship laws related to place of birth but the variation in the Japanese and Indian percentages indicates that the respondent composition had changed and a small citizenship bias had emerged. In summary, the spring re-test produced a respondent group which was not truly representative of the student body. Those who returned the survey tended to be young, recently enrolled students, who were somewhat different than the hypothetical “typical” student in terms of citizenship.

9.1.2 RHS student profile

Fall - spring surveys 1990-1991

The RHS student body was comprised primarily of students born in North America (47% USA; 10% Canada). Twenty-five percent were born in the European Union while 19% were born in other European countries or elsewhere in the world. Almost all the students had lived in more than one country for six months. In this sense, the respondents were very similar to the respondents at AHS. Again, like AHS, 57% of the student body had been at the school a year or less, 17% for two years, and 26% for three years or more.
About two-thirds of the students lived in the school's residences (68%), which was the normal year to year ratio. Fifty percent indicated their fathers were "clergymen or an officer in a religious organisation." Only two other vocational categories had 10% of the responses: executives (11%) and teachers/professors (10%). Many students (41%) indicated that their mothers were "homemakers" but 29% categorised their mothers as "clergy or an officer in a religious organisation."

Domicile arrangements fell out along traditional family lines with 91% of the students stating that they lived with "both parents." The Baptists (25%) formed the largest religious group followed by the Pentecostals but over half the students declared themselves to be "other Protestant." Only six percent indicated they were non-Protestant and only one student claimed "no religion." This demographic feature, together with the occupations of the parents, gave rise to the designation of this school as the "Religious High School" (RHS) and was the principal feature which distinguished it from AHS.

Spring 1992

Forty-three percent of the 110 Spring 1992 respondents were male, 57% were female. Nine percent were 15 years old, 15% were 16, 32% were 17, 34% were 18, 9% were 19 and 2% were 20 years old.² Expressed as grade levels, the students were distributed as follows: 26% were in grade 12, 27% were in grade 11, 28% were in grade 10, and 19% were in grade 9. This represented a slight deviation from the student population because the grade eleven class actually comprised 32% of the student body.³ The majority held citizenship in North American (59%) with the next

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² Grades 7 and 8 were not included in this total because they completed only part of the survey.

³ Cf., chapter 8 for an explanation of this anomaly.
largest group coming from western Europe (28%). Most other regions of the world were represented but only by 1 to 3% of the student population.

About a third of the student body reported they had been in the school one year (32%), 20% reported two years, 16% three years, 13% four years, 5% five or six years, and 13% seven or more years. Residential students represented 71% of the respondents which was in keeping with the historic pattern. Occupational classifications remained similar to the fall 1990 respondent group. Fifty-four percent listed their father's occupation as clergy or the equivalent in some religious organisation. Teachers/professors at 8% and executives and engineers at 7% were two other noteworthy categories.

RHS students who completed all three surveys (fall 1990, spring 1991, spring 1992) were designated the f-s-s cohort. No bias was detected in this respondent group.

9.2 Staff profiles

The focus of attention at the two sites was the perspective of students and parents. The staff were included here primarily to illuminate aspects of the student response. Even this limited role was hampered by the poor response rate and the inability to ascertain the representativeness of the respondent group. Only several highlights are noted below. Additional discussion relevant to the staff perspective follows in chapters eleven and twelve.

9.2.1 AHS staff respondents

Of the forty teachers on staff (full and part-time), eighteen completed the survey in the fall for a response rate of 45%. Five who had not completed the survey

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4 Students were asked to round off partial years and to count 1991-92 as a completed year.
in the fall, or who failed to submit it then, completed the re-test in the spring. These five were combined with the fall respondents to give a response rate of 58%. Only six (15%) completed the survey in both the fall and the spring so there was no possibility of a fall-spring comparison. This was a disappointment because one of the objectives of the survey was to test the theory that teachers change along with and, in part, because of, their students.

AHS respondents were equally split between male and female (11/12) with the majority (64%) ranging in age from 39 to 43. Americans represented 48% of the staff with other significant groups coming from Great Britain and Switzerland (both 14%). Like the students, the staff had lived in many countries for more than 6 months. Over half indicated they had lived in three or more countries for at least half a year. As a group they tended to be more "religious" than the students with only 13% indicating they had "no religion." Roman Catholics (20%) and Protestants (26%) formed the largest groups. Most of the teachers had been in the school from 1 to 5 years with only 8% indicating they had been there more than 6 years. Only one of the respondents had attended university for less than five years.

9.2.2 RHS staff respondents

The RHS staff were surveyed in the fall of 1990 and spring of 1991. In the case of the fall survey, 28 of 38 returned the survey for a response rate of 74%. The spring response was much poorer: 10 of 37 responded for a 27% response rate. Because only 22% (8 of 37) completed both the fall and the spring surveys, there was insufficient data for a fall-spring comparison so the two surveys were combined to create a "staff response" analogous to AHS.
9.3 The VCES model

Data from the surveys was organised within the framework of the VCES model. Item linkage to the model is set out in chapter eight. In addition to the items contained in the surveys, there were six indices created from items which assessed different but logically connected aspects of the same construct. Each of these indices is included in an appropriate VCES category.

9.3. Organisation climate - input and process determinants

9.3.1.1 Organisational climate: milieu

.1 Age

Input variables, like "age," were found to be related to a number of process and outcome variables. For example, the scores expected on the final AHS report card and feelings about the school's handbook both showed a weak correlation with age. In the case of "scores," 45% of the young adolescents (i.e., the youngest third), expected A's, 13% of the middle adolescents expected A's and only 7% of the older adolescents expected A's. Table 9.2 sets out the Spearman rho correlation picture for the "age" variable.

However, age (spring) was not associated with the number of friends a student had, the students' perception that their parents supported the school, the sense students had that they were more tolerant because of the school's impact on their lives, the feeling that people in the school thought like they did, or the perception that the school had high expectations.

---

5 Age with scores expected: $\chi^2$ 29.17466, DF 4, N=162, $\nu=.300$, p<.001; age with feelings about the handbook: $\chi^2$ 26.02291, DF 6, N=154, $\nu=.29067$, p<.001.
Table 9.2: "Item correlations with 'age' at RHS and AHS"

<table>
<thead>
<tr>
<th>AHS younger students (i.e., &quot;age&quot;) associated with</th>
<th>rho</th>
<th>N</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>a willingness to recommend the school</td>
<td>.3310</td>
<td>81</td>
<td>.001</td>
</tr>
<tr>
<td>a higher overall score for the school</td>
<td>.4381</td>
<td>79</td>
<td>.001</td>
</tr>
<tr>
<td>support for the &quot;overt values are taught at AHS&quot; index</td>
<td>.3200</td>
<td>82</td>
<td>.002</td>
</tr>
<tr>
<td>a belief their values were similar to the school's at entry</td>
<td>.2359</td>
<td>79</td>
<td>.001</td>
</tr>
<tr>
<td>a feeling that their was a positive &quot;school climate&quot;</td>
<td>.2356</td>
<td>82</td>
<td>.017</td>
</tr>
<tr>
<td>a feeling that the school had a &quot;positive atmosphere&quot;</td>
<td>.2871</td>
<td>81</td>
<td>.005</td>
</tr>
<tr>
<td>approval of the AHS handbook rules</td>
<td>.1935</td>
<td>82</td>
<td>.041</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RHS Younger students (i.e., &quot;age&quot;) associated with</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>less conviction that there were high academic expectations</td>
<td>-.2392</td>
<td>108</td>
<td>.006</td>
</tr>
<tr>
<td>support for the walkman rule</td>
<td>.1664</td>
<td>109</td>
<td>.042</td>
</tr>
<tr>
<td>a belief that teachers were the greatest source of negative influence</td>
<td>.3192</td>
<td>93</td>
<td>.001</td>
</tr>
<tr>
<td>a belief that peers were the greatest source of positive influence</td>
<td>-.2473</td>
<td>92</td>
<td>.009</td>
</tr>
<tr>
<td>lack of involvement in the school</td>
<td>-.2208</td>
<td>63</td>
<td>.041</td>
</tr>
<tr>
<td>lack of support for the handbook prohibition rule</td>
<td>-.2108</td>
<td>63</td>
<td>.041</td>
</tr>
</tbody>
</table>

RHS fall 1990

As one would expect in a valid survey, input items age and grade level were closely related (\(r=.8891, p<.01\) 2-tailed) while age and time in school were weakly correlated (\(r=.2296, p<.01\) 2-tailed) as was age and the number of countries students had lived in (\(rho= .3218, N=148, p<.001\)). Student age was not significantly associated with the types of personalities in the Study of Values, nor was it significantly associated with religion, parents' occupations, residence status, or negative behaviour. Older adolescents were associated with fewer A’s and more C’s, just as they were at AHS.\(^7\)

However, no significant relationship was found between age and the perception RHS students had of their parents' attitudes towards the school. Similarly, there was no significant relationship between age and many process items including feelings about the school climate and atmosphere, the number of close friends, support for most of the handbook rules, a general feeling about the handbook, perceptions of high academic expectations, support for the handbook prohibition rule, and lack of involvement in the school.

---

6 That is, no alcohol, illicit drugs, dancing, etc.

7 Age was re-coded: 12,13,14=1 young adolescents, 15,16=2 middle adolescents, 17,18=3 older adolescents. \(\chi^2 = 9.81346, DF 4, p<.05, V=.20221, N=120,\) eta-squared with academic achievement dependent .082.
moral and behavioural expectations, and a belief that people in the school thought like the student. Furthermore, there was no significant relationship between age and outcome items such as the academic achievement of the student, the number of detentions, the overall score of the school, and the willingness to recommend the school to others.

2 Citizenship

No significant relationship was found between the student's birthplace and the way in which the AHS rule book was viewed, the number of close friends the student had, the source of best friends, the sense in which a student saw AHS people thinking like he/she did, or the student's involvement in the school programme.

Relationships with RHS citizenship (Spring '92) were found to be unrelated or only weakly related to many VCES items, including the major outcome measures. However, as one would expect, there was a moderately strong relationship between birthplace and citizenship. Citizenship was also related to the father's occupation. Seventy percent of North American fathers were "clergy" with only 25% reported as "professional" or "business/executive." Fifty percent or more of the European and "other" students listed their parents as "professional" or "business/executive" with about 30% indicating their parents were clergy in both cases. This result corresponded with historic enrolment patterns at RHS.

Citizenship was also weakly related to the RHS students' claims to have read the handbook and their feelings about it. Seventy-seven percent of North Americans said they had read it all, 50% of the "other" citizenships had read it all, but only 27% of the European citizens said they had read it all. Conversely, 67% of the Europeans,

\[ \chi^2 = 77.18271, DF = 6, p < .001, \eta^2 = .60338, \text{birthplace dependent}.342. \]

\[ \chi^2 = 22.08947, DF = 6, N = 107, p < .001, \eta^2 = .32128, \text{father's occupation dependent}.013. \]
36% of the "other" citizens, and 19% of the North Americans claimed they had read parts of it.\textsuperscript{10} The pattern repeated itself in terms of what the students felt needed to be done with the handbook. North Americans thought it was good the way it was (5%) or that it only needed minor revision (59%), "other" citizenships concurred although with less support (8% - good as was, 46% - needed minor revisions), while the majority of Europeans felt that a lot of changes needed to be made (38%) or that it should be "thrown out and completely re-written" (28% compared to 23% for "other" and 5% for North Americans).\textsuperscript{11}

3. Number of countries lived in for more than six months

Students at AHS and RHS were international in a double sense - they had lived in many countries and they held passports from around the world. The number of countries lived in for more than six months was not significantly related to key process and outcome items. However, it was moderately to weakly correlated with the RHS student's age ($r=.3053$, $p<.01$, 2-tailed), grade level ($r=.3517$, $p<.01$, 2-tailed), and length of time spent in the school ($r=.2382$, $p<.01$, 2-tailed). In the case of time in the school, there was a similarly weak positive correlation at AHS between the number of countries lived in and years in the school ($\rho=.2127$, $N=177$, $p<.01$). These correlations were predictable and represent a confirmation of the instrument's reliability in the sense that data was consistent and followed a logical pattern.

\textsuperscript{10} B2.16: $\chi^2$ 31.69530, DF 6, $N=103$, $p<.001$, $V=.38306$, eta-squared with handbook dependent .142.

\textsuperscript{11} B2.16: $\chi^2$ 13.24923, DF 6, $N=103$, $p<.05$, $V=.25361$, eta-square with feelings about handbook dependent .105.
.4 Parents' occupation

No significant relationship was found to exist between either parent's occupation and the grades AHS students received, the sense in which the students felt AHS people thought like they did, or the perception the students had that their values were the same as the schools when they enrolled. There was also no significant relationship between the mother's occupation and the overall score the students gave to the school.

The generally insignificant role of parental occupation was confirmed at RHS. For example, the father's occupation was not found to be associated with the students' perception of their parents' support for the school, with their feeling that other people in the school thought similarly to them, with their sense that their values were the same as the school's, with a willingness to recommend the school, or with the overall score of the school. The f-s-s cohort at RHS confirmed the non-significance of additional relationships related to the father's occupation including the six value profiles in the Study of Values survey, detentions, academic achievement, and the number of close friends. The mother's occupation at RHS was likewise not found to have a significant relationship with any of the fifteen variables which were examined.\(^\text{12}\)

.5 Grade level

Grade level was not found to be significantly related to 21 of the 22 items studied with the RHS spring 1992 respondents. Only in the case of time in the school was their found to be a significant relationship.\(^\text{13}\) The nature of these relationships was corroborated by the f-s-s cohort. Several additional ones were explored with this

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\(^{12}\) The six value profiles from the *Study of Values*, detentions, academic achievement 1991,1992, perceived parents' attitudes, close friends, overall score, similar thinking, values similar on entry, willingness to recommend.

\(^{13}\) Spearman's rho=.4830, N=88, p<.001; a crosstab study confirmed this.
group and it was found that year in school was weakly, but positively, associated with the source of friends (rho=.2506, N=50, p<.05) and teachers as the primary source of negative influence (rho=.2821, N=46, p<.05).

.6 Years in school

The number of years a student has attended a school can be seen as both an input and process factor. The fall recording of "years" was seen as an input into the school while in the spring it was held to be a process element. Years in the school was not seen as a particularly dynamic factor. It was not found to be associated with such items as the overall score given to AHS, the perception that personal values were similar to the school's upon entry, the grades expected on the report card, the rating of the School Life index, the perception that parents were supporting the school, the acceptance of the rules and principles of the handbook, the willingness to recommend the school, the learning of values like tolerance and involvement, and of the feeling that people in the school thought like the student.

However, it was weakly associated with the age of the student as well as with the belief that there was a positive atmosphere at AHS. The number of years at AHS was also associated with sources of influence in the school. In this case the impact was negative. Those with one year or less at AHS felt that another member of the peer group was the greatest negative influence in their lives (45%). Those with 2, 3 or 4 years in the school all ranked the peer group second or lower as a source of negative influence (19%, 20%, 11% respectively). Students with one year or less selected "a classroom teacher" as the next most likely source of negative influence (24%). For those with two or more years in the school, teachers were very rarely identified as a

14 Newer students were associated with a higher mean ranking on the atmospheric scale: rho=.3067, N=73, p<.01; years with age rho=.5705, N=81, p<.001; r=.5528, p<.01.
source of negative influence. For those with more than one year in the school the principal "negative source" was an administrator (30-33% for all three categories). For the relatively new students, administrators were a noteworthy source (17%) but not to the degree that they were for longer term students. The other distinguishing factor about the longer term students was their frequent identification of many sources of influence. Perhaps the one exception to this was the designation of the "counsellor" as a negative source by the two year students (24%). The school's counsellor had been ill and unavailable for much of the year.\(^\text{15}\)

At RHS it was found that length of time in the school was not associated with academic performance or negative behaviour (Fall 1990) or with gender, citizenship, and father's occupation (Spring 1992). Analysis of data from the f-s-s cohort indicated that "length of time" in RHS was not significantly related to key items in the VCES model.

Two handbook rules were significantly related to time in the school, although in both cases ("order" and "walkman") the pattern was not directly (progressively) related to length of time in the school. New students were the most dogmatic about their beliefs. On the one hand, they were the most supportive of "order" while, on the other, they were the least supportive of the "walkman" prohibition. The one and two year students were generally the most supportive of these rules, the three to five year students were generally the most undecided (67% "order" and 50% "walkman"), and the 6+ year students were the most diversified in their opinions.\(^\text{16}\)

\(^{15}\chi^2 40.60295, \text{DF} 21, \nu=44289, N=69, p<.01.\)

\(^{16} \text{"Order:" } \chi^2 27.66110, \text{DF} 12, N=61, p<.01, \nu=.38878, \text{eta-squared with "order" dependent } .211 \text{ and with "time" dependent } .078; \text{ "walkman" } \chi^2 26.46279, \text{DF} N=61, p<.05, \nu=.32932, \text{ eta-square with "walkman" dependent } .048 \text{ and with "time" dependent } .100.\)
.7 Domiciliary arrangements

The frequency studies used for the creation of student profiles at both sites indicated that virtually all the students lived with their natural parents although, in the case of RHS, many lived in residence during the school term. Residence status was not significantly associated with many other items including the parent's occupation, religion, academic achievement, or the Study of Values profiles. Only in the case of the "aesthetic personality" was there a significant relationship. In the Spring 1992 survey three items were in significant association (p<.05) with place of residence. Students who lived in the school residences were associated with the classroom as a source of friendship (44% to 28%) and with "other" sources of best friends (21% to 12%), or with the feeling that they did not have "best friends" (22% to 4%). Non-boarding students were particularly associated with best friends from the neighbourhood (44% to 4%). Ethnic sources of best friend were equally popular (10%) for both residential and non-residential students.

Another significant, moderately weak relationship existed between residence status and the student's declaration of involvement in the life of the school. Residential students were more associated with involvement. Residential students were also associated with a willingness to recommend the school Data from the f-s-s cohort

17 That is, a personality which values beauty and harmony, grace and symmetry - fulfilled in artistic experiences. $\chi^2$ 10.89699, DF 4, p<.05, N=95, $\phi=.33868$, eta-squared with "aesthetic" dependent .037.

18 This response demonstrated face validity because only home students had an opportunity to make long term friends in a community which did not speak English.

19 $\chi^2$ 26.20992, DF 4, p<.001, N=98, $\phi=.51715$, eta-squared with "friendship" source dependent .009, with dorm dependent .267.

20 $\chi^2$ 13.08127, DF 4, p<.01, N=108, $\phi=.34803$, eta-squared with "involvement" dependent .109.

21 $\chi^2$ 10.58120, DF 4, N=106, p<.05, $\phi=.31595$, eta-squared with "recommend" dependent .034, with "residence" dependent .100.
demonstrated that there was a significant association between the place of residence and the belief that people in the school thought like the student did. Forty-three percent of the residential students agreed that people at RHS thought like they did whereas only 12% of the home students felt this way. Conversely, 24% of the home students felt strongly that people did not think like they did (residential=8%) and 29% had "no opinion" (residential=13%). This concurs with the parent survey where it was found that parents of residential students were more sure than parents of home children that their values were the same as the school's.22

8 Gender

Gender was the item most extensively studied with crosstabs. Four items from the AHS handbook section were taken as representative of the ten. They, together with all the rest of the items in the AHS survey section one were studied with the use of crosstab tables except for item 29. Only three of the relationships were found to be statistically significant (p<.05). This meant that gender was not significantly related to the grades expected, an evaluation of the school's atmosphere, the overall grade, or a willingness to recommend the school.

The three items which were associated with gender were particularly interesting because of light they throw on gender issues. When confronted with the statement, "Above all, students should act responsibly and respect others," (S1q12) 100% of the female respondents agreed, 38% of them indicating they "strongly agreed." The majority of male respondents agreed (25% strongly agreed) but there was a considerable minority who disagreed (23%) or strongly disagreed (3%). Responsibility

\[ \chi^2 = 7.83750, \text{DF 3, } p<.05, N=57, \nu=.37081, \text{ eta-squared "think similar" dependent .119.} \]
and respect were two values expressed in the handbook which girls, rather than boys, tended to support.\textsuperscript{23}

Male and female students at AHS also differed on the number of friends they felt they had in the school, as Table 9.3 points out.

### Table 9.3: "AHS friendship with gender."

<table>
<thead>
<tr>
<th></th>
<th>male</th>
<th>female</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>1</td>
<td>23%</td>
<td>5%</td>
</tr>
<tr>
<td>3,4</td>
<td>26%</td>
<td>53%</td>
</tr>
<tr>
<td>5-10</td>
<td>31%</td>
<td>21%</td>
</tr>
<tr>
<td>10+</td>
<td>5%</td>
<td>16%</td>
</tr>
</tbody>
</table>

$\chi^2 14.62178, \text{DF}=4, \nu=.42227, N=82, p<.01$

The third significant association with gender came from the item asking students if AHS had "high moral expectations." The crosstab study revealed that males were particularly associated with agreement (85\% versus 53\% for the females) while females were associated with disagreement (47\% versus 15\% for the males).\textsuperscript{24}

At RHS, gender was associated with detentions and the \textit{Study of Value}'s "theoretical" personality.\textsuperscript{25} In the case of the indicator of negative behaviour (detentions) males were particularly associated with "two or three" (14\% to 7\% for females) or "more than three" (14\% to 3\% for females) while females were particularly associated with no detentions (68\% to 62\%) or one (23\% to 10\%).\textsuperscript{26}

In contrast to female students, males were weakly associated with a rejection of the handbook even though they were split between those who thought it was good as it was (or only needed a few changes), and those who wanted to throw it away or

\textsuperscript{23} $\chi^2 13.43271, \text{DF}=4, \nu=.40474, N=82, p<.01$; the spring results provided confirmation: $\chi^2 12.90311, \text{DF}=4, \nu=.46374, N=60, p<.05$.

\textsuperscript{24} $\chi^2 9.87313, \text{DF}=3, \nu=.34699, N=82, p<.05$.

\textsuperscript{25} The "theoretical personality" is held to value the discovery of the truth; he/she is empirical, critical, rational.

\textsuperscript{26} $\chi^2 9.16260, \text{DF}=3, N=121, p<.05, \nu=.27518$, eta-squared with detentions dependent .039.
make substantial changes (21%). Female students were associated with a desire to make some minor changes (59%) or to make substantial changes (36%) but not to throw it out and start again (5%).

Female students at RHS were also more positive about the principle enjoining them to keep the campus neat and tidy. Eleven percent of the RHS male students expressed "no opinion" and 7% disagreed while 98% of the females agreed (46%) or strongly agreed (53%). Males were associated with a negative feeling about the rule requiring them to be neat and "well-groomed." Sixty percent disapproved (23%) or strongly disapproved (37%) with the rule compared to 28% of the females who were more often associated with positive feelings about male dress regulations than were males (45%).

9 Religion

Religious persuasion was not related to the perception students had that their values were similar to those of AHS when they first came to the school. However, it was found to be significantly related to the feeling that "people around AHS think pretty much like I do." Protestants and those claiming "no religion" were the most sure that people at AHS thought like they did while those with other religious beliefs felt different from "most people," as Table 9.4 points out. The RHS students' religious backgrounds (Fall 1990) were not found to be related (p<.05) to any other items of particular interest in the value change model.

27 $\chi^2$ 9.37996, DF 3, N=100, p<.05, $\nu=.30627$, eta-squared with handbook feeling dependent .018.

28 $\chi^2$ 9.24428, DF 3, p<.05, N=106, $\nu=.29531$, eta-squared with neat dependent .033.

29 $\chi^2$ 18.60793, DF 4, N=103, p<.001, $\nu=.42504$, eta-squared with groom dependent .125.
Table 9.4: "Religion and the perception of identity at AHS"

<table>
<thead>
<tr>
<th>&quot;people think like I do&quot;</th>
<th>SA/A</th>
<th>D/SD</th>
<th>NoOp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roman Catholic</td>
<td>53%</td>
<td>46%</td>
<td>N=15</td>
</tr>
<tr>
<td>Protestants</td>
<td>60%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td>31%</td>
<td>69%</td>
<td>6%</td>
</tr>
<tr>
<td>No religion</td>
<td>64%</td>
<td>29%</td>
<td>7%</td>
</tr>
</tbody>
</table>

χ² 38.30110, DF24, p=.39948, N=60, p<.05, excessive frequency of empty cells

9.3.1.2 Organisational climate: ecology

No aspects of this feature of the VCES model were explored in the student surveys.

9.3.1.3 Organisational climate: social system

1 Handbooks

The AHS students

Students were asked to state their degree of support for eleven rules and regulations taken from the AHS handbook. It is impossible to quantify the degree to which these statements reflected underlying values held by "the school," but they do reveal how "close" the student was to officially stated school policies which, presumably, approximated what the school felt "its" values would look like.

There was strong support for the no drugs policy as well as the handbook's call for responsibility and respect, and its designation of various offences as "serious infractions." On the other hand, students were divided on the issues of a closed campus, vehicle restrictions, and prohibitions against cheating and truancy, although in the case of these latter two rules the majority of students were still in agreement with the "school's" position.

These reactions to the handbook were generally reflective of informed positions. Only 13% of the students said they did not know what the handbook was (2%) or that they had never read it (11%). The considerable majority (68%) had read parts of it and 19% indicated they had read all of it. Given their broad support for the
handbook, it is not surprising that 25% said it was "good the way it was" and did not need to be changed. Fifty-eight percent thought some minor changes were in order although they felt that it was "pretty much what I would like to see in a handbook." Only 17% wanted to make major changes (8%) or to throw it away and start again (7%).

Ten of the eleven AHS handbook excerpts reappeared in the spring. Once again the support for the overt values of the school was apparent although it was muted. Table 9.5 demonstrates that in every one of the ten rules or statements there was a shift towards disapproval and in only two cases were the "no opinions" greater than in the fall. Students were less supportive and more sure of what they believed by the end of the year.

Table 9.5: "Percent of AHS students approving the handbook: Fall versus Spring rates"

<table>
<thead>
<tr>
<th>Item summary</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>No Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Spring</td>
<td>Fall</td>
<td>Spring</td>
<td>Fall</td>
</tr>
<tr>
<td>#5 closed campus</td>
<td>11</td>
<td>6</td>
<td>37</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>#6 no smoking</td>
<td>53</td>
<td>51</td>
<td>23</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>#7 no alcohol</td>
<td>35</td>
<td>35</td>
<td>28</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td>#8 no drugs</td>
<td>90</td>
<td>81</td>
<td>5</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>#9 no vandalism</td>
<td>33</td>
<td>28</td>
<td>40</td>
<td>41</td>
<td>24</td>
</tr>
<tr>
<td>#10 get involved</td>
<td>30</td>
<td>18</td>
<td>48</td>
<td>46</td>
<td>18</td>
</tr>
<tr>
<td>#11 infractions</td>
<td>58</td>
<td>46</td>
<td>33</td>
<td>37</td>
<td>6</td>
</tr>
<tr>
<td>#12 responsible</td>
<td>49</td>
<td>32</td>
<td>46</td>
<td>54</td>
<td>5</td>
</tr>
<tr>
<td>#13 no cheating</td>
<td>24</td>
<td>21</td>
<td>39</td>
<td>33</td>
<td>23</td>
</tr>
<tr>
<td>#14 no truancy</td>
<td>26</td>
<td>13</td>
<td>43</td>
<td>45</td>
<td>17</td>
</tr>
</tbody>
</table>

N=82-84

Two indices were used to assess the rules and values in the AHS handbook.

One set of rules was grouped together as "taught values" because they were referred to on many public occasions throughout the course of the year in contexts other than the handbook. These "taught values" were implicitly or explicitly stated in the rules.\(^{30}\)

\(^{30}\) Specifically, "closed campus" (S1.5 - implicit in the rule: the value accountability), "involvement" (S1.10 - involvement explicit in the rule), "respect and responsibility" (S1.12 - respect and responsibility explicit in the rule), and "truancy" (S1.14 - achievement and consideration of others included in the rule and therefore explicit).
The other index was created by collapsing all the items relating to the handbook into the index "AHS handbook." In retrospect the creation of two indices was probably unnecessary. From a theoretic standpoint, one could argue that the six "rules" not included in the "taught values" index contained values which were also taught in other contexts. A correlation of the two indices confirmed their close association.31

It is clear that the rules and values, both implicitly and explicitly stated in the handbook, were significantly associated with many of the input-process-outcome factors. The "taught values" index was associated with the two input items "age" (rho=.3200, N=82, p<.002; r=.3260, p<.01) and the perception parents' supported the school (rho=.3400, N=83, p<.001), but it was not related to the number of countries in which the student had lived or the number of years he/she had been in the school. A two-way analysis-of-variance verified this. With "taught values" as the dependent variable, age and years as the independent variables, and the number of countries lived in as the covariate, it was found that the covariate was not significantly related to "taught values" (p=.870), and the main effects were split with age significant (p=.015) and years insignificant (p=.128). Their two-way interaction was not significant (p=.147).

In terms of process factors, "taught values" was not related to an expectations index, but it was related to a "school life" or school atmosphere index (School Life index, r=.4474, N=84, p<.01).32 Finally, it was not related to the grades students had

31 "Taught values" with "AHS handbook 1" r=.8491, N=147, p<.01.

32 All items in the Williams and Batten School Life survey were combined to form a School Life index. See Chapter 12 for a full discussion of the survey and the index.
received the previous year or the current year but it was associated with the overall score given to the school (rho=.3071, N=80, p<.01).

The more general handbook index, which was obtained by collapsing all the handbook items, presented a similar but fuller picture. Age was weakly associated with the handbook index (fall: r=.2515, N=181, p<.01; spring: rho=.1935, N=82, p<.05) while years in the school, the number of countries lived in, and the sense that one's values were the same as the school's were not. A multiple regression analysis of the main background factors confirmed the impression that they had little association with support for the school's handbook. Because each of the independent variables (age, years in AHS, and number of countries lived in) were significantly related, particularly in the case of age and years, multiple regression was an appropriate test to establish the relative importance of the independent variables to the dependent variable. The standardised regression coefficients (beta weight) of the independent variables were “number of countries” .126147, “age” .266889, and “number of years in the school” -.023600. However, only “age” was significant (Sig T: .0049). The collective effect of all three independent variables (R², multiple coefficient of determination) was only .07575 (adjusted R² .05944) meaning that only 6% of the variance in support for the handbook index was explained by the three variables in the equation. The multiple R (multiple correlation) was .27522 with F=4.64422 and a significance level of F=.0038. In short, these background factors were not very helpful in predicting support for the handbook.

Process factors like the taught values index and the expectations index were not found to be associated with support for the handbook while the School Life index

33 This is based on the spring responses. Using the fall responses a weak association with years in the school was found to exist with the handbook index but not with the taught values index (rho=.1834, N=178, p<.01).
was \( r=.2946, N=84, p<.01 \). Given this, it is not surprising that students who felt strongly about the positive atmosphere in the school also felt supportive of the handbook \( \rho=.4215, N=83, p<.001 \). No association was found to exist between support for the handbook and the number of good friends the students felt they had or their belief that others in the school thought the way they did.

Finally, in terms of outcomes both the handbook index and the taught values index failed to demonstrate a relationship \( (p<.05) \) to academic achievement ("grades" in either the current or previous year) or the perception that tolerance had been learned because of the school’s influence. Support for the handbook was, however, positively associated with support for the school in general. That is, there was a correlation between handbook support and the overall grade given to the school \( \rho=.2108, N=80, p<.05 \) and the willingness of the student to recommend the school to others \( \rho=.3262, N=83, p<.001 \).

The RHS students

RHS students were asked to comment on various facets of the student handbook in the Spring 1992 survey. In general the students were supportive of the rules although there were some definite exceptions. Keeping the grounds neat and tidy was enthusiastically supported (53% strongly agreed, 39% agreed) and the call for order, respect and behavioural compliance in classes (i.e., "no unnecessary disturbances") was clearly supported (30% definitely agreed, 53% agreed). There was also considerable support for censorship of movies on the basis of anti-Christian themes (occult), excessive violence, nudity and language (33% definitely agreed, 34% agreed, 16% disapproved or strongly disapproved) and for a prohibition on alcohol and illicit drugs together with gambling, crude and religiously offensive language, and
social dancing (32% strongly agreed, 30% agreed, 23% disagreed or strongly disagreed).

Compared to the AHS handbook, the RHS handbook was behaviourally focused, that is, the regulations included more specific, personal prohibitions in behavioural areas where popular culture advocated an alternative approach (e.g., hair length, caps in school). Support for the handbook declined when issues of personal appearance were addressed. Regulations requiring and defining feminine modesty received support from 53% of the student body. Twenty-seven percent disagreed. Rules which prescribed the dress of male students were even more divisive with only 37% agreeing while 42% disagreed (19% of them strongly). The principal social regulation which placed restrictions on dating was even more unpopular: 21% strongly disapproved, 28% disapproved, and 23% expressed "no opinion"). The prohibition of walkmans at school events was also clearly unsupported (33% strongly disagreed, 36% disagreed, 23% "no opinion," with only 8% in agreement).

In contrast to AHS, the RHS handbook was well read. Fifty-nine percent said they had read it all (AHS 19%). Given the ambivalent support for the various points of the handbook, it is not surprising that only 4% felt the handbook was "good just the way it was" (AHS 25%). Nevertheless, the majority (51%) felt that they would only like to make some "minor changes" (cf., AHS 58%). However, there was a considerable group (32%) which wanted to make lots of changes (AHS 17%) and 14% which felt it should be thrown out and completely re-written (AHS 8%). Table 9.6 provides a summary of the correlations (p<.05) which existed between items in the VCES model and both the students' familiarity with the handbook and their support for it.
Table 9.6: “RHS students and the handbook”

<table>
<thead>
<tr>
<th>A tendency to read all the handbook (#17) associated with</th>
<th>rho</th>
<th>N</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>positive feelings about the handbook</td>
<td>-.2562</td>
<td>104</td>
<td>.004</td>
</tr>
<tr>
<td>parents' appear supportive of the school</td>
<td>-.2721</td>
<td>102</td>
<td>.003</td>
</tr>
<tr>
<td>peers seen as the greatest source of negative influence</td>
<td>.2292</td>
<td>93</td>
<td>.014</td>
</tr>
<tr>
<td>a feeling that people in the school thought like the student involvement in the school</td>
<td>-.2492</td>
<td>88</td>
<td>.010</td>
</tr>
<tr>
<td>greater spiritual appreciation due to RHS' impact</td>
<td>-.1680</td>
<td>98</td>
<td>.049</td>
</tr>
<tr>
<td>a willingness to recommend the school</td>
<td>-.2047</td>
<td>96</td>
<td>.023</td>
</tr>
<tr>
<td>a belief that values were similar to the school's at enrolment</td>
<td>-.2336</td>
<td>86</td>
<td>.015</td>
</tr>
<tr>
<td>a higher overall score for RHS</td>
<td>-.2366</td>
<td>87</td>
<td>.014</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support for the handbook associated with</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a higher DIT “p” score</td>
<td>-.3253</td>
<td>41</td>
<td>.019</td>
</tr>
<tr>
<td>a higher overall score for RHS</td>
<td>.6987</td>
<td>99</td>
<td>.000</td>
</tr>
<tr>
<td>a belief that values were similar to the school's at enrolment</td>
<td>.5828</td>
<td>83</td>
<td>.000</td>
</tr>
<tr>
<td>a willingness to recommend the school</td>
<td>.7380</td>
<td>82</td>
<td>.000</td>
</tr>
<tr>
<td>a more positive atmosphere</td>
<td>.4007</td>
<td>79</td>
<td>.000</td>
</tr>
<tr>
<td>greater spiritual appreciation due to RHS' impact</td>
<td>.6187</td>
<td>91</td>
<td>.000</td>
</tr>
<tr>
<td>involvement in the school</td>
<td>.3262</td>
<td>94</td>
<td>.001</td>
</tr>
<tr>
<td>parents' appear supportive of the school</td>
<td>.5814</td>
<td>97</td>
<td>.000</td>
</tr>
<tr>
<td>peers seen as the greatest source of negative influence</td>
<td>-.3860</td>
<td>89</td>
<td>.000</td>
</tr>
<tr>
<td>teachers seen as the greatest source of positive influence</td>
<td>.2889</td>
<td>88</td>
<td>.003</td>
</tr>
<tr>
<td>higher academic average</td>
<td>.3299</td>
<td>102</td>
<td>.000</td>
</tr>
</tbody>
</table>

A principal components analysis of the of the RHS handbook items was used to create two indices related to the handbook. Two factors emerged in the analysis with an eigenvalue exceeding 1. The first factor extracted had an eigenvalue of 3.979 which accounted for 49.7% of the variance. The second factor accounted for 13.6% of the variance. Six of the eight items loaded on to factor one (.62922+) while two loaded on to factor two (.93969 and .70908). In the case of factor 2, neither item specified a behavioural restriction whereas in the case of the six items loading on to factor 1, all specified behavioural restrictions in a "quantifiable" way. Factor 2, therefore, was labelled as "Handbook 2" and was interpreted as being oriented towards “principle.” Factor 1 was designated as "handbook 1" and was seen to be associated with both principle and practice. The handbook indices were both significantly related to "Life 92"35 ("handbook 1" r=.3757, "handbook 2" r=.3798, both p<.01, 2-tailed), and to

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34 Cf. Chapter 12 The Defining Issues Test. “P” scores reflect the relative importance respondents give “principled moral considerations” as defined by Rest/Kohlberg.
academic achievement ("handbook 2" $r = .2280$, p < .05, 2-tailed; "handbook 1" $r = .3295$, p < .01, 2-tailed).

Staff response to the handbook

When asked to give their opinion about the ten rules and statements taken from the handbook, the AHS faculty indicated a clear support. Table 9.7 compares the student and staff fall-spring responses to the handbook items.

The majority of the staff not only "agreed" with the rules, they "strongly agreed" with them and in only four of the ten items were there any staff members who responded with "no opinion." In one of the four items in which 80% or more of the staff "strongly agreed," the students also "strongly agreed" (drugs - 90%). On the other three (alcohol, general infractions, and vandalism), the total percent of students "strongly agreeing" ranged from 25% to 50% below the staff.

Table 9.7: "AHS handbook support by the fall and spring students and staff"

<table>
<thead>
<tr>
<th>Item</th>
<th>Fall/Spr/Staff</th>
<th>A (%)</th>
<th>No Op (%)</th>
<th>D (%)</th>
<th>SD (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5 closed campus</td>
<td>11/ 6/ 62</td>
<td>37/ 24/ 38</td>
<td>12/ 26/ 0</td>
<td>26/ 19/ 0</td>
<td>14/ 25/ 0</td>
</tr>
<tr>
<td>#6 no smoking</td>
<td>53/ 51/ 71</td>
<td>23/ 16/ 19</td>
<td>14/ 7/ 10</td>
<td>7/ 18/ 0</td>
<td>3/ 8/ 0</td>
</tr>
<tr>
<td>#7 no alcohol</td>
<td>35/ 35/ 86</td>
<td>28/ 26/ 10</td>
<td>23/ 6/ 5</td>
<td>8/ 26/ 0</td>
<td>3/ 7/ 0</td>
</tr>
<tr>
<td>#8 no drugs</td>
<td>90/ 81/ 95</td>
<td>5/ 6/ 5</td>
<td>2/ 5/ 0</td>
<td>2/ 8/ 0</td>
<td>1/ 0/ 0</td>
</tr>
<tr>
<td>#9 no vandalism</td>
<td>33/ 28/ 83</td>
<td>40/ 41/ 5</td>
<td>24/ 1/ 10</td>
<td>2/ 29/ 0</td>
<td>1/ 1/ 0</td>
</tr>
<tr>
<td>#10 get involved</td>
<td>30/ 18/ 52</td>
<td>48/ 46/ 38</td>
<td>18/ 11/ 10</td>
<td>2/ 19/ 0</td>
<td>2/ 6/ 0</td>
</tr>
<tr>
<td>#11 infractions</td>
<td>58/ 46/ 81</td>
<td>33/ 37/ 19</td>
<td>6/ 1/ 0</td>
<td>2/ 14/ 0</td>
<td>1/ 1/ 0</td>
</tr>
<tr>
<td>#12 responsible</td>
<td>49/ 32/ 76</td>
<td>46/ 54/ 24</td>
<td>5/ 1/ 0</td>
<td>1/ 11/ 0</td>
<td>1/ 1/ 0</td>
</tr>
<tr>
<td>#13 no cheating</td>
<td>24/ 21/ 67</td>
<td>39/ 33/ 33</td>
<td>23/ 6/ 0</td>
<td>11/ 30/ 0</td>
<td>3/ 11/ 0</td>
</tr>
<tr>
<td>#14 no truancy</td>
<td>26/ 13/ 71</td>
<td>43/ 45/ 29</td>
<td>17/ 5/ 0</td>
<td>10/ 24/ 0</td>
<td>4/ 13/ 0</td>
</tr>
</tbody>
</table>

Staff N=20,21

It appears the staff's strong cognitive commitment to the rules (and presumably the values which they embodied) did not translate into a "positive" change in the students over the course of the school year. Students actually moved away from the position held by the staff. On six of the items the student support slipped by 15% or

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35 This was created by collapsing all the items in the Williams and Batten School Life survey (1992) into one index. See Chapter 12 for a full explanation.
more towards "disagree-strongly disagree" (items 6,7,9,10,13,14). In the case of four of the six rules where there was a discernible slippage of support, (6,7,9,10) some of the staff had expressed "no opinion" about the item suggesting that there was not a strong staff commitment to those specific rules.

Thirty percent of the staff said they would leave the handbook as it was while 53% wanted to make "insignificant, minor" changes and 18% wanted to make major changes. This closely paralleled the reaction of the students even though the students were less committed than the staff to the specific rules which were isolated and given to them for comment. The changes the staff wanted to make were not primarily in the area of academics (11%), activities (11%), or school services (6%), but in the area of "social responsibilities" (28%).

Those staff who wrote both the fall and spring surveys showed a support for the various rules of the handbook which was in keeping with the fall trend although in the case of S1.10 two “strongly agreed” that students should get involved, two agreed, and one disagreed. It reflected the only disagreement amongst the staff on these questions and it raised the possibility that support for all the rules, statements, and values may have slipped over the course of the year, as appears to have happened with the students.

**Summary**

In synthesising results from the two sites, it becomes apparent that students at both schools had read the handbooks and were familiar with their contents and that their feelings and perceptions about the handbooks were frequently correlated with other perceptions and beliefs they had about their school experience. Over the course

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36 Students: 25% thought it was good the way it was, 58% advocated minor changes, and 17% wished to make major changes.
of the year disapproval for the rules increased at both sites and the students appear to have moved further away from the “official” staff position. Handbook support was related to the students’ perception of parental support for the schools, to a perception that they had enrolled with values similar to the schools’, and to the belief that the schools had a positive atmosphere. It was also associated with the students’ overall grade for their school and their willingness to recommend them.

.2 High expectations

High expectations are often seen to be a feature of an effective school (e.g., Mortimore et al. 1988) although what is meant by the construct is not always clear. In this context, the idiosyncratic definitions ascribed to “expectations” by the student were accepted without question. However, a qualitative study would have been helpful in ascertaining the meanings students attributed to the concept of expectations.

Three facets of high expectation were investigated (academic, moral, and behavioural). A frequency study of the responses made it clear that AHS students were convinced their school had high expectations in all three of these areas, although in the case of moral/ethical expectations there was a relative increase in the "no opinion" response. In the parent survey, parents were also asked if AHS had high behavioural expectations. Eighty-four percent replied in the affirmative which was remarkably similar to the 81% recorded by the students.

The students’ belief that the school had high academic expectations (S1.24) was not significantly correlated with the students’ position on truancy, their grades over the year, the number of friends they had, or their general support for the handbook. It was, however, associated with their conviction that they had learned to be more tolerant (rho=.3890, N=82, p<.001) and that people in the school thought like they did (rho=.3222, N=82, p<.01). Not surprisingly, it was moderately correlated
with the belief that the school had both high moral expectations (rho=.4603, N=81, p<.001) and high behavioural expectations (rho=.4064, N=81, p<.001). Students who felt there were high moral/ethical expectations tended to also feel that there were high behavioural expectations (rho=.4652, N=81, p<.001). Therefore, it would seem that assurance of high expectations in one area carried with it an assurance that it existed elsewhere in the system. It was also found that high moral and behavioural expectations were positively associated with a feeling of a positive atmosphere in the school (SI.27) and a sensation that people thought like the student thought (rho=.2043, N=82, p<.05).

A high expectations index, which combined high moral, academic, and behavioural expectations, was created on the basis of theory. A principal components analysis of items 21 - 29 in the spring survey confirmed the reasonableness of this creation. Table 9.8 sets out the pertinent details of the analysis.

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Eigenvalue 3.33612</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of variance 21.5</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Loading (pattern matrix)</td>
</tr>
<tr>
<td>values similar at entry</td>
<td>.78832</td>
</tr>
<tr>
<td>recommend the school</td>
<td>.75302</td>
</tr>
<tr>
<td>involved in the school</td>
<td>.72656</td>
</tr>
<tr>
<td>positive atmosphere</td>
<td>.70952</td>
</tr>
<tr>
<td>school people think similarly to student</td>
<td>.57049</td>
</tr>
</tbody>
</table>

| Factor 2 Behaviour index | Eigenvalue 1.62987 |
| Percent of variance 18.1 | |
| Item | Loading (pattern matrix) | Communitlty |
| high moral expectations | .79136 | .62761 |
| high behavioural expectations | .78830 | .58087 |
| more tolerance learned because of AHS | .65087 | .56538 |
| high academic expectations | .62195 | .48068 |

Using the expectation index, it was found that opinions about expectation were positively but weakly associated with the overall score the students gave the school (rho=.2395, N=80, p<.05) and with the perception that parents were supportive of the
school (\(\rho = .3809, N = 82, p < .001\)). However, conviction about high expectations was not associated with support for the school's rules as set out in the handbook.

Further clarification of the role of expectations occurred through the responses of students at RHS. They were sure that the school had high expectations in all three domains which were evaluated, including the academic (77%; RHS parents 96%), the moral (74%; RHS parents non-academic 76%), and the behavioural (83%). Behavioural expectations were least frequently associated with other items in the VCES model. It was essentially independent having significant association (\(p < .05\)) with virtually no other items except the other expectation variables.\(^{37}\)

By way of contrast, high academic expectations were associated with a range of other items in the model, as Table 9.9 demonstrates.

<table>
<thead>
<tr>
<th>Item</th>
<th>(\rho)</th>
<th>(N)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>age (i.e., older students)</td>
<td>-.1909</td>
<td>100</td>
<td>.029</td>
</tr>
<tr>
<td>support for the handbook's prohibitions rule</td>
<td>.1913</td>
<td>97</td>
<td>.030</td>
</tr>
<tr>
<td>support for the handbook's 'grounds neat and tidy' rule</td>
<td>.1935</td>
<td>100</td>
<td>.027</td>
</tr>
<tr>
<td>peers as the primary source of negative influence</td>
<td>-.2018</td>
<td>81</td>
<td>.035</td>
</tr>
<tr>
<td>involvement in the school</td>
<td>.2450</td>
<td>91</td>
<td>.010</td>
</tr>
</tbody>
</table>

The RHS expectation index formed by the combination of the three expectation items was not significantly related to any of the other indices in the survey or to time in the school, age of the child, academic achievement, or grade level.

.3 Friends

AHS and RHS students were asked how many close friends they had at school. Table 9.10 summarises the responses at the two schools and indicates that multiple friends were the norm. When asked from which group of students their best friend was drawn, 56% of the students at AHS replied from their "classmates." Relatively few

\(^{37}\) "High moral" with "high behaviour:" \(\rho = .7744, N = 92, p < .001\); "high academic" with "high behaviour:" \(\rho = .4569, N = 94, p < .001\); "high moral" with "high academic:" \(\rho = .3326, N = .95, p < .001\).
students identified other sources like "ethnic background" (11%) and "primary school friends and acquaintances" (17%). Eleven percent said they did not have a "best friend." Best friend sources at RHS were quite diversified although "classmates" were the predominant source (39%). Ethnic sources (10%), the "neighbourhood" (14%), and other unidentified sources (16%) were also leading sources. Seventeen percent felt they did not have a "best friend" (AHS 11%).

Table 9.10:
"The number of close friends at AHS and RHS"

<table>
<thead>
<tr>
<th>Number of close friends</th>
<th>AHS</th>
<th>RHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>One</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Two</td>
<td>11%</td>
<td>5%</td>
</tr>
<tr>
<td>Three, four</td>
<td>40%</td>
<td>28%</td>
</tr>
<tr>
<td>Five to ten</td>
<td>26%</td>
<td>40%</td>
</tr>
<tr>
<td>More than ten</td>
<td>11%</td>
<td>18%</td>
</tr>
</tbody>
</table>

AHS students who claimed they had no friends confirmed this by declaring that they had no "best friend" (71%) although 29% said they did have a "best friend" from an ethnic source and one student who had no friends said that his best friend was a classmate. The most uniform source of "best friend" was the primary school: it was equal to "classmates" as the source of "best friend" for those with more than 10 friends, it was the second best source for those with only one friend, it was tied for the second best source for those with 5 to 10 friends, and it was the third best source for those with 3 or 4 friends. The predominant source of best friend for all students whether they had lots of friends or only one was "classmates" (56%). The second best source was a primary school acquaintance (17%) while ethnic sources comprised only

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38 The validity of this item was substantiated by the fact that primary school acquaintances emerged as an insignificant source of friendship at RHS because only a few of the RHS students knew each other before they entered secondary school.

39 The answers to these questions raise some doubt as to their construct validity. Up to 30% did not see the apparent contradiction in their answers or else they distinguished between friends in general (anywhere in the world) and friends at the school.
11% of the "best friends," which is interesting in light of the school's multi-cultural nature.\textsuperscript{40}

The number of close friends the RHS students felt they had was significantly related to two handbook rules, one on "dating" (\(\rho=.2495, N=105, p<.01\)), the other on "order-maturity-respect" (\(\rho=.2801, N=105, p<.01\)). Associations with positive and negative sources of influence were moderately weak in the f-s-s cohort.\textsuperscript{41} The number of close friends was also weakly related to two outcomes: RHS' overall score (\(\rho=.1839, N=101, p<.05\)) and academic achievement (\(\rho=-.1905, N=103, p<.05\)). However, it was not associated with other outcomes or with inputs such as age, year in school, parents' perceived attitude to the school, the similarity of values on entry, or the length of time in the school. Furthermore, it was not associated with process items such as the expectation variables, a positive atmosphere, or the feeling that people thought similarly to the student at RHS.

\textbf{4 Misbehaviour}

"Detentions" were the common form of disciplinary action taken at RHS. They typically resulted in an hour of after school service although the nature of the disciplinary action was left up to the discretion of the faculty member or administrator issuing the detention. Misdemeanours ranged from excessive lates to disruptive behaviour in class. In the case of serious misbehaviour, multiple detentions or "suspensions" were given.

The behavioural item "detentions" was assessed in the spring of 1991 so that many of the correlations associated with other variables were available only through the f-s-s cohort. This meant that the misbehaviour was both a process and input item.

\textsuperscript{40} \(\chi^2=44.12120, \text{DF}=16, V=39415, N=71, p<.001\).

\textsuperscript{41} Positive: \(\rho=.2706, N=46, p<.05\); negative: \(\rho=-.3990, N=46, p<.01\).
This point highlights the danger associated with the establishment of clear, rigid boundaries between "input," "process," and "output." In many cases the boundaries are fluid, as the network of associations in this dissertation testify.

The majority of students (65%) indicated they had not received a detention during the year. Seventeen percent reported having received one detention, 6% two detentions, 4% three detentions, 1% four detentions, 1% five detentions, 3% six detentions, and 3% seven or more. Students were told to consider six detentions as equivalent to a one day suspension, and seven detentions as the equivalent of multiple suspensions.

Virtually all possible relationships between detentions and the other items in the survey were examined in a correlational study using the f-s-s cohort. No significant relationship was found between deviant behaviour, as identified by detentions, and the overall score the student was willing to give the school, the major sources of positive and negative influence, the number of close friends the student had, the general feeling about the handbook, the religious background of the student, or the place of residence, time in the school, the age of the child, the number of countries lived in, a willingness to recommend the school, a perception of high expectations, a feeling that people thought similarly to the student at year end, or a student’s feeling that there was a positive atmosphere in the school. Three significant correlations did emerge:

1. perception of increased appreciation for spiritual matters (rho=.2545, N=54, p<.05),
2. involvement in the school (rho=.2516, N=54, p<.05),
3. academic average (1991 here seen as an outcome: rho=.2029, N=84, p<.05).

.5 Sources of influence

AHS and RHS students were asked to indicate who had the greatest positive and negative influence on them during the school year. Table 9.11 points out that
students felt their friends or their peer group were the most influential, both positively and negatively. Sources of negative influence were more diverse with at least four agents receiving a substantial vote and all the rest receiving at least some recognition as the leading cause of negative influence. Positive sources were essentially restricted to friends and classroom teachers for students at both schools. Other positive sources were insignificant. The administration appeared as the second most frequently cited source of negative influence at AHS while teachers were at RHS. "Best friends," boy/girl friends, and activity sponsors were not considered to be major sources of negative influence at either school.

Table 9.11: "Sources of positive and negative influence at AHS"

<table>
<thead>
<tr>
<th>source of influence</th>
<th>greatest positive</th>
<th>greatest negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>classroom teacher</td>
<td>24%</td>
<td>14%</td>
</tr>
<tr>
<td>an administrator</td>
<td>1%</td>
<td>26%</td>
</tr>
<tr>
<td>extracurricular activity</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>counsellor</td>
<td>1%</td>
<td>11%</td>
</tr>
<tr>
<td>other staff member</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>best friend</td>
<td>50%</td>
<td>7%</td>
</tr>
<tr>
<td>boy/girl friend</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>another peer</td>
<td>6%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Staff as the primary source of negative and positive influence42 at RHS was associated with a wide range of input, process, and outcome items. Table 9.12 sets out the correlates (p<.05) of a tendency to see the staff as the primary positive and negative source of influence in the school. All of these correlations could be inverted to reflect the associations with a tendency to perceive peers to be the primary source of negative or positive influence.

---

42 Items 21 and 22 in the '92 Spring survey were collapsed and re-coded because positive and negative sources of influence yielded nominal level data. The first five alternatives, which were all staff related, were coded as 1 and the last three alternatives, which were all student related, were coded as 2. A tendency to #1 was then interpreted as a tendency to view the staff as the leading source of positive or negative influence.
Table 9.12: “Significant associations with RHS staff as the primary source of positive and negative influence in the school”

<table>
<thead>
<tr>
<th>Staff as the primary source of negative influence</th>
<th>rho</th>
<th>N</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>parents not supportive of the school</td>
<td>-.2207</td>
<td>88</td>
<td>.019</td>
</tr>
<tr>
<td>peers seen as the primary source of positive influence</td>
<td>-.2421</td>
<td>85</td>
<td>.013</td>
</tr>
<tr>
<td>younger students (age)</td>
<td>.3192</td>
<td>93</td>
<td>.001</td>
</tr>
<tr>
<td>handbook needs substantial change</td>
<td>-.3226</td>
<td>89</td>
<td>.001</td>
</tr>
<tr>
<td>tendency to perceive an absence of high academic expectations</td>
<td>-.2250</td>
<td>92</td>
<td>.016</td>
</tr>
<tr>
<td>feeling that there was not a greater appreciation for spiritual matters because of RHS</td>
<td>.1788</td>
<td>93</td>
<td>.043</td>
</tr>
<tr>
<td>lower academic achievement</td>
<td>.2821</td>
<td>46</td>
<td>.029</td>
</tr>
<tr>
<td>disagreement with four handbook rules</td>
<td>-.2390</td>
<td>49 to</td>
<td>.001 to</td>
</tr>
<tr>
<td></td>
<td>to .4396</td>
<td>51</td>
<td>.046</td>
</tr>
<tr>
<td>lower overall score for RHS</td>
<td>-.3990</td>
<td>46</td>
<td>.003</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff as the primary source of positive influence</th>
<th>rho</th>
<th>N</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>student’s values were similar to school’s at enrolment</td>
<td>.2144</td>
<td>88</td>
<td>.022</td>
</tr>
<tr>
<td>older students</td>
<td>-.2473</td>
<td>92</td>
<td>.009</td>
</tr>
<tr>
<td>longer periods of enrolment</td>
<td>-.2270</td>
<td>92</td>
<td>.015</td>
</tr>
<tr>
<td>peers seen as the primary source of negative influence</td>
<td>-.2421</td>
<td>85</td>
<td>.013</td>
</tr>
<tr>
<td>agreement with five handbook rules</td>
<td>.2501</td>
<td>47 to</td>
<td>.005 to</td>
</tr>
<tr>
<td></td>
<td>to .3687</td>
<td>51</td>
<td>.040</td>
</tr>
<tr>
<td>positive feelings about the handbook</td>
<td>.3652</td>
<td>88</td>
<td>.000</td>
</tr>
<tr>
<td>willingness to recommend the school</td>
<td>.2834</td>
<td>90</td>
<td>.003</td>
</tr>
<tr>
<td>a higher overall score for RHS</td>
<td>.2706</td>
<td>46</td>
<td>.034</td>
</tr>
</tbody>
</table>

9.3.2 Atmospheric climate/culture - input and process determinants

1 Parents’ attitudes towards the school

The parent surveys established that student enjoyment of the school (as perceived by parents) was an important correlate of desirable outcomes and a positive assessment of school processes. Both the student surveys explored the significance of a student’s perception of parental support for the school. The parents indicated in their surveys that they were supportive of the schools and pleased with the education their child was receiving. When AHS students were asked about their parents' attitude towards the school 24% said "very supportive and positive" and 43% said "supportive and positive." On the other hand, 20% felt their parents were "neutral with no really discernible attitude" and 8% felt their parents were "somewhat critical and negative" or "very critical and negative" (6%).
AHS student perception of a positive parental attitude was weak to moderately associated with the students' conviction that people around the school thought like they did (rho=.3149, N=83, p<.01), with a support for the rules and values in the handbook (rho=.3400, N=83, p<.001), and with the belief that the school had high expectations (expectations index rho=.3809, N=82, p<.001). It was also weakly associated with the students' statements that they had been involved in the school over the year (rho=.1852, N=83, p<.05) and that their values were similar to the school's when they first enrolled (rho=.1934, N=80, p<.05). A student's perception of parental attitudes towards the school was not associated with the age of the student, the number of friends he/she had, the years spent in the school, grades on the report card, or the conviction that tolerance had been learned over the course of the year due to the influence of the school.

RHS students perceived their parents' attitude towards the school to be supportive and positive (16% "very supportive," 44% "supportive") but there were a considerable number who saw their parents as "neutral with no really discernible attitude" (20%) or even negative and critical (14% somewhat, 2% very). Five percent selected "none of the above." This perception closely paralleled that at AHS.

The student's perception of their parents' attitudes towards the school was an active correlate at RHS. For example, eighteen of the twenty-eight relationships explored in the cohort study had a significant correlation (p<.05) with this item. In terms of input items, year in school, the age of the student, and the length of time in the school were all not found to be significantly related, as was the case at AHS. However, the feeling the student had that his or her values were similar to the school's upon entry was related to the perception of parental support for the school (rho=.3685, N=58, p<.01; AHS agreement).
Non-associates on the process side of the model included sources of friends, sources of positive influence, the number of close friends, the feeling that there were high expectations in the school, and the sense that people thought similarly to the student. However, a perception that parents were supportive of the school was associated with the source of negative influence \( (\rho = -0.2906, N=50, p<0.05) \). That is, students who felt their parents were supportive of the school were associated with feelings that other students rather than the staff were the primary source of negative influence. Furthermore, those who perceived their parents to be supportive of the school were associated \( (p<0.05) \) with support for virtually all the rules of the handbook, with a feeling the handbook was essentially good the way it was,\(^{43}\) and with a positive atmosphere.\(^{44}\)

In terms of outcome items, a perception that RHS parents were supportive of the school was associated with academic achievement \( (\rho = 0.2761, N=61, p<0.05) \), with involvement in the school \( (\rho = 0.3911, N=61, p<0.001; \text{AHS agreement}) \), with a feeling that the student had a greater appreciation for spiritual things because of RHS \( (\rho = 0.4176, N=61, p<0.001) \), with a willingness to recommend the school \( (\rho = 0.4103, N=60, p<0.001) \), and with a high overall score for the school \( (\rho = 0.7139, N=56, p<0.001) \).

Sixteen of the above items were also analysed using data from the Spring 1992 survey. Eight of those not found to be significant in the f-s-s cohort were also found to be not significant with the spring 1992 group. Seven of the eight relationship found to be significant with the f-s-s cohort were also found to be significant with the Spring

\(^{43}\) Correlations were typically .4 to .5; feelings about the handbook in general: \( \rho = 0.5935, N=57, p<0.001 \).

\(^{44}\) Spearman's \( \rho = 0.2338, N=57, p<0.05 \).
1992 respondent group. In all cases the strength and nature of the correlation were similar in both groups.45

.2 Values similar to the school at entry

AHS and RHS students who felt their values were the same as those of the school at enrolment were moderately correlated with a number of key items in the VCES model. Table 9.13 summarises the correlations (p<.05) which existed at the two schools.

Table 9.13: “RHS and AHS item correlations with ‘values were similar at enrolment’”

<table>
<thead>
<tr>
<th>Item</th>
<th>AHS</th>
<th></th>
<th></th>
<th></th>
<th>RHS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>rho</td>
<td>N</td>
<td>p</td>
<td>rho</td>
<td>N</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>positive overall grade</td>
<td>.4093</td>
<td>78</td>
<td>.000</td>
<td>.4347</td>
<td>54</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>positive atmosphere</td>
<td>.3402</td>
<td>81</td>
<td>.001</td>
<td>.4414</td>
<td>56</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>age</td>
<td>.2359</td>
<td>79</td>
<td>.18</td>
<td>.3538</td>
<td>59</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>involvement</td>
<td>.2093</td>
<td>81</td>
<td>.030</td>
<td>.3685</td>
<td>58</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>parents supportive</td>
<td>.1934</td>
<td>80</td>
<td>.043</td>
<td>.3685</td>
<td>58</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>people in the school thought like the student</td>
<td>.2600</td>
<td>81</td>
<td>.010</td>
<td>.4693</td>
<td>57</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>willingness to recommend the school</td>
<td>.2694</td>
<td>81</td>
<td>.008</td>
<td>.4414</td>
<td>58</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>tendency to lots of friends</td>
<td>-2.694</td>
<td>81</td>
<td>.008</td>
<td>.2672</td>
<td>49</td>
<td>.032</td>
<td></td>
</tr>
<tr>
<td>staff seen as the primary positive influence</td>
<td>.2694</td>
<td>81</td>
<td>.008</td>
<td>.2672</td>
<td>49</td>
<td>.032</td>
<td></td>
</tr>
<tr>
<td>feeling of support for the handbook</td>
<td>.3158</td>
<td>55</td>
<td>.009</td>
<td>.3670</td>
<td>101</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>academic achievement</td>
<td>.3670</td>
<td>55</td>
<td>.009</td>
<td>.3670</td>
<td>101</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>spiritual growth due to RHS</td>
<td>.2951</td>
<td>59</td>
<td>.012</td>
<td>.2951</td>
<td>59</td>
<td>.012</td>
<td></td>
</tr>
</tbody>
</table>

RHS students were almost equally divided on the issue of whether or not their values were similar to the school’s upon entry. Forty-five percent felt their values had been similar (10% strongly) while 41% percent felt they had not been (14% strongly). Sixteen percent expressed no opinion. This response points out a significant discrepancy between the parents’ and children’s perceptions. Eighty percent of the parents said that their child’s value system had been the same as the school’s upon entry, and 11% were undecided.

45 The only discrepancy was found to be in positive atmosphere which was not significantly correlated with parents’ attitude in the larger respondent group (rho=.0900, N=95, p=.151).
3 Others in the school think like the student

Two items explored the understanding a student had that others around him/her thought the way he/she did in an effort to provide further illustration of and explanation for value change proposition #4.46 “Values were similar at entry” was seen as a cultural input item and “people think like I do” (i.e., “others in the school think like me”) was seen as a cultural process item. Many of the AHS students saw themselves as "outsiders." As in the case of RHS, only fifty percent came to AHS sensing that their values were the same as the school’s. Even at the end of the school year 46% of them still felt the "people around AHS" did not think "pretty much" like they did. The bias towards new students in the spring sample may be reflected in these statements. Nevertheless, at year end many students still felt a sense of alienation or independence from the group. Table 9.14 provides a summary of the response to C1.21 as well as the other items in this section of the survey. Many RHS students also felt they thought differently than did others in the school. When asked if people at RHS thought like they did, only 37% agreed (1% strongly) while 47% disagreed (11% strongly) and 16% had no opinion.

The sensation a student had that others in the AHS community thought the same way he/she did over the year was not found to be correlated with support for the handbook ("AHS handbook 2" index), with grades received in school, with age or years in the school, with involvement in school activities, or with the number of good friends the student had. It was, however, weak to moderately correlated with the perception that the parents were supportive of AHS (rho=.3149, N=83, p<.02) and with the belief that the school had high academic standards (rho=.3222, N=82, p<.01).

46 The closer a competing value is to the one held by the individual, the more likely it is that he/she will internalize the new value.
Table 9.14: "AHS student response to items #21-29"

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>NoOp</th>
</tr>
</thead>
<tbody>
<tr>
<td>#21 AHS people think like me</td>
<td>7%</td>
<td>38%</td>
<td>35%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>#22 I was involved in the life (activities)</td>
<td>16%</td>
<td>46%</td>
<td>14%</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>#23 My tolerance of others increased due to AHS</td>
<td>8%</td>
<td>36%</td>
<td>21%</td>
<td>8%</td>
<td>26%</td>
</tr>
<tr>
<td>#24 AHS has high academic expectations</td>
<td>26%</td>
<td>56%</td>
<td>7%</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>#25 AHS has high behavioural expectations</td>
<td>27%</td>
<td>54%</td>
<td>13%</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>#26 AHS has high moral/ethical expectations</td>
<td>13%</td>
<td>54%</td>
<td>12%</td>
<td>4%</td>
<td>16%</td>
</tr>
<tr>
<td>#27 AHS has a positive atmosphere</td>
<td>13%</td>
<td>55%</td>
<td>16%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>#28 I would recommend AHS to prospective students</td>
<td>35%</td>
<td>45%</td>
<td>5%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>#29 My values were similar to AHS' when I came</td>
<td>6%</td>
<td>44%</td>
<td>30%</td>
<td>9%</td>
<td>11%</td>
</tr>
</tbody>
</table>

N=81-84

It was also weakly correlated with a number of other items: the belief that the school had high moral/ethical standards (rho=.2043, N=82, p<.05), the belief that their values were similar to the school's at enrolment (rho=.2600, N=81, p<.01), the belief that the school had a positive atmosphere (rho=.2057, N=83, p<.05), and the belief that the student had learned tolerance for others from the school (rho=.1992, N=84, p<.05).

At RHS "values were similar at entry" was related to all the handbook rules, whereas the feeling that others at RHS thought similarly to the student over the year was related to only three rules: "order" (rho=.2143, N=105, p<.05), "prohibitions" (rho=.1919, N=103, p<.05), and "neatness" (rho=.1886, N=105, p<.05). Furthermore, in all three cases the relationship with "others think like me" was weaker. Feelings that others thought like the student in June of the school year was also not correlated significantly with perceived parental support, with sources of positive and negative influence, with age, grade level, and number of close friends, or high moral and behavioural expectations. In the case of parent attitudes and sources of positive influence, the absence of a relationship was in contrast to "values were similar at entry." Conversely, the presence of a relationship between "others think like me" and a
perception of high academic expectation (rho=0.2005, N=104, p<.05) was in contrast to "values were similar at entry."

"Others think like me" was most strongly correlated with the input item "values were similar at entry" (rho=0.4147, N=99, p<.001). It was inversely related to the student's awareness of the handbook (f-s-s cohort: rho=-0.2980, N=61, p<.01)\(^4\) and to two other process items - a feeling that there was a positive atmosphere in the school (rho=0.3609, N=100, p<.001) and a feeling that there were high academic expectations in the school (rho=0.2005, N=104, p<.05)

It was also associated with several key outcome factors including a willingness to recommend the school (rho=0.1917, N=103, p<.05), a feeling of greater appreciation for spiritual things because of the school (rho=0.1867, N=105, p<.05), a claim to have been involved in the life of the school (rho=0.2779, N=105, p<.01), and a decision to give the school a high overall rating (rho=0.2373, N=101, p<.01).

4 Students' value profile

The students' value profiles were established through the Rokeach *Value Survey*. A summary and discussion follow below in chapter eleven.

5 Positive school atmosphere

AHS students perceived their school to have a positive atmosphere (68%). Although this perception was not significantly related to the number of good friends a student had, it was found to have a relationship to all the other items explored. By way of contrast, RHS did not have a "positive atmosphere" according to most students. Although 28% felt that it did (2% strongly agreed), 36% felt it did not and 18% felt strongly that it did not. Another 19% expressed "no opinion." Nevertheless, the majority felt they would recommend the school to others (15% strongly agreed,

\(^4\) i.e., belief that people thought like the student was associated with the reading of all the handbook.
43% agreed, 20% no opinion, 10% disagreed, 12% strongly disagreed). Table 9.15 sets out the significant correlates of a positive school atmosphere at RHS and AHS.

Table 9.15: “RHS and AHS correlates of a positive school atmosphere”

<table>
<thead>
<tr>
<th>Item</th>
<th>AHS</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>BHS</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>positive high overall score</td>
<td>.5280</td>
<td>71</td>
<td>.000</td>
<td></td>
<td></td>
<td>.3339</td>
<td>98</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>high School Life index</td>
<td>.3800</td>
<td>83</td>
<td>.000</td>
<td></td>
<td></td>
<td>.3648</td>
<td>97</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>student’s values similar to school’s at entry</td>
<td>.3981</td>
<td>66</td>
<td>.000</td>
<td></td>
<td></td>
<td>.3979</td>
<td>55</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>age</td>
<td>.3955</td>
<td>72</td>
<td>.000</td>
<td></td>
<td></td>
<td>.3902</td>
<td>58</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>willingness to recommend the school</td>
<td>.5063</td>
<td>68</td>
<td>.000</td>
<td></td>
<td></td>
<td>.3390</td>
<td>100</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tolerance learned because of the school</td>
<td>.3702</td>
<td>58</td>
<td>.005</td>
<td></td>
<td></td>
<td>.3979</td>
<td>55</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>support for the handbook index</td>
<td>.4215</td>
<td>83</td>
<td>.000</td>
<td></td>
<td></td>
<td>.1702</td>
<td>102</td>
<td>.044</td>
<td></td>
<td></td>
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<td>high moral - ethical expectations</td>
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<td>shorter enrolment period in the school</td>
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<td>others in the school thought like the student</td>
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<td>spirituality learned because of the school</td>
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9.3.3 Goal Attainment - Outcome

.1 Grades expected

Academic achievement in the AHS spring group was similar to the fall with 16% indicating their grades over the year had been A’s (fall: 22% mostly A’s), 70% indicating B’s (fall: 59%) and 13% C’s (fall: 17%). However, in this study no significant correlation was found between achievement and many of the factors which were related to the value change process. If one held previous year end grades to be a milieu “input,” it, too, showed little significant relationship to key process - outcome factors.

The majority of students at AHS claimed to have received B’s over the year. The same was true at RHS. Students were asked to give the grades they had received.

48 If one held previous year end grades to be a milieu “input,” it, too, showed little significant relationship to key process - outcome factors.

49 N.B., this was the student’s recollection of past scores.
in three academic subjects (English, Math, Social Studies) as well as their last quarter grade average. In the first case, the average of three academic subjects indicated that 25% had obtained an "A" average, 50% a "B" average, and 24% a "C" average with only one student's average being reported as a "D." Having the students submit their own calculation of their grade average resulted in a similar, albeit slightly higher average. This is best explained by the fact that the overall average included subjects which traditionally yielded grades higher than the "core academic" subjects. Twenty-nine percent responded that their average was "A," 59% that it was "B," and 13% that it was "C." Another possible explanation for the higher scores was that not all students submitted a grade point average (N=87). It may be that those with higher grades were more likely to record their grade point average.

Academic achievement ("grades") amongst the RHS 1992 respondents followed a pattern established in the fall and spring surveys 1990-91. The greatest number of students reported a "B" average (38%), with an equal number reporting an "A" or a "B" (29%) and 4% reporting a "D." Compared to the earlier surveys there was an erosion of the "B's" to the "C's" and the "D's."

Using data from the Spring 1991 respondents, it was found that not very many input measures had a strong correlation with academic achievement. Time in the school (prior to the 1990-1991 school year), the number of countries lived in more than six months, and the grade level were all not significantly correlated with academic achievement. The input exception was the age of the child (rho=.1986, N=87, p<.05). On the process side, the number of detentions was weakly associated with academic average (rho=.2029, N=84, p<.05).

Using the RHS Spring 1992 respondent group, the input variable "values were similar upon entry" was significantly correlated with achievement (rho=.3670, N=101,
p<.001) as were seven of the eight handbook rules (rho=.1677 to .3565, p<.05)) but perceived parental attitudes about RHS were not. On the process side, academic achievement was associated with the number of close friends (rho=-.1905, N=103, p<.05), and, possibly, with a perception of high behavioural standards.\(^{50}\) It was not related to sources of negative and positive influence.

Other outcomes included in the survey were generally associated with academic achievement. The willingness to recommend the school (rho=.1965, N=105, p<.05), the perception of increased appreciation for spiritual things (rho=.2297, N=107, p<.01), the claim to be involved (rho=.2559, N=107, p<.01), and the overall score given to RHS (rho=.3492, N=102, p<.001) were all significantly associated with academic achievement.

.2 Involved in the school (value)

The staff and students at AHS publicly stated that tolerance and involvement were important values to them. When asked if they had been involved in the school, less than a third of the students felt they had not been involved or had not learned to be more tolerant because of the influence of AHS. Consequently, the students believed the school had impacted their lives in the values domain. Although this does not measure the force or extent of the impact (i.e., how much more tolerant or involved), these responses make a strong case for the potential of a school to have a significant effect in the affective domain and, as such, they confirm the conclusion drawn from the parent's survey.

Several factors were associated with involvement which were not associated with the learning of tolerance. Students' perception of parental support for AHS was not correlated with tolerance whereas it was with involvement, albeit weakly

\(^{50}\) Spearman's rho=-.1534, N=107, p=.057.
(\rho=.1852, N=83, p<.05). Age was not significantly correlated with tolerance, whereas it was with involvement (\rho=.2145, N=82, p<.05); the feeling that others thought like the student was associated with tolerance whereas it was not with involvement. The number of good friends was not associated with tolerance whereas it was with involvement.\textsuperscript{51} Both values were similar, however, in their weak relationship to the belief that their values were similar to the school's upon entry.

Most students at RHS claimed to have been involved in the life of the school.\textsuperscript{52} The age of the RHS student, length of time enrolled at RHS, and the grade level were not found to be significantly related to involvement but perceived parental attitudes (\rho=.3750, N=102, p<.001) and "values similar at entry" (\rho=.3135, N=103, p<.001) were. Process variables with significant relationships included six of the handbook rules (\rho=.2151 to .3063, p<.05), the general feeling about the handbook (f-s-s cohort \rho=.3761, N=59, p<.01), high moral/ethical expectations (\rho=.2020, N=108, p<.05), high academic expectations (\rho=.2599, N=108, p<.01), and "others think like me" (\rho=.2779, N=105, p<.01). Those without significance included the number of close friends, positive atmosphere, and sources of positive and negative influence.

Acting as an output of the school but as an input in the 1991-92 school year, detentions were found to correlate significantly with involvement (f-s-s cohort \rho=.2516, N=54, p<.05), as were the items "more spiritual because of RHS" (\rho=.3147, N=109, p<.001), the overall school score (\rho=.2602, N=104, p<.01), and academic average (\rho=.2559, N=107, p<.01).

\textsuperscript{51} Spearman's \rho=-.2899, N=82, p<.01; N.B., fewer friends was associated with less involvement in the school.

\textsuperscript{52} Sixty-five percent agreed (15% strongly) and 19% disagreed (7% strongly).
Involvement was the only AHS item significantly correlated with birthplace. There was a weak relationship between the country of birth and support for the statement "Get involved with school activities." The Scandinavians (90%) and North Americans (88%) approved or strongly approved of involvement. The Japanese, while supportive, were less likely to approve of it (65%). Students from Great Britain (79%), the rest of the EU and Switzerland (73%), and those from other areas of the world (74%) came between the reticent Japanese on the one hand and the enthusiastic North Europeans/North Americans on the other.

3 Tolerance (value)

Forty-four percent of the AHS students said they were more tolerant because of AHS and 62% said they had become involved. In the case of tolerance, 26% expressed "no opinion." By comparison, 93% of the AHS parents felt their children were more tolerant because of AHS' influence and 86% felt AHS was good at getting their child involved.

"Tolerance for others" learned because of AHS was not associated with perceptions of parental support for the school, involvement in the school, age of the student, years in the school, number of good friends, and support for the handbook, but it was associated with the student's feeling that his/her value system was the same as the school's upon entry (\(\rho=.2093, N=81, p<.05\)), with a feeling that people thought pretty much like the student (\(\rho=.1992, N=84, p<.05\)), and with a conviction that there were high academic expectations in the school (\(\rho=.3990, N=82, p<.001\)).

\[\chi^2=39.20329, \text{DF } 24, N=176, \nu=.23598, p<.05.\]

\[54\] In the case of "involved" the parents' question was worded differently which may explain the discrepancy. Nevertheless, it appears that parents perceived more of a positive school effect in this area than did the students.
.4 Developed appreciation for spiritual matters

The official documents at RHS (e.g., student handbook, staff manual) indicated that RHS existed to create "a greater appreciation for spiritual things" in the lives of its students. Most students (54%) felt that they had a "greater appreciation for spiritual things" because of the influence of RHS" (18% strongly agreed, 36% agreed), but 12% expressed "no opinion" and 34% disagreed (17% strongly).

The student's belief that he or she had a greater appreciation for spiritual things because of the school was an active correlate in the VCES model. Once again input items tended to be unrelated (time in school, grade level, age of the child) but there were two noteworthy exceptions: perceived parental support for the school (rho=.3111, N=102, p<.001) and "values were similar at entry" (rho=.3556, N=103, p<.001).

Most of the processes assessed in the survey were weakly related to the students' belief that they had acquired a greater appreciation for spiritual things, including six of the handbook rules (rho=.1739 to .3080, p<.05), the general feeling about the handbook (f-s-s cohort rho=-.4523, N=59, p<.001), the source of negative influence (rho=-.1788, N=93, p<.05), "others think like me" (rho=.1867, N=105, p<.05), and positive atmosphere (rho=.2295, N=102, p<.01). Once again, the three expectation variables were not significantly related. Outcome measures such as a willingness to recommend the school (rho=.3595, N=107, p<.001), the claim to have been involved (rho=.3147, N=109, p<.001), academic achievement (rho=.2297, N=107, p<.01), and RHS' overall score (rho=.4316, N=104, p<.001) were also significantly related.
Recommendation of the school

One outcome which has been largely ignored in effective schools research is the "satisfied customer." Did the student feel like he or she had a profitable experience in the school? That is, did the student feel like the school was effective for him/her? This subjective outcome is particularly useful because it goes beyond the traditional academic achievement = effective school simplification. The two items "would you recommend AHS to other students who might want to come" and "give your school a grade on the scale used to score you during the year" asked the student to look at the question of school effectiveness in a personal, subjective, and comprehensive way. Included in this, presumably, would be a student's (unconscious?) evaluation of changes which occurred in his or her world view, lifestyle, and values which he or she in some way attributed to the school. While these items were vague and imprecise and raised questions about the meanings students attributed to overall effectiveness, they nevertheless represented a reasonable starting point for a subjective assessment of effectiveness.

Many AHS students were sure that the school's atmosphere was positive (68%) and an even greater number (80%) said they would recommend the school to others. This favouring of the recommendation item suggests that the decision to recommend the school transcended positive feelings about the school's atmosphere. That is, the students were more enthusiastic about the "school" than they were about the positive feelings they associated with it.

The student's affirmation of the school was positively associated with input factors such as the feeling that one's values were similar to the school's at entry (rho=.2694, N=81, p<.01) and the age of the student (rho=.3310, N=81, p<.001), but it was not associated with the number of friends the student had or the number of years
in the school. It was also associated with school process factors such as the perception that there was a positive atmosphere in the school (rho=.3699, N=83, p<.001), that the school was a good place to be (School Life index: rho=.3800, N=83, p<.001), and that the handbook was worthy of support ("AHS handbook 2:" rho=.3262, N=83, p<.001).

Following the pattern of other outcomes, willingness to recommend RHS was not significantly related to the age of the child, the year in school, the length of time spent in the school, the number of close friends, and the three expectation variables. It was related, however, to the students' perception of the parents' support for the school (rho=.4722, N=100, p<.001) and to "values were similar at entry" (rho=.6087, N=101, p<.001).

All eight of the handbook rules were related to a willingness to recommend RHS (rho=.2407 to .5041, p<.05), as was the general feeling about the handbook (f-s-s cohort rho=.5398, N=58, p<.001), the sense that there was a positive atmosphere in the school (rho=.3390, N=100, p<.001), the belief that others thought like the student (rho=.1917, N=103, p<.05), and the perception of the staff as the primary source of positive influence (rho=.2834, N=90, p<.01). Willingness to recommend the school was significantly associated with a number of other outcome measures including the belief that the student had developed more appreciation for spiritual matters because of RHS (rho=.3595, N=107, p<.001), involvement in the school (rho=.2312, N=107, p<.01), academic achievement (rho=.1965, N=105, p<.05), and RHS' overall score (rho=.5807, N=102, p<.001).

.6 The overall grade of the school

When AHS students were asked to rate their school as they were rated on a report card, 14% gave the school an "A," 58% gave it a "B," 24% gave it a "C," and
5% gave it a "D" or an "F." Interestingly, the average grade students received from teachers was also a B.

Not surprisingly, "the school's overall score" was correlated with a willingness to recommend the school (\( \rho = 0.5327, N=80, p<0.001 \)) and it shared many of the associations identified with that item. Like willingness to recommend the school, the overall score was moderately correlated with the sense that AHS had a positive atmosphere (\( \rho = 0.4000, N=80, p<0.001 \)), that it was a good place to be (school life index: \( \rho = 0.4732, N=80, p<0.001 \)), and that the handbook was worthy of support (\( \rho = 0.2108, N=80, p<0.05 \)). It was also moderately associated with two input factors: age (\( \rho = 0.4381, N=79, p<0.001 \)) and "values were similar at entry" (\( \rho = 0.4093, N=78, p<0.001 \)). It was not associated with years in the school or with the number of friends the student had. Unlike academic achievement (grades), the the school’s overall score was associated with high expectations (expectation index: \( \rho = 0.2395, N=80, p<0.05 \)) and with support for the values (rules) taught in the handbook ("taught values:" \( \rho = 0.3071, N=80, p<0.01 \)).

The overall score given to RHS was also a "B" (50%), although the lower grades ("C" - 20%; "D" - 13%; "F" - 5%) more than offset the highly rated "A's" (12%). It was the most active of the variables in the VCES model. It was not related to the age of the child, to the length of time spent in the school, to the grade level, to the three expectation variables or to the claimed awareness of the handbook. Otherwise it was related to every variable in the model and, at times, highly so.

In terms of inputs, there was a strong correlation between the overall score and perceived parental support for the school (\( \rho = 0.7139, N=56, p<0.001 \)), and "values were similar at entry" (\( \rho = 0.4174, N=98, p<0.001 \)). From the perspective of process variables, all the handbook rules were significantly related to the overall score.
(rho=.2837 to .5396, p<.05), as was the general feeling about the handbook (f-s-s cohort rho=.7251, N=54, p<.001), the number of close friends (rho=.1839, N=101, p<.05), "others think like me" (rho=.2373, N=101, p<.01), the perception of a positive atmosphere (rho=.3339, N=98, p<.001), and the feeling that teachers were the primary source of positive influence (f-s-s cohort rho=.2706, N=46, p<.05) and peers were the primary source of negative influence (f-s-s cohort rho: -.3990, N=46, p<.01).

Finally, in the case of other outcomes, the school's overall grade was significantly associated with a willingness to recommend RHS (rho=.5807, N=102, p<.001), a conviction that a greater appreciation for spiritual matters had developed because of the school (rho=.4316, N=104, p<.001), a claim to be involved in the life of the school (rho=.2602, N=104, p<.01), and academic average (rho=.3492, N=102, p<.001).
CHAPTER TEN: Discussion

Chapter ten follows the outline of the VCES model. Organisational climate is discussed first, followed by atmospheric climate, and outcomes.

10.1 Organisational climate

10.1.1 Milieu

A review of the results from the correlation study revealed that milieu input features of organisational climate, at least as defined by such standard inputs as age, multi-cultural exposure (i.e., the number of countries in which the student lived), gender, parents’ occupation, and citizenship, were not as active in the VCES model as were atmospheric climate inputs, including, in particular, the students’ perception that their parents supported the school and that their personal values were similar to the school’s when they first enrolled.

1.1 Age, grade level

The role of “age” in the VCES model was idiosyncratic. At AHS younger students tended to be more positive about the school as a whole than were older students while at RHS younger students were less involved and demonstrated a relative alienation from the teachers. Grade level played a similarly inconsistent role at the two sites. Student perceptions appeared to vary from age group to age group and from grade level to grade level but not necessarily in a linear way associated with social or biological maturation. Consequently, the age of the student represented a valid way of defining group attitudes and beliefs in these schools but the impact of ageing was not identified. This differentiation between age and ageing was frequently heard in the halls and staff rooms as one often heard teachers labelling a particular class, such as a grade 10 class, as a “positive” class, or a grade 12 class as a “good” class and a grade 11 class as an “academic” class. These labels or designations could
theoretically arise from group trends associated with age but not with ageing.

.2 Citizenship

Birthplace was originally seen as a potential correlate of many of the items in the model because of the different values associated with "home" cultures. However, no significant relationship was found between the student's birthplace and his/her views of the handbook, numbers of friends, identification with the school's thinking, or involvement in the school's programme. This lack of association suggests that the international school community may possess an "international," essentially English language supra culture which transcends the home country's cultural idiosyncrasies. Such a phenomenon is in itself intriguing and worthy of further investigation although evidence from both the parent and the Rokeach surveys indicates that home cultural inputs remained substantial in other dimensions of the VCES model.

.3 Parents' occupation

The insignificant role parental occupation and economic situation played at these two sites raises a number of important questions in regards to school climate and value change. One group of parents (AHS) could be described as economically "privileged," the other group (RHS) could be described as lower middle class with a small representation of both the lower and upper classes. In terms of positive outcomes and positive processes, both schools were described by parents and students as "effective." In other words, economic class did not appear to be a significant correlate of a school's effectiveness in the minds of the participants (those who attended or paid for the schooling).

How does one explain this in light of the fact that many studies have made it clear economic advantage plays a major role in school outcomes? One possible explanation is that academic outcomes are usually seen as THE measure of school effectiveness. In this study the focus was on affective outcomes and effectiveness was defined primarily by parents and students. When the spotlight shifted to the affective domain and to the perspective of the participants (parents and students) and away from the cognitive domain and the expectations of governments and special interest groups,
socio-economic explanations appeared to be less associated with effectiveness. Popular thinking today attributes poor outcomes and a school’s inability to do well (“ineffectiveness”) to economic disparity and social injustice. Results from these two contrasting sites suggests that this is not always the case and that other factors of a more significant nature can be active in an effectiveness explanation.

There is little evidence that AHS with its high income parents outperformed RHS with its lower middle class parents even on major academic outcomes, as one would expect given the economic advantage of AHS. Results from the standardised SAT and Advanced Placement exams could provide some insight into this but the impression was that both schools performed well on these instruments and were both “effective.” It was not the purpose of these surveys to explore this point but because of the interesting results which emerged, further study is warranted.

One interesting explanation for the failure of socio-economic status to play a significant role is that attitudes and characteristics typically associated with social privilege may have been overshadowed by other attitudes and characteristics in these schools. In other words, social privilege in itself is not a “cause” of ineffectiveness or poor outcomes but rather a correlate which can be mitigated or eliminated under certain conditions. For example, the religious attitudes and beliefs espoused at RHS (cf., Rokeach profiles in chapter eleven) may negate the deleterious effects often attributed to economic disadvantage. International exposure and parental educational levels may also have played a role in downgrading the importance of wealth and status.

Unfortunately, no comprehensive explanation is possible given the data at hand, but it suggests that there may be ways to create “effective” schools with positive processes and outcomes that do not rely on the largesse of a government.

4 Years in school

Two handbook rules were significantly related to time in the school, although in both cases the pattern was not linearly related to length of time in the school. New students were the most dogmatic about their beliefs. On the one hand, they were the most supportive of “order” while on the other, they were the least supportive of the
"walkman" prohibition. The one and two year students were generally the most supportive of both rules, the three to five year students were generally the most undecided, and the 6+ year students were the most diversified in their opinions. This suggests that students entered the school with their minds made up but after a year or two in the school, they became more accepting of the rules. This period of acceptance was followed by a period of growing uncertainty which culminated in the independent positions held by the long-term students. Such an interpretation has appeal because it leaves room both for maturation due to ageing and school effect, but the evidence is sketchy and based on too few variables, a small sample, and a statistical procedure plagued by empty cells and low frequencies. In contrast to what was said above about ageing and grade level, the correlates of "years in the school" lend support to the contention that groups existed within the school which were superficially associated with maturation. In actual fact, these groups appear highly idiosyncratic. Once again, an ethnographic study would be most helpful in revealing what these "groupings" actually meant and why they existed.

.5 Gender

In spite of a number of significant correlations (p<.05), it must be said that gender, too, was not frequently associated with other items in the VCES model. For example, gender in both schools was not significantly related (p>.05) to citizenship, father's occupation, birthplace, residence status, and length of time in the school, all of which could have been anticipated in a valid instrument. Nor was it associated with a general feeling about the handbook, academic achievement, the overall score given to the school, the feeling that others in the school thought like the student, the belief that spiritual appreciation had been learned because of the school (RHS), the perception that the school had high academic or behavioural standards, the belief that the school had a positive atmosphere, a willingness to recommend the school, or the student's perception that his/her values had been the same as the school's upon entry. In short,

1 $\chi^2$ 27.66110, DF 12, N=61, p=.00620, $\chi^2$.38878, eta-squared with order dependent .211 and with time dependent .078; "walkman" $\chi^2$ 26.46279, 16 DF, N=61, p=.04785, $\chi^2$.32932, eta-square with walkman dependent .048 and with time dependent .100.
there was no basis for gender stereotyping at either school even though it is apparent from the Rokeach *Value Survey* that gender was associated with varying value profiles. Support for the handbook rules revealed a gender difference in the holding of the values *responsibility* and *respect*. Girls tended to endorse them more enthusiastically. It could be argued that girls were simply more inclined to rule conformity than were boys but given that only two of the rules were associated with gender (*p* < .05) and that the rules which were differentiated by gender overtly embodied the distinct values of *responsibility* and *respect* rather than specific behavioural criteria, it seems more likely that girls held the values differently than did boys but that this difference was not particularly associated with positive perceptions of school processes and outcomes.

10.1.2 Organisational climate: social system

.1 Handbooks

It has often been noted that schools unconsciously teach many values they do not intend to teach. However, there are some values which are "officially" a part of the school's teaching agenda. The handbook was one place where both schools articulated values they wished to teach and prescribed behaviours which they felt were indicative of an actual "holding" of these values or which they felt would permit them to operate as though the values were held by the school community. On a perhaps superficial level, therefore, a school could consider itself effective at teaching values if students became increasingly supportive of the school handbook. It needs to be noted, however, that an indication of support for the handbook could be seen as compliance with social convention. As David Trainor (1995) pointed out, "'Knowing right from wrong' is not always about morality but may be about social compliance" (p. 12). This phenomenon led Marfleet (1995) to distinguish between "school values and values in schools."

Three items correlated significantly (*p* < .05) with support for the handbooks: perception that parents were supportive of the school, belief that there was a positive climate in the school, and support for the school as a whole. Longer exposure to the handbook's rules and values through an increased number of years in the school was
not associated with greater support for it, nor was the feeling of identification with the school ("values similar on entry" and "people in the school think like me").

Interestingly, students who claimed to be unfamiliar with the handbook were associated (p<.05) with a feeling that the handbook needed serious revision. These students were also associated with a perception that their parents were not supportive of the school, with a rejection of most of the specific rules and values in the handbook, with a feeling that the staff had been the most likely source of negative influence in the school, with a feeling that people in the school did not think like they did, with a claim that they had been uninvolved in the school during the year, and with a belief that the atmosphere in the school had not been positive. In short, there was negative linkage between the items and a common, consistent aspect of disaffection. One also wonders to what degree the handbook was actually unknown or unread by this group.

Although the data provides no evidence for this, it is tempting to speculate that those who claimed ignorance of the handbook meant something closer to “I wish I knew nothing about the handbook.” Failure to acknowledge awareness of the handbook would therefore be another way of expressing disaffection from the school.

By way of contrast, a feeling that the RHS handbook was basically good or needed only minor changes was associated with the belief that a student's values had been similar to the school's upon entry, with a perception that parents were supportive of the school, with a belief that the staff had been the primary source of positive influence and the peer group the primary source of negative influence, with a reading of all or most of the handbook, with a support for the various rules and values in the handbook, with the belief that there was a positive atmosphere in the school, with high academic achievement, with involvement in the school, with a belief that the school fostered greater appreciation for spiritual things, with a willingness to recommend the school, and with a decision to give the school a high rating. A positive thread of "effectiveness" is evident in these correlations (p<.05). Acknowledging support for the handbook was tantamount to identification with the “school.”
Each of the handbook rules with its accompanying explicit or implicit values was studied in connection with the VCES model. The rules and values of the handbook, were "live" issues which found many correlates in the model (p<.05). The exceptions were primarily the expectation variables and, typically, age, years at RHS, and grade level. The handbook factors themselves were frequently inter-correlated.

Over the course of the year support for the handbooks appeared to decline at both schools. In every one of the ten rules or statements investigated at AHS there was a shift towards disapproval. In only two cases were the "no opinions" greater than in the fall. Students were less supportive and more sure of what they believed by the end of the year.

How is this shift to be interpreted? Given the AHS spring age bias it could be argued that the younger, newer students were less likely to endorse or adopt the rules and underlying values. It could also be argued that the younger, newer students were more "rebellious." One could also imagine that the early enthusiasm of September, with its promises, its hopes and its reservoir of good will, had waned in the face of year long pressure, disappointment, and conflict.

The data does not provide the evidence necessary to answer this question. However, after a full year in the school it is difficult to imagine that the younger, newer students still did not understand the reasons for the rules. Furthermore, there is no evidence to suggest that they were more "rebellious" or that they found the rules more onerous. In other words, it seems improbable that the age bias in the AHS spring sample could alone account for the disappearance of support for the handbook. A crosstab study of the "number of years at AHS" with "feelings about the handbook" makes it clear that longer term students were more associated with a feeling that the handbook needed revising than were shorter term students.\(^2\) None of the students with five years at the school wanted to leave the handbook the way it was while 31% of newcomers to the school and 39% of those with one year in the school thought it was good the way it was. This makes the case for a negative school impact. Furthermore,

\(^2\) \(\chi^2 = 30.95714, \text{DF} = 15, p=.00890, N=157, p=.00890.\)
it raises questions about "effectiveness." One can only speculate what the AHS staff would feel about this drift away from the early, initial support for the handbook with its rules and values. There would be those who would say that the school's stress on individuality and critical thinking had taken precedent over the values which were articulated in the handbook and that the more important "values" had won. In other words, the school had been effective in creating a positive, unintended effect albeit at the cost of other desired effects. Older students and students who had been in the school for some time would soon be leaving. "Therefore," the argument would go, "it was good to see older students thinking through the values for themselves." On the other hand, one suspects that while some teachers would applaud independent, critical thinking, others would conclude that the independent, critical thinking process had somehow gone awry if it left students less supportive of other cherished values.

Speculation aside, the trend to less student support over the year was a negative effect running counter to the stated objectives of school.

Further study needs to be done in order to establish what effect, if any, the staff's "no opinions" had on the students. Even though the staff as a whole felt strongly committed to the rules, there was evidence that the minority's lack of clear support may have fostered divergent thinking amongst the students and led to a decrease in support for the handbook and its provisions.

2 High expectations

The three expectation items, which asked students to assess the school's academic, moral-ethical, and behavioural expectations, were significantly correlated with each other, thereby suggesting a conceptual linkage between them. A principal components analysis verified this indicating that high expectations in one area carried with it an assurance that it existed elsewhere in the system. Perceptions of high expectations in the various domains were not associated with input items such as age, gender, and years in the school but there was a correlation (p<.05) with the input item 3

3 In the case of involvement (S1.10) one of the five staff who completed both the fall and the spring surveys "disagreed" in the spring after "agreeing" in the fall. The other four were split between "agree" and "strongly agree." If these five are seen to be in any way representative of the staff as a whole, it would seem that the staff, too, had become less supportive over the course of the year.
relating to the students’ perception that their parents’ supported the school. There was also evidence that the school’s overall grade was associated with a general belief that the school had high expectations.

Behavioural expectations were noticeably the least active of the three expectation dimensions explored in the VCES model. This provides some evidence for the truth of proposition #9 “Values are held interactively across the domains of personality in unique and idiosyncratic ways.” This uniqueness and idiosyncrasy appears to be particularly observable in the behavioural domain.

Perceptions of the school’s academic and moral-ethical expectations were correlated with items at both sites (p<.05). In the case of academic expectations, the item with the clearest connection to perception of high expectation was the belief that people in the school thought like the student. High academic expectations were also associated with the learning of tolerance and involvement. A belief that there were high moral-ethical expectations in the schools was associated with the feeling that there was a positive atmosphere in the schools and, in the case of AHS, with a belief that others in the school thought like the student. Given this pattern it would appear that students who tended to feel they shared the same belief orientation as others in the school also tended to feel that the school had high expectations. This correlation has face validity if one accepts that people in general feel their personal expectations are "high."

3 Misbehaviour

The item which asked students at RHS about their detention record appeared in the Spring 1991 survey. It was studied in light of responses to the Spring 1992 survey through the fall-spring-spring cohort. Therefore, strictly speaking, the record of misbehaviour was a 1991-1992 input. However, one could just as easily argue that it would qualify as a school process item because the behaviour record was acquired in 1990-1991 while the student was attending RHS. This item duplicity illustrates an inadequacy which exists with the linear notion of input - process - outcome in school effectiveness research. Processes and outcomes in one year become inputs in another.
One simple result of this is the obscuring of the impact "school history" has on the present. Evaluations of school "effect" in school effectiveness research need to reflect autarkic elements in the input - process - outcome model.

Misbehaviour was surprisingly unassociated (p>.05) with the item which asked students if they felt others in the school thought similarly to them. In other words, misbehaviour was not strictly speaking linked to a sense of alienation. Misbehaviour was significantly associated (p<.05) with a tendency on the part of the student to feel that the school had not been effective in accomplishing either of its main goals, namely that of providing an opportunity for spiritual growth or of promoting academic achievement. It was also associated with lack of involvement in the school. Given these key associations, it would seem that an "effective school" would not have a large number of students enrolled in it whom it would define as misbehaving.

4 Evaluation of sources of influence

In identifying a primary source of positive and negative influence rather than in claiming "no opinion," students gave support to the contention that the school had an impact on them. This declaration provides evidence for value change proposition #13: "elements in a school's environment influence value formation in unique and disparate ways." With increased exposure to the school, the "potency" of the elements changed. What was initially a source of negative influence became a minimal or non existent source as time passed. Perhaps acculturation to the school's environment brought with it a conviction that the negative was not as negative as first perceived. Further research is needed to clarify the nature of the metamorphosis which took place in this setting and to investigate if changes in sources of influence was simply associated with maturation and not a school process factor.

Friends and peers were seen as both the most positive and the most negative source of influence in the schools. Teachers were the second most potent source of influence, both positively and negatively, while administrators tended to be seen as having little positive influence but considerable negative influence. Given the important role played by the peer group, schools like RHS and AHS would do well to
develop policies which encourage students to enrol who share the values' orientation of the "school."

The identification of staff rather than peers as the primary source of negative influence was associated with parents' lack of support for the school, with the feeling that peers had the greatest positive impact on the student, with the feeling that the handbook needed to be substantially revised, with the conviction that a number of its rules and values were not worthy of support, with the belief that the school did not have high academic expectations, with the feeling that the student did not have a greater appreciation for spiritual things because of the school’s influence (RHS), and with an overall low grade for the school.

By way of contrast, the student designation of a staff member as the principal source of positive influence was associated (p<.05) with the feeling a student had that his or her values were similar to the school's upon entry into the school, with a feeling that the peer group had been the main source of negative influence in the school, with the feeling that the handbook was basically satisfactory and that specific rules in the handbook were worthy of support, with a perception that there was a positive atmosphere in the school, with a belief that the school was a good school, and with a willingness to recommend it to others.

In summary, identification of sources of influence in the school was an important correlate in the VCES model. Positive processes and outcomes were associated (p<.05) with a tendency to view teachers as the primary positive source of influence and peers as the primary negative source.

10.2 Atmospheric climate/culture - input and process factors

10.2.1 Parents’ attitude towards the school

The students' perception of their parents' attitudes towards the school was another active correlate in the VCES model. At RHS eighteen of the twenty-eight relationships in the cohort study had a significant correlation (p<.05) to the students' perception of their parents' attitudes. Many students at RHS felt their parents had a neutral or relatively critical attitude towards the school and yet parents were emphatic
that they shared the school’s values and thought it was doing a good job of educating their children. This apparent discrepancy would seem to be best explained by a tendency for people (students in this case) to assume that other people (parents) think the way they do. This phenomenon raises questions about the validity of those items which asked students and parents to indicate how each other felt about a particular issue. In actual fact the items did not reveal how others thought, but how the first party felt the others thought. In the case at hand, the students’ perception of parental disenchantment appears to be inaccurate from a parental perspective (at least according to what parents were willing to admit to the school in their surveys) but the item maintains validity in that it reveals how supportive students perceived their parents to be, and one presumes that students acted according to their perceptions.

Results from a study of this item indicate that a school like RHS or AHS, which desires a positive climate where values can be transferred effectively, would do well to see if students perceive their parents to be supportive. It is this perception which was associated (p<.05) with involvement in the school, with academic achievement, with the learning of spirituality (RHS), with a high overall score for the school, with a willingness to recommend the school, and with a belief that the students’ values were similar to the school’s at entry.

10.2.2 Student felt personal values were similar to the school’s at entry

Earlier it was noted that socio-economic inputs appeared to have only a modest association with other inputs in the VCES model. By way of contrast, the philosophic inputs appeared to be active and inter-related in a consistent manner. Students at RHS and AHS who felt their personal values were similar to the school’s at entry were significantly associated (p<.05) with such desirable outcomes as a high overall grade for the school and a willingness to recommend it. These students were also associated with involvement in the life of the school and, in the case of RHS, with a feeling that they had grown "spiritually" because of attendance at RHS. In terms of process items, these students were also associated with a perception that their schools had positive atmospheres and that others in the school thought like they. In terms of inputs, a
feeling that they entered their schools thinking like their schools was associated (p<.05) with a belief that parents had been supportive of the school.

A non-parametric correlation like this one does not indicate causation or direction in a relationship. It could be supposed from this item that if enrolment policies were written in such a way as to ensure that students shared the school's philosophic orientation a happy, productive school would result. Such a deduction goes beyond the evidence because it is possible that this input item is, in fact, an outcome of the school. The item asked the student to recall a perception. It seems highly probable that the perception was influenced by experiences in the school over the year. For example, it could be that the perception of a positive atmosphere left students with the impression that their values had been the same as the school's when they entered it.

Value change propositions 4 and 6 suggested that for a school to be effective, students who enrol must feel that the school's value system is not foreign to them and that the new values they encountered will be "comprehensible" and close to what they already believe. Data from the input item "values were similar on entry" supported these propositions. To phrase the item in the language of the propositions, the student's perception that he/she was close to the values of the school was associated with a willingness to support the values of the school and to learn the lessons which the school wished to teach (e.g., tolerance for others). It is apparent both from this item and the one dealing with a student's perception that "people in the school think like me" that identification with the values in the school was associated with the student's belief that he or she had learned values from the school and that a positive climate with high expectations existed in it.

10.2.3 Others in the school thought like the student

The previous item asked students to recall a perception from the past. The item which asked students if they felt others in the school thought like they did asked a similar question but from the perspective of the present. Not surprisingly, the two questions were most strongly correlated with each other. This in itself argues for the
seepage of the past into the present and the present into the past. In the case of this particular item, the correlations were analogous to those related to recollections that personal values were similar to those of the school at enrolment. Current perceptions of solidarity with others in the school was associated (p<.05) with supportive parents (AHS), with perceptions of high moral or academic standards in the school (suggesting that students think they personally hold high standards), with perceptions of a positive atmosphere in the schools, with involvement, with the learning of spirituality (RHS), with a willingness to recommend the schools, and with a high rating for the schools.

A closer look at a specific correlation demonstrates how a perception of solidarity with others in the school community worked out in practice at both sites. Parents indicated that they thought the schools had high academic expectations. The students agreed, when asked a similar question, and anecdotal evidence existed which indicated that the school staff felt "academic excellence" was a very high priority for them. Given the importance of this particular item it would have been difficult to imagine the students or the parents feeling that the schools did not have high academic expectations and yet still feeling that people thought like them. This line of reasoning argues for the validity of the instruments but, more importantly, it points out a possible key principle in school effectiveness. These schools shared a community goal orientation. Students, staff, and parents were focused on similar objectives and each "group" believed the others were participating in this common pursuit. Associated with this was a sense of positive atmosphere and a confidence on the part of the students and their parents that desired outcomes had occurred.

RHS students were almost equally divided on the issue of whether or not their values were similar to the school's at entry. This response points out a significant discrepancy between parents' perceptions and their children's because 80% of the RHS parents said that their child's value system had been the same as the school's at entry. This disparity serves to illustrate the point that parents' and students' impressions of each other represented different perspectives of reality. On occasion the perspectives appeared very similar but at other times they stood in remarkable contrast to each
other. The correlational study was not intended to evaluate which perception of reality was "accurate" but rather to explain the role the respondents' perception of reality played in the VCES model.

The issue of item reliability may also have created an illusion of discrepancy in the perceptions of parents and students. Parents were asked if their children's values were similar to the school's in the year preceding the students' answer to the same question. The students completed the survey at the end of a "difficult" period in the year in which several prominent students were disciplined. The students' perceptions about similarities and differences between their values and the school's may have been influenced by elements in the current atmosphere and a re-test a year later may have found the perceptions to be closer to those of the parents. An ethnographic study would have been helpful in determining what the question meant to both the students and the parents.

10.2.4 Positive school atmosphere

Both RHS and AHS were held to be effective by the students and their parents. However, both schools were not seen to possess the same measure of "atmospheric positiveness." This differentiation enriched the data because it allowed for a theoretic contrast between the two sites. Nevertheless, the contrast failed to materialise in the sense that the same pattern of correlation appeared at both sites. Perceptions of a positive atmosphere were linked to many of the items. It was clearly a more important factor in the VCES model than age, grade level, parents' occupation, and citizenship.

Students who felt the school had a positive climate tended to be those who also believed that the school was a good place to be when compared to other schools ("recommendation," "overall score") as propositions 14 and 15 suggested would be the case. Although the student's perception that the school had a positive atmosphere was not significantly related to the number of good friends a student had, it was found to have a relationship to all the other items explored at AHS.

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4 Proposition 14: "Some school environments are more conducive to value change than others;" proposition 15: "Some schools are more effective at creating a social environment/climate for value change than are others."
10.3 Goal attainment - outcome

10.3.1 Grades expected

In chapter nine it was noted that at AHS no significant correlation was found between achievement and many of the factors which were related to the value change process. This marginal role for academic achievement appears to contradict much of current thinking about effective schools. However, it may be that AHS was an outlier in key respects. For example, truancy was not an issue in the school. To look for a correlation between a non-existent problem and academic achievement is futile. Furthermore, it may be that some students inflated their grades so that what was recorded was a "hoped for grade" or "I deserved this grade" rather than a factual recall of the grades which were given. Finally, it should be noted that this survey did not "prove" background factors were unrelated to achievement. Rather, they were not found to be significantly related in the AHS context which only "proves" that however related they may be in some contexts, they are not in all and caution should be exercised in unquestioningly ascribing outcomes (causation) to a particular set of inputs.

These conclusions were essentially confirmed at RHS. Using data from the Spring 1991 respondents, it was found that few input or process measures were strongly correlated with academic achievement. In this regard, academic achievement stands in contrast to two other prominent outcomes assessed in these surveys: the students' willingness to recommend the school and the students' overall score for the school. However, it was apparent from both schools that academic achievement was linked (p<.05) to other positive outcomes, particularly the student's willingness to recommend the school, the overall score of the school, involvement in the school, and the learning of spirituality (RHS). The one input of note which was associated (p>.05) with academic achievement was the student's feeling that his/her values were similar to the school's at entry. In terms of processes, the number of detentions, the number of close friends, and support for the handbook were all associated with academic achievement. Perhaps one can discern in this that academic achievement was more
closely associated with organisational - social system climate than it was with atmospheric climate. Additional research is needed to explore the way in which these two aspects of climate could be active in a school creating an environment conducive to the creation of positive outcomes in the cognitive, affective, and behavioural domains.

10.3.2 Learning of specific values: involvement, tolerance, spiritual appreciation

Students were asked whether the school had been effective at teaching them some of the key values it said it intended to teach them. The fact that the students were generally convinced that such was the case argues for the effectiveness of the schools in the sense that many students indicated they had "learned" what the school wished them to learn. There was also evidence which suggests the effectiveness was not a black and white issue. According to the students, the schools were clearly more effective at teaching some values than they were others and some students benefited more from the "school's" conscious or unconscious approach to teaching the values. For example, a study of involvement at AHS indicated that the school actively sought to teach students the importance of being "involved." Nevertheless, the spring respondent group was considerably less supportive of this "value" than was the fall group in spite of frequent and pointed exhortations about it in school assemblies and elsewhere. Year-end fatigue may have influenced the answers and clouded memories but the simplest interpretation of the data suggests that school effectiveness was quantitatively different for individuals, as proposition 14 suggests.

Several transcendent correlational characteristics appeared at both sites. Specifically, the students' belief that their values were similar to their schools when they first enrolled was significantly correlated (p<.05) with a feeling that all three values had been learned. The linkage which existed between these specific values and other outcomes, such as willingness to recommend the school and to give it high marks, further illustrates the point that effectiveness at RHS and AHS tended to be a pervasive phenomenon rather than an isolated incident. Effectiveness at teaching
specific values was also associated with unique clusters of variables. That is, each value had unique association (p<.05) with various items in the survey while sharing several transcendent correlations.

10.3.3 Willingness of students to recommend the school

If one accepts that the students' perceptions of their schooling experience are a valid measure of effectiveness, and if one accepts that simple, generalised questions such as "willingness to recommend" and "overall school score" tap this construct of effectiveness and encompass the affective domain as well as the cognitive (perhaps even more so given the number of clear correlations in this survey), then one can identify several elements in the school effectiveness model which were associated with effective value change. Students who felt AHS and RHS had been particularly effective for them, leaving them with positive feelings about what the school had done to them and for them and would be able to do for others, were students who perceived a positive atmosphere in the school, who felt their school had high standards in general, who supported the handbook, who felt their parents were supportive of the school, and who entered the school feeling like the school shared their values. Additionally, they were students who were positive about a series of outcomes which they attributed to the school.

While further study is needed to substantiate this, the preliminary evidence suggests that a school's effectiveness, as measured by the students' willingness to recommend their school, transcended the "positive feelings" they sensed in the school. This tentative conclusion is based on an analysis of student responses to the three expectation questions at AHS. Responses to these expectation items were more in line with responses to the overall recommendation question than they were to the positive school atmosphere question. In the minds of the students, having a "happy school" was not as associated with the school's overall quality and their willingness to recommend it as was their conviction that it had high expectations.
10.3.4 Overall score

The overall score given the school was a very active correlate in the VCES model. By this it is meant that the score given to the school was associated significantly (p < 0.05) with many of the other ratings the students gave to their schools. Students who were willing to give their schools a high mark were those students who also tended to see their parents as supportive of the school and who were themselves supportive of the schools' handbooks. Higher school marks were also associated with an identification with the school's values and philosophic orientation. Students who gave the school high marks also tended to feel that they entered the school with values like it and that others in the school thought similarly to them. Not surprisingly, therefore, a high overall score was associated with a perception that the atmosphere was positive and that outcomes were excellent.

10.4 Summary

A complex but discernible picture of effectiveness emerged from these surveys. The relationships which were established were internally consistent and, in general, in agreement with findings reported in the relevant literature. The cultural inputs, as opposed to the organisational inputs (milieu and social system), were particularly associated with a climate in the school which was linked to outcomes the schools would define as goal attainment. The schools were active, effective agents of value change in the adolescents who attended them.

Proposition #4 argued that if a student entered a school with values similar to it, the student would be more open to the school's influence. The correlation picture which emerged here suggested that students who entered feeling their values were similar to the schools' were associated not only with a year long (process) feeling that the school was positive and that people in the school thought like they did, but they also left feeling positive about the school, ready and willing to recommend it, and confident they had learned value lessons. This interrelationship confirmed proposition #12. These students also felt their parents supported the school. This belief in turn was associated with a conviction that the school had high expectations and that the
rules and regulations in the handbook were desirable. What emerged, therefore, was not a picture of causation but a picture of an intricate web or network of association.

An effective school in this context was one in which students felt they had learned the school's key values and attributed the learning to the schools themselves. One of the weaknesses of the survey was that the meanings students gave to the various items upon which these conclusions are based was not explored in a qualitative study. For this reason, the explanation of value change can only be stated in broad generalities. Its relevance to the individual student remains conjecture.

In a time-sequence model of value change in a school setting, it would appear that students who came to the school with values close to the school's and who, together with their parents, supported the philosophic objectives of the school, tended to be those who learned the values the school sought to teach and had a rather pleasant time doing so.

Serious problems arise with this interpretation, however. One could legitimately ask, "How is it possible for students to learn what they say they already knew when they enrolled in the school?" Students who saw the school as effective at teaching them values claimed to have entered with values like the school's. This apparent case of circular reasoning could best be explained by assuming that students meant they felt they enrolled holding values like the school and then left the school holding them more firmly as a result of the schools' impact on their lives. Once again, a qualitative study would be helpful in ferreting out the meaning of this response.

The time-sequence model also ignores the fact that time and sequence are not linear in the reality which the VCES model explores and defines. For this reason, causation itself becomes problematic regardless of the "power" of the statistical tool used to analyse the data because these tools are only capable of prediction in a truly quantifiable universe. This problem can be illustrated by once again turning to the item which asked students if they felt their values were similar to the school's when they enrolled. From where did the student's perceptions originate? From rumours and memories in the constituency served by the school? If so, the student's perception was
a school outcome acting as an input. Did the perceptions originate in the stories of siblings enrolled in the school? If so, the perceptions were a school process item acting as an input in the younger brother or sister. Did the perceptions originate from exposure to the school’s promotional literature or from an interview with the headmaster? Again, these are school process items acting as inputs into the school.

If this item was given to the students to answer in the fall just as they enrolled it could be argued that the responses would be uninformed. If the question was asked at the end of a year - as was done in these surveys - it could be argued that the student's perception of the "past" was prejudiced by memories of the school year and that reality had shifted as a result of positive or negative feelings about outcomes.

In short, a time - sequence or causation model does not accurately reflect the reality the VCES model seeks to explore. A truly satisfying model of effectiveness must take into account its web-like essence, with each strand serving an independent and dependent function. One positive connection to the web of effectiveness is not indicative of institutional effectiveness. When you have "it," you have “it” in a way which appears to touch every aspect of the organisation. However, when the effectiveness quality is missing or lost, it seems highly improbable that this quality could be restored without substantial change in many facets of the school and the community. Given the evidence here, it is impossible to imagine a simple panacea for ineffectiveness. “Effectiveness” was a “state of being.” Within this state, there was room for anomalies, such as eroded support for the handbook, because effectiveness was more than the mathematical summing and subtracting of isolated positive and negative elements in the school. The anomalies, when compared to the state of being, appeared transient, marginal, and inconsequential.

It can be said with assurance that a school which students felt taught them values (i.e., goal accomplishment) was an effective school in many ways. It possessed a positive atmospheric and organisational climate, the dominant elements of which were not stock inputs such as age, gender, socio-economic status (at least in these study), and citizenship - over which the school had no direct or indirect control. The
climate was characterised by a sense of belonging and identity with the school, a sense that parents and others were supportive, a sense that expectations were high, a perception that the atmosphere around the institution was positive, an assurance that the teachers were positive sources of influence and that peers were the primary negative source of influence, and a conviction that cognitive, affective, and behavioural outcomes were all positive.

Finally, these schools which were effective at creating both positive value change and other desirable outcomes were ones which were in tune with their clientele and constituency. The broad school community was focused on common goals and although they differed in the two schools - perhaps because of the parents' vocations - the schools were both "effective." These school communities had the advantage of being able to define their particular value orientation and definition of effectiveness. In many respects they were similar, although in key respects they were different. Effectiveness did not mean that both schools shared the same inputs and processes. If there is a lesson for a broader educational community it would be that school effectiveness would be enhanced if parents, students, and school staff were brought into a common sense of ownership and purpose. Funding equality and resource distribution may be helpful in some instances but the evidence here is that they are not essential aids in creating effectiveness. One can well imagine that programmes which attempt to create equality actually create discord and ineffectiveness because of the intrusion of marginal "stakeholders" into the local educational environment. Problems would appear to be inevitable when an agency external to the community decides what values are to be taught and what outcomes are to be prescribed as essential for effectiveness. The absence of these external interest groups and the presence of community harmony and initiative appeared to be prominent features of effectiveness in these two sites and it seems likely that this characteristic would be true in other settings as well.

5 Note for example, the RHS goal of developing spiritual sensitivity. The AHS community would most likely have found this an objectionable and divisive goal.
Results from the parent - student surveys focused attention on variables in a school setting which created a climate for values to change. Chapter eleven summarises evidence for a theory of value change which was earlier set out as sixteen propositions (chapter two). The evidence for the propositions, which was derived from the Rokeach Value Survey, ranged from the tentative to the confirmatory depending on the proposition in question. The overall result, however, gives rise to an explanation at the theoretic level of how and why values changed in these schools. This complements the earlier chapters which contextualised the value change by identifying key school based factors which were associated with the change.

11.1 Methodology

11.1.1 The philosophic orientation of the instrument

Milton Rokeach (1968) divided values into two categories. One group, which he called “instrumental,” related to desirable modes of conduct such as honesty and obedience. The other group, which he called “terminal,” related to desirable end states such as happiness and peace. The two were seen to be interrelated in the sense that the instrumental values were the means of obtaining the terminal.

Both groups of values were subdivided into two categories. In the case of the instrumental, Rokeach distinguished between interpersonal values (e.g., honesty, love), which he felt influenced conduct and resulted in guilt when they were violated, and intrapersonal/competence values (e.g., capability, logic) which resulted in feelings of inadequacy and failure when they were violated. Terminal values, similarly, were subdivided into self-centred/personal values (e.g., peace of mind and salvation) and social values, such as world peace and equality. In Rokeach’s words,
...two separate value systems may be posited-instrumental and terminal-each with a rank-ordered structure of its own, each, no doubt, functionally and cognitively connected with the other, and both systems connected with many attitudes towards specific objects and situations. (p.161)

Rokeach's classification system invites comparison with others. It has the advantage of simplicity, and its location of a value system within a belief-attitude-opinion-faith matrix is attractive. Furthermore, its grounding in the principles of central tendency and congruity (cf., chapter 2) make the entire theory impressive both in its breadth and in its suitability for empirical research. It also has the advantage of bridging the various scholarly disciplines from economics to ethics and psychology. For these reasons, Rokeach's approach has much to offer and the empirical research which was undertaken at RHS and AHS was based in part on the instrument he developed.

11.1.2 Evaluating the suitability of the instrument

Work done by Lau Sing (1988) at the Chinese University of Hong Kong explored the validity of the Rokeach instrument for the assessment of value systems. Correlating results of the Rokeach Value Survey (RVS) with Scott's Personal Value Scale, Lau Sing found that there was "strong support [for the] RVS as a valid value measure" based on his survey of 927 Chinese university students. He went on to say,

The validity of the ranking procedure used in RVS is...supported. It is important to show that ranking is a valid method, as it is better than rating method to obtain true priority/preference data. The preference data so obtained adhere more closely to the concept of value system proposed by Rokeach (1973). (p. 590)

Summarising various reviews of the instrument, it is apparent that previous researchers have found the instrument's reliability to be "adequate" (Cohen (1978) and Kitwood (1978)), and valid for ages 11+. It has been found to be generally suitable for "experiments concerned with value change" (Kitwood, 1978, p. 1033) and
has been used in a variety of secondary school settings. Results from these and other studies have found it to be “carefully constructed,” “short,” easy to analyse, comprised of “interesting” tasks, modest in its expectations of the respondent’s ability, and relatively reliable given the type of instrument it is (Buros, 1978).

Researchers have also reported a number of weaknesses in the instrument. Its ipsative nature requires large samples and “assumes all items have the same ‘value energy,’” its “item reliabilities are generally not high enough to sustain their use for individual assessment in counselling,” (Cohen 1978, pp. 1031, 1032), its selection of specific values fails to include values which schools seek to promote, its use of 36 instrumental and terminal values assumes “all children have a value system sufficiently well developed to accommodate the 36 values on the test,” its rank ordering procedure “demands a taxonomy that is theoretical; [even though] values may not be understood this way,” and its requirement that respondents rank 18 values at one time is “conceptually difficult” (Buros, 1978).

11.1.3 Procedure and analysis

1 AHS students

The Rokeach was integrated into the battery of surveys which were given to the AHS students in the fall and spring. Following completion of a short demographic section, students proceeded directly to the Rokeach Values Survey. Rokeach’s eighteen terminal and eighteen instrumental values were listed in alphabetical order and the respondents were requested to rank the values in importance to them as "guiding principles" of life. The rank order which emerged was used to create a values profile which could be compared with factors related to the effective schools model. In an effort to capture a sense of the "feelings" dimension of value holding, students and staff
were asked to rate how much they "liked" the terminal values (1=like very much, 10=dislike very much).

A comprehensive analysis of the data explored the differences in the way the respondents ranked the values. The Friedman two-way ANOVA was used to establish the profile of various staff and student groups and the Kruskal-Wallis $H$ (K-W) one-way ANOVA was used to analyse significant differences which arose between the scores of more than two groups on a specific value. In cases where the staff and students fell into just two groups, such as in the case of gender, the Mann-Whitney $U$ test (M-W) was used.\(^1\) In one instance the median test was employed (staff gender) but the more powerful M-W style tests were otherwise used to establish statistically significant differences between groups.

.2 RHS students

Students at RHS completed the Rokeach on three occasions, in Fall 1990, Spring 1991 and Spring 1992. In each instance the instrument was combined with other items and instruments to create a survey battery with the Rokeach as the second "section" in the battery. As was the case at AHS, the intention was to use a well-known survey with a solid theoretical foundation which could define and in some way describe the value change which was taking place in the school.

Analysis of the Fall 1990 survey focused on the possibility of a relationship between the student's value profile and the number of years he or she had been enrolled at the school. The Fall 1990 Value Survey also permitted an exploration of the relationship between value profiles and school input factors. In the Spring 1991 and Spring 1992 re-tests, these objectives remained in view although the focus of

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\(^1\) Cf. the SPSSx Introductory Statistics Guide, p.129. For a description of the K-W and M-W see above chapter four. See also Bryman and Cramer, pp. 126-133 for a discussion of the appropriate non-parametric test to be used with rank order data such as is provided by the Rokeach survey.
attention shifted to possible relationships between value profiles and school processes and outcomes. The inclusion of a Rokeach sub-scale on "feelings about the terminal values" was intended to give insight into the holding of the values in a non-cognitive way, just as it was at AHS.

One relevant comment heard repeatedly about the Value Survey at both RHS and AHS was that "All the values in the middle were the same." This type of comment coincided with a weakness other researchers had observed in the survey. In short, the Rokeach appeared more reliable at the extreme ends of the ranking scale than it did in the middle. Consequently, the analysis which follows focuses particular attention on the high and low rankings.

The data collected at RHS was analysed in the same manner as it was at AHS. The Friedman two-way ANOVA was used to establish the profile of various staff and student groups and the Kruskal-Wallis $H$ (K-W) one-way ANOVA was used to analyse significant differences which arose between the scores of more than two groups on a specific value. In cases where the staff and students fell into two groups, such as gender, the Mann-Whitney $U$ test (M-W) was used.

### 3. Staff

Teachers at both sites were also given the Rokeach to complete as part of their battery. The primary intention was to provide a comparison and contrast to the students. Given the value change propositions undergirding the VCES model, it seemed logical to assume that students and staff would both experience changes over the year which would be significantly associated with inputs, processes and outcomes in the school. Unfortunately the staff response rate was poor and there was no way of verifying the representativeness of the sample like there was with the students.²

² Cf., 9.2.1 and 9.2.2 for a summary and discussion of the staff responses.
Therefore, it was not possible to assess staff changes over the year as it was with the students.

11.2 Rokeach Value Survey Results

Sections 8.1 and 8.3 in Chapter Eight set out the response rate for the Value Survey at the two schools. Aspects of reliability are discussed below in conjunction with various analyses. Estimates of internal reliability related to the students’ feelings about the terminal values were calculated using Cronbach’s alpha and all were found to be satisfactory.\(^3\) The survey as a whole was located in the atmospheric climate/culture of the VCES model and was considered an input-process determinant. However, the value profiles of returning students could be viewed as an input, process, or outcome factor depending on the perspective one wished to take. Once again, this demonstrates the limitations of an input-process-outcome approach to assessing school effectiveness.

Data from the Rokeach surveys is summarised below in three sections. The first section focuses on an analysis of a general, undefined school impact created by the number of years a student had been in the school (proposition #12).\(^4\) The second section provides a synopsis of the major findings which emerged from a correlation of the Rokeach value profiles with various items in the surveys such as the age or gender of the respondent (proposition #13).\(^5\) The third section provides a summary of the data which sheds light on the various other propositions which undergird the VCES model.

\(^3\) *Alpha* scores for feelings about the AHS fall terminals .8243, AHS spring terminals .8800, RHS fall terminals .8306, RHS spring 1991 terminals .8395, RHS spring 1992 terminals .8862.

\(^4\) Propositions #12: Schools, as a social environment, influence value formation in unique and disparate ways.

\(^5\) Proposition #13: Some elements in a school’s environment are more likely to influence value change than are others.
11.2.1 General impact of the schools on student value profiles

One of the main reasons for employing the Rokeach was to verify the existence of a statistically significant relationship between attendance at a school and the existence of a particular value profile, which was distinct from the profiles created by other factors such as the age, gender, social background, academic ability, and religion of the student. The summary which follows explores this possibility from a number of perspectives, each of which is methodologically problematic but each of which suggests that there was an independent, unique value profile associated with the school.

11.2.1.1 Age of the student versus years enrolled at AHS: terminal values

Both the age of the student and the number of years enrolled at AHS were significantly associated with different value profiles in the fall and the spring at AHS. The age of the student differentiated three values in the fall while years enrolled in the school differentiated four. By this it is meant that older students had a value profile which was statistically different (p<.05) from the younger students. This statistical difference was created by the way in which three values in particular were ranked in the profile. Students also had statistically different value profiles according to the number of years they had been in the school. By this it is meant that students who were newly arrived at the school did not have the same value profiles as those who had been in the school for various lengths of time. The statistical difference between the profiles of those who were newly arrived and those who had been in the school for some time was attributable to the way in which four values were ranked.

If the values which differentiated students by age had been the same as those which differentiated them by how long they had been enrolled in the school, then it
could have been argued that the change in the rankings of the values was associated with maturation rather than with school effect. However, the only value differentiation (p<.05) to be shared by the age of the student and the number of years enrolled in the school was the value broadminded. The other three values which were ranked differently in a statistically significant manner by the length of time the student had been in the school were not associated with the age of the student.

It was also conceivable that the values differentially ranked (p<.05) by years of enrolment at AHS were associated with some other non-school input factor such as gender. Using the same procedure with the gender of the student, it was found that there were 7 values differentiated in the fall by gender (p<.05), but only one of the 7 was the same as the values ranked differently by the number of years the student had been in school. This suggests a unique relationship between the number of years students had been in the school and the way in which they held their values.

This impression is strengthened by comparing the value profiles of new and returning students in Table 11.1. As the table shows, seven values were held with a mean rank difference of at least one full point. This is particularly noteworthy because in six of the seven cases the returning students’ mean rank was closer to the teachers than was the new students. Taken by itself, this evidence does not “prove” that teachers impacted the students but it does raise the possibility that the teachers were associated with the unique value profile.

A more in depth look at the terminal value profiles of students based on years in the school shows that while there was not a particular pattern associated with the rankings (i.e., there was no uniform, graduated shift from year to year) there was considerable differentiation associated with each year. In other words, there was a

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6This means that the statistically significant change in ranking which occurred in the value broadminded with students who had been in the school for a long period of time was as likely to be associated with ageing as it was with some undefined school based factor.

7A comfortable life, an exciting life, freedom, inner harmony, mature love, and self-respect. The exception was true friendship.
Table 11.1: "Value profile of new and returning students, AHS fall respondents."

<table>
<thead>
<tr>
<th></th>
<th>First month mean (rank)</th>
<th>Returning students mean (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfortable life</td>
<td>7.47 (7)</td>
<td>10.37 (13)</td>
</tr>
<tr>
<td>exciting life</td>
<td>7.00 (6)</td>
<td>9.91 (9)</td>
</tr>
<tr>
<td>sense accomplishment</td>
<td>10.20 (10)</td>
<td>10.47 (14)</td>
</tr>
<tr>
<td>peace</td>
<td>6.97 (5)</td>
<td>6.91 (4)</td>
</tr>
<tr>
<td>beauty</td>
<td>12.52 (16)</td>
<td>11.87 (15)</td>
</tr>
<tr>
<td>equality</td>
<td>9.15 (8)</td>
<td>9.01 (7)</td>
</tr>
<tr>
<td>family security</td>
<td>6.65 (3)</td>
<td>7.20 (5)</td>
</tr>
<tr>
<td>freedom</td>
<td>4.72 (1)</td>
<td>5.81 (1)</td>
</tr>
<tr>
<td>happiness</td>
<td>5.75 (2)</td>
<td>6.02 (3)</td>
</tr>
<tr>
<td>inner harmony</td>
<td>11.95 (14)</td>
<td>10.20 (12)</td>
</tr>
<tr>
<td>mature love</td>
<td>11.85 (13)</td>
<td>10.15 (11)</td>
</tr>
<tr>
<td>national security</td>
<td>12.70 (17)</td>
<td>12.25 (16)</td>
</tr>
<tr>
<td>pleasure</td>
<td>9.57 (9)</td>
<td>9.93 (10)</td>
</tr>
<tr>
<td>salvation</td>
<td>14.63 (16)</td>
<td>14.39 (18)</td>
</tr>
<tr>
<td>self respect</td>
<td>10.35 (12)</td>
<td>8.72 (6)</td>
</tr>
<tr>
<td>social recognition</td>
<td>12.40 (14)</td>
<td>12.59 (17)</td>
</tr>
<tr>
<td>true friendship</td>
<td>6.88 (4)</td>
<td>5.84 (2)</td>
</tr>
<tr>
<td>wisdom</td>
<td>10.23 (11)</td>
<td>9.36 (8)</td>
</tr>
<tr>
<td></td>
<td>N=40</td>
<td>N=116</td>
</tr>
</tbody>
</table>

Table 11.2: "Mean Rank of terminal values by the AHS fall respondents ages 11-14"

<table>
<thead>
<tr>
<th>time in the school</th>
<th>1st mon</th>
<th>1 year</th>
<th>2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfortable life</td>
<td>6.87</td>
<td>7.60</td>
<td>11.73</td>
</tr>
<tr>
<td>exciting life</td>
<td>7.10</td>
<td>9.30</td>
<td>11.55</td>
</tr>
<tr>
<td>sense accomplishment</td>
<td>9.90</td>
<td>9.60</td>
<td>10.55</td>
</tr>
<tr>
<td>peace</td>
<td>6.03</td>
<td>7.40</td>
<td>7.27</td>
</tr>
<tr>
<td>beauty</td>
<td>12.17</td>
<td>9.60</td>
<td>12.09</td>
</tr>
<tr>
<td>equality</td>
<td>9.47</td>
<td>8.90</td>
<td>8.91</td>
</tr>
<tr>
<td>family security</td>
<td>6.50</td>
<td>4.40</td>
<td>7.18</td>
</tr>
<tr>
<td>freedom</td>
<td>4.97</td>
<td>6.70</td>
<td>5.64</td>
</tr>
<tr>
<td>happiness</td>
<td>5.43</td>
<td>5.90</td>
<td>7.73</td>
</tr>
<tr>
<td>inner harmony</td>
<td>12.77</td>
<td>11.30</td>
<td>12.55</td>
</tr>
<tr>
<td>mature love</td>
<td>12.57</td>
<td>14.40</td>
<td>7.00</td>
</tr>
<tr>
<td>national security</td>
<td>12.63</td>
<td>14.40</td>
<td>10.27</td>
</tr>
<tr>
<td>pleasure</td>
<td>9.57</td>
<td>8.50</td>
<td>12.36</td>
</tr>
<tr>
<td>salvation</td>
<td>14.50</td>
<td>16.30</td>
<td>15.27</td>
</tr>
<tr>
<td>self respect</td>
<td>11.23</td>
<td>8.30</td>
<td>7.91</td>
</tr>
<tr>
<td>social recognition</td>
<td>11.77</td>
<td>13.60</td>
<td>9.82</td>
</tr>
<tr>
<td>true friendship</td>
<td>6.37</td>
<td>6.10</td>
<td>6.18</td>
</tr>
<tr>
<td>wisdom</td>
<td>11.17</td>
<td>8.70</td>
<td>7.00</td>
</tr>
</tbody>
</table>

N=30                         | N=10    | N=11   

discernible change in the various group's value profiles which was associated with the school (p<.05) and was independent of age.

Using the same seven values which were found to be significantly differentiated by the new and returning students {(a comfortable life, an exciting life, freedom, inner...
harmony, mature love, self respect, true friendship), it was found that holding age constant (i.e., by restricting the study to young adolescents 11-14) those with two years at AHS had mean ranks closer to the adults in the school on 6 of the 7 values.

They were also closer to the AHS staff than were those who had been there 1 year on 4 of the 7 values. Compared to new students, those who had been at the school for one year were closer to the staff's mean rank on 5 of the 7 values. Once again, this points to a differentiation in student value profiles which was independent of age and associated with the school. It also raises the possibility that teachers were related in some way to the altered value profile of the young adolescents.

However, a similar pattern was not discernible with the 15-16 year olds. Holding age constant (15,16 year olds), there was no substantial difference between new students and returning students on the 7 values which had previously shown a mean rank difference. Students who had been in the school for one year had profiles slightly more like the staff than two year students or those in their first month.\(^8\)

The most comprehensive look at the relationship between the value profiles created by the number of years in the school and by the teachers was possible in the 17-20 year old category because long term enrolment patterns existed with this group. Compared to the staff, the third year and over groups were the most like the staff. This provides provisional evidence for proposition #12 which holds schools to be active social environments where value change occurs. Congruence with the staff value system was assessed by comparing the staff's mean rank with the mean rank each "length of time in the school" category had for the eighteen values. The unit of time in the school which was closest to the staff value was given a rank score of one. The length of time unit which was next closest to the staff was given a score of 2. The length of time unit which was furthest away from the staff received a rank score of 5 (because there were five categories of "length of time in the school"). Adding together the scores on each value it was found that the mean rank score of the third and fourth year students was tied (2.667) for the lowest rank score which means that these long

\(^8\) Four values to three in both cases; first month students were more like the staff than were second year students in three of the four values. The small sample of five may be responsible for this shift.
Table 11.3: Mean rank of fall terminals by AHS fall respondents ages 15-16

<table>
<thead>
<tr>
<th>Term</th>
<th>1st month</th>
<th>1 year</th>
<th>2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfortable life</td>
<td>8.40</td>
<td>10.20</td>
<td>7.67</td>
</tr>
<tr>
<td>exciting life</td>
<td>8.60</td>
<td>11.53</td>
<td>8.93</td>
</tr>
<tr>
<td>sense accomplishment</td>
<td>10.60</td>
<td>11.67</td>
<td>10.93</td>
</tr>
<tr>
<td>peace</td>
<td>11.60</td>
<td>4.40</td>
<td>7.80</td>
</tr>
<tr>
<td>beauty</td>
<td>12.60</td>
<td>11.67</td>
<td>12.00</td>
</tr>
<tr>
<td>equality</td>
<td>8.40</td>
<td>6.20</td>
<td>11.87</td>
</tr>
<tr>
<td>family security</td>
<td>5.60</td>
<td>5.27</td>
<td>7.80</td>
</tr>
<tr>
<td>freedom</td>
<td>6.00</td>
<td>5.20</td>
<td>8.60</td>
</tr>
<tr>
<td>happiness</td>
<td>6.40</td>
<td>6.33</td>
<td>4.20</td>
</tr>
<tr>
<td>inner harmony</td>
<td>10.40</td>
<td>9.53</td>
<td>11.13</td>
</tr>
<tr>
<td>mature love</td>
<td>10.40</td>
<td>12.27</td>
<td>9.33</td>
</tr>
<tr>
<td>national security</td>
<td>11.20</td>
<td>10.73</td>
<td>11.93</td>
</tr>
<tr>
<td>pleasure</td>
<td>7.80</td>
<td>10.67</td>
<td>9.33</td>
</tr>
<tr>
<td>salvation</td>
<td>13.40</td>
<td>15.33</td>
<td>13.20</td>
</tr>
<tr>
<td>self respect</td>
<td>9.80</td>
<td>9.47</td>
<td>8.73</td>
</tr>
<tr>
<td>social recognition</td>
<td>16.00</td>
<td>13.07</td>
<td>12.20</td>
</tr>
<tr>
<td>true friendship</td>
<td>8.00</td>
<td>6.33</td>
<td>5.13</td>
</tr>
<tr>
<td>wisdom</td>
<td>5.80</td>
<td>11.13</td>
<td>10.60</td>
</tr>
</tbody>
</table>

N=5  N=5  N=15

Table 11.4: "Mean rank of fall terminals by AHS fall respondents ages 17-20."

<table>
<thead>
<tr>
<th>Term</th>
<th>1st month</th>
<th>1 year</th>
<th>2 years</th>
<th>3 years</th>
<th>4+ yrs</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfortable life</td>
<td>10.20</td>
<td>11.00</td>
<td>11.00</td>
<td>12.40</td>
<td>12.05</td>
<td>14.18</td>
</tr>
<tr>
<td>exciting life</td>
<td>4.80</td>
<td>11.40</td>
<td>13.56</td>
<td>9.60</td>
<td>7.90</td>
<td>10.00</td>
</tr>
<tr>
<td>sense accomplishment</td>
<td>11.60</td>
<td>14.40</td>
<td>12.22</td>
<td>9.80</td>
<td>9.43</td>
<td>6.45</td>
</tr>
<tr>
<td>peace</td>
<td>8.00</td>
<td>5.60</td>
<td>8.56</td>
<td>6.80</td>
<td>8.52</td>
<td>9.73</td>
</tr>
<tr>
<td>beauty</td>
<td>14.60</td>
<td>12.20</td>
<td>13.67</td>
<td>11.40</td>
<td>13.00</td>
<td>9.91</td>
</tr>
<tr>
<td>equality</td>
<td>8.00</td>
<td>11.20</td>
<td>9.56</td>
<td>7.10</td>
<td>9.10</td>
<td>9.64</td>
</tr>
<tr>
<td>family security</td>
<td>8.60</td>
<td>9.60</td>
<td>7.56</td>
<td>7.30</td>
<td>7.81</td>
<td>6.09</td>
</tr>
<tr>
<td>freedom</td>
<td>2.00</td>
<td>5.00</td>
<td>5.11</td>
<td>5.50</td>
<td>4.48</td>
<td>7.18</td>
</tr>
<tr>
<td>happiness</td>
<td>7.00</td>
<td>6.20</td>
<td>5.33</td>
<td>7.60</td>
<td>5.71</td>
<td>7.64</td>
</tr>
<tr>
<td>inner harmony</td>
<td>8.60</td>
<td>6.80</td>
<td>6.11</td>
<td>10.40</td>
<td>9.05</td>
<td>8.36</td>
</tr>
<tr>
<td>mature love</td>
<td>9.00</td>
<td>7.80</td>
<td>10.11</td>
<td>11.10</td>
<td>9.43</td>
<td>8.73</td>
</tr>
<tr>
<td>national security</td>
<td>14.60</td>
<td>8.00</td>
<td>12.00</td>
<td>12.10</td>
<td>14.05</td>
<td>14.55</td>
</tr>
<tr>
<td>pleasure</td>
<td>11.40</td>
<td>11.00</td>
<td>10.11</td>
<td>8.10</td>
<td>9.81</td>
<td>11.73</td>
</tr>
<tr>
<td>salvation</td>
<td>16.60</td>
<td>12.40</td>
<td>11.78</td>
<td>15.00</td>
<td>15.14</td>
<td>15.64</td>
</tr>
<tr>
<td>self respect</td>
<td>5.60</td>
<td>9.00</td>
<td>7.67</td>
<td>8.00</td>
<td>8.48</td>
<td>4.73</td>
</tr>
<tr>
<td>social recognition</td>
<td>12.60</td>
<td>12.40</td>
<td>13.78</td>
<td>14.40</td>
<td>11.57</td>
<td>14.18</td>
</tr>
<tr>
<td>true friendship</td>
<td>8.80</td>
<td>6.00</td>
<td>3.89</td>
<td>4.70</td>
<td>6.05</td>
<td>7.09</td>
</tr>
<tr>
<td>wisdom</td>
<td>9.00</td>
<td>11.00</td>
<td>9.11</td>
<td>9.70</td>
<td>9.43</td>
<td>5.18</td>
</tr>
</tbody>
</table>

N=5  N=5  N=9  N=10  N=21  N=11

Term students had a value profile which was closest to the staffs. Students in their first month were third with a mean rank score of 2.873, students in their second year were fourth (3.22), and the furthest away from the staff were the first year students (3.56).

Assuming that adults in the school were less likely than students to change their values, and assuming that these crude statistical methods are satisfactory, it is...
apparent that students with three years or more in the school were closest to the adult value position.

Summarising the results of "length of time in the school" with age of the student held virtually constant, it is evident that the most distinct association of movement towards the adult position occurred amongst the early adolescents. In the middle age category, no pattern was discernible, while in the older age category the long term students were most like the staff.

These results were obtained from a review of the fall responses on the terminal values. The responses of the spring respondents demonstrated a similar pattern. There were insufficient cases for the Friedman test to be performed on the 11-14 and 15-16 year olds, so the only age group examined was the older adolescents (17-20). Even here the poor rate of response clouded the interpretation. Older adolescent students who had been enrolled in AHS longer than one year had a value system profile which was somewhat closer to the staff than did older adolescent students who had been enrolled in the school for one year or less. In eleven of the eighteen values the "over one year in the school" group were closer to the staff while in seven of the eighteen, the one year or less students were closer to the staff.

Given the trends noted above one would suspect that the cohort value profiles would become somewhat more like the staff over the course of the year. All the mean ranks were compared to the staff and only those which showed a substantial shift (1 mean rank position) were tabulated. This approach has merit because the Rokeach instrument did not appear to be sensitive to subtle differences in values with "middle rankings." By excluding values with smaller shifts the "big picture" emerged. Small mean rank changes may have been due to a reliability problem rather than to an actual change in the student's value position. As a result, the extreme rankings and rankings in which there were substantial shifts appear to be the areas where conclusions can be drawn with the greatest confidence.
The spring cohort's value profile was marginally more like the staff's than was the fall cohort's. Ten of the eighteen values were ranked more like the staff's in the Spring than they were in the fall. On the other hand, eight values were ranked closer to the staff's in the fall than they were in the spring. This difference would appear to be inconsequential.

In summary, therefore, two points emerge from the data on fall terminals. First, when one controlled for age, there was a distinct, unique value profile which was associated with the number of years a student had been in the school. Second, the shift in terminal values which took place during the year was marginally in the direction of the staff's value system, particularly amongst the younger adolescents. In no instance did the value profile of the 18 terminal values move away from the staff over the course of the year or according to the number of years the student had been enrolled in the school.

11.2.1.2 Age of the student versus years enrolled in AHS: instrumental values

A similar approach was used to ascertain whether this pattern repeated itself with the instrumental values. The new and returning students disagreed in substantive terms (a mean rank score of more than 1) on seven values: ambitious, courageous, honest, independent, intellectual, loving, and responsible. The returning students had a mean rank score closer to the staff on 5 of the 7 values suggesting that longer periods of enrolment resulted in a school value profile which was somewhat like that of the staff. This conclusion was drawn after the new and returning students' instrumental profiles were examined. However, when age was held constant, it was found that the shift towards the staff was primarily associated with young adolescents.
The same procedure was used with spring responses. New students (one year or less) were compared to those who had been in the school for more than a year. The difference between the groups was assessed by comparing each mean rank to that of the staff for the same value. The returning students were found to have 11 mean values closer to the staff than were the new, "one year or less" students.

To control for age, details of the older adolescent age group were examined. No difference was found between the mean rank scores of those who had been in the school one year and less and those who had been in the school more than a year. That is, the one year or less students were just as likely to have value profiles like the staff as were the more than one year students.¹⁰

To view the change over the 1991-1992 school year from another perspective, the fall/spring cohort's mean ranks were compared. There were changes over the year but a comparison of the mean rank scores indicated that the fall responses were more like the staff's than were the spring on 11 of 18 values.

In summary, it is apparent that the instrumental value profiles were also associated with years in the school and had distinctive features not attributable to age. However, one cannot speak with much confidence of a shift towards the staff profile. As with the terminal values, the young adolescents appeared most associated with a move towards the adult values. Older adolescents who had spent an appreciable time in the school were also relatively like the staff but in terms of a transition over the 1991-1992 school year, the cohort study did not reveal a pattern of change associated with the staff.

¹⁰ Nine values were ranked closer by both groups.
11.2.1.3 Age of the student versus years enrolled at AHS: feelings about terminal values

"Feelings about" the fall terminal values were also studied using the Friedman two-way analysis-of-variance. Table 11.5 provides a summary of the students' and staff's feelings about the values. The only comparison which can be done between the AHS teachers and the students comes from a study of the fall/spring cohort. The cohort students rated 11 values more like the staff in the spring than they did in the fall. However, many of the ratings were very close and the statistical procedure too primitive to place confidence in the results. Like work done with the "cognitive values," the "affective values" point to an interesting trend which needs further investigation.

Table 11.5: "Mean ratings of the AHS students' and staff's 'feelings' about the terminal values"

<table>
<thead>
<tr>
<th></th>
<th>Fall only</th>
<th>Fall cohort</th>
<th>Spring cohort</th>
<th>Spring only</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfortable life</td>
<td>9.35</td>
<td>8.73</td>
<td>8.67</td>
<td>8.73</td>
<td>11.34</td>
</tr>
<tr>
<td>exciting life</td>
<td>10.02</td>
<td>11.04</td>
<td>8.94</td>
<td>9.33</td>
<td>9.68</td>
</tr>
<tr>
<td>accomplishment</td>
<td>10.33</td>
<td>10.30</td>
<td>9.53</td>
<td>9.58</td>
<td>8.11</td>
</tr>
<tr>
<td>world at peace</td>
<td>8.21</td>
<td>8.58</td>
<td>8.63</td>
<td>8.28</td>
<td>8.82</td>
</tr>
<tr>
<td>world of beauty</td>
<td>10.79</td>
<td>10.92</td>
<td>11.42</td>
<td>11.20</td>
<td>9.34</td>
</tr>
<tr>
<td>equality</td>
<td>9.89</td>
<td>10.16</td>
<td>8.54</td>
<td>8.64</td>
<td>9.34</td>
</tr>
<tr>
<td>family security</td>
<td>7.76</td>
<td>7.88</td>
<td>8.58</td>
<td>8.70</td>
<td>7.84</td>
</tr>
<tr>
<td>freedom</td>
<td>6.59</td>
<td>6.41</td>
<td>7.46</td>
<td>7.33</td>
<td>6.68</td>
</tr>
<tr>
<td>happiness</td>
<td>6.63</td>
<td>6.69</td>
<td>7.20</td>
<td>7.09</td>
<td>7.26</td>
</tr>
<tr>
<td>inner harmony</td>
<td>10.83</td>
<td>11.14</td>
<td>10.26</td>
<td>10.41</td>
<td>7.71</td>
</tr>
<tr>
<td>mature love</td>
<td>10.15</td>
<td>10.77</td>
<td>10.23</td>
<td>10.37</td>
<td>8.92</td>
</tr>
<tr>
<td>national security</td>
<td>12.15</td>
<td>11.37</td>
<td>11.68</td>
<td>11.99</td>
<td>13.05</td>
</tr>
<tr>
<td>pleasure</td>
<td>8.89</td>
<td>8.61</td>
<td>8.63</td>
<td>8.36</td>
<td>12.03</td>
</tr>
<tr>
<td>salvation</td>
<td>13.91</td>
<td>13.15</td>
<td>13.16</td>
<td>13.27</td>
<td>15.16</td>
</tr>
<tr>
<td>self-respect</td>
<td>8.88</td>
<td>8.81</td>
<td>10.31</td>
<td>10.41</td>
<td>7.11</td>
</tr>
<tr>
<td>social recognition</td>
<td>11.85</td>
<td>11.54</td>
<td>11.29</td>
<td>11.33</td>
<td>13.16</td>
</tr>
<tr>
<td>true friendship</td>
<td>5.86</td>
<td>6.35</td>
<td>6.83</td>
<td>6.51</td>
<td>7.58</td>
</tr>
<tr>
<td>wisdom</td>
<td>8.89</td>
<td>8.54</td>
<td>9.63</td>
<td>9.49</td>
<td>7.87</td>
</tr>
</tbody>
</table>

N=157  N=59  N=49  N=69  N=19

11.2.1.4 Age of the student versus years enrolled at RHS: terminal values

The primary study of the value profiles created by the number of years a student had been enrolled in a school was done at AHS. The same procedures on a modified scale revealed an analogous pattern at RHS. Once again the Kruskal-Wallis \( H \) test, which compared mean ranks, was used as a test of significance. In the case of
young adolescents (Fall 1990), the Rokeach terminal value *happiness* was significantly differentiated \((p<.05)\) by length of time in the school. Later, in the Spring '91 survey, the terminal values *family security* and *mature love* were also differentiated after the age of the student had been taken into account. For the middle adolescents (Spring 1991), length of time in the school significantly differentiated the terminal values *true friendship* and *wisdom* while for older adolescents length of time in the school differentiated *an exciting life, a sense of accomplishment, happiness, mature love*, and *national security* in the fall and *a sense of accomplishment, peace, and wisdom* in the spring. Three terminal values were significantly differentiated by length of time in the school in more than one age group: *mature love, happiness*, and *wisdom*.

In reflecting on these differentiations, it is apparent that once age had been taken into account, there remained a distinct value’s profile associated with length of time in the school. Regardless of their age, students who had been in the school for longer periods of time were associated with a greater appreciation for *mature love* and *wisdom*, and with less appreciation for *happiness* than were those more recently arrived at the school.

Instrumental values were less frequently significantly differentiated \((p<.05)\) by length of time in the school with age held constant. There were no repeat values from one age group to another, as was the case with the terminal values, nor was there a differentiation which was consistent in both the fall and the spring.

**11.2.2 Significant differences in value profiles associated with specific VCES items**

Terminal and instrumental value profiles were established at both sites for each administration of the surveys. Included in this broad collection of profiles were those which were created by the responses each student gave to the various input-process-
outcome items in the survey. For example, there was a male and female profile created each time the survey was administered. Similarly, there was a Protestant and Catholic profile, a profile for those who expected to get A’s and a profile for those who expected to get D’s. These profiles were then compared with each other to see if there was a statistical difference (p<.05) in the way the values were ranked. This made it possible to analyse profiles based not only on the number of years a student had been at the school (see above), but also to analyse profiles based on his or her gender, age, birthplace, grades, religion, number of countries lived in, parents’ occupation, record of misbehaviour, willingness to recommend the school, and the overall grade they gave to the school. Almost all possible comparisons were examined for the various respondent groups.

Some values were more likely to be part of a differentiated profile, whether it was a differentiation based on the age of the student, the gender of the student, the student’s citizenship, or some other factor. For example at AHS, the terminal values comfortable life (4), world at peace (8), family security (4), inner harmony (5), mature love (4), and salvation (4) were the terminal values most frequently differentiated (p<.05) by the various input-process-outcome factors in the survey. On the other hand, two terminal values - wisdom and happiness - were not differentiated on the basis of any of the 13 input-process-outcome items taken from the VCES model in either the fall or the spring. It could be said, therefore, that the various value profiles which were created by the 13 items in the VCES model (e.g., gender, academic achievement) were differentiated (p<.05) from each other in the way they ranked world at peace, inner harmony, et al., but they were never differentiated from each other in the way they ranked wisdom and happiness.

An examination of the twelve AHS items used to differentiate the instrumental values revealed that there was even more differentiation associated with school input-process-outcome factors in the Rokeach instrumental scale than there was in the
terminal scale. Differences continued to be associated with milieu input items such as age, gender, religion, parents' occupation, number of countries lived in, and birthplace, but school process and outcome variables were also significantly associated \((p<.05)\). These included the number of years the student had been in the school, the overall score given to the school, the willingness to recommend the school to others, and the number of friends he or she had in the school. Table 11.6 tabulates the frequency of differentiation associated with instrumental values in both the fall and the spring.

Table 11.6: "Frequency of differentiation by each variable"

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fall only</th>
<th>Spring only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Gender</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Years</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Religion</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Grades</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Number of countries lived in</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Father's occupation</td>
<td>1</td>
<td>N/A</td>
</tr>
<tr>
<td>Mother's occupation</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Birthplace</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>Willing to recommend the school</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Number of friends</td>
<td>N/A</td>
<td>2</td>
</tr>
<tr>
<td>AHS overall score</td>
<td>N/A</td>
<td>1</td>
</tr>
</tbody>
</table>

Given the various items in the surveys, the most statistically significant differentiation \((p<.05)\) was associated with years enrolled at AHS, gender, age, birthplace, mother's occupation, number of countries lived in, and religion. A closer look at some of the profiles is helpful in illustrating the dynamic quality of a school setting while pointing out the obvious, namely, that there are competing values in a school setting. If there were not, value change would be theoretically impossible.

11.2.2.1 Gender; years of enrolment

Males at AHS more highly valued an exciting life, mature love, and salvation than did females, while females more highly valued a world of peace, family security, true friendship and equality. Those who had been in the school for a shorter period of
time placed a higher value on *an exciting life*, and *a world at peace* than did their peers
while the long term students placed a higher value on *mature love* and down graded *a world of beauty* and *salvation*.

11.2.2.2 RHS academic average - spring 1992

Lower grades were associated with a statistically significant (p<.05) ascription
of more importance to a *comfortable life* and less importance to *self-respect*.
Conversely, high grades were associated with an ascription of less importance to a
*comfortable life* and more importance to *self-respect*. The value *broadminded* was
more important to those with low grades, and less for those with high grades, while
*courageous* and *obedient* were more important for those with high grades and less for
those with low grades.

11.2.2.3 RHS detentions - spring 1991

Many detentions were significantly associated (p<.05) with a higher regard for
*an exciting life* and *pleasure*, and for less regard for *family security* and *salvation*.
Amongst the instrumental values, *forgiving*, *honesty*, and *loving* were the most
important for those with no detentions and relatively less important for those with
several detentions. "No detentions" was also associated with *obedience* (most
important) and *independence* (least important). Therefore, a behavioural holding of
the school's values, or at least a behavioural conformity to the rules was associated
with a distinct set of values. 11 This supports the contention that values are held in
accordance with trait consistency and that changes in the holding pattern have a
derivative impact which crosses the domains of personality (here, from behaviour to
cognition; propositions #5,9,10).

---

11 Only in the case of the values *independent* and *obedient* was there a change in the pattern of "no
detentions" and "two or three detentions" representing the two extreme positions. That is, the more
detentions there were, the more pronounced was the trend in the ranking of the value.
11.2.2.4 RHS student values were similar at enrolment, spring 1992

Those who agreed or strongly agreed that their values were similar to the school's upon entry ascribed less importance to pleasure and more importance to salvation than did those students who disagreed or strongly disagreed. Three other values were also differentiated by "values were similar at enrolment." Social recognition was held to be least important by those who strongly disagreed with "values were similar at enrolment" but was equally important for the other groups of students. Self-respect was most important to those who agreed with "values were similar at enrolment" and least important to those who disagreed. On the instrumental side, honest was least important to those who strongly disagreed that their values were similar to the school's when they first enrolled. Other groups viewed honest similarly. In summary, those who felt their values were similar to the school's upon entry, had statistically different value profiles than those who felt their values were dissimilar upon entry. This characteristic provides important evidence for the reliability of the item because it demonstrates that the students' perception of a difference or a similarity of values at entry into the school was verified by the existence of a statistically different (p<.05) value profile.

11.2.2.5 Father's occupation

Peace was held to be least important by students whose fathers were "clergy" or "professional." Family security, salvation, and wisdom were most important to children of "clergy," and least important to children of "professionals." Freedom was most important to children whose fathers were businessmen, executives, or professionals, and least important for "clergy." No instrumental values were found to be significantly differentiated by father's occupation.

12 The 10 students who entered "other occupation" were not included in this analysis.
11.2.2.6 The staff perspective

The staff were generally not differentiated on the basis of the 5 items tested (years at AHS, gender, age, birthplace, and religion). Given the hiring practices of the school, it would seem that the Head had been successful in bringing staff to the school who thought as the "school" thought. Given proposition #10\textsuperscript{13} it appears that the application and interview process did a good job of selecting adults with similar values. It is noteworthy that "years teaching at AHS" was the item most associated with differentiation amongst the staff. In fact, other than one value differentiated by gender, there was no differentiation except that associated with teaching years at AHS. It would seem that staff were hired with similar value positions, or at least similar positions on key values which then followed a pattern of trait consistency, and that it was the school itself which then became associated with differences. This is not to say that the school created the effect but it was associated with it.

Although it is normally considered inappropriate to work from a mean with rank ordered data, a standard deviation analysis was done on the Rokeach fall terminals in order to investigate any pattern which emerged. It was found that extreme rankings tended to have the smallest deviations. This was seen to be helpful in further defining what a value system "looks like."

Happiness (3.76), freedom (3.96), pleasure (4.10), true friendship (4.13), and salvation (4.19) were the values with the lowest standard deviations in their mean rankings. Again, further study with a more sophisticated instrument would be valuable in establishing the relationship between the size of the standard deviation and group value change. Is a small deviation score for values which are ranked highest and lowest associated with institutional harmony? Is it this kind of group holding pattern

\textsuperscript{13} "The interactive process of value change follows a pattern of trait consistency."
which would allow for an effective application of proposition #15: some schools are more effective at creating a social environment/climate for value change than are others.

11.2.2.7 Summary

Virtually all the key values in the Rokeach scale of 18 terminal and 18 instrumental values were associated with key school input-process-outcome factors at AHS. Therefore, it can be stated unequivocally that AHS was clearly associated with the process of change in adolescent values. These results indicate the association was considerable, diverse, and unique (attributable) to the school.

11.2.3 Value profiles and the value change propositions

AHS was the primary site for an evaluation of the relationship between student value profiles and a general school effect as defined by the number of years a student had been enrolled in the school. RHS was the primary site for an evaluation of the relationship between student value profiles and the value change propositions.

11.2.3.1 Value change propositions and the Rokeach surveys

One of the reasons the Rokeach was administered over two years on five testing occasions was to assess the appropriateness and accuracy of the value change propositions identified in chapter 2. If one accepts the definitions used in this study, then the straightforward statement “humans value” can be said to have been confirmed (proposition #1). Furthermore, as the previous section in chapter 11 demonstrated, the Rokeach value profiles were associated with change over time thereby providing evidence for proposition #2, “values change.”

The Rokeach instrument allowed for a measurement of a value’s centrality in a belief system by having students rank the eighteen values in importance. The highest ranked values represented the core or central values while the lowest ranked values
represented the peripheral values. The students’ willingness and ability to rank the values in order of importance substantiated the idea of central and peripheral values, as was implied in proposition 3. Measuring change in the core values allowed for an investigation of the veracity of propositions 3, 5, and 10. By contextualising the Rokeach in a school setting it was also possible to capture a glimpse of how schools as social environments influence or share in the formation of values in adolescents (propositions 4, 6-16).

11.2.3.2 Propositions 3 and 5 (f-s-s cohort)

Tables 11.7-10 set out the value profiles of male and female students over the period 1990-92. The tables focus on the central and peripheral values of both the terminal and instrumental values, here arbitrarily set as the four top and bottom values. Reflecting on the results of this data obtained from the responses of the f-s-s cohort one is left with the impression that little change occurred over the two years, particularly in the core or central values. The three highest ranked terminal values were virtually impervious to change although the fourth ranked value showed movement towards inner harmony and away from family security on the part of both males and females. The instrumental values were similarly static. The core values, especially the first three showed no change, although the fourth ranked values demonstrated some movement.

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14 Proposition 3: The more central a value is in one’s belief system, the greater will be the repercussion of a change in the value.

15 Proposition 5: When one value changes, it has a derivative effect on one’s belief system; proposition 10: the interactive process of value change follows a pattern of trait consistency.
Table 11.7: "RHS female terminal values"

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. True friendship</td>
<td>2. True friendship</td>
<td>2. Wisdom</td>
<td></td>
</tr>
</tbody>
</table>

Table 11.8: "RHS female instrumental values"

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Loving</td>
<td>2. Loving</td>
<td>2. Loving</td>
<td></td>
</tr>
<tr>
<td>15. Capable</td>
<td>15. Intellectual</td>
<td>15. Logical</td>
<td></td>
</tr>
<tr>
<td>17. Intellectual</td>
<td>17. Imaginative</td>
<td>17. Polite</td>
<td></td>
</tr>
</tbody>
</table>

Table 11.9: "RHS male terminal values"

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. True friendship</td>
<td>2. True friendship</td>
<td>2. Wisdom</td>
<td></td>
</tr>
</tbody>
</table>

Table 11.10 "RHS male instrumental values"

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Loving</td>
<td>2. Loving</td>
<td>2. Loving</td>
<td></td>
</tr>
<tr>
<td>15. Capable</td>
<td>15. Independent</td>
<td>15. Independent</td>
<td></td>
</tr>
<tr>
<td>17. Intellectual</td>
<td>17. Imaginative</td>
<td>17. Polite</td>
<td></td>
</tr>
</tbody>
</table>

The peripheral values were less stable although even here changes were not dramatic and tended to be in the ranking position rather than in the value's
classification as "peripheral." In the case of female and male terminal values, six values were used in the three rankings of four peripheral values. In other words, only two new values were added and two dropped from the list of peripheral values over the two year period. In the case of the instrumental values, six values were used by the females and eight by the male students to fill the ranks on the three tests. One value, clean, was consistently ranked eighteenth which raises the possibility that peripheral values may also be impervious to change, much like the core or central values. If this is true, then the definition of "peripheral" and "central" needs to be modified to reflect the fact that one can hold a value that is rated "unimportant" as securely in that rank as one can hold a value that is rated "important."

However, because there was discernible volatility in the order of the peripheral values, as well as several notable changes, there is evidence here for the contention that the more central a value is, the more unlikely it is to change and that peripheral values are more malleable than are core ones. Given this, schools need to have modest expectations about the likelihood of central values changing during the adolescent period when students are in secondary school.

11.2.3.3 Propositions 3 and 5 (AHS-RHS comparison)

Propositions 3 and 5 predict that when values change there is a derivative effect throughout the system. Because core values remained essentially static at RHS, it was not possible to trace this process at this site alone. However, a comparative study of the value systems at RHS and AHS demonstrates what a change in core values would mean and addresses issues raised by the propositions. Students at RHS and AHS were divided into two groups - those who had been in the school for more than one year and those who had been in the school one year or less. The core-peripheral value profiles
of the students with more than one year at RHS and AHS are presented in Tables 11.11 and 11.12.

Students at RHS ranked salvation as the most important value while students at AHS ranked it as least important. If values change with "trait consistency"\textsuperscript{16} and with a "derivative effect"\textsuperscript{17} then it would follow that the RHS and AHS value profiles should be markedly different.

Of the four core terminal values in the two schools, only true friendship was shared between students of RHS and AHS. Two of the four core instrumental values were held in common. By creating the most radical shift possible (value #1 became #18) a substantial derivative effect was created.

\begin{table}[h]
\centering
\caption{"RHS/AHS terminal value profile of long term students"}
\begin{tabular}{|l|l|}
\hline
RHS Spring 1991 & AHS Spring 1992 \\
\hline
1. Salvation & 1. True friendship \\
2. Wisdom & 2. Happiness \\
3. True Friendship & 3. Freedom \\
4. Inner harmony & 4. Self-respect \\
15. Beauty & 15. Social Recognition \\
17. Comfortable life & 17. Beauty \\
\hline
\end{tabular}
\end{table}

\begin{table}[h]
\centering
\caption{"RHS/AHS instrumental value profile of long term students"}
\begin{tabular}{|l|l|}
\hline
RHS Spring 1991 & AHS Spring 1992 \\
\hline
1. Honest & 1. Honest \\
2. Loving & 2. Loving \\
3. Forgiving & 3. Responsible \\
4. Responsible & 4. Cheerful \\
15. Independent & 15. Logical \\
17. Imaginative & 17. Clean \\
18. Clean & 18. Obedient \\
\hline
\end{tabular}
\end{table}

\textsuperscript{16} Proposition 10: The interactive process of value change follows a pattern of trait consistency.

\textsuperscript{17} Proposition 5: When one value changes, it has a derivative effect on one's belief system.
However, it is also apparent that not all the values - even in the core area - were linked together so that when there was a change in a key value not all the values were re-ordered. *National security* and *beauty* were seen by students with substantially different core values to be similarly insignificant while *true friendship* was held independently of other competing values such as *salvation* and *wisdom* (ranked 1 and 2 at RHS) and *happiness* and *freedom* (ranked 1 and 2 at AHS).

The cross over into instrumental values was not as direct as one might suppose from the propositions and further strengthens the case for a multiple linkage of values: the derivative effect was not evident in all the values. Three of the four core instrumental values and two of the peripheral instrumental values were the same. One can only speculate, but it is tempting to think that there was a conceptual link between the low rank given *obedience* at AHS (18th) and its absence from the list of peripheral values where *salvation* is ranked first in terminals and *forgiveness* ranked third in instrumentals (i.e., at RHS). In summary, there was a considerable but not universal derivative effect with some evidence of trait consistency.

By comparing the profiles of new students to the schools it was possible to obtain another perspective on trait consistency. It also provided an insight into the relationship between value profiles and length of time enrolled in the school. The core-peripheral profiles of the new students are provided in Tables 11.13, 14.

A comparison of new students with returning students in both schools reveals some interesting differences. *Happiness* appeared on the "new students to RHS" list of core terminal values. It was also a core value of both the new and returning students at AHS. Therefore, it would seem that longer exposure to RHS (depicted by the returning students) was associated with a disappearance of *happiness* and an emergence of *inner harmony* in the core value profile. The core instrumental values at
RHS also saw a change from *self-control* (new students) to *responsible* (returning students), but in this case *self-control* was not one of the core values at AHS. New students at AHS did not demonstrate greater similarity to RHS than did the returning students at AHS in either terminal or instrumental core value profiles. On the peripheral side, the new students to AHS were perhaps even further away from the RHS students than were returning students to AHS because they ranked *inner harmony*, one of core values for long term students at RHS, amongst their peripheral values, while long term AHS students did not.

<table>
<thead>
<tr>
<th>RHS Spring 1991</th>
<th>AHS Spring 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Salvation</td>
<td>1. True friendship</td>
</tr>
<tr>
<td>2. True friendship</td>
<td>2. Freedom</td>
</tr>
<tr>
<td>3. Wisdom</td>
<td>3. Happiness</td>
</tr>
<tr>
<td>4. Happiness</td>
<td>4. Peace</td>
</tr>
<tr>
<td>15. Comfortable life</td>
<td>15. Inner harmony</td>
</tr>
<tr>
<td>17. Social recognition</td>
<td>17. National security</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RHS new students</th>
<th>AHS new students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Honest</td>
<td>1. Courage</td>
</tr>
<tr>
<td>2. Forgiving</td>
<td>2. Honest</td>
</tr>
<tr>
<td>3. Loving</td>
<td>3. Cheerful</td>
</tr>
<tr>
<td>4. Self-controlled</td>
<td>4. Ambitious</td>
</tr>
<tr>
<td>15. Capable=independent</td>
<td>15. Capable</td>
</tr>
<tr>
<td>17. Logical</td>
<td>17. Logical</td>
</tr>
<tr>
<td>18. Clean</td>
<td>18. Obedient</td>
</tr>
</tbody>
</table>

The main point here is that the qualified derivative effect observed in the f-s-s cohort study is also discernible when comparing new and returning students. Trait consistency existed in the sense that *salvation, wisdom, obedience, freedom* and *forgiving* were conspicuous in their roles amongst both new and returning students.
That is, regardless of how long the student group\textsuperscript{18} had been at RHS, for example, it held \textit{salvation} as a core value together with \textit{wisdom} and \textit{forgiveness} and it did not hold \textit{freedom} as a core value, or \textit{obedience} as a peripheral value. The converse was true at AHS.

A comparison of the staff at the two schools represents an additional perspective on this issue. Tables 11.15, 16 provide a comparison of the staff value profiles at RHS and AHS.

\begin{table}[h]
\centering
\caption{Terminal value profiles of the staff at RHS and AHS}
\begin{tabular}{|l|l|}
\hline
\hline
1. Salvation & 1. Responsible \\
2. Wisdom & 2. Wisdom \\
3. Family security & 3. Family security \\
4. True friendship & 4. A sense of accomplishment \\
15. National security & 15. Comfortable life \\
\hline
\end{tabular}
\end{table}

\begin{table}[h]
\centering
\caption{Instrumental value profiles of the staff at RHS and AHS}
\begin{tabular}{|l|l|}
\hline
RHS staff & AHS staff \\
\hline
1. Loving & 1. Honest \\
2. Honest & 2. Helpful \\
3. Responsible & 3. Loving \\
4. Forgiving & 4. Responsible \\
15. Broadminded & 15. Polite \\
17. Intellectual & 17. Clean \\
18. Clean & 18. Obedient \\
\hline
\end{tabular}
\end{table}

A similar pattern repeated itself with the adults. Once again the impact of extreme change could be seen with \textit{salvation} ranked #1 at RHS and #18 at AHS. Two core values (\textit{family security} and \textit{wisdom}) and two peripheral values (\textit{a comfortable life} and \textit{national security}) remained unaffected by the change occasioned by \textit{salvation}'s dramatic relocation in the system. But, where \textit{responsibility} replaced \textit{salvation} at the

\textsuperscript{18} N.B., these profiles and conclusions are based on a group study and do not reflect the idiosyncrasies of individuals.
top of the list (AHS) and salvation replaced pleasure at the bottom of the list (AHS) peace and pleasure were no longer peripheral (RHS) and a sense of accomplishment became a core value (AHS). Obedience, once again appeared at the bottom of the AHS instrumental value list (confer student profiles) and forgiving disappeared from the AHS group of core values.

Therefore, even with adults there was a discernible derivative effect accompanying a radical shift in a central value (e.g., here salvation). Nevertheless, the radical shift was confined to less than half the values under discussion in the core-peripheral group.

11.2.3.4 Proposition 9 (AHS)

In order to obtain some idea of the cross over in domains from the cognitive to the affective, students were asked to indicate how much they "liked" the values. A summary of the extreme ratings given the 18 terminal values is found in Table 11.17.

Table 11.17: "AHS student emotional commitment of the terminal values."

<table>
<thead>
<tr>
<th>Terminal value</th>
<th>Like very much</th>
<th>Dislike very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a comfortable life</td>
<td>37% 20%</td>
<td>0 0</td>
</tr>
<tr>
<td>2. an exciting life</td>
<td>31% 23%</td>
<td>1% 2%</td>
</tr>
<tr>
<td>3. a sense of accomplishment</td>
<td>27% 24%</td>
<td>2% 0</td>
</tr>
<tr>
<td>4. a world at peace</td>
<td>53% 10%</td>
<td>2% 3%</td>
</tr>
<tr>
<td>5. a world of beauty</td>
<td>30% 14%</td>
<td>6% 2%</td>
</tr>
<tr>
<td>6. equality</td>
<td>35% 17%</td>
<td>2% 5%</td>
</tr>
<tr>
<td>7. family security</td>
<td>49% 19%</td>
<td>1% 1%</td>
</tr>
<tr>
<td>8. freedom</td>
<td>63% 15%</td>
<td>0 1%</td>
</tr>
<tr>
<td>9. happiness</td>
<td>58% 18%</td>
<td>1% 1%</td>
</tr>
<tr>
<td>10. inner harmony</td>
<td>29% 17%</td>
<td>4% 2%</td>
</tr>
<tr>
<td>11. mature love</td>
<td>32% 21%</td>
<td>1% 3%</td>
</tr>
<tr>
<td>12. national security</td>
<td>21% 14%</td>
<td>4% 7%</td>
</tr>
<tr>
<td>13. pleasure</td>
<td>36% 24%</td>
<td>0 1%</td>
</tr>
<tr>
<td>14. salvation</td>
<td>12% 13%</td>
<td>9% 17%</td>
</tr>
<tr>
<td>15. self-respect</td>
<td>42% 15%</td>
<td>1% 1%</td>
</tr>
<tr>
<td>16. social recognition</td>
<td>20% 11%</td>
<td>4% 4%</td>
</tr>
<tr>
<td>17. true friendship</td>
<td>69% 16%</td>
<td>1% 1%</td>
</tr>
<tr>
<td>18. wisdom</td>
<td>41% 17%</td>
<td>1% 1%</td>
</tr>
</tbody>
</table>

N=159-163 The lower response rate (83%) may reflect fatigue or uncertainty about the item. However, it was still considered high enough to permit generalisations with confidence.

19 Proposition 9: Values are held interactively across the domains of personality (i.e., cognitively, affectively, conatively, and behaviourally) in unique and idiosyncratic ways.
No student disliked a comfortable life "very much" (i.e., gave it a low rating of 9 or 10 on the continuum). Consequently, it had the best low rating score. On the other hand, the students found seven other values which they "liked" more than they did a comfortable life (i.e., to which they gave a consistently higher rating of 1 or 2). This suggests a comfortable life was not held with the same emotional intensity as some of the other values in the emotional hierarchy. Salvation had the lowest negative rating (25% disliked it very much, i.e., 9 or 10) as well as the lowest positive rating although it fared better than the negative rating suggested it would (i.e., 25% rated it 1 or 2).

Although the validity of the scale is open to serious question, it appears to support the contention that values are held differently in the cognitive and emotional domains while at the same time allowing for a pattern of consistency to exist between the two. True friendship, freedom, family security, happiness, and a world at peace were the values most frequently accorded high cognitive rankings and they were also the values which were rated "most liked." The converse was true for salvation, national security, and social recognition.

Tables 11.18,19 provide a summary of the study on the emotional holdings of the values. If one accepts the "feeling" index to be indicative of emotional commitment to a value - and there are obvious reasons for not doing so - it becomes apparent that the variables used in the VCES model were more active in differentiating values which were cognitively held than they were values which were emotionally held. Seven values were differentiated in both the cognitive and emotive domains (e.g., "age" differentiated a comfortable life on both the cognitive and emotive scales). In each case the "feeling" index corresponded to the cognitive index. So, although not all values associated with a difference in the cognitive domain were likewise associated

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20 The comparisons which follow seek to take into account that the cognitive values were ranked while the emotive values were rated.
Table 11.18: "Frequency of value differentiation on the AHS fall terminal feelings"

<table>
<thead>
<tr>
<th>Cognitive Fall</th>
<th>Cognitive Spring</th>
<th>Feeling Fall</th>
<th>Feeling Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfortable life</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>an exciting life</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>a sense of accomplishment</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a world at peace</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>a world of beauty</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>equality</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>family security</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>freedom</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>happiness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>inner harmony</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>mature love</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>national security</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>pleasure</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>salvation</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>self-respect</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>social recognition</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>true friendship</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>wisdom</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11.19: "AHS fall terminal feelings differentiated by variables"

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fall only</th>
<th>Spring only</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>gender</td>
<td>3</td>
<td>missing</td>
<td>3</td>
</tr>
<tr>
<td>years</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>birthplace(citizen)</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>religion</td>
<td>1</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>scores</td>
<td>N/A</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>recommend</td>
<td>N/A</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>friends</td>
<td>N/A</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>AHS score</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

with a difference in the emotive domain, when the same value was differentiated, it was differentiated in a consistent manner. For example, males gave mature love a lower mean rank than did females on the cognitive scale (that is, they held it to be more important). They also gave it a lower mean rating on the affective scale indicating that they felt more strongly than did females that they "liked" mature love. Older adolescents thought a comfortable life was less important than did the other age groups and they also had a lower (i.e., greater) emotional commitment to it. Similarly a world at peace was relatively unimportant to those with "no friends," and less well liked by this group.
The affective rating scale differentiated 11 values the cognitive rankings did not. On no value was there a contradiction between the cognitive and the affective scales but the affective had its own unique association with differentiation. Because of the uncertainty surrounding the test's reliability, one must stop short of concluding that this provides indisputable evidence that values are held interactively in unique and idiosyncratic ways (proposition #9) but it does lend support to the proposition.

11.3 Discussion

11.3.1 Instrument reliability

Earlier it was noted that many researchers have used the Rokeach and found its reliability to be “satisfactory.” This designation needs serious qualification. As many have already noted, the data which emerges from the Rokeach study is ordinal so it is not possible to quantify the degree of difference within the rankings and ratings. This problem can be briefly illustrated using the data which emerged from AHS. The distance between salvation as the leading candidate for rank 18 at AHS and another value, such as social recognition in rank 17, may have been much greater than the "distance" between rank 17 and rank 16. The flexibility or band width which was discernible between the cognitive and the emotional holding of the value may have been a result of the ordinal nature of the data rather than because of a substantive change in the “way in which the value was held.”

The 62 respondents who completed both the fall and the spring surveys at AHS were treated as a cohort and a number of statistical analyses were performed on their answers. A simple comparison of the responses given by the fall respondents (id 1-181) and the fall and spring respondents (id 1-62) substantiated that the cohort differed from the study body. The fall/spring cohort was more closely associated with the positions (mean ranks) of the spring only cohort than it was the fall only cohort. This
is a point of validity for it would follow that the fall/spring cohort, which made up 79% of the spring respondents, would be more like the spring group than the fall group of which it formed only a small part (34%). Given that the spring group was young and recently enrolled in the school (i.e., it was a biased sample), it follows that the fall/spring cohort was also biased in a similar direction and the value profile should substantiate this. Of the 13 sub groups in the fall/spring cohort which differentiate the fall terminal values, 6 of them were part of the 23 sub groups which differentiated the fall terminal values amongst the fall only respondents. In other words, 46% of the significant differentiations in the fall/spring cohort were also in the fall only differentiations. On the other hand, 15 of the 19 (79%) of the significant differentiations found in the spring by the fall/spring cohort were also found in the spring only response group.

This rather complicated review of the significant differences (p<.05) is important because it supplies evidence for the reliability of this part of the survey. However, the re-test taken in the spring by the AHS fall/spring cohort had a potential for 14 differentiations to be repeated but only 7 occurred. Over the course of nine months students changed, but was the difference in the rankings due to problems with test reliability or did the differences reflect an actual change in the value holding pattern? Although the reliability of the test as a whole is considered adequate one must still suspect some of the difference was attributable to problems of reliability.

Nevertheless, because factors like age, years in AHS, grades, close friends, and a willingness to recommend the school were associated with differences and were part of the students' experience during the nine months between writings, it seems improbable that the differences between the fall and the spring were due exclusively or even primarily to the unreliability of the instrument.
The case for this is strengthened by looking at specific value differentiations which remained constant over the nine month period. Gender was one factor which was associated with a high degree of differentiation. If the Rokeach test was reliable, one would expect the fall results in this relatively "static" group to be essentially similar in the spring.\(^2\) Such was the case. With gender as the discriminating factor, four values were isolated as significant (p<.05) by the fall only respondents. Three of these four were also in the group of values differentiated in the spring by the spring only respondents. In each case the statistically significant differentiation was the same: males saw exciting life and mature love as more important, and females saw a world of peace as more important.

The picture which emerged in the instrumental values was analogous to that of the terminals. Referring once more to gender, there were 4 values in the fall and 2 values in the spring which the cohort of 62 differentiated. This meant that the cohort isolated differences associated with gender on six different values. The fall and spring only respondents differentiated a total of 8 different values with gender, 7 in the fall and 3 in the spring with two of the spring having been differentiated earlier in the fall. All 6 of the cohort differentiated values were also in the group of 8 values differentiated by the fall and spring only groups on the basis of gender. In each of the six cases, the differentiation was the same.

This examination of consistency gives the impression that the reliability of the Rokeach instrumental scale, based on a test-re-test analysis, was satisfactory but less dependable than the terminal value scale. Both scales provide interesting and worthwhile insights of a general nature but they fall short of giving one confidence that

\(^2\) By "static" it is meant that gender remains constant whereas other groupings, such as length of time in the school, are subject to change because the school is changing and that which it seeks to differentiate is also changing.
all the observed differences were attributable to a "real" change in the thinking of the respondent. It seems clear that when the Rokeach is employed its reliability should be established within whatever context it is used. A general statement of reliability which presumes to encompasses all age groups and settings is not likely to be very helpful. The issue of reliability remains but there is enough evidence to say with confidence that value change occurred and the school was significantly associated with it.

One additional comment on reliability is warranted. This survey was intended to observe change. To establish reliability while probing for change is problematic. In some respects the instrument was asked to perform inverse functions simultaneously. Consequently, reliability needs to be established in a careful, and somewhat arduous manner.

11.3.2 Summary

1 Proposition #12 - school influence on value formation

The differentiation in ranking given specific values which occurred in association with the number of years in the school confirmed that the schools were associated with a unique and changing value profile. The fact that the number of years enrolled in the school had this association follows logically from the students' statements in the locally developed surveys that the school had been responsible for an impact on their values both generally and specifically.

22 It should be noted that the conditions of the re-test were not the same as they were in the fall (AHS), that an assumption was made that changes in gender would be relatively few, and that it was a teenage sample. In other contexts the reliability could be higher.
Proposition #13

Although value differentiation was also often associated with non-school factors or factors beyond the control or influence of the school (age, gender, birthplace), there were many associates which were a part of the school's domain. Length of time in the school was as associated with a different value profile as was the student's age, gender, number of countries lived in, religion, and birthplace. However, the fact that two key outcomes - the overall score given to the school and the student's willingness to recommend the school to others - were not typically associated with a particular value profile suggests that whatever the students "meant" by their responses to these questions, it apparently did not reflect the way in which they held most of the values measured by the Rokeach instrument. Once again, this highlighted the need for a qualitative study to investigate the meaning of value change and effectiveness described in these two settings.

In order to enhance "positive value change" a school must begin with a recognition that it has a significant, unique role to play in the value formation process. While background factors are clearly associated with value formation, the school remains a sovereign domain for which it is responsible. It should be held accountable for effectiveness in this area just as it is in others, especially the cognitive. The Rokeach value scale or one constructed on its theoretic principles but modified to measure specific values the school seeks to teach, provides one way of assessing the role the school is playing in shaping its students' values.

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23 Proposition #13: Elements in a school's environment influence value formation in unique and disparate ways.

24 Positive change is here defined as movement towards the school's officially stated value position as approved by those in authority (that is, those who hire staff to do the "job" and define what the "job" is).
All the school based process-outcome factors studied were found to be associated to some degree with change. This is not to say that these factors caused values to change. Not only is the non-parametric test incapable of providing that form of assurance, but deductive reasoning argues strongly against a causal connection. For example, academic achievement was associated with a distinctive ranking (p<.05) of several values. If causation was the issue then simply raising grades would result in a mean rank change of these values. While this may be true - the K-W is unable to assess such a relationship - such action would be concomitant with other changes which would surely interfere with the cause and effect process. For example, students indicated the school had high academic expectations. Inflating grades would theoretically reduce student confidence that expectations were high. Unwanted negative changes would result and the school's overall effectiveness rating from the student's perspective could be lower than before the grades were inflated.

.3 Other Propositions

Values are held interactively across domains

The frequency study at AHS suggested that the "central values" in a system were given the highest cognitive rank and were the most "liked," that is, there was a high degree of emotional attachment to them. Values which were peripheral, such as salvation, were given the lowest rank on the cognitive scale and were also the most "disliked." However, even though the connection between the cognitive and the emotional was direct, it was not without its fluctuations and anomalies.

Further investigation is needed in order to see if this phenomenon is particularly associated with value change. Is a value which is peripheral but not as strongly disliked as their rankings would predict - such as a comfortable life or salvation - more
likely to move to a cognitively central position then are values which are emotionally more "unattractive" than their rankings predict?

Derivative effects occur when a value changes

The parents, teachers, and students had some striking differences in their core values which indicate that there is a significant derivative effect when core values are changed. However, the effect of this change was not all pervasive nor was there a radical re-ordering of many values close to the core. The evidence is, of course, restricted to a derivative effect in cognitive holding. From evidence obtained elsewhere it appears likely that the derivative effect created by a change in a value's ranking was more pronounced in the behavioural domain but the nature of this effect remains obscure and in need of full investigation.

Because schools can be associated with a unique value profile, it would be logical to include in a definition of an effective school, that it must have a self-conscious awareness of what values it wished to have its students learn and then to assist them in that learning process. The methodology would need to take into account the multiple value profiles which exist in the school and which differ from one group to another.

In summary, it is clear that values changed at the two sites under investigation (propositions #1,2), that change in core values had a derivative effect (proposition #5) which was somewhat associated with trait consistency (proposition #10) and which crossed over the domains of personality in idiosyncratic ways (proposition #9), that each student had a profile which reflected his or her unique characteristics and experiences (age, gender, years in the school, grades in school, number of friends, etc.; proposition #7), that values were learned in a social environment (proposition #11), that the school - as a social environment - had a unique and significant association with
the change, particularly as it related to terminal values (proposition #12), and that
certain school input-process-outcome elements were more associated with change than
were others (proposition #13).

Finally, in regards to the Rokeach instrument, it can be said that regardless of
the limitations which are associated with its approach, it was useful in both defining
and explaining value change in these school settings. With modification, it could be
used with benefit in other schools settings where adolescent values and value change
are the subject of interest and study.
CHAPTER TWELVE:
The Study of Values, The Defining Issues Test, and The School Life Survey

In addition to the Rokeach Values Survey (cf., chapter eleven), three other surveys were used which were developed by researchers who wished to assess various aspects of values, value change, and school climate. All three surveys had been used in school settings and all had a strong theoretical basis which was complementary but distinctive to the one undergirding this study. This distinctive quality was seen to be an advantage because the theory which gave rise to the VCES model represents only one approach to a complex issue. These instruments offered the promise of new and useful insights which might otherwise have been overlooked.

Chapter twelve begins with a summary of results from The Study of Values and the Defining Issues Test, both of which assessed a dimension of values at RHS. A third section reports the findings of the School Life survey which was developed in Australia to evaluate school climate. In each case, the summary of the instrument begins with a short methodological review followed by a synopsis of the results and a brief discussion.

12.1 The Allport-Vernon-Lindzey Study of Values

12.1.1 Methodology

The Study of Values was used to clarify whether “personality,” as defined by Allport, Vernon, and Lindzey (1931, 1960), was associated with perceptions about effective schooling and value change outlined here in the VCES model. It represented an alternative taxonomic approach to values and to the relationship between cognitively held values and school input-process-outcome factors. The survey was designed to produce a theoretical, economic, aesthetic, social, political, and religious score which measured “the dominant interests of personality.”
Its twelve pages consist of a series of 120 questions, twenty for each "personality." In Part One, respondents are given two possible alternatives to a simple question such as, "Assuming that you have sufficient ability, would you prefer to be: a) a banker; b) a politician?" In part two, four alternatives are given. For example, "At an evening discussion with intimate friends of your own sex, are you more interested when you talk about a) the meaning of life; b) developments in science, c) literature, d) socialism and social amelioration?" The respondents record their preferences and then normally transcribe their totals to a score sheet. In this case, however, the totalling and scoring was done by the researcher. It took the students between 15 to 25 minutes to complete, depending on their age and their English language ability.

The authors report a split-half reliability ranging from .84 for the theoretical index to .95 for the religious, with an overall mean using a z transformation of .90. Repeat reliability was reported as .89 for a one month study and .88 for a two month interval. Eternal validity was determined to be satisfactory by the authors through an examination of the scores of groups whose characteristics were known. They reported that "in nearly all cases the high and low scores correspond well with a prior expectation" (Test Manual 1970, p.13). The instrument was also found to be "highly predictive" of occupational careers.

Researchers have endorsed the Study of Values as a valuable instrument because of its widespread, successful use in guidance, counselling, and research, its use of a clearly defined taxonomy, its "adequate" internal consistency and split-half reliability, its ease of administration, and its ubiquitous nature (Buros, 1978; Test Manual, 1970).
Widey recognised weaknesses of the instrument include the fact that it is dated (the first edition was developed in 1931; the 1960 third edition was used in this study), the vocabulary is sophisticated, the moral category is conspicuously missing, and its definition of values as personal preferences (dominant interests) is not always compatible with the definitions used by others (Buros, 1978). These weaknesses were all observed in the study at RHS. The *Study of Values* did not define values in the way in which it was defined in chapter two, the language required clarification and explanation, and the items and norms were out of date.

Nevertheless, the opportunity to obtain a fresh perspective and to possibly discover another way of looking at the values issue justified the inclusion of the survey in the first battery which the students completed at RHS in the fall of 1990.

12.1.2 Results

The respondents included all the grade 9-12 students at RHS (cf., chapter eight). Twenty-two percent had an "outstanding" score as "religious people" compared to 8% for the political, 6% for the economic, 5% for the social, and 1% for the theoretical. If the Allport, Vernon, Lindzey depiction is accurate, one could perceive in RHS a group personality orientation dominated by a desire to have "communion with the cosmos, mystically relating to its wholeness." The Rokeach instrument revealed that *salvation* was the value which was considered most important

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1 Allport, Vernon, Lindzey described the six types of "men" in the following manner: 1) The theoretical man most values the discovery of truth. He is empirical, critical, and rational, aiming to order and systematize his knowledge. 2) The economic man most values that which is useful. He is interested in practical affairs, especially those of business, judging things by their tangible utility. 3) The aesthetic man most values beauty and harmony. He is concerned with grace and symmetry, finding fulfillment in artistic experiences. 4) The social man most values altruistic and philanthropic love. He is kind, sympathetic, unselfish, valuing other men as ends in themselves. 5) The political man most values power and influence. He seeks leadership, enjoying competition and struggle. 6) The religious man most values unity. He seeks communion with the cosmos, mystically relating to its wholeness."
by the parents, teachers, and students. While the terms are different, the two
instruments independently identified a dominant characteristic of the school.

Table 12.1 sets out the majority of the other relationships (p<.05) which
existed between the personality types and the various input-process-outcome factors in
the VCES model.

Table 12.1: "The Allport et al. personality types and the VCES model"

<table>
<thead>
<tr>
<th>personality type</th>
<th>VCES item</th>
<th>correlation</th>
<th>N^2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>theoretical</td>
<td>number of close friends</td>
<td>rho .2766</td>
<td>40</td>
<td>.023</td>
</tr>
<tr>
<td></td>
<td>grade level</td>
<td>rho .1467</td>
<td>103</td>
<td>.041</td>
</tr>
<tr>
<td>economic</td>
<td>academic average</td>
<td>rho -.2435</td>
<td>103</td>
<td>.012</td>
</tr>
<tr>
<td></td>
<td>age of the student</td>
<td>r -.2046</td>
<td>158</td>
<td>LE .05</td>
</tr>
<tr>
<td>aesthetic</td>
<td>number of detentions</td>
<td>r -.2083</td>
<td>123</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>parents' support for the school</td>
<td>rho -.3514</td>
<td>40</td>
<td>.013</td>
</tr>
<tr>
<td>social</td>
<td>School Life index 1992^4</td>
<td>r .3553</td>
<td>100</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>source of negative influence</td>
<td>rho -.4512</td>
<td>33</td>
<td>.004</td>
</tr>
<tr>
<td>political</td>
<td>none</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>religious</td>
<td>academic average</td>
<td>rho .4113</td>
<td>41</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>RHS overall score</td>
<td>rho .2918</td>
<td>37</td>
<td>.021</td>
</tr>
</tbody>
</table>

Although only a few of the one hundred and fifty plus relationships were
statistically significant (p<.05), several had particular import for the issue of school
effectiveness. Once again it was apparent that “thinking like the school” and having
“values similar to the school at entry” - to use the words of the locally developed
surveys - was associated with a high overall grade for the school and with academic
achievement. In this survey, it was the “religious” personality which illustrated this
relationship and defines it as “religious” in value orientation.

Perceptions of a positive climate in the school (school life index ‘92) were
associated with a high score on “social” personality. Conversely, a low “social”

^2Spearman’s rho was used with ordinal data, Pearson’s r was used with interval data and indices.

^3 Low N scores reflect the fact that correlation with the spring 92 items could only be done through
the f-s-s cohort.

^4 For a discussion of the School Life index see below 12.3
personality score was associated with teachers as the primary source of negative influence in the school. Students who tended to score high on the "theoretical" personality scale (empirical, critical, rational) were those who tended to have few friends while those who scored low on the aesthetic scale (beauty, harmony, art) were those who tended to have no detentions and to feel their parents were supportive of the school.

Several other correlations were also established with nominal data, although their relevance to this particular study is incidental. For example, the RHS students' religious backgrounds were significantly related to the "social man" index. A student's religion accounted for 7% of the variance in the "social man" variable (eta-squared .071). Residential students were more closely associated with an "average aesthetic personality" (67% to 50%) than were home students.

12.1.3 Discussion

The Study of Values was useful in the sense that it confirmed the strong religious element in the school, which in itself was an important point in ascertaining the survey's validity. Additionally, it further defined the existence in the school of varying value profiles or "personalities," in the words of this instrument. These "personalities" were part of the social environment which created a setting for competing values and value change.

The relationship which existed between the religious personality and positive school outcomes (p<.05) strengthens the argument that the students' general orientation to the predominant value characteristic of the school is a primary feature of

5 $\chi^2$ 27.73367, DF 16, p<.05, $\nu=.26735$.

6 $\chi^2$ 10.89699, DF 4, p<.05, N=95, $\nu=.33868$, eta-squared with aesthetic dependent .037.
an effective climate. It appears to create a common sense of purpose which is closely linked to perceptions of effectiveness.

The *Study of Values* actually raised as many questions as it answered. For example, it revealed that the “social” personality was associated with perceptions about the climate (in this case positive). If sensitivity to climate is a feature of personality rather than a quality possessed by all “personalities,” then how generally pervasive and influential is the climate? Furthermore, was the “social” personality associated with “climate” or with some particular aspect of “climate?” Given unanswerable questions like these, it is clear that the instrument is not very helpful in clarifying the nature and role of “personality” in a climate which is mediating value change in spite of the fact that the instrument itself appeared to be reliable in the sense that it confirmed expectations and results from other sections of the student battery. Furthermore, without further clarification of the “personality” construct and without updated norms and modern idioms, the value of the *Study of Values* is marginal in a study like this.

12.2 The *Defining Issues Test*

12.2.1 Methodology

The *Defining Issues Test* explored the possible relationship between "moral development," as defined by Kohlberg-Rest, and factors in the VCES model. The focus was on the cognitive domain where it was hoped the test would reveal strategies in reasoning about values which could be correlated with perceptions of school effectiveness.

The shortcomings of the Kohlberg-Rest approach were set out in chapter two. Nevertheless, its frequent usage in many studies relating to values and moral education argued for its usage at RHS. Furthermore, some reports from those who had used the
test were particularly encouraging and suggested that the instrument would be relevant in this context. For example, James Rest reported that Thoma's 1986 meta analysis found education in the college setting accounted for over 50% of the variance in DIT scores (1988, p.183). Such a report raised hopes that the instrument would prove similarly profitable at RHS, shedding light on the importance of "education" in a high school setting.

The revised edition (1986) of the *Defining Issues Test* was purchased from the Center for the Study of Ethical Development (Dr James Rest) at the University of Minnesota. It was included in the Fall 1990 battery at RHS. All high school students completed it and the results were transcribed to data sheets which were sent to the Center for analysis. The test consisted of a series of moral dilemmas which required the students to choose the course of action which they considered most appropriate given the circumstances of the dilemma.

The analysis of the data by the Center included information on the importance each individual and group at RHS gave to the various stages of "moral development." The "P" score is the most important DIT score and most frequently used in research reporting. It is interpreted as "the relative importance that subjects give to 'principled moral considerations'" (stages 5,6; Rest, *Guide*, p. 11). The "P" score is a particularly useful score because it is representative of the movement towards stages 5 and 6 and away from the lower stages.

Issues of reliability and validity relating to the DIT have been dealt with at length in Rest (1979) and are summarised in the *Guide for the Defining Issues Test*. The test-re-test reliability for the P score is generally in the high .70s and .80s as is Cronbach's Alpha index of internal consistency. Stage score reliability typically drops
to the .50s and .60s. Other evaluations of reliability and validity have been undertaken and the results provided a justification for its use in a study like this.

Internal reliability checks on the RHS data sent to the Center eliminated three respondents on the basis of the "M" factor\(^7\) and 34 out of the 166 respondents (20%) on the basis of inconsistency.\(^8\) All statistical analyses were computed on the purged file and represented a consistent, complete, machine readable response rate of at least 64% for all the subgroups. It should be noted, however, that the respondent group appeared to be biased in favour of those who possessed English language skills at or above grade levels in the United States.

12.2.2 Results

Norms for the P, U, and A scores\(^9\) have been established at the Center based on a summary of data from "thousands of subjects" and from "hundreds of studies" each year.\(^10\) Nevertheless, it is not a truly representative sample but a norm based on the data submitted to the Center. In general, "P" scores have been found to be in the 20s for Junior High School students, in the 30s for High School students, in the 40s for

\(^7\) Three respondents scored 8 or more "meaningless" items indicating they were not following directions or were unable to understand the questions.

\(^8\) The Consistency Check compares a student's rating data with the ranking data and is intended to identify students who were not following directions or who did not comprehend the material. The 20% loss is somewhat high. According to the Center, "It is usual in studies to lose between 5 and 15% of a sample to invalidating from the Consistency Check or M score. Anything much higher than this generally means that the subjects for the study were insufficiently motivated to take the test or were tired when taking the test or [had] insufficient reading skills to understand the test." (Guide, p. 15) Because RHS teachers with younger students had indicated the reading level was too advanced for their students and because many of the students had received their elementary education in a language other than English, it seems likely that the primary problem at RHS was linguistically based. Nevertheless, the invalidation record reduces the confidence that can be placed in the conclusions drawn from the DIT. Twelve tests were not submitted to the Center because the students had been unable to finish them.

\(^9\) A: antiestablishment attitude; U: utilizer score - the degree to which a subject uses concepts of justice in making moral judgements; scores usually range between .10 and .20.

\(^10\) The Center processes over 35,000 questionnaires each year.
college students, in the 50s for graduate students, and in the 40s for "adults-in-general" (Rest, Guide, p. 19). Table 12.2 displays the RHS “P” scores together with the standard deviations (SD), the norms for the age group, the t scores and a probability assessment.

<table>
<thead>
<tr>
<th></th>
<th>RHS P</th>
<th>SD</th>
<th>Norms P</th>
<th>SD</th>
<th>t</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 9</td>
<td>28.6</td>
<td>11.5</td>
<td>31.0</td>
<td>13.9</td>
<td>-0.779</td>
<td>NS</td>
</tr>
<tr>
<td>Grade 10</td>
<td>33.0</td>
<td>16.2</td>
<td>0.603</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 11</td>
<td>29.6</td>
<td>11.0</td>
<td>-0.483</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 12</td>
<td>31.4</td>
<td>12.2</td>
<td>0.132</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>38.1</td>
<td>8.0</td>
<td>44.9</td>
<td>15.0</td>
<td>-2.208</td>
<td>.026</td>
</tr>
</tbody>
</table>

P: the sum of scores from stages 5a, 5b, 6 converted to a percent.

The "P" scores for all four student groups fell into a range which was typical of high school students in the United States. The Grade 10 class demonstrated the greatest tendency towards "principled moral thinking" but it also had the highest standard deviation suggesting the class was more divided in its approach to moral reasoning than the other classes. A t-test of the staff subgroup compared their "P" score to university graduates and found that the staff at RHS tended to be moderately less likely to be "thinking as a moral philosopher would" than the norm for adults in this educational category. Based on the standard deviation norms for grade 9 and especially for the staff, it would appear that RHS as a group was relatively unified in its approach to “principled moral thinking.”

11 Grade 9 is included with the High School rather than Junior High, as is the case in some school districts. The author of the DIT considered Grade 9 students to be the youngest group capable of sitting the test.

12 In a one way analysis of variance described below it was found that when the staff was divided into two age groups - younger (23-40) and older (46-64) - they had different means and standard deviations. The younger adults' mean score was 40.0000 with a standard deviation of 8.6380 compared to older adults who had a mean of 34.2857 and a standard deviation of 5.4380. However, a Kruskal-Wallis one-way Anova did not find the difference between the younger and older adult mean ranks on the "P" scores to be significant.
Although neither a t-test nor a significance test was performed on data emerging from the DIT's "A" and "U" scores,\textsuperscript{13} it is apparent from the data summarised in Table 12.3 that the RHS community scored lower on the antieestablishment attitude scale than was normal. On the "utilizer" score, the variation in the RHS subgroups (standard deviation) was higher than normal and the "U" score itself was consistently low. This would indicate for the grade 9s and 10s, at least, that moral decisions were based on concepts other than justice.

In the one-way analysis of variance test run on the "P" scores, the "F probability" was not significant in the case of gender, age, or time in the school.\textsuperscript{14} To the degree that "time in the school" represented "education," the concept of "education" did not significantly differentiate the DIT "P" score. A Kruskal-Wallis one way Anova confirmed these findings. It also found that residence status, country of birth, the number of detentions, religious background, and both parents' occupations were not significantly related to the "P" scores. It did find, however, that academic achievement was significantly related to the "P" score as Table 12.4 demonstrates.

Additional correlation work done with the "P" score is set out in Table 12.5. Both the Pearson $r$ and the Spearman rho confirm the relationship which existed

\textsuperscript{13} ""A"" represents considerations that reflect an antieestablishment attitude. These considerations presuppose an understanding of Stage 4, but fault existing authorities and 'the establishment' for being hypocritical and inconsistent with its own rationale. The "A" point of view is critical but offers nothing positive in its place." \textit{Guide}, p.12

"The U score is derived from two pieces of DIT data: the action choices that people make ... and ... the items that they rank as most important. [Dr. Stephen] Thoma has shown that each of the 12 items for each story has a logical implication that favors one action choice or the other. If the items that a person picks tend to go along with the person's action choice, then the person has a high U score because it is inferred that the person's concepts of justice...is driving the advocacy of a particular course of action. If there is little fit, then the person has a low U score and it is inferred that the person makes moral decisions on some different basis than concepts of justice. The practical import of the U score is it can be used to increase the predictability to behavior...[T]he U score is more experimental and tentative [than the P score]...." \textit{Guide}, p.13.

\textsuperscript{14} The "F test" is an estimate of the between group (mean square) variance compared to the within group variance.
between high "P" scores and academic achievement. A tendency to think in higher moral principles of justice was also associated with support for the handbook, with a perception that there was a positive climate in the school, with a feeling that there had been spiritual development because of the influence of RHS, with a recollection that the student's values were similar to the schools when he or she enrolled, and with a high overall score for the school.

Table 12.3: "'A' and 'U' scores from the DIT"

<table>
<thead>
<tr>
<th></th>
<th>RHS A</th>
<th>SD</th>
<th>Norms A</th>
<th>SD</th>
<th>RHS U</th>
<th>SD</th>
<th>Norms U</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 9</td>
<td>2.57</td>
<td>2.52</td>
<td>2.72</td>
<td>2.64</td>
<td>0.077</td>
<td>0.140</td>
<td>0.195</td>
<td>0.031</td>
</tr>
<tr>
<td>Grade 10</td>
<td>2.01</td>
<td>2.67</td>
<td></td>
<td></td>
<td>0.076</td>
<td>0.083</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 11</td>
<td>1.94</td>
<td>2.67</td>
<td></td>
<td></td>
<td>0.109</td>
<td>0.148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 12</td>
<td>1.42</td>
<td>1.93</td>
<td>1.86</td>
<td>2.43</td>
<td>0.163</td>
<td>0.192</td>
<td>0.094</td>
<td>0.026</td>
</tr>
<tr>
<td>Staff</td>
<td>1.38</td>
<td>1.86</td>
<td></td>
<td></td>
<td>0.315</td>
<td>0.158</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12.4: "'P' score with academic achievement."

<table>
<thead>
<tr>
<th>Mean Rank</th>
<th>Cases</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>36.39</td>
<td>19</td>
<td>A</td>
</tr>
<tr>
<td>30.08</td>
<td>36</td>
<td>B</td>
</tr>
<tr>
<td>11.10</td>
<td>5</td>
<td>C</td>
</tr>
</tbody>
</table>

Kruskal-Wallis 1-Way Anova: N=60, corrected \( \chi^2 \) 8.3675, \( p<.05 \)

Table 12.5: DIT correlations and the VCES model

<table>
<thead>
<tr>
<th>item</th>
<th>correlation</th>
<th>N^16</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>handbook index</td>
<td>( r = .3133 )</td>
<td>110</td>
<td>LE .05</td>
</tr>
<tr>
<td>school life index</td>
<td>( r = .2910 )</td>
<td>128</td>
<td>LE .01</td>
</tr>
<tr>
<td>academic average year 1</td>
<td>( rho = .3124 )</td>
<td>60</td>
<td>.011</td>
</tr>
<tr>
<td>academic average year 2</td>
<td>( rho = .4512 )</td>
<td>43</td>
<td>.002</td>
</tr>
<tr>
<td>spiritual growth due RHS</td>
<td>( rho = .4530 )</td>
<td>38</td>
<td>.004</td>
</tr>
<tr>
<td>positive atmosphere in school</td>
<td>( rho = .3230 )</td>
<td>33</td>
<td>.033</td>
</tr>
<tr>
<td>values were similar at entry</td>
<td>( rho = .4732 )</td>
<td>35</td>
<td>.002</td>
</tr>
<tr>
<td>school's overall score</td>
<td>( rho = .3846 )</td>
<td>40</td>
<td>.014</td>
</tr>
</tbody>
</table>

^15 Spearman's rho was used for ordinal level data, Pearson's \( r \) for interval level data and indices.

^16 Wide variance in the number of valid respondents is due to the correlations with different testing periods. For example, items from the 1992 battery were correlated with each other through the f-s-s cohort.
12.2.3 Discussion

In post high school age subjects, Dr Rest found education to be "far more predictive of DIT scores" than chronological age. In High School, he felt the picture was not clear because age and education were confounded. However, his Center established that gender, IQ, SES, geographic region, and religion were only weakly or insignificantly correlated with DIT scores. Therefore, "education is really the only demographic variable on which to base norms" (Rest, Guide, p. 20).

The insignificance of gender, SES, geography, and religion were confirmed at RHS but the significance of "education" was not, perhaps because it is unclear what is meant by "education." An inability to clarify the role of "education" may also have been due to the fact that the test was not valid for this international respondent group. Given the high rate of discarded tests one cannot be sure that the sample was unbiased in important respects, such as English language ability.

From the results which did emerge at RHS, one could possibly conclude that the primary association with a high "P" score was academic ability rather than "moral development." Such a result is in line with criticism of the DIT and the Kohlberg-Rest theory of moral development. One cannot generalise to a larger population from the basis of a small sample but one can say that in the context of RHS, the "P" score was associated with academic achievement.

However, one can also say that higher levels of moral development were associated with perceptions of positive school processes and outcomes. Students who were doing "well" in school, learning what the school desired them to learn (academics, handbook rules/principles, spiritual values) and feeling like the school was a positive place to be and worthy of a high overall mark, tended to be those had higher
scores in moral development, and not those who had a particular milieu profile (gender, SES, age).

The term “moral development” suggests positive change, maturation over time, and improved status. Proposition #8 held that value change was not equivalent to “moral development.” The association of the “P” score with the student’s personal assessment that they had developed a greater sense of appreciation for spiritual matters because of the influence of the school does not disprove the proposition, but it does hold out the possibility that while moral development in the Kohlberg-Rest sense may not be equivalent to value change, it may be linked in some as yet undefined way. Clarification of the meanings students attributed to “a greater sense of spiritual growth” is an essential prerequisite before there can be a profitable understanding of the relationship between “moral development” and spiritual growth - to say nothing of value change.

In summary, looking at the “P” scores from the perspective of the VCES model, it becomes apparent that “moral development” as defined by Kohlberg-Rest was associated with a positive assessment of several school processes and outcomes, including a sense of spiritual “development,” while milieu inputs were not. Once again, it needs to be noted that causation is not the issue. Perhaps in the Kohlberg-Rest sense of the word, “education” could be seen to be accounting for higher “P” scores, but the data simply point out the existence of a relationship between some factors relating to “education” and moral development.

12.3 The School Life Survey

12.1.1 Methodology

The Spring 1991 RHS battery was identical to the Fall 1990 in sections one and two but sections three and four, which comprised the DIT and the Study of Values,
were replaced with the Williams and Batten *School Life* survey. This survey was re-tested at RHS in the spring of 1992 and appended to the AHS spring 1992 battery so that there were three separate administrations of the survey - two at RHS and one at AHS.

The *School Life* survey was chosen because of its strong theoretical basis, because it encompassed a diverse number of features which were associated with school climates, and because it could be readily reduced to a single composite index which could in turn be correlated with factors in the VCES model. It was hoped the survey would further clarify the nature of the relationship between school climate and value change.

The *School Life* survey's definitions and philosophic orientation are described in Williams and Batten (1981). Briefly, the *School Life* explores six facets or dimensions of school life: general affect, negative affect, status, identity, teachers and opportunity. Taken together they represent a picture of the complex phenomenon which the authors refer to as the "school life." Williams and Batten used exploratory factor analysis, which supported the theoretical arguments guiding their investigation, to ascertain whether or not the items in the survey explored the six dimensions they perceived in "school life." The scales which emerged remained "somewhat impure" at the time of the survey's publication and they sounded a note of caution about an uncritical reliance on them:

In both the exploratory and confirmatory factor analyses we engaged in post-hoc model fitting. In the exploratory analyses this took the form of successive analyses on reduced variable sets in the interests of refining the item pool. In the confirmatory analyses this post-hoc fitting took the form of a successive relaxation of constraints on the orthogonality of error terms until the model achieved an acceptable fit to the data. The problems and dangers of this approach are well known and reside, essentially in the possibility that we have capitalized on chance variation peculiar to this data set. If so, then the apparent 'reality' of the constructs may be compromised. We saw no real alternative to this approach for the present investigation but caution that these
models ought to be replicated on a new data set to determine the degree of this compromise, if any (Williams and Batten, 1981, p. 42).

Five of the six dimensions which the *School Life* survey seeks to evaluate lie within the domain of the atmospheric climate in the VCES model. They include "general affect," "negative affect," "status," "identity," and "opportunity." The sixth dimension - "teachers" - could also be included in the atmospheric climate, inasmuch as it examined student beliefs. However, the items in this dimension focus on the school's social system of informal rules and is therefore conceptually located in the "organisation-climate" of the school effectiveness/value change model (VCES).

The *School Life* survey's orientation towards atmospheric climate means that the interpretation of the index which emerges from it must reflect its limited assessment of a school's overall "climate." Not only did it take a different perspective on climate in the sense that it did not distinguish between atmospheric and organisational climate, it did not include an assessment of "inputs" which are seen in this study to have a bearing on school climate.

The *School Life* survey was originally field tested with 1000 sixteen year-olds in Australia. The authors' item analysis of the survey's six foundational scales found alpha reliabilities ranging from .69 to .83. Subsequent revision and refinement of the scales left the reliabilities in the .70 to .81 range. Construct validity was explored through factor analysis with mixed results. Rotated factors emerged with validity scores ranging from .55 and .69. The tendency to factorial heterogeneity suggested to the designers the need for additional development of their measures but they still felt justified in concluding that "these estimates of the validities of the...scales are of a level that offers partial, if not whole-hearted, support for [the synchronistic] model [incorporated into the *School Life* survey]" (Williams and Batten, 1981).
The survey comprises 71 items, each of which begins with the leading phrase, "School is a place where...." Four alternatives are given to each statement allowing students to "definitely agree," "mostly agree," "mostly disagree," or "definitely disagree." The statements are simple and brief: "teachers treat me fairly in class;" "teachers are fair and just;" "teachers give me the marks I deserve." Students at RHS and AHS completed the survey in fifteen minutes or less and there were no reported problems with comprehension. Written permission was received from the authors to use the survey in this study. Cronbach alpha reliability scores were high.

12.3.2 Results

The School Life survey was collapsed following the re-coding of reversed items to give a School Life index for both AHS and RHS. Correlations between the index and items in the VCES model are set out in Table 12.6.

Table 12.6: "The School Life index and the VCES model"

<table>
<thead>
<tr>
<th>Survey administration</th>
<th>VCES item</th>
<th>Correlation</th>
<th>N</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RHS School Life 91</strong></td>
<td>DIT &quot;P&quot; score</td>
<td>$r = .2910$</td>
<td>92</td>
<td>LE .01</td>
</tr>
<tr>
<td></td>
<td>academic average '91</td>
<td>$r = .2306$</td>
<td>87</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>number of detentions</td>
<td>$r = .3472$</td>
<td>123</td>
<td>LE .01</td>
</tr>
<tr>
<td></td>
<td>School Life 92 index</td>
<td>$r = .5414$</td>
<td>100</td>
<td>LE .01</td>
</tr>
<tr>
<td></td>
<td>social personality</td>
<td>$r = .3553$</td>
<td>103</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>handbook support index 92</td>
<td>$r = .3798$</td>
<td>110</td>
<td>LE .01</td>
</tr>
<tr>
<td></td>
<td>academic average</td>
<td>$r = .2805$</td>
<td>58</td>
<td>.033</td>
</tr>
<tr>
<td></td>
<td>RHS overall score</td>
<td>$r = .3488$</td>
<td>53</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>willingness to recommend school</td>
<td>$r = .3384$</td>
<td>48</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>involved in the school</td>
<td>$r = .4982$</td>
<td>55</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>handbook support index</td>
<td>$r = .2557$</td>
<td>61</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>taught values index</td>
<td>$r = .3168$</td>
<td>55</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>years enrolled in the school</td>
<td>$r = .2842$</td>
<td>60</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>age of the student</td>
<td>$r = .2984$</td>
<td>61</td>
<td>LE .05</td>
</tr>
<tr>
<td></td>
<td>more tolerant due to AHS</td>
<td>$r = .4130$</td>
<td>62</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>values similar at entry</td>
<td>$r = .2708$</td>
<td>72</td>
<td>.011</td>
</tr>
<tr>
<td></td>
<td>parents supportive of AHS</td>
<td>$r = .2754$</td>
<td>83</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>positive atmosphere in AHS</td>
<td>$r = .4511$</td>
<td>74</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>AHS overall score</td>
<td>$r = .4263$</td>
<td>80</td>
<td>.000</td>
</tr>
</tbody>
</table>

17 See chapter eight for response rates at the two sites.

The strongest relationship which existed in the model was between the two “school life” indices. It could be argued that this was a reflection of the instrument’s re-test reliability, but the correlation could also support the contention that climates are relatively static and related to each other from year to year. Positive climates in both schools were associated with positive feelings about the school’s handbooks and with outcomes such as the schools’ overall grade. Academic achievement, “moral development,” and the learning of specific values, which the school stated it wished to teach, were also significant outcome correlates of a positive school climate. Students who had obtained a record of misbehaviour tended to see the climate as negative while those who had been involved in the school tended to see it as a pleasant place to be.

The School Life survey has undergone significant revision since Williams and Batten first conceived it. In order to produce a more refined measure, the authors selected the five items with the highest loadings within each of six scales which had emerged from their earlier work. By accepting only the five items with the highest loading in each category (four in the case of “negative affect”), a group of 29 elite items emerged. A subsequent factor analysis of these items, showed the same clearly defined factors. Therefore, they felt it was reasonable "to argue for six dimensions to the quality of school life within the theoretical context of [their] investigation" (Williams and Batten, 1981, p.37).

In an effort to see if the dimensions were evident in the data gathered at these sites, a principle components analysis was undertaken of the data gathered at RHS in 1991 and 1992. The procedures used for these analyses were the same as those used with the locally developed surveys described above in chapters six and nine. In the case of the Spring 1991 survey, 19 factors had an eigenvalue greater than 1. The first factor, with an eigenvalue of 17.49732, accounted for 24.6% of the variance. The
varimax rotation converged in 143 iterations, the oblimin in 89. Seventeen factors had an eigenvalue greater than one in the Spring 1992 survey. Factor 1 had an eigenvalue of 25.07385 and accounted for 35.2% of the variance. The varimax rotation converged in 29 iterations, the oblimin in 146. In both cases the pattern matrix which emerged from the analysis was used in the comparative study with Williams and Batten.

The results lent support to Williams and Batten’s concept of dimensions in school life. Their 29 elite items and the six dimensions or domains of school life are listed together with the results of the two RHS surveys in Table 12.7. In both RHS surveys, most of the elite items which Williams and Batten identified, were also found to load .3 or higher on a common factor at RHS. Because there were many more factors in the RHS surveys, not all items had their principal loadings on the factor listed in the table but, even though their principal loadings may have been elsewhere, the items nevertheless loaded above .3 on a common factor.

Table 12.7: "RHS item correlation with the Williams and Batten model."

<table>
<thead>
<tr>
<th>Williams/Batten - Item number</th>
<th>Spring 1991 - Item</th>
<th>Spring 1992 - Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Affect</td>
<td>6,69,11,55,52</td>
<td>Factor 17: 56,69,11,52</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>43,27,66,34</td>
<td>Factor 12: 43,66,34</td>
</tr>
<tr>
<td>Status</td>
<td>41,35,20,25,17</td>
<td>Factor 9: 35,20,17</td>
</tr>
<tr>
<td>Identity</td>
<td>18,70,63,50,14</td>
<td>Factor 15: 63,50,14,18</td>
</tr>
<tr>
<td>Teachers</td>
<td>21,9,51,38,19</td>
<td>Factor 1: 21,9,51,38</td>
</tr>
<tr>
<td>Opportunity</td>
<td>65,44,47,3,60</td>
<td>Factor 6: 60,44</td>
</tr>
</tbody>
</table>

Some modification of the Williams and Batten domains was necessary in the RHS environment. For example, loadings in the Spring 1991 "General Affect" were too low to be considered significant (typically .2). The same was true of the Spring 1992 items which Williams and Batten identified as "Negative Affect." However, it

19 Item 51: .2926.

20 Items 47 = .2457 and 60 = .2454
can be said that virtually all the Williams and Batten domains emerged in both the Spring 1991 and Spring 1992 surveys. For example, four of the same items (21,9,51,38) relating to the Williams and Batten "teacher" scale had significant loadings on a common factor in both the Spring 1991 and Spring 1992 surveys.

A comparison of the Spring 1991 and 1992 principal components analyses of the data from RHS revealed that a number of items loaded on to common factors in both surveys. Because so many factors emerged (17,19), it was not possible or helpful to define each factor or to do correlational studies with them. However, rudimentary indices could be identified. In addition to "teachers" mentioned above, a harmonisation of the two surveys ('91,'92) revealed that a considerable number of items could be grouped together on the basis of a .3+ loading on a factor. Table 12.8 provides a summary of the items, and their corresponding loadings, on three possible subscales.

The RHS School Life survey 1991 had a mean score of 1.995 with a standard deviation of .34626. The School Life survey 1992 had a mean score of 1.979 with a standard deviation of .45607. This suggests that the climate - as measured and defined by these surveys - was more "positive" in the 1991-1992 school year but that the school was less harmonious.

The climate at AHS was marginally more negative than at RHS (mean 2.058) but more harmonious (standard deviation .359) during the 1991-2 school year. In order to establish a reference point for this school climate comparison, three additional comparisons were drawn from the locally developed surveys. Both schools also had an index which reflected the belief that there were high expectations in the school.

Students at RHS were marginally more sure that their school had high expectations than were students at AHS (RHS mean 2.0756, standard deviation .9097; AHS mean 2.202, standard deviation .9106). On the other hand, students at AHS
Table 12.8: "RHS Effectiveness indices based on School Life"

<table>
<thead>
<tr>
<th>Effective School index</th>
<th>Loadings on School is a place where...</th>
<th>Loadings on Factor 1 '91</th>
<th>Loadings on Factor 1 '92</th>
</tr>
</thead>
<tbody>
<tr>
<td>64 I am treated with respect</td>
<td>.67059</td>
<td>.36365</td>
<td></td>
</tr>
<tr>
<td>21 teachers treat me fairly in class</td>
<td>.65011</td>
<td>.32333</td>
<td></td>
</tr>
<tr>
<td>38 teachers give me the marks I deserve</td>
<td>.60383</td>
<td>.42124</td>
<td></td>
</tr>
<tr>
<td>62 teachers are friendly to me in class</td>
<td>.46656</td>
<td>.28500</td>
<td></td>
</tr>
<tr>
<td>51 teachers listen to what I say</td>
<td>.38852</td>
<td>.42124</td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** The school was effective in the sense that it left the student feeling empowered and responsible for the results he or she received.

<table>
<thead>
<tr>
<th>Effective School index 2</th>
<th>Loadings on School is a place where...</th>
<th>Loadings on Factor 15 '91</th>
<th>Loadings on Factor 1 '92</th>
</tr>
</thead>
<tbody>
<tr>
<td>63 I get to know myself better</td>
<td>-.76535</td>
<td>.48598</td>
<td></td>
</tr>
<tr>
<td>50 I learn a lot about myself</td>
<td>-.71377</td>
<td>.27248</td>
<td></td>
</tr>
<tr>
<td>14 mixing with other people helps me</td>
<td>-.71351</td>
<td>.25932</td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** The school was effective in the sense that it left the student feeling that he/she had learned about himself/herself.

<table>
<thead>
<tr>
<th>Effective School index 3</th>
<th>Loadings on School is a place where...</th>
<th>Loadings on Factor 19 '91</th>
<th>Loadings on Factor 17 '92</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 I feel happy</td>
<td>-.46180</td>
<td>.61068</td>
<td></td>
</tr>
<tr>
<td>23 I feel proud to be a student</td>
<td>-.41494</td>
<td>.45910</td>
<td></td>
</tr>
<tr>
<td>69 I feel great</td>
<td>-.35449</td>
<td>.38465</td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** The school was effective because the student's overall impression was that he/she had a positive, enjoyable experience.21

---

21 While having "fun" at school is not normally stated as a "goal" by parents, school boards, teachers, or even students, it can be seen as a form of inclusive effectiveness. This assumes that adolescent students would not say they felt "happy, proud and great" (items #52, 23, 69) if they felt they had not received the grades they deserved, if they felt they had been left ill-prepared for the future, or if they felt they had run seriously afoul of the school community's rules and regulations.

gave their school a somewhat higher overall grade (Table 12.9), and they were more willing to recommend their school to others (Table 12.10). Taken as a whole, the similarities between the two schools on all four measures of comparison seem more striking than the dissimilarities.

**12.1.3 Discussion**

If both RHS and AHS are held to be effective - and both appear to be similarly effective in the eyes of the students - then effective climates can be described as associated with a linkage of consistent positive perceptions. By this it is meant that the effective school climate was not associated with a negative view of any of the items
Table 12.9:  
"Overall grade at RHS and AHS"

<table>
<thead>
<tr>
<th>RHS</th>
<th>AHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12%</td>
</tr>
<tr>
<td>B</td>
<td>50%</td>
</tr>
<tr>
<td>C</td>
<td>20%</td>
</tr>
<tr>
<td>D</td>
<td>13%</td>
</tr>
<tr>
<td>F</td>
<td>5%</td>
</tr>
</tbody>
</table>

Table 12.10:  
"Students willingness to recommend their school"

<table>
<thead>
<tr>
<th>I would recommend</th>
<th>RHS</th>
<th>AHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>15%</td>
<td>35%</td>
</tr>
<tr>
<td>Agree</td>
<td>43%</td>
<td>45%</td>
</tr>
<tr>
<td>Disagree</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>No Opinion</td>
<td>20%</td>
<td>8%</td>
</tr>
</tbody>
</table>

with which it was correlated. It is clear from this instrument, as well as from the locally developed instruments, that an effective climate is not simultaneously associated with a mixture of positive and negative perceptions about inputs, processes and outcomes. For example, it does not appear that a positive climate could be composed of incongruities such as dissatisfaction with the handbook, a feeling that parents were unsupportive of the school, a perception that values had been learned, an exemplary overall school grade, and high academic achievement.

The fact that positive climates in two schools shared some common features and yet differed on others suggests that climates are not created by the inclusion or exclusion of a particular roster of school based factors but that those which do become associated with it are uniformly positive. The features common to both sites appear to be factors which all members of the community hold in common and define as important. The achieving of these mutually held and mutually defined goals is associated with a positive climate.
It was clear from both sites that positive outcomes, such as the learning of specific values, improved academic achievement, "moral development" ("P" scores), a willingness to recommend the school, and a high overall score of the school, were all significantly associated with a positive assessment of "climate." That is, the students' perception at both RHS and AHS was that major outcomes of an academic and values nature had been personally relevant to them. The repeated correlations which have arisen between this aspect of outcome and positive school climate make it difficult to conceive of a "positive climate" in which the participants did not feel they had personally attained the goals of the "school."

The modest agreement which existed between the results of the Williams and Batten study in Australia and the principal components analyses done at RHS lends support for the theory of climate dimensions upon which the School Life survey was based. However, it would also seem clear that researchers who would like to explore facets of these various dimensions in other school contexts must undertake confirmatory factor analyses to verify the degree to which the dimensions actually define a construct in their educational setting. The study here suggested that 71 items were not required to assess "school life" and a much smaller instrument, comprising the 29 elite items, would be sufficient. Correspondence with the authors revealed that the instrument has undergone further revision and a shorter version is now available.

The Williams and Batten School Life survey also holds out the promise that with further refinement and additional testing, it may be possible to build a "school effectiveness" survey with indices based on various dimensions of school climate. This could be a useful tool complementing those already available and required in instruments like the accreditation self studies done for the European Council of International Schools.
Evidence from the work at RHS indicates that the climate can shift from year to year and that students can be increasingly diversified in their views of what the climate is in the school. At the same time it appears that positive perceptions of school climate in one year are associated with positive perceptions about school climate in a previous or subsequent year. The instrumentation was too crude to prove that the RHS general climate rating of 1992, which was lower and more diversified than it was in 1991, was less effective at creating positive value change than the climate of 1991. The only comparison which can be drawn relates to academic achievement where a positive evaluation of climate was more associated with high grades in 1992 than it was in 1991. The provisional evidence indicates that the shift from year to year is small. More study needs to be done to see how volatile and malleable a climate is over a longer period of time and in the face of substantial change or intervention.
PART SIX: CONCLUSION

Chapter Thirteen: Discussion and Implications

13.1 School effectiveness and the affective domain

Andrew Marfleet (1995) wrote recently that research on values in schools is “thick with theory and thin on data” (p. 35). This thesis sought to address this problem and to examine school effectiveness in the values’ dimension of the affective domain through an approach which empirically tested a theory of “values” and “effective schools.”

Such an investigation is timely. The fledgling “effective schools” movement has matured in the last decade to the place where public educational policy in many countries is influenced by it (e.g., Tibbitt et al. 1994; Mortimore 1994). The recently established Values Education Council in Great Britain, with its dozen or more member organisations dedicated to the promotion and development of values (Taylor 1995, p. 24), is testimony to an increasing interest in issues related to the affective domain.

13.2 Reflections on the research design

The value change - effective schools model (VCES) used throughout this study was designed to be sensitive to local school issues, while simultaneously exploring overarching theory and principle. It was successful in the sense that it located relevant factors in a logical schema which interfaced the dominant constructs of value change, effective schools, and school climate.

Nevertheless, it appeared artificial and arbitrary at times. While it could be argued that “human development will always defy measurement and remain to some extent mysterious” (Genck 1983, p.26), the model created unnecessary confusion through its restrictive pigeonholing of variables. It was not until the data had been analysed that it became obvious the input-process-outcome linear/sequential approach
commonly associated with effective schools was not satisfactory when dealing with perceptions, attitudes and beliefs. An adequate explanation of value change in schools must include a blurring of the lines between input, process, and outcome. Reality appears to be described best as a series of interactive, mutually dependent domains rather than a linear, sequential chain of discrete categories.

![Interactive domains in an effective school](image)

On the micro level of the individual variable, an accurate model of effectiveness must take into account the web-like essence of effectiveness, with each input, process, or outcome variable operating as an interdependent strand in an effectiveness web. One positive connection in the web is not indicative of institutional effectiveness. Furthermore, when the effectiveness quality is missing or lost, it seems improbable that it could be restored without substantial change to many facets of the school community. Consequently, it is difficult to imagine a simple panacea for ineffectiveness. Effectiveness is more than the mathematical summing and subtracting of isolated positive and negative elements in the school. The negative anomalies which exist in the effective school, appear transient, marginal, and inconsequential when compared to the general state of effectiveness.

Interactive, mutually dependent domains and a web-like interdependence of individual variables are two characteristics of the values change/effective schools interface which were not anticipated in the VCES model. Another question emerging from the VCES model related to the specification of an “organisational” and
"atmospheric" climate (culture). These designations in the VCES model appear to be more justified in theory than in practice. It is not conceptually difficult to differentiate between variables which reflect norms, belief systems, values, cognitive structures, and meanings within a school (i.e., atmospheric climate - culture) and variables which reflect patterns of rule interaction (i.e., organisational climate - social system), but when variables, such as those assessing opinions about the handbook, are arbitrarily designated as part of the organisational climate rather than the atmospheric climate, the value of the distinction becomes debatable. More research needs to be done which explores the existence, relevancy, and, above all, the meaning of climate dimensions before the value of such designations becomes obvious to practitioners.

On the issue of "meaning," it became apparent on several occasions that a quantifiable explanation of a relationship between variables was not possible without further clarification of the "meaning" associated with the variables (and presumably the underlying reality). This phenomenon suggests future work in this area would benefit from a mixed design which sees quantitative and qualitative research as complementary and which simultaneously explores meaning, definition, and explanation.

Nevertheless, in spite of its shortcomings, the design was able to establish a meaningful picture of adolescent value change in an effective school. Evidence was obtained for generalisable propositions at the theoretical level and explanation was given which further clarified the limits and potentialities of the school as a facilitator of change.

The use of contrasting schools at two sites enabled the model to examine a parameter of value change. Neither school was a "typical" school in a statistical sense. Their relevance to the broad education community is based primarily on the clarification of principle and the application of theory rather than on the assumption
that there will be analogous situations in other schools which justify an application of the conclusions. In this case, a quantitative methodology was used to explore patterns in data and to develop theoretical ideas related to value change and effective schools.  

13.3 Value change

13.3.1 Affirmation of the value change theory

A value change theory consisting of sixteen propositions was proposed and investigated, and substantial support was found for it. Evidence from RHS and AHS affirmed that students see life in the school from a value's perspective (proposition #1) and that over the course of their enrolment their values change in association with many of the variables which are directly "under the control" of the "school" (#2). If a centrally held value changes (e.g., salvation in this study), the change will have a significant effect on the way in which a number of other values are held (#3,5).

However, for the value to change, it appears that the new or competing value must be meaningful and comprehensible (#6), and the closer the new value is to the one already held by the student, the more likely it is that he or she will internalise it (#4). Each student filters values through his or her personality (#7) and "holds" them differently in the cognitive, affective, conative and behavioural domains (#9) according to a pattern of trait consistency (#10).

Schools have an ability to influence value formation in their students. In fact, it appears they have no choice; by their very nature, they cannot avoid influencing value formation (#11,12). Various elements in the school's environment - particularly those associated with people - affect students differently (#13,16), and over the course of time these modify and develop, which means that schools have an ability to be increasingly effective or ineffective at producing positive value change (#14).

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1On the acceptability of this objective in quantitative research see Hammersley 1995.
13.3.2 Qualifications and implications

In the case of proposition #2 (values change), it was found that parents underwent a cognitive re-ordering of their values and changed their behavioural expectations as their child matured. However, it was also seen that adults did not experience significant value change due to a prolonged stay in another country. Evidence from the RHS survey suggested that the region or area where the parents were raised had an enduring influence on their values. This reinforced the impression that core values were formed in childhood, presumably before these adults were old enough to live abroad as expatriates. This evidence for the malleability of values in young people further strengthens the case for a carefully conceived values education programme in schools.

Propositions #4 and #6 appear to be crucial to effectiveness. From the reports of both the parents and the students at RHS, the students underwent significant positive value change in the cognitive and behavioural domains as the theory predicted (#4,6) given the fact that parents, students, and teachers shared a core value orientation. New, competing values were "meaningful" and "close" to the students' value positions because the basic values orientation was shared by the students, the parents and the "school." The correlation picture which emerged suggested that students who entered feeling their values were similar to the schools' were associated not only with a year long (process) feeling that the school was positive and that people in the school thought like they did, but they also left feeling positive about the school, ready and willing to recommend it, and confident they had learned value lessons.

The parents, teachers, and students at RHS and AHS had striking differences in their core values (i.e., salvation) which resulted in a significant derivative effect (proposition #5) and a discernible but unexplained linkage between various values
(proposition #10, trait consistency). However, the derivative effect of a change in one’s values was not all pervasive nor was there a radical re-ordering of many values close to the core. The evidence from this study was restricted to a derivative effect in cognitive holding although there was provisional evidence (RHS Part B) which suggested that the derivative effect of a value’s re-ordering was more pronounced in the behavioural domain than it was in the cognitive. The nature and extent of this effect remains obscure and in need of full investigation.

In this study the unity and harmony which was observable on the cognitive side of value holding at both schools was not as evident on the behavioural side. It was this dimension about which parents were noticeably opinionated and which differentiated them in many ways. That is, the tendency to positive and negative views of processes was often associated with the position parents took on behavioural standards.

Proposition #7 (individual personality acts as a filter) received support from the results of the Rokeach Value Survey. Each student had a profile reflecting his or her unique characteristics and experiences (age, gender, years in the school, grades in school, and number of friends). The Vernon-Allport-Lindzey Study in Values also suggested that “personality orientations” (e.g., the “social man”) were associated with elements in the value change process. Given this preliminary evidence suggesting that individuals are active rather than passive agents in value formation, more research needs to be done to clarify in broad terms what “effectiveness” meant for individual students. This study focused on school-wide issues. It is apparent from the evidence here that an in-depth study of the individual in the school would reveal much which would benefit those who are seeking to facilitate positive value change in the lives of individual students.
Proposition #8, which held that value change was not equivalent to moral “development,” was not fully investigated and needs independent confirmation. The evidence which did emerge from the DIT suggests that while moral development in the Kohlberg-Rest sense may not be equivalent to value change, it may be linked in some as yet undefined way. Definitions and meanings still need to be clarified before there can be a satisfying confirmation of the proposition.

The frequency study at AHS suggested that the core or central values in a system were given the highest cognitive rank and were the most "liked;" that is, there was a high degree of emotional attachment to them. Values which were peripheral were given the lowest rank on the cognitive scale and were also the least liked. However, even though the connection between the cognitive and the emotional was direct, thereby providing support for the idea that values are held interactively across domains (#9), there were anomalies and fluctuations. Further investigation is needed in order to see if this phenomenon is particularly associated with value change.

There was also evidence for proposition #9 in the variations which occurred in the behavioural domain. A collective “holding” of the same values (cognitively) did not mean the schools existed in a perpetual state of bliss and harmony. Expressions of behavioural value holding created tension particularly when they appeared to tap a core, cognitively held value. However, complete harmony did not appear to be a prerequisite of effectiveness in values education because RHS was clearly held by the parents to be effective in creating positive value change in spite of the disagreement which existed in the behavioural dimension.

The differentiation in ranking given specific values, which occurred in association with the number of years in the school, confirmed that the schools were associated with a unique and changing value profile (proposition #12: schools influence
value formation). The fact that the number of years enrolled in the school had this association follows logically from the students’ and parents’ statements in the locally developed surveys that the school had been responsible for an impact on the students’ values both generally and specifically.

The climate of a school may be “bigger” than the sum of its parts - or at least bigger than those parts which are identifiable and measurable. Nevertheless, there were specific elements in the climate which emerged as potent and within the supervisory jurisdiction of the school (proposition #13: elements in the school’s environment influence value formation in unique ways). Although value differentiation is often associated with non-school factors or factors beyond the control or influence of the school (age, gender, socio economic status, birthplace), this study revealed many associates of value change which were a part of the school’s domain. In general terms, the survey variable “length of time in the school” was associated with distinctive values just as was gender, age, number of countries lived in, religion, and birthplace.

Parents and students agreed that the effective agents of change in the school were people rather than programmes or facilities. Parents felt teachers in the school environment had the greatest positive impact on their child followed closely by the peer group. Conversely, they felt the peer group was the primary source of negative influence. Students tended to give the peer group a higher positive influence rating than did their parents but they agreed their peer group was the greatest source of negative influence followed by the teachers - administrators. Agents which were dynamic in one area were dynamic in the other although not necessarily in the same degree. School policies, extracurricular activities, textbooks, and facilities were all less influential than “people” in the school. This provides evidence for proposition #11 which holds that “values are learned in social environments.”
It follows from this that a school must recognise that it has a significant, unique role to play in the value formation process. While background factors are associated with value formation, the school plays a role for which it is responsible and it should be held accountable for effectiveness in this area just as it is in others, especially the cognitive. The Rokeach value scale or one constructed on its theoretic principles but modified to measure specific values the school seeks to teach, provides one way for schools to assess the role they are playing in shaping student values.

Proposition #15 held that some schools were more effective at creating a climate for value change than were others, but this comparative aspect of effectiveness was not investigated and conclusions about it cannot be drawn from the data. Based on a comparison of school climate indices, the “willingness to recommend question,” the “overall grade” question, and the parents’ responses to questions about the schools’ teaching good values and having an impact on their children’s lives, it would appear that the two schools were both effective but effective with different criteria and definitions in view. Although it would seem to follow logically from the other propositions, the fact that values are contextually based make it likely that meaningful interpretations of effectiveness in creating value change will focus on comparisons within schools (e.g., year to year; classroom to classroom) rather than comparisons between schools.

13.3.3 Summary statement: value change theory

The data from the two site study attests to the usefulness of the value change theory as an explanation of how values change in a school setting. Because values are formed in school in an unavoidable process, those responsible for values education at the local level would do well to structure their programmes and implementation strategies around the propositions which were investigated here. To be an effective
school in the affective domain, it is not enough to feel a commitment to values education, nor is it enough to know which values one should foster. A disproportionate emphasis has been placed on the what and the why of values education. For truly effective education to be undertaken, careful attention needs to be given to the "how" of such an education. This thesis has provided substantiation for a theory comprised of tenets which are transferable. It should enable schools to plan a detailed and practical implementation programme which is both philosophically reasonable and pedagogically sound.

13.4 School effectiveness

13.4.1 The school effectiveness theory

Earlier it was noted that the effective schools research tradition has been severely criticised on methodological and conceptual grounds. This thesis sought to address some of the frequently voiced criticisms. Like a number of recent models, this one used a wide range of input, process and outcome items (e.g., Mortimore et al. 1988). The tendency in past research has been to examine a small number of factors and to consider, for example, academic achievement to be THE measure of effectiveness. Another failure in past research has been the focus on SES background statistics without actually exploring the attitudes and opinions which are thought to be associated with social class characteristics. This thesis placed the emphasis on beliefs and opinions rather than on a statistical designation of wealth or poverty.

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2 The shortcomings of effective schools research which are noted in this section have been catalogued by many working in the field or who are critical of it. For a comprehensive "outsiders" viewpoint, see Jansen 1995. Similar observations from a sympathetic position are included in Purkey and Smith 1982, 1983, 1985; Reynolds and Reid 1985; Gray and Jones 1985; Cuttance 1985a,b; and McNamara 1988.
Some effective schools studies have pointed out the outstanding qualities of exemplary schools and suggested that these qualities were transferable to other schools regardless of the contexts in which these schools operated. This problem was avoided by providing a theoretical basis for the principles of effectiveness and value change which was germane to contexts other than RHS and AHS.

Another problem addressed in this design relates to causal ordering. Critics of effectiveness research, such as Jansen (1995), have frequently pointed out that many studies had as their objective the search for “causes” of effectiveness. This study demonstrates that many of the processes which were associated with “effective” outcomes were themselves positive “contributors” to effectiveness because the outcomes were “first” perceived to be positive. Consequences and causes were thus frequently contiguous.

The inability of this model to avoid aggregation of data to the school level meant that some potential school effects were unobserved. Many researchers (e.g., Reynolds and Reid 1985) have pointed out that the variation of effectiveness within a school is greater than the variation of effectiveness between schools. The problem of aggregation to the school level was partly overcome through an examination of subgroups within the school, such as those formed by gender, years of enrolment, grade level, country of citizenship, parents’ occupation and religion. Nevertheless, a significant area of impact was not observed because data was not collected at the level of the classroom.

On this point, it should be noted that although the surveys were all found to have an acceptable degree of validity and reliability, they were simply satisfactory within the limited sphere in which they operated. They did not explore all the frontiers of value change in school attending adolescents. Their scope was limited and
additional research with new variables needs to be undertaken if a full picture of effectiveness in the affective domain is to emerge.

13.4.2 Discussion and implications

13.4.2.1 Clarified vision: a sense of purpose

Both AHS and RHS were schools which had clarified and communicated their values to the public. Parents and students alike felt they knew what the schools stood for and endorsed the vision which was communicated to them. While it may appear obvious and trivial, it is worth noting that the "schools" had to know their values, at least at a policy level, before they could publicly communicate them effectively. This finding provides evidence for the reasonableness of those who have argued that values in the school must be articulated and openly declared if proper transmission is to occur (Everard 1993; Wilkins 1992; Marfleet 1995; Evans 1993; Deakin 1992). Some, such as Christopher Ormell (1993), have suggested that educational inspectors should be required to ascertain if a school was "operating with a distinct, clearly understood, set of Values" (p. 42). He goes on to argue that this would enable students to come into contact with "genuine Values" and to see them "in operation, feeling their impact, understanding what they do for people, what they mean" (p. 42). Lord Northbourne's amendment to the Education Bill 1992 required that schools "publish information describing the values upon which education in the school is based, and the matter in which pupils' spiritual, moral and cultural development is achieved" (in Wilkins 1992, p. 21). It may be, however, that when schools are legislated to know and communicate their values, the game is lost. For these two effective schools, legislation was not the motivating force and one suspects that values cannot be taught or communicated if they are not "held," and if they are held, then one does not need a government dictate to tell you to communicate what you truly believe.
13.4.2.2 Ownership and inclusion: a sense of community

Clarified and communicated values fostered a shared vision which was a hallmark of both RHS and AHS. Parents and students supported the school from its rules and regulations to its philosophy and curriculum. There was a sense of community which pervaded the institutions and resulted in a consistently positive attitude even when there were elements in the environment (e.g., facilities, school counsellors) which were seen to be deficient. Other researchers have discovered a shared culture and a sense of mission to be operative in effective schools (Chittenden 1993; Mortimore 1994; Slee 1994; Burns 1995; Bangs 1995).

Because schools can be associated with a unique value profile, it appears that two principles of effectiveness are a self-conscious awareness of the values which are distinctive to the school and a commitment to work together as a community to pursue the values. This finding supports Nicol’s (1994) assertion “that the whole school must be involved [in promoting spiritual and moral development] through a shared ethos...there is a need for collective agreement on codes and standards of behaviour that reflect the needs of the whole community” (p. 95).

.1 School staff

Unfortunately the RHS and AHS staff response rates were low and their representativeness unknown. On the evidence which did emerge, the staff appeared to be highly supportive of the school’s goals and objectives (e.g., handbook support). In one case it appeared that lack of full support for the handbooks was particularly associated with students lack of support for the rules. In other words, when the staff did not show solidarity with the “school,” it appeared the students were particularly unsupportive of the rule. This lends support to the conclusions drawn by Murgatroyd and Morgan, (in Evans 1993, p. 11): “the first critical component of Total Quality
Management...[is the] ‘alignment and commitment to a shared vision’, in a culture where ‘there is a great deal of ownership for the goals of the organisation among and between all staff.”’ However, the causal connection certainly was not established. It may very well be that those staff members who did not demonstrate solidarity on a rule were influenced by the students’ opinions rather than the converse.

.2 Parents

Parents agreed on the nature and importance of a cluster of core values. With it came a shared values orientation which was associated with a belief the school had positively impacted the students in both the cognitive and affective domains. Other researchers have also found that where there is “convergence between the culture of the school and the culture of the family” children are more likely to succeed (Walker 1995). This suggests that effectiveness is associated with parents and teachers operating in complementary and supporting roles (cf., Mansfield 1995; Smith 1995).

It is widely recognised that home background factors play a key role in success at school (e.g., Roebben 1995; Pierce 1994; Croll 1995). Background factors related to home life were associated with unique value profiles at RHS and AHS but those factors which were particularly associated with effectiveness in the affective domain, as defined by positive opinions about school processes and outcomes, were not those factors which categorised occupation, educational background, or religion. There was no statistically significant relationship between the parents’ feeling that the school’s philosophy was similar to theirs and their age, income level, years in the host country, gender, country of citizenship, occupation, the grade level of their children, or the number of children enrolled. In other words, milieu input items did not have a significant relationship to the philosophic identity which parents had with the school.
It would seem from this that success in school would more likely be enhanced by creating a school community with a common mission and values objective than it would be by equalising educational provision. Incomes were low at RHS but it appeared equally effective in both the cognitive and affective domains. The common characteristic between the two schools was not economic equality but focused communities which identified with the school’s values and mission. For parents, it was “their” school.

3. Students

In many respects the same could be said of the students. They, too, felt that the school was “theirs.” By this it is not meant that the students thought the same as the adults - differing value profiles verified this - nor did it mean that “everyone in the school thought pretty much like they did,” or that students “ran” the school.\(^3\) However, they did feel that they entered the school with values similar to it and throughout the year they claimed to have been involved in its programmes. Above all, they were willing to recommend their school to others and to give it a good overall grade. Other researchers have likewise discovered that when students identify with their school and feel that their concerns and opinions are important, positive academic and behavioural outcomes result (e.g., Irving and Parker-Jenkins 1995; Fraser 1989). In the words of Tock Keng Lim (1995), students “who are congruent in a setting see the setting more positively and function better in it.”

Both schools seemed to operate intuitively with the ideas of propositions #4 and #6 in mind. They enrolled students who wanted to be there and who thought the school held their value position. This made it possible for the schools to operate in a climate where change was likely to take place (#4: the closer a competing value is to

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\(^3\) On the futility of enshrining student rights see Barrow 1995.
the one held by the individual, the more likely it is that he/she will internalise it; 
values must be potentially meaningful if they are to be internalised). In short, these 
schools enrolled students who were generally predisposed to look favourable on the 
school’s influence.

Most students are not educated privately so generalisations about enrolment 
policies to the public sector cannot be made. However, even in a publicly funded 
educational setting the local school must be given the ability to create a shared vision 
with the local community. A state imposed values agenda will not be effective because 
values can only be taught if they are valued and government dictate has not proven to 
be an effective means of making people hold something to be valuable when they are 
not predisposed to do so. Therefore, with few exceptions, the values agenda needs to 
be created at the local, school community level.

On a related matter, results from the correlation study revealed that milieu 
input features of organisational climate, at least as defined by such standard inputs as 
age, multi-cultural exposure, gender, parents’ occupation, and citizenship, were not as 
active in the VCES model as were atmospheric climate inputs, including, in particular, 
the students’ perception that their parents supported the school and that their personal 
values were similar to the schools when they first enrolled. It may be that when the 
focus is on affective outcomes and effectiveness is defined primarily by parents and 
students and away from the cognitive domain and the expectations of governments and 
special interest groups, milieu inputs are less valid as predictors of effectiveness. Once 
again, this argues for the devolution of authority and responsibility to the local school 
level.

13.4.2.3 Impacting adolescents: a sense of accomplishment

1 The role of the school
Earlier it was noted that Mortimore et al. (1988) published their large scale study of school effectiveness under the title, *School Matters*. Both students and parents at RHS and AHS believed their institution "mattered." It was seen to have an effect on students' behaviours, beliefs, and achievement. While standard input factors such as gender, parents' occupation, and citizenship were occasionally associated with outcomes, school based factors including the teachers, the school peer group, the curriculum, the school administration, the board, and even the facilities, were all associated in some way with positive change in the affective domain.

One could argue that this linkage between the school processes and outcomes was purely subjective and that parents and students could have been deluded into perceiving an effect which did not exist. While this may have been the case, the fact that the phenomenon existed in two very different schools suggests that perceptions of reality have a powerful predictive capacity. If parents and students believe that teachers are having an impact on them, it seems difficult to imagine gathering data which would counter the claim without doing violence to what the parents and students "mean" by the concept "having an impact." Nevertheless, because the correlates were subjective (e.g., to students: "I would recommend the school to others," or "I believe my parents are supportive of the school") meanings are obscure and a complementary qualitative study would be useful in ascertaining what students and parents meant when they stated their opinions.

The fact that the school was found to be potent and influential corresponds to the findings of others working in the field. For example, Mortimore (1994) found that student progress in school is primarily influenced by the school, not the home background. David Galloway (1995) found that the school's contribution to within school behaviour exceeded that of other factors, including home background. These
results lend support to the underlying assumption of the 1988 Education Reform Act which held that schools could contribute significantly to student development in the affective domain (see also, e.g., Trainor 1995).

.2 The peer group

Earlier in the chapter it was noted that the primary vehicles of value change were personal agents operating in the school. Both parents and students felt that they had been more influenced positively and negatively by the social environment than by the school’s ecology (physical variables) and its formal and informal system of rules. Friends and peers were seen as both the most positive and the most negative source of influence in the schools. Teachers were the second most potent source of influence, both positively and negatively, while administrators tended to be seen as having little positive influence but capable of considerable negative influence. This finding concurs with others who have observed that “the most powerful mode of learning for teenagers is their friendship and peer groups” (Walker 1995). Effective schools would seem to be those which work with this fact and include students in the school community as vital contributors. It is also possible that specific programmes can be developed to allow the peer group to provide positive input into the lives of their colleagues. For example, in one case (Wanneroo Senior High described by Graham 1991), peers were used to complement and enhance the school’s pastoral care programme. Given the key role played by the peer group, schools would be well served by the research community if more work was done on harnessing the potential for good which lies dormant in most schools.

.3 The school staff

The other major source of influence at the school level was the staff. Parents and students both identified the staff as influential in value formation. In the case of
students, those who tended to see the staff as the greatest positive source and the peer group as the most likely negative source of influence tended to be those who saw the school as effective for them. Once again this reflects the findings of other researchers who have seen the dynamic role played by teachers who model the values they are seeking to teach (Nicol 1994; Kelsey 1994; Ingram 1995; Ryan 1985). In actual fact, one wonders how someone can teach persuasively what one does not hold to be true and if one holds a value to be true then it will be held interactively in the behavioural and affective domains as well as in the cognitive domain. Even though the staff as a whole felt strongly committed to the handbook rules, there was evidence at AHS that the minority’s lack of clear support may have fostered divergent thinking amongst the students and led to a decrease in support for the handbook and its provisions.

Galloway (1995) and others (e.g., Mortimore 1995) have found individual teachers and the social ethos to be particularly efficacious in dealing with disruptive behaviour but it still remains to be seen what the modelling role of the teacher means to the individual student. Why is the teacher such a potent force for change? While the teacher’s impact supports the contention that values are learned in a social environment - and so the “big” answer exists at the theoretical level - the meaning of this at the personal level remains obscure. Hidden factors of an influential nature may be present (Hailstone 1994). Once again, a complementary, qualitative study would be helpful in uncovering what it meant for the teachers and the peer group to be influential in the lives of the individual student. From such a study patterns could be established which would be useful to teachers who wish to maximise the benefits of the role they play while simultaneously allowing the school community to evaluate their effectiveness as a teacher in this realm.
Positive ratings for school leadership were associated here as elsewhere (Mortimore 1994) with a high esteem for the school and its programmes. An effective administration was particularly associated with high behavioural expectations and clear public statements to the community about the school’s values, goals and objectives.

4 The climate

The climate construct most completely encapsulates what social learning theorists would consider to be the locus of school effect on values. Earlier it was noted that classroom effects were not measured in this study. Consequently, a significant portion of the school impact was not assessed except to say that the school staff was a major source of influence in the school. Rossiter (1994) and others have noted that the teacher is the dominant influence on classroom behaviour and motivation. But he goes on to say that outside the classroom, the dominant influence appears to be the social ethos of the school. The evidence here supports this and attempts to classify the effect along two major lines, atmospheric climate and organisational climate.4 Atmospheric climate appeared to be more related to effectiveness in the values domain but additional research of a definitional nature needs to be undertaken to justify the distinction between these two aspects. As was said earlier, the distinctions established by the VCES model occasionally appeared arbitrary, particularly as they sought to incorporate causation and time sequence.

In spite of the inadequacies of the model, the data revealed that climate was a frequent correlate of student and parent perceptions of effectiveness in the affective domain. Those who felt the school had a positive climate tended to be those who also

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4 Organisational: comprises ecology (climate created by physical variables), milieu (climate created by individual background characteristics) and social system (climate created by patterns of rules of interaction); atmospheric climate: comprises the school culture (norms, beliefs, values, meanings, etc.).
believed that the school was a good place to be when compared to other schools ("recommendation," "overall score"), as propositions 14 and 15 suggested would be the case. Indeed, a student's perception that the school had a positive climate was found to have a direct positive relationship with virtually all the other items explored in the surveys. While this does not prove that some schools are more effective at creating a climate for positive change, it does clearly indicate that the school's climate is an outstanding correlate of positive change and raises serious doubts about the ability of a school to promote positive change when students do not perceive the school to have a positive climate. This point could be clarified by further study using schools which have less positive climates than AHS and RHS although considerable support already exists for association between a positive climate and effective moral educational programmes (Schremer 1992; Lim 1995; Pierce 1994).

One of the dominant features of the climates in both schools was the emphasis placed on achievement. In the case of RHS the emphasis was binary in nature in the sense that achievement was encouraged and equally expected in both the affective and the cognitive domains. Students and parents perceived the school to have high expectations in both areas. The parents' primary reason for sending their children to the schools was their conviction that high achievement would result and that careful monitoring of progress would take place. The emphasis on achievement and its corollary, high expectations, are two principles which have been widely recognised as endemic in effective schools (Mortimore 1994). Such a conclusion comes perilously close to prescribing a formula for success. However, the principle of goal orientation and focus on achievement is still something which must be articulated at the local level.

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5 Proposition 14: "Some school environments are more conducive to value change than others;" proposition 15: "Some schools are more effective at creating a social environment/climate for value change than are others."
Its meaning and relevance are contextually based. Furthermore, their existence is closely wrapped up in the very definition of effectiveness. How can an institution be considered "effective" if goals are not achieved?

In this study organisational climate appeared to be less associated with effectiveness in the affective domain than atmospheric climate. It may be that this is not a generalisable principle. Jansen (1995), for example, has pointed out that many studies conducted by the World Bank demonstrate "the significance of textbooks and other 'material inputs' as factors in explaining school achievement." What this is probably saying, however, is that there is an "ecological" threshold which schools need to cross; once it is crossed its role in improvement becomes negligible. Further research would be helpful in verifying the existence of an ecological threshold which schools must cross if they are to be "effective," and then to define the threshold in terms of needs in the First and Third World. Less plausibly, his findings may reveal that organisational climate is more important for academic achievement than is atmospheric climate. Further research is also necessary to clarify possible elements in a climate or climate "types" which are particularly associated with achievement in the cognitive domain as opposed to achievement in the affective domain.

.5 Outcomes

In keeping with a perceived need in the effective schools research community, this study focused on a range of outcome measures in order to tap affective outcomes rather than just those associated with academic achievement. Creemers and Reynolds (1989) have argued that the "continued use of academic development measures as if they reflected all areas of students' development can no longer be defended" (p. 381). One of the reasons they took this position was that "multiple outcome indicators have often shown a surprising degree of independence." On one level this was found to be
true in this study, while on another it was not. All the outcomes appeared to be linked together in the sense that parents and students who saw the school as achieving positive outcomes in one area tended to see positive outcomes in other areas and in other domains (i.e., the cognitive, behavioural, and affective domains). Those who felt the school had been effective in the values domain were those who understood and endorsed the school’s values, who were supportive of the school, who enjoyed it, who believed the school was a potent instigator of change, and who saw the changes as positive. Such a linkage in perspectives has been discovered elsewhere and has led Anderson (1985) to speak of “a halo effect” between the various variables. At this level, therefore, the evidence from AHS and RHS does not support the notion that multiple indicators show independence.

However, there was a distinction between correlates of academic achievement and other forms of achievement in the school and it is here that independence was established. In chapter nine it was noted that at AHS no significant correlation was found between achievement and many of the factors which were related to the value change process. In this regard, academic achievement stands in contrast to two other prominent outcomes assessed in these surveys: the students' willingness to recommend the school and the students' overall score for the school.

There was also evidence which suggested that effectiveness at these schools was not a black and white issue. Like Shorter (1995), whose “recommenders” saw specific points they did not appreciate in the school, students at AHS and RHS felt their schools were more effective at teaching some values than they were others and some students benefited more from the “school’s” conscious and unconscious approach to teaching the values. While further study is needed to substantiate this, the preliminary evidence suggests that a school’s effectiveness, as measured by the
students’ willingness to recommend their school, transcended the “positive feelings” they sensed in the school. In the minds of the students, having a “happy school” was not as associated with the school’s overall quality and their willingness to recommend it, as was their conviction that it had high expectations. This appears to justify the use of the two questions, “Would you recommend your school to others?” and “What overall grade would you give your school?” as effective synthesisers of positive and negative experiences associated with the schools. Shorter (1995) employed a similar recommendation question and also found tentative evidence for the belief that the question did in fact probe an aggregation of feelings and experiences. This study confirmed his conclusion that recommenders and non-recommenders both found positive and negative elements in the school. However, the definite impression here was that those who recommended the school tended to be those who felt positive about virtually all aspects of it.

13.5 Conclusion

This thesis began with the question: Is there value change in adolescents attributable to the influence of the school and, if so, can the shift be quantified and explained? The evidence from RHS and AHS indicated a significant value change occurred which was attributable to the school, and that the change was explainable within the terms of a values change - effective schools model. Quantification of the change, however, appeared to be an elusive quest, at least at the school level.

Explanation for the value change did not emerge as a cause and effect phenomenon, but as an interaction amongst a complex network of change factors which did not operate in a mechanical framework. A satisfying model of effectiveness must take into account the network essence of the value change phenomenon, with each pathway serving an independent and dependent function. Although no formula
was found for school effectiveness in the affective domain, a theory of value change in
the context of a school environment did emerge. With the insight that it brings, policy
makers can plan programmes and develop strategies which have meaning at the local
level. The two schools in this study, which were effective at creating both positive
value change and other desirable outcomes, were ones which were in tune with their
clientele and their local constituency. A perception of school community existed which
was based on a common value’s orientation and definition of effectiveness.

Effectiveness in these contexts did not mean that both schools shared the same
“quality” of inputs, the same approach to processes, or the same definition of desirable
outcomes. Rather, they shared a common sense of ownership and purpose. Funding
equality and resource distribution (i.e., material inputs in the organisational climate)
may help some schools improve performance in the affective domain but the evidence
here is that these characteristics in themselves are not important aids in creating
effectiveness. One can well imagine that programmes which attempt to create equality
actually create discord and ineffectiveness because of the intrusion of marginal
“stakeholders” into the local educational environment. Problems would appear to be
inevitable when an agency external to the community decides what values are to be
taught and what outcomes are to be prescribed as essential for effectiveness.

The absence of these external interest groups and the presence of community
harmony and initiative appeared to be prominent features of effectiveness in these two
sites and it seems likely from the evidence here and elsewhere that this characteristic
would be true in other settings as well. As Mortimore (1994) put it, “The best people
to help a school improve are those who work in the institution itself” (p. 7). One
implication of this is that policy makers need to invest decision-making authority and
accountability as close to the point at which “education” occurs as is possible. In the
words of the former US Secretary of Education, William Bennett (1992), "We should give superintendents greater authority to run their districts; give principals greater autonomy to run their schools, and teachers greater authority to run their classrooms; and then hold them all accountable for the results they achieve" (p.63).

As others have observed, effectiveness needs to be defined locally (Rose 1995; Creemers and Reynolds 1989; Bangs 1995; MacBeath 1995). While there are those who would disagree, claiming that the "market" is unfair and discriminatory because "some individuals are better able to exercise [their] rights than others" and education is not an individual activity but a state (society wide) activity (Graham 1994), the evidence here suggests that far more attention needs to be paid to the needs, aspirations, and distinctives of the local community than has been the case over the last thirty years of research into school effectiveness. Fiske has observed that improvements in school effectiveness which originate at the local level are analogous to a "dozen people trying to modernise an old car" (Fiske 1991, p. 247). However, the revolutionary change which he seeks will not be found in a nationally re-tooled factory which employs a common productive mode but in the empowerment of the local school where society at large only intervenes in areas of the affective domain which are essential for the survival and prosperity of the larger community.

Mortimore (1994) lists eleven "likely reasons as to why some schools are more influential than others." Most of them were identified in this study and all tended to operate in accord with each other. In other words, effectiveness was endemic, and the factors which the schools determined and defined to be effective crossed over domains from the cognitive to the affective, coalescing to form an effective learning environment which had significant impact on the values of those adolescents who attended them.
APPENDIX ONE

Instrument: AHS Parent Survey
Administration: Spring 1992
Parent Survey 1992

In the questions which follow, please circle the answer which BEST reflects your opinion or situation.

PART A Demographic Descriptors

1. Age
   1. 20-29 2. 30-39 3. 40-49 4. 50+

2. Sex
   1. Male 2. Female

3. Country of citizenship
   1. United States or Canada
   2. A Latin American country
   3. A Western European country
   4. An Eastern European country (former Warsaw Pact)
   5. A Middle Eastern/North African country except Israel
   6. An African country (Nigeria and south)
   7. Oceanic including Australia
   8. Israel
   9. Japan
   10. India
   11. Other Asian country

4. What is the occupation of the principal wage earner in the household?
   1. Professional
   2. Business
   3. Clerical and Sales
   4. Manual Laborer/farmer
   5. Non-labor force
   6. Undesignated

5. Optional
   What is your annual household income in Swiss francs?
   1. Below 40,000 2. 40,000 - 65,999 3. 70,000 - 99,999

6. How many children do you have enrolled in school, 1991-1992?
   1. 2 2. 3 3. 4

7. How many school years has your child attended (in the case of more than one child add the years for each separately; round off partial years, including 1991-92)?
   1. 3 2. 4 3. 5 4. 6

8. Marital Status

9. How long have you lived in?
   1. 1 year or less 2. 2-4 years 3. 5-8 years 4. 9+

10. In which grade(s) is (are) your child (children) in school?
    1. 1 2. 2-4 3. 5-8 4. 9+

   a. Your child (children) is (are) in the Middle School
   b. Your child (children) is (are) in the High School

PART B School Issues

Using the rating scale below, indicate your feelings about various aspects of

A - Outstanding, excellent
B - Very good
C - Satisfactory
D - Fair, needs improvement
F - Poor, needs significant improvement
NP - No opinion

1. The school facilities
2. The School Board
3. The administration
4. The academic program
5. The teaching staff
6. The counseling services
7. The extra-curricular program
8. (clubs, sports, music, etc)
9. The support staff
10. (secretaries, custodians, etc)
11. Overall grade

For the next group of questions, use the following rating scheme:
SA = Strongly Agree
A = Agree
D = Disagree
SD = Strongly Disagree
NP = No opinion

In questions which refer to your child's interaction with the school, please respond with a general assessment that summarizes the experience of all children currently attending the school.

10. I sent my child to because it was a financially attractive option.
11. I sent my child to the most conveniently located school.
12. I sent my child to because it had a good academic reputation.
13. I sent my child to because it was an American International school.
14. I sent my child to because my child wanted to go to school.
15. My child's educational philosophy is similar to mine.
16. Offers my child an attractive social environment.
17. Teaches my child good values.
18. I like the way teachers teach at the school.
19. Preparing its students well for the future.
20. The teachers positively influence my child's values.
21. The school's policies and regulations positively influence my child's values.
22. My child's peer group at school positively influences my child's values.
23. Asks my child to work too hard.
24. Has high expectations for good behavior.
25. Thinks about life.
26. Should a parent assume the greater responsibility for teaching proper values to his/her child?  
   SA = Strongly Agree  
   A = Agree  
   D = Disagree  
   SD = Strongly Disagree  
   NP = No opinion

27. Does a good job of teaching citizenship to its students?  

28. Are the consequences for misbehavior appropriate?  

29. Teachers recognize the individual learning needs of their students.  
   SA = Strongly Agree  
   A = Agree  
   D = Disagree  
   SD = Strongly Disagree  
   NP = No opinion

30. My child enjoys attending school.  
   SA = Strongly Agree  
   A = Agree  
   D = Disagree  
   SD = Strongly Disagree  
   NP = No opinion

31. I have confidence in the leadership provided by the school administrators.  
   SA = Strongly Agree  
   A = Agree  
   D = Disagree  
   SD = Strongly Disagree  
   NP = No opinion

   SA = Strongly Agree  
   A = Agree  
   D = Disagree  
   SD = Strongly Disagree  
   NP = No opinion

33. My child effectively develops tolerance for others.  
   SA = Strongly Agree  
   A = Agree  
   D = Disagree  
   SD = Strongly Disagree  
   NP = No opinion

34. Is your child involved in the life of the school?  
   SA = Strongly Agree  
   A = Agree  
   D = Disagree  
   SD = Strongly Disagree  
   NP = No opinion

35. What grades do you think your child will receive in his/her final report for the year (estimate the oldest child if more than one attends the school)?  
   1. All A's  
   2. Mostly A's  
   3. All B's  
   4. Mostly B's  
   5. All C's  
   6. Mostly C's  
   7. Mostly D's or lower  
   8. No idea

36. Which of the following values would you rate as the MOST important for you to teach or model (circle only one)?  
   1. Respect  
   2. Wisdom  
   3. Friendship  
   4. Inner harmony  
   5. Health  
   6. Justice  
   7. Beauty  
   8. Equality  
   9. Freedom  
   10. Piety  
   11. Order  
   12. Sense of purpose

37. Using the same list as above, which of the following values would you rate as the LEAST important for you to teach or model?  
   1. Respect  
   2. Wisdom  
   3. Friendship  
   4. Inner harmony  
   5. Health  
   6. Justice  
   7. Beauty  
   8. Equality  
   9. Freedom  
   10. Piety  
   11. Order  
   12. Sense of purpose

38. From the list of personal qualities below, which would you rate as the MOST important for you to foster?  
   1. Intelligence  
   2. Capability  
   3. Cleanliness/neatness  
   4. Courageousness  
   5. Tolerance  
   6. Creativeness  
   7. Independence  
   8. Love  
   9. Obedience  
   10. Responsibility  
   11. Self-control  
   12. Commitment to excellence

39. Using the same list as above, which personal qualities would you rate as the LEAST important for you to teach or model?  
   1. Intelligence  
   2. Capability  
   3. Cleanliness/neatness  
   4. Courageousness  
   5. Tolerance  
   6. Creativeness  
   7. Independence  
   8. Love  
   9. Obedience  
   10. Responsibility  
   11. Self-control  
   12. Commitment to excellence

40. If you were to find increased funding of 25%, on what should it be spent?  
   1. Facilities  
   2. Academic programs  
   3. Extra-curricular activities  
   4. Lowering tuition rates

41. If you were to find that revenue decreased by 25%, what should the principal cuts be made in?  
   1. Facilities  
   2. Academic programs  
   3. Extra-curricular activities  
   4. Other

Sentence answer:
42. What do you like most about the school?  

43. What do you think is the biggest problem with which you must deal?

Thank You  
May 1992
APPENDIX TWO

Instrument: RHS Parent Survey
Administration: Spring 1991

Those sections from Part B which were not used in this research project have not been included in the appendix.
Part A
The following questions are intended to help us categorize the data in the rest of the survey. Please answer the questions as they relate to you in May, 1991.

1. Age
   - 20-29
   - 30-39
   - 40-49
   - 50+

2. Citizenship
   - American
   - Canadian
   - French
   - German
   - British
   - Dutch
   - Finnish
   - other European
   - Middle East
   - other

3. In which of the following countries have you lived for a total of five years or more?
   - Austria
   - France
   - Holland
   - Libya
   - Canada
   - Belgium
   - Germany
   - Italy
   - Spain
   - US
   - Switzerland
   - Turkey
   - Other European
   - Other Middle East
   - Other

4. What is your current occupation?
   A. Missionary (check the ONE which represents your principal responsibility)
      - Church planter
      - Administrator
      - Teacher
      - Secretary
      - Housewife
      - Musician
      - Evangelist
      - Office/clerical
      - Media
      - Consultant
      - other(specify)
   B. Non Missionary
      - Engineer
      - Teacher
      - Labourer
      - Housewife
      - Lawyer
      - Executive
      - Secretary
      - Accountant
      - Media
      - Entrepreneur
      - Office/clerical
      - other(specify)

5. Optional
   What is your annual gross salary in US dollars?(in the case of homes where both parents receive salaries, please indicate the combined gross income of both parents.)
   - $10-19,000
   - 20-29,000
   - 30-49,000
   - 50-69,000
   - 70,000+

6. How many years of education have you had? (Check the highest appropriate category).
   - Elementary (grades 1-8)
   - Lower secondary (grades 9, 10)
   - Upper secondary (grades 11, 12, 13)
   - Post secondary (1-4 years)
   - Post secondary (5, 6 years)
   - Post secondary (more than 6 years)

7. How many children do you have?
   - one
   - two
   - three
   - four
   - five +

8. a. How many years has (have) your child (children) attended counting 1990-91 as a completed year?
   - 1st child
   - 3rd child
   - 2nd child
   - 4th child

b. In what grade level is your child?
   OPTIONS
   A. Elementary (1-6)
   B. Middle (7,8)
   C. Secondary (9-12)
   ANSWERS
   - 1st child
   - 2nd child
   - 3rd child
   - 4th child
9. Why did you send your child (children) to ' ? Please select the reason which is MOST appropriate and place it beside your child (children) and indicate how important the reasons were for you using a scale of 1-5.

REASON
A. was the most financially attractive option
B. was the most convenient school for me
C. had a good academic reputation
D. 's philosophy of education was compatible with mine
E. offered my child an attractive social environment
F. offered a chance for my child to grow spiritually.
G. offered extracurricular opportunities
H. offered an attractive curriculum
I. had an attractive pedagogic style (the way teachers teach)
J. offered an English language program
K. prepared students for North American culture
L. Other (specify ____________________________)

ANSWER
First Child Second Child Third Child Fourth child

10. The ten reasons listed in question 9 are listed below by letter and brief description (the letter refers back to question 9). Please indicate on a scale of 1 to 5 how important these factors were to you when you enrolled your children.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Very Important</th>
<th>Very Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Financially attractive</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>B Conveniently located</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>C Academics</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>D Philosophy</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>E Social</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>F Spiritual</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>G Extracurricular</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>H Curriculum</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>I Pedagogy</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>J English</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>K N.A. Culture</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>L Other</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

11. On a scale of 1-5, please indicate how important your child's willingness to go figured into your decision to send him/her.

<table>
<thead>
<tr>
<th>Child</th>
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<tr>
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<td>2nd child</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>3rd child</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4th child</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

12. What grades do you expect your child to receive at year's end?

OPTIONS
A. All A's
B. Mainly A's with some B's
C. All B's
D. Mainly B's with some C's
E. All C's
F. Mainly C's with some D's
G. All D's
H. Very low expectations, or I don't care

ANSWERS
_____1st child _____2nd child _____3rd child _____4th child

13. Where does your child live?

OPTIONS
A. In the residences
B. At home with parents
C. In a home other than parents
D. Combination of the above

ANSWERS
_____1st child _____2nd child _____3rd child _____4th child
Part B

Many of the questions in Part B reflect issues unique to our residential program. Parents with students living at "home" or younger than the questions assume, please answer as though your child were older and in residence at . The descriptions in Part A will allow us to analyze the data according to the age and status of your child(ren).

Section 2

Below are 29 questions which reflect how you view modern technology and a variety of social issues which have particular significance to because it is a residential school. Please circle the letter which most accurately describes your situation when your family is not separated by boarding at (in cases where students are not in residential facilities, please answer with a normal school week in mind).

10. How many movies in a year do your children see in a movie theatre?

OPTIONS
A. I do not allow my child to attend a movie theatre.
B. 1-4 C. 5-9 D. 10-14 E. 15 +

ANSWERS
___ 1st child ___ 2nd child ___ 3rd child

11. Rate the following according to its importance when you evaluate a film.

<table>
<thead>
<tr>
<th></th>
<th>very unimportant</th>
<th>very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nudity</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Violence</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Sex</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Subject matter</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Occult</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>New Age</td>
<td>1 2 3 4 5</td>
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</tbody>
</table>

19. Would you allow your son(s) or daughter(s) to wear T-shirts or other clothing that are emblazoned with a product, a group, or message that reflects a posture in conflict with Christian standards?

A. Yes, this is my child's decision
B. Yes, but I do not always approve
C. No

20. Would you allow your son(s) or daughter(s) to put up posters on his/her bedroom walls that are emblazoned with a product, group, or message that reflects a posture in conflict with Christian standards?

A. Yes, this is my child's decision
B. Yes, but I do not always approve
C. No

21. Below are a series of statements about hair (not facial) which have a bearing on policy. Please indicate to what degree you support the following statements by selecting a number in the OPTIONS list and placing it on the lines in the ANSWER list.

OPTIONS

ANSWERS
___ A. Hair should be worn any way the students wish
___ B. Hair should be neat and clean
___ C. Hair should only be the natural color
___ D. No part of a boy's hair should be shaved
___ E. Hair style reflects inner spirituality
___ F. Boys should be permitted to wear an ear ring(s)
___ G. Boys' hair should not be over the ears or the collar
PART C

The following questions are intended to help us understand how you view the non-academic, value dimension of our educational programme. It is NOT a test of your personal knowledge or commitment to ("here refers to the entire programme - school, residences, church, extra-curricular). By sharing your reflections, you will assist the school in its effort to function as effectively as it can.

The respondent on this copy of PART C is Male Female

Directions: There are four short sections to this instrument; please respond to each statement by circling the number of the response which most accurately describes your perception. Use the following definitions to guide your evaluations:

"Strongly agree" = you whole-heartedly concur with the statement
"Agree" = you are of the same opinion as the statement
"Undecided" = you cannot say for sure that you support it
"Disagree" = you do not believe the statement is accurate
"Strongly disagree = you definitely do not believe the statement
"No obs." = no observation which enables you to form an opinion

SECTION ONE

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly</th>
<th>Disagree</th>
<th>No obs.</th>
</tr>
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<tbody>
<tr>
<td>1. shares my values</td>
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<td>2. is consistent in its beliefs</td>
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<td>3. Values are taught at</td>
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<td>4. The curriculum has had a significant impact on my child's (children's) values..</td>
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<td>5. Administrators have effectively communicated the values</td>
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<td>6. The publications make frequent and clear statements about the institution's values and what it stands for...</td>
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<td>7. The institution's values are reflected in the physical facilities of the school (classrooms, building, resources)</td>
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<td>8. The values and beliefs of are well known to the community, parents, and students...</td>
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<td>9. consistently adheres to its values, even in times of adversity...</td>
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<td>10. The value system at changes from year to year...</td>
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<td>11. 's actions are consistent with its beliefs...</td>
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<td>12. has high academic expectations for its students...</td>
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<tr>
<td>13. has high non-academic expectations for its students...</td>
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<td>14. The staff at support the values of the school...</td>
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<tr>
<td>15. provides its students with a safe, comfortable, positive environment...</td>
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<td>16. offers its students a high quality of instruction...</td>
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<td>17. devotes enough time to the teaching of values...</td>
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<tr>
<td>18. devotes enough time to the teaching of academic skills...</td>
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<td>19. The staff at are motivated and committed...</td>
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<td>20. does a good job of training its staff...</td>
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</tbody>
</table>
21. Has a clear conception of its goals and objectives. 
22. Regularly monitors its students' academic development. 
23. Regularly monitors its students' moral development. 
24. The leaders of provide strong leadership. 
25. There are a lot of values taught at that the institution does not realize it is teaching. 

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No obs.</th>
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</table>

SECTION TWO

1. I have a clear understanding of the values is teaching my child/children. 
2. I endorse all the values my child (children) is (are) learning at. 
3. I have seen a marked change in my child's behaviour which I attribute to the influence of:
   a) First child (years at )
   b) Second child (years at )
   c) Third child (years at )
4. The changes you have seen in your child which you attribute to the influence of have been "positive". 
5. My child (children) first attended with a value system which closely reflected that of the school:
   a) First child
   b) Second child
   c) Third child
6. Academically my child has done well at:
   a) First child
   b) Second child
   c) Third child
7. My child has learned a lot of "positive" values at:
   a) First child
   b) Second child
   c) Third child
8. My child has learned a lot of "negative" values at:
   a) First child
   b) Second child
   c) Third child

PAGE - 9
### SECTION THREE

Below are two lists of values. Beside the list of values please indicate on a scale of 1 - 5 in column one how important you feel the values are; in column two please indicate on a scale of 1 - 5 how effectively you feel is teaching these values.

#### List A

<table>
<thead>
<tr>
<th>VALUE</th>
<th>SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nadu (eternity)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Respect</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Wisdom</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Friendship</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Love of God</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Inner harmony</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>(Integrated world view)</td>
<td></td>
</tr>
<tr>
<td>Beauty</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Sense of purpose</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Recognition</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Joy (happiness)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Equality</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Freedom</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Health (fitness)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Piety</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Order</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Justice</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Production</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>(effective, involved)</td>
<td></td>
</tr>
</tbody>
</table>

#### List B

<table>
<thead>
<tr>
<th>VALUE</th>
<th>SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligent (academic)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>capable</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Clean/neat</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Courageous</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Helpful</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Creative</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Independent</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Loving</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Obedient (authority)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Responsible</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Self-controlled</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>(self-disciplined)</td>
<td></td>
</tr>
<tr>
<td>Future (goal) oriented</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Individualistic</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Committed to excellence</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Co-operative</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
SECTION FOUR

In the two questions below there are a list of "agents", or factors which may have had an impact on your child's (children's) values.

1. Rank in importance the agents which appear to you to be positively influencing your child's values while they were at

   ______ Teachers
   ______ School policies
   ______ Textbooks
   ______ Physical facilities
   ______ Hidden Curriculum (unstated, often unintended or unrecognized influences)
   ______ Residential Staff
   ______ Administrators
   ______ Peer group
   ______ Church
   ______ Extra-Curricular Activities
   ______ Other

(Optional: if you can think of specific examples of the influence these agents have had, we would appreciate a description of them on an additional sheet of paper)

2. Rank in importance the agents which appear to you to be negatively influencing your child's values while at

   ______ Teachers
   ______ School Policies
   ______ Textbooks
   ______ Physical facilities
   ______ Hidden Curriculum (unstated, often unintended or unrecognized influences)
   ______ Residential Staff
   ______ Administrators
   ______ Peer Group
   ______ Church
   ______ Extra-curricular Activities
   ______ Other

(Optional: if you can think of specific examples of the influence these agents have had, we would appreciate a description of them on an additional sheet of paper)
APPENDIX THREE

Instrument: AHS Student Survey (including sections designated for the AHS staff)
Administration: Fall 1991 and Spring 1992

Fall 1991 (page 389)
- The Rokeach Value Survey was a part of the Fall 1991 battery which is available in Rokeach (1973). The values which Rokeach used in his survey are listed in various places in Chapter 11 as well as below. (The AHS staff completed all parts of the survey except section two)

Spring 1992 (page 394)
- The Rokeach Value Survey and the Williams and Batten School Life survey were a part of the Spring 1992 battery. The School Life survey is published in Williams and Batten (1981).

<table>
<thead>
<tr>
<th>Rokeach Value Survey</th>
<th>Terminal Values</th>
<th>Instrumental Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfortable life</td>
<td>ambitious</td>
<td></td>
</tr>
<tr>
<td>exciting life</td>
<td>broadminded</td>
<td></td>
</tr>
<tr>
<td>accomplishment</td>
<td>capable</td>
<td></td>
</tr>
<tr>
<td>world at peace</td>
<td>cheerful</td>
<td></td>
</tr>
<tr>
<td>world of beauty</td>
<td>clean</td>
<td></td>
</tr>
<tr>
<td>equality</td>
<td>courageous</td>
<td></td>
</tr>
<tr>
<td>family security</td>
<td>forgiving</td>
<td></td>
</tr>
<tr>
<td>freedom</td>
<td>helpful</td>
<td></td>
</tr>
<tr>
<td>happiness</td>
<td>honest</td>
<td></td>
</tr>
<tr>
<td>inner harmony</td>
<td>imaginative</td>
<td></td>
</tr>
<tr>
<td>mature love</td>
<td>independent</td>
<td></td>
</tr>
<tr>
<td>national security</td>
<td>intellectual</td>
<td></td>
</tr>
<tr>
<td>pleasure</td>
<td>logical</td>
<td></td>
</tr>
<tr>
<td>salvation</td>
<td>loving</td>
<td></td>
</tr>
<tr>
<td>self-respect</td>
<td>obedient</td>
<td></td>
</tr>
<tr>
<td>social recognition</td>
<td>polite</td>
<td></td>
</tr>
<tr>
<td>true friendship</td>
<td>responsible</td>
<td></td>
</tr>
<tr>
<td>wisdom</td>
<td>self-controlled</td>
<td></td>
</tr>
</tbody>
</table>
Before proceeding to the survey, please complete the questions which follow. There are three sections. Every one should complete section one. All students should then proceed to section two and school staff to section three.

Please circle the number in the answer which BEST describes your situation.

**Section One: All participants**

1. Sex
   1. Male 2. Female

2. When were you born? ____ (day) ____ (month) ____ (year)

3. Country of birth
   1. USA 2. Canada 3. Latin America
   4. France 5. Germany 6. Great Britain
   7. Other European Community countries
   8. Switzerland 9. Austria
   10. Norway, Sweden, Finland
   11. Middle East including Turkey
   12. Former Communist eastern European ("Warsaw Pact")
   13. Africa 14. Pakistan 15. India
   19. Other Asian
   20. None of the above

4. In which of the above countries have you lived five or more years? (Please circle the numbers of all the countries that apply)
   1. USA 2. Canada 3. Latin America
   4. France 5. Germany 6. Great Britain
   7. Other European Community countries
   8. Switzerland 9. Austria
   10. Norway, Sweden, Finland
   11. Middle East including Turkey
   12. Former Communist eastern European ("Warsaw Pact")
   13. Africa 14. Pakistan 15. India
   19. Other Asian
   20. None of the above

5. In how many countries have you lived for more than six months?

6. (Optional) Religious orientation - please circle the number which best describes your religious position
   1. Roman Catholic 2. Protestant
   3. Orthodox 4. Evangelical Christian
   5. Hindu 6. Muslim
   9. Shintoist 8. Other religion
   9. Don't know 10. No religion

Questions 7-17 consist of rules and statements taken from the handbook. Please indicate your opinion of the statements using the following rating scale:
7. "All students (except Seniors) must remain on the school grounds during the academic day... unless they have explicit permission to leave from a faculty member and have signed out/in the director of Students' office before leaving. Seniors who wish to leave the campus during a free period must also sign out/in."
   1. You definitely approve of the rule
   2. You approve of the rule
   3. You have no opinion about the rule
   4. You disapprove of the rule
   5. You definitely disapprove of the rule

8. 'Motorbikes, bicycles, and cars may only be used coming to school in the morning and leaving the school at the end of the day.'
   1. You definitely approve of the rule
   2. You approve of the rule
   3. You have no opinion about the rule
   4. You disapprove of the rule
   5. You definitely disapprove of the rule

9. "Smoking on school grounds is not permitted."
   1. You definitely approve of the rule
   2. You approve of the rule
   3. You have no opinion about the rule
   4. You disapprove of the rule
   5. You definitely disapprove of the rule

10. "The drinking of alcoholic beverages on school grounds and at school dances is not permitted."
    1. You definitely approve of the rule
    2. You approve of the rule
    3. You have no opinion about the rule
    4. You disapprove of the rule
    5. You definitely disapprove of the rule

11. "The use, sale, or promotion of drugs for non-medicinal purposes is prohibited and illegal."
    1. You definitely approve of the rule
    2. You approve of the rule
    3. You have no opinion about the rule
    4. You disapprove of the rule
    5. You definitely disapprove of the rule

12. "will not condone behavior which is damaging to the school community or which jeopardizes its reputation. Freedom ceases when it infringes on the rights of others."
    1. You definitely agree with the statement
    2. You agree with the statement
    3. You have no opinion about the statement
4. You disagree with the statement
5. You definitely disagree with the statement

13. "Get involved with school activities!"
   1. You definitely agree that this is a good idea
   2. You agree that this is a good idea
   3. You have no opinion about this idea
   4. You disagree that this is a good idea
   5. You definitely disagree that this is a good idea

14. "Vandalism; cutting school; the unauthorized use of alcohol; the use possession or distribution of illegal drugs; theft; bullying and plagiarism, are all ... serious infractions."
   1. You definitely approve of this rule
   2. You approve of this rule
   3. You have no opinion about this rule
   4. You disapprove of this rule
   5. You definitely disapprove of this rule

15. "Above all, students should act responsibly and respect others."
   1. You definitely agree with this statement
   2. You agree with this statement
   3. You have no opinion about this statement
   4. You disagree with this statement
   5. You definitely disagree with this statement

16. "Every student is on her/his honor not to cheat: if you give or receive help on tests, worksheets, graded homework, or exams you are guilty of cheating."
   1. You definitely agree with this statement
   2. You agree with this statement
   3. You have no opinion about this statement
   4. You disagree with this statement
   5. You definitely disagree with this statement

17. "Cutting classes not only leads inevitably to loss of learning and poor performance, but is inconsiderate towards the teacher and the other students."
   1. You definitely agree with this statement
   2. You agree with this statement
   3. You have no opinion about this statement
   4. You disagree with this statement
   5. You definitely agree with this statement

Section Two: Students only

1. How long have you attended?
   (Count part of a school year as a complete year)
   1. This is my first month
   2. One year
   3. Two
   4. Three
   5. Four
   6. Five
   7. Six
2. What is your father's occupation?
1. Engineer  
2. Teacher, professor  
3. Lawyer  
4. Executive  
5. Accountant  
6. Secretary  
7. Business entrepreneur (owns and runs his own business)  
8. Office/clerical  
9. Architect  
10. Scientist  
11. Business consultant  
12. Research consultant  
13. Labourer  
14. Medical doctor  
15. Nurse  
16. Dentist  
17. Other medical  
18. Homemaker  
19. Journalist, media production  
20. Artist, graphic artist, interior designer  
21. Fine Arts performer or producer (e.g., musician, actor)  
22. Clergyman, officer in a religious body  
23. Unemployed  
24. Other ___________________________(please indicate)

3. What is your mother's occupation?
1. Engineer  
2. Teacher, professor  
3. Lawyer  
4. Executive  
5. Accountant  
6. Secretary  
7. Business entrepreneur (owns and runs his own business)  
8. Office/clerical  
9. Architect  
10. Scientist  
11. Business consultant  
12. Research consultant  
13. Labourer  
14. Medical doctor  
15. Nurse  
16. Dentist  
17. Other medical  
18. Homemaker  
19. Journalist, media production  
20. Artist, graphic artist, interior designer  
21. Fine Arts performer or producer (e.g., musician, actor)  
22. Clergyman, officer of a religious group  
23. Unemployed  
24. Other ___________________________(please indicate)

4. With whom do you live?
1. Both parents  
2. With one parent and a step-parent  
3. Only with your mother  
4. Only with your father

5. How many brother's and sisters do you have?
1. One  
2. Two  
3. Three  
4. Four  
5. Five or more

6. On your last year's final report card or summary of school grades, what type of grades did you receive? Use the following scale as your guide:
A = excellent  
B = good  
C = average/satisfactory  
D = fair/poor  
F = failure
1. All As  
2. Mostly As  
3. All Bs  
4. Mostly Bs  
5. All Cs  
6. Mostly Cs  
7. All Ds  
8. Mostly Ds  
9. Mostly Fs
7. Which of the following statements about the Student Handbook is true for you?
   1. I don't know what the Student Handbook is
   2. I have never read it
   3. I have read parts of it
   4. I have read it all

8. If you have read parts or all of the please indicate which of the following statements best coincides with your feelings about it?
   1. I think it is good just the way it is
   2. I would like to make some minor changes to it, but it is pretty much what I would like to see in a handbook
   3. I would like to make lots of changes to it because it has many ideas in it that need to be changed
   4. I would like to throw it away and write a completely new one

Section Three: Staff only

1. How many years have you taught at ?

2. How many years of education have you had?
   1. Secondary
   2. Post secondary (1-4 years)
   3. Post secondary (5 or more years)

3. If you were asked to edit the student handbook you would
   1. Leave it as it is (except for the updating of personnel details, dates and schedule, i.e., the "General information" section for the current school year")
   2. Make some minor, relatively insignificant changes
   3. Make significant changes
   4. Throw the current one away and start all over

4. If you would have made changes (#4, preceding question), which of the following areas would have been areas you would change? (circle all that apply)
   1. Introduction
   2. Academics
   3. Social Responsibilities
   4. Activities
   5. School services
In the next 9 questions, please use the following scale to describe your feeling or experience at:

1. SA - Strongly Agree
2. A - Agree
3. D - Disagree
4. SD - Strongly Disagree
5. NP - No Opinion

21. The people around me think pretty much like I do..........................SA A D SD NP
22. I was involved in the "life" (activities) of this year.........................SA A D SD NP
23. I am more tolerant of others now because I attended ......................SA A D SD NP
24. has high academic expectations for its students.........................SA A D SD NP
25. has high behavioral expectations for its students.........................SA A D SD NP
26. has high moral/ethical expectations for its students......................SA A D SD NP
27. There is a positive atmosphere around the school.........................SA A D SD NP
28. I would recommend to other students who might want to come............SA A D SD NP
29. When I first entered, my values were similar to those of........SA A D SD NP
30. Students are often given grades of A, B, C, D, and F to denote the quality of their work. If you graded on such a scale you would give it a 1. A 2. B 3. C 4. D 5. F

Part Two is a repeat of the Rokeach Value Survey which you did in the fall.

The Rokeach Value Survey

Instructions

On the next page are 16 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life.

Study the list carefully and pick out the one value which is the most important for you. Write the value in Box 1 on the left.

Then pick out the value which is second most important for you. Write it in Box 2. Then do the same for the remaining values. The value which is least important goes in Box 16.
APPENDIX FOUR

Instrument: RHS Student Survey (including sections completed by the RHS staff)

Fall 1990 (page 397)
• In addition to the survey items listed in Appendix Four, the fall 1990 battery included the Rokeach Value Survey, the Allport-Vernon-Lindzey Study of Values, and the Defining Issues Test. These three surveys are available in Rokeach (1973), Allport-Vernon-Lindzey (1931, 1960, 1970), and Rest (1979). The RHS staff completed all questions except 6-9 in the demographic section.

Spring 1991 (This administration is not included in the appendix)
• The Spring 1991 battery includ
INTRODUCTION

Your have been chosen to participate in a scientific study of value change. Enclosed are three surveys which have helped educational researchers come to a better understanding of the processes involved in value transformation.

Please do not turn the page until your supervisor tells you to. Then proceed through the survey booklet at a steady pace and follow the directions for each of the surveys it contains. Take time to reflect on the issues which are raised but do not spend too long on any one question. Do not ask your supervisor to explain any of the words or concepts in the surveys; however, if the general instructions at the beginning of each survey are unclear, then you may ask the supervisor for assistance.

Later in the school year, you will be asked to complete some additional survey material. At that time the information which you then give will be added to what you have given here. Please follow the instructions carefully so as to ensure that your identification is known only to you.

This survey is completely confidential! Under no circumstances will your name be associated with the survey material nor will any attempt be made to identify you. Please answer the questions as honestly as possible so as to ensure that the study can be useful for researchers who wish to understand how young people think today.

You may use pen or pencil to fill in the answers

Demographic information
1. Sex: Male Female
2. Year of birth
3. Year in school
4. Country of birth
5. Length of time in current school
   i) less than one month
   ii) one year
   iii) two years
   iv) three years
   v) four years
   vi) five years
   vii) six years
6. If your school has a residential programme, do you live in a dormitory? Yes No
7. Father's occupation
8. Mother's occupation
   (if he/she is a missionary, also include the type of missionary activity in which they are engaged)
9. Do you live with: both parents your father your mother
   other (do not include dorm parents)
10. Number of countries in which you have lived for more than six months
11. Religious orientation
   a. Protestant
   b. Roman Catholic
   c. Greek/Russian Orthodox
   d. Hindu
   e. Muslim
   f. Jewish
   g. Other religion
   h. No religion
   1. Lutheran
   2. Anglican/Episcopal
   3. Pentecostal
   4. Baptist
   5. Presbyterian
   6. Mennonite
   7. Other Protestant
### Part One: Demographic Descriptors

Please circle the appropriate number.

1. Sex
   - 1. Male  
   - 2. Female

2. Birth date __________ day ______ month ______ year

3. Country of Citizenship (if you have dual citizenship, select the country you have lived in the longer)
   1. United States or Canada  
   2. A Latin American country  
   3. A European country  
   4. A Middle Eastern/North African country except Israel  
   5. An African country (Sahara and south)  
   6. Australia  
   7. India  
   8. Japan  
   9. Other Asian country

4. How long have you attended (as a completed year)
   - One  
   - Two  
   - Three  
   - Four  
   - Five  
   - Six  
   - Seven or more

5. Are you a resident student?  
   - 1. Yes  
   - 2. No

6. Grade in school
   - 1. 12  
   - 2. 11  
   - 3. 10  
   - 4. 9

7. Father's occupation __________________________________

8. Country of birth________________________________________

### Part Two: Site Questions

Please circle the number which BEST describes your situation, experience, or opinion.

The next 8 questions are taken from the handbook. Please indicate your opinion about them using the following rating scale:

1. You definitely approve of the school rule/statement
2. You approve of the school rule/statement
3. You have no opinion about the rule/statement
4. You disapprove of the school rule/statement
5. You strongly disapprove of the school rule/statement

9. "Students are expected to keep buildings and grounds neat and tidy."
   - You definitely approve of the school rule/statement
   - You approve of the school rule/statement
   - You have no opinion about the rule/statement
   - You disapprove of the school rule/statement
   - You strongly disapprove of the school rule/statement

10. "Students are expected to behave in a way that promotes a good learning environment, physical well-being, and personal character development... all resident and nonresident students are expected to abstain from the use of alcohol or the non-medical use of other drugs and to refrain from the use of obscene or improper language, from gambling, and from social dancing."
   - You definitely approve of the school rule/statement
   - You approve of the school rule/statement
   - You have no opinion about the rule/statement
   - You disapprove of the school rule/statement
   - You strongly disapprove of the school rule/statement

11. In the classrooms, students are expected to conduct themselves orderly, contribute to class discussion, and refrain from unnecessary disturbances or disruptions. They are to characterize the relationships between students and teachers..."
   - You definitely approve of the school rule/statement
   - You approve of the school rule/statement
   - You have no opinion about the rule/statement
   - You disapprove of the school rule/statement
   - You strongly disapprove of the school rule/statement

12. "Girls are expected to dress in a way that is modest... Tight fitting skirts or pants which reveal the outline of the underwear are not acceptable. Low, gaping, or sheer blouses or tops, or halter tops, are not acceptable."
   - You definitely approve of the school rule/statement
   - You approve of the school rule/statement
   - You have no opinion about the rule/statement
   - You disapprove of the school rule/statement
   - You strongly disapprove of the school rule/statement

13. "Boys are expected to wear clean, neat shirts and pants... Headgear is not considered appropriate within the school building. Hair should be clean, well-groomed and of moderate length..."
   - You definitely approve of the school rule/statement
   - You approve of the school rule/statement
   - You have no opinion about the rule/statement
   - You disapprove of the school rule/statement
   - You strongly disapprove of the school rule/statement

14. "We should avoid films which emphasize vulgar language and/or language which takes our Lord's name in vain, contain nudity, illicit sex, demean man, mock the Christian life or its principles and standards, have excessive violence, or promote... witchcraft or satanism."
   - You definitely approve of the school rule/statement
   - You approve of the school rule/statement
   - You have no opinion about the rule/statement
   - You disapprove of the school rule/statement
   - You strongly disapprove of the school rule/statement

15. "Personal tape recorders and Walkmans may not be used at school. Walkmans may not be used on the buses... or at school events."
   - You definitely approve of the school rule/statement
   - You approve of the school rule/statement
   - You have no opinion about the rule/statement
   - You disapprove of the school rule/statement
   - You strongly disapprove of the school rule/statement
16. "Dating will be limited to high school students in grades nine through twelve. Dating is defined as any meeting or activity planned in advance by a couple. Boys and girls may meet together in open, generally supervised areas, such as a home, school, church, dormitories, or other locations where a school or church function is in progress."

1. You **definitely approve** of the school rule/statement
2. You **approve** of the school rule/statement
3. You have **no opinion** about the rule/statement
4. You **disapprove** of the school rule/statement
5. You **strongly disapprove** of the school rule/statement

17. Which of the following statements about the Student Handbook is true for you?

1. I don't know what the Student Handbook is
2. I have never read it
3. I have read parts of it
4. I have read it all

18. If you have read parts or all of the Student Handbook, please indicate which of the following statements best coincides with your feelings about it?

1. I think it is good just the way it is
2. I would like to make some minor changes to it, but it is pretty much what I would like to see in a handbook
3. I would like to make lots of changes to it because it has many ideas in it that need to be changed
4. I would like to throw it away and write a completely new one

19. What grades did you receive this year?

1. As
2. Bs
3. Cs

20. How many close friends do you have at school?

1. None
2. 1
3. 2
4. 3
5. 4-10
6. More than 10

21. Who do you think had the greatest **positive** influence on you during this school year?

1. A classroom teacher
2. An administrator
3. An extra curricular activity sponsor or coach (i.e., an adult whose primary influence on you was not in his/her professional role as a classroom teacher, administrator, etc.)
4. A councillor/chaplain/pastor
5. Other staff members or volunteer workers
6. A best friend
7. A boy/girl friend
8. Another member of your peer group

22. Who do you think had the greatest **negative** influence on you during this school year?

1. A classroom teacher
2. An administrator
3. An extra curricular activity sponsor or coach (i.e., an adult whose primary influence on you was not in his/her professional role as a classroom teacher, administrator, etc.)
4. A councillor/chaplain/pastor
5. Other staff members or volunteer workers
6. A best friend
7. A boy/girl friend
8. Another member of your peer group

23. From which group was your **best friend(s)** drawn (please circle the answer which you think is most descriptive of your situation)?

1. Classmates
2. Students from your ethnic background
3. Students with whom you had gone to primary school
4. Students from the same neighborhood in the area
5. Other
6. You do not have a "best" friend at school

24. How would you describe your parents' attitude towards you?

1. Very supportive and positive
2. Supportive and positive
3. Neutral with no really discernable attitude
4. Somewhat critical and negative
5. Very critical and negative
6. None of the above

In the next 9 questions, please use the following scale to describe your feeling or experience at school.

1. SA - Strongly Agree
2. A - Agree
3. D - Disagree
4. SD - Strongly Disagree
5. NP - No Opinion

25. The people around me think pretty much like I do._________________________ SA A D SD NS

26. I was involved in the "life" (activities) of this year._________________________ SA A D SD NS

27. I have a greater appreciation for the spiritual things because I attended school._________________________ SA A D SD NS

28. I have high academic expectations for my students._________________________ SA A D SD NS

29. I have high behavioral expectations for my students._________________________ SA A D SD NS

30. I have high moral/ethical expectations for my students._________________________ SA A D SD NS

31. There is a positive atmosphere around the school._________________________ SA A D SD NS

32. I would recommend students who might want to come._________________________ SA A D SD NS

33. When I first entered school, my values were similar to those of others._________________________ SA A D SD NS

34. Students are often given grades of A, B, C, D, and F to denote the quality of their work. If you graded on such a scale you would give it a


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