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A Thesis
Submitted in part fulfilment
of the Doctorate of Education degree,
School of Education,
Durham University

PHD

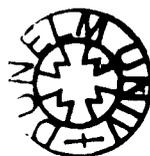
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Title

Motivational adjustment of (Primary) teacher trainees in the early stages of learning to teach English in Hong Kong.

VICTOR FORRESTER



25 MAR 2002

Motivational adjustment of (Primary) teacher trainees to the early stages of learning to teach English in Hong Kong.

Victor Forrester

Abstract

Despite decades of research on human motivation within an educational context, there emerges neither one theory nor one pragmatic intervention that is commonly accepted. These observations raise two fundamental questions: why does human motivation confound a common theoretical base and why does it appear to resist interventions?

Addressing these two fundamental questions, this thesis offers a literature critique that highlights motivation in education as value-laden. The thesis then posits that to understand motivational adjustment the critical focus lies not on the value-agents (lecturers, parents) but on the value-receivers (the students). Additionally, the thesis posits that an adequate comprehension of students' motivational adjustment requires a research methodology that embraces the defining context.

The research subjects are two cohorts of trainee (Primary) teachers. The first cohort (N=47) comprises incoming students direct from Secondary education. The second cohort (N=33) are post Certificate in Education students with prior work and teaching experience. Both cohorts are enrolled in first semester, Bachelor of Education programmes at the Hong Kong Institute of Education in Hong Kong, Special Administrative Region of the Peoples' Republic of China. A feature of this study is that the research subjects are ethnic Chinese.

Reporting a semester-long study, a critique of 'motivation' is provided in the light of data collated from both pre and post semester questionnaires (N= 160) and mid and end semester interviews (N= 38).

Data analysis displays the emergence over one semester of an underlying motivational conformity towards prioritising 'self-defense'. Three effects of prioritising 'self-defense' are noted: first, students' perception of an event is subservient to its short-term experience; second, cognition is subservient to affective responses and third, goals are determined by the interaction between the affective and cognitive responses.

The thesis concludes by noting implications for further research in both human motivation and cultural studies.

Key words: Motivation, teacher-training, culture, ethnic Chinese, Hong Kong (PRC).

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List of Abbreviations

Hong Kong Institute of Education:	HKIEd
Bachelor of Education:	B.Ed.
Bachelor of Education (Full Time) (Primary) 4- year programme:	4-year group.
Bachelor of Education (Full Time: Add-on) (Primary) 2- year programme:	2-year group.

Chapter One: Introduction

For clarity, this Chapter is arranged into four sections. The study is introduced first in terms of its motivational background and then a second section defines its scope. As this study is centred in Hong Kong, a third section then reviews the cultural milieu. The Chapter then concludes with a final brief summation.

First we turn to a brief review of the motivational background to this study.

I. Background to the Study

As a research subject, human motivation has proved resistant and elusive - testified by the lack of any one commonly accepted central theory (see: Wittrock, 1986; Weiner, 1992; Gardner, 1993; Pintrich and Schunk, 1996 and Brophy, 1998).

Despite its elusiveness, motivation continues to be centre-staged within the educational context (amongst many see: Coleman, 2001; Santrock, 2001; Wilen 2000 and Burden 2000).

Within the context of this particular research – the Hong Kong Institute of Education – learner motivation is also being centre-staged, attracting institutional attention in the form of a mandatory Teaching and Learning Quality Assurance.

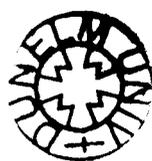
Intriguingly, such efforts towards respectively mapping, explaining and measuring human motivation conveniently sidestep the issue that effective motivational interventions remain uncertain (amongst others see: Higgins et al 2000; Heckhausen, 2000; Heckhausen and Dweck, 1998).

Where interventions are uncertain and theories abound the indications suggest that perhaps something is being missed.

In Chinese, such a situation is given a positive twist - "*To know there is no path is to know the way forward*" (attributed to Confucius). As this research is sited within the Cantonese culture of Hong Kong, it is apposite to adopt the spirit – but not the bravado – of that particular saying.

A full review of the background motivational literature is provided in Chapter Two.

Here we now turn to consider the scope of this study.



II. Scope of Study

Five aspects of the scope of this study are presented - specifically its aims: problem and research questions; procedures, significance and finally its limitations.

1. Aims

The aim of this investigation is to add to an understanding of human motivation within an educational context.

Specifically, this investigation seeks to contribute to motivational theory building by adopting an ethnographic approach that interrogates a motivational theory within an educational context.

2. Problem and Research Questions

The central problem can be expressed negatively – there is no commonly accepted theory of human motivation and there are no motivational interventions commonly accepted as being effective. Simply, whatever ‘motivation’ is, it remains curiously elusive.

To explicate this curious elusiveness, the research here interrogates ethnographic evidence drawn from a specific context against a motivational theory.

The central research question reflects both the essentially investigative nature of this research and the specifics of the bounding context:

What is the motivational impact on incoming teacher trainees of English of their first semester at the Hong Kong Institute of Education?

This investigation, and especially the data gathering process, is guided by the following research questions:

- *What are incoming teacher trainees’ motivations on joining the HKIEd?*
- *How do teacher trainee motivations adjust to the demands of learning at the HKIEd?*
- *What are the characteristics/features of teacher trainee motivations at the end of their first Semester?*

It is anticipated that the above investigative questions will provide insights and a database. From such an evidential foundation, may be extracted both a theoretical understanding of human motivation within an educational context and an explication of motivational interventions' confounds.

3. Procedures

Procedures employed are guided by the research questions.

To address the central research question "*What is the motivational impact on incoming teacher trainees of English of their first semester at the Hong Kong Institute of Education?*" two forms of data are collated.

First, to show whether (or not) incoming students do in fact record a "*motivational impact*", data is required from pre & post the intervention of Tertiary education. For the purposes of the central research question, it would be helpful were this pre & post data to be informative both at cohort level and individual case level. Accordingly it is proposed to employ the Hong Kong version of both the:

- *Study Process Questionnaire*
- *Learning Process Questionnaire Form A*

(Biggs, 1992.)

As their titles suggest, each questionnaire has its own particular focus (study & learning traits): collectively, they have produced helpful measurements of the impact of educational interventions (see: Gow et al 1989 and Balla et al 1991). Both questionnaires have been adequately validated and their reliability tested for use within the target context (Biggs, 1992 p15-44).

To explore "*How . . . incoming*" students do whatever it is they do on entering Tertiary education the study employs ethnographic interviews.

The justification for this particular methodology here goes to the heart of this research in which behaviour adjustments are taken as reflections of underlying shifts in students' motivation. A review of the current literature on motivation reveals, despite decades of in-depth research, no commonly accepted central theory (see: Wittrock, 1986; Brophy, 1998, Weiner, 1992, Gardner 1993, Pintrich and Schunk, 1996). Part of this on-going debate recognizes the significant interface of motivation and socialisation (see:

Sivan, 1986; Mehan, 1979, Collins and Green, 1992). In the absence of a commonly accepted central theory and to add an astringent to the on-going debate, ethnographic interviews will provide a database from which this study may build a framework of comprehension.

The nature of this research embodies a specific focus on the analysis of process. Process is the analyst's way of interpreting or understanding change (Strauss & Corbin, 1998). An important aspect of this research will be to monitor the process of incoming students' adjustment to Tertiary education in English at the HKIEd.

Three research questions have been structured to guide this data collection and analysis in ways that will highlight and account for students' adjustments that may occur during the period of this study.

As theory building directly links macro-issues to the phenomenon under investigation this mode of research requires that broader, contextual issues, which are shown to influence the phenomena under study, are given due recognition within this study.

4. Significance

Two aspects of significance are presented – first the theoretical understanding of human 'motivation' and second, the practical concerns of the contextual employer (here the Hong Kong Institute of Education).

a) Adding to our understanding of "Motivation".

Studies of 'motivation' are premised on two basic assumptions: firstly that outward manifestations of behaviour are reliable indicators of inner 'motivation' (Weiner, 1992, p 17; Brophy, 1998, p 2) and secondly that to understand 'motivation' will facilitate positive behavioural change (O'Neil and Drillings, 1994, p 1; Raffini, 1996, Dornyei and Otto, 1998). However such assumptions conveniently side step the operation of motivation in an everyday context with its plethora of factors and influences (Galloway et al, 1998, Brophy, 1987). Such assumptions additionally sidestep the everyday interface between 'motivation' and 'culture' (Watkins and Biggs, 1996). This study seeks to explore 'motivation' and its interface with 'culture/socialisation' within a specific learning context (here the HKIEd), to interpret the impact that a plethora of factors, influences and a new 'culture/socialisation' experience have on the individual's outward manifestations of behaviour.

An additional feature of this study is its focus on incoming students who are Cantonese studying within their ethnic culture. This contextual combination is not common in the available literature.

b) To the Hong Kong Institute of Education.

The new (1998 onwards) degree programmes at the HKIEd share a significant trait – they were designed without reference to the voice of incoming students.

External validation of these new degree programmes has addressed the academic standing of programme content: however there remains a need to consider the impact of these programmes – in this study, restricted to the first Semester modules – in terms of incoming students adjusting to the demands of Tertiary education.

Institutional weight is signaled by the mandatory implementation of *Teaching and Learning Quality Assurance* that centre-stages student motivation within the educational context.

An additional feature of this study is its focus on the impact on the ‘customer’ of the new ‘core’ programmes at the HKIEd, an area into which this study stands as a pioneer.

5. Limitations of Research

For clarity, the limitations of this study are grouped in terms of first the research instruments and secondly, in terms of the research parameters.

a) Instruments

There are recognized limitations to the use of the *Study Process & Learning Process Questionnaires*. Amongst such limitations are:

- Setting a lens that may focus clearly on certain areas but at the expense of ignoring unidentified others. The Biggs’ questionnaires have their own declared “lens” (a six-point sub-scale: surface/deep/achieving Motive & surface/deep/achieving Strategy). Whether Motive and Strategy are *exclusively* significant in an understanding of student adjustment to Tertiary education, will be contested unless supported by the qualitative data.

- As Biggs indicates, another limitation inherent in set questionnaires is: “*How well has one anticipated the students’ most likely interpretations?*”(Biggs 1992, p39). This study employs qualitative methodology in which participants both have the opportunity to reflect back on their responses. This ethnographic data is used to inform and validate the questionnaire data interpretation.

There are in-built limitations to the use of *ethnographic data* that include:

- Any theory from which an explanation may be formulated as a hypothesis requires further validating research. Such further research is beyond the scope of this particular study. (This limitation however is held to reflect the very nature of this particular study – which views “adjustment” not in terms of a “quick fix” but a life-long endeavor).
- The study sample is nominally, not statistically representative. Conclusions will inform theoretical but not immediately practical considerations.
- By definition, the validity of theory building stands or falls on the adequacy of the collected data and its interpretation (Strauss & Corbin, 1998). As such ‘adequacy’ is acknowledged to be a skills-based process and accordingly this particular study has one binding caveat that here, this study represents a first initiation. Particular care will be taken to validate data interpretation through veridical readings.

b) Parameters

There are several limitations to be acknowledged, including:

- The decision to make the study focus exclusively student-centred. The exclusion of staff input is acknowledged but justified in terms of the following contextual reasons:
 - a. The research context which to date has excluded the ‘student voice’.
 - b. Pragmatic constraints: incoming students are taught by a minimum of 10 lecturers across a range of class sizes (25 to 60+ students) and a range of languages (Cantonese, English, Putonghua and variants of Cantonese/English.)
- The decision to limit the research to only the first semester in year one of these programmes. The exclusion of the second semester, year one of studies is acknowledged but justified as follows.

- a. The central research-question that defines the research population as students who are “incoming”. This definition addresses an ‘educational point of change’. It will be argued (though contestably so) that after the first semester, any data collected beyond the first semester would be diluted/tainted by factors beyond those influencing an “incoming adjustment” to Tertiary education.
- The exclusion of further (demographic) investigation into pre-HKIED students’ lives is acknowledged but justified as follows.
 - a. An individual’s rights to privacy as enshrined in HK law.
 - b. Time-scale of relevant data-collection (one Semester) imposes practical constraints.
 - c. The initial student sample embraces both Secondary school leavers from throughout HK, ‘continuing’ students converting Certificate-status to Tertiary degree status and ‘returning’ students from school employment. This range imposes practical constraints.
- The selection of students from two different course cohorts implies a limitation in terms of dividing available research resources. The decision to focus on two different course cohorts is justified as follows.
 - a. Theory building may be enriched by access to contrastive data.
 - b. The future of the HKIED is dependent specifically on these two ‘customer-sources’.

Having considered the background and scope of this study, we now turn to consider one aspect of context – here the cultural milieu of parents and students in Hong Kong.

III. Cultural milieu

The research subjects are Hong Kong students born in the decade 1970-80 and entering the HKIED in 1999.

The following review seeks to locate these research subjects within their and their parents’ ‘values’ and ‘beliefs’ here subsumed under the general term of their cultural setting.

In operative terms, 'values' and 'beliefs' are interchangeable terms that the literature contends reflect personal choices and govern behaviour (see: Rokeach, 1973). Emphasising this bespoke nature of values and beliefs, their application is recognised as being context-specific (Taylor, 1970). It is this bespoke, context-specific view of culture, values and beliefs that is explored in the following.

For clarity, we turn first to consider parental culture.

1. Parental culture

Immigration from China into Hong Kong peaked in the 1960's (United Nations Report 1974, p13-14), a defining experience for the parental culture of the subjects of this research.

Luk (1995) describes this parental culture (i.e. the predominant Hong Kong culture from the 1970s) as being "an indigenous mass-culture which was being created by the new middle-class of young professionals and broadcast through the mass media and school system" (ibid. p. 18). Luk's description of the 1970's suggests the Hong Kong Chinese cultural identity is self-made and implicitly is constantly being made. In an upwardly mobile immigrant society, cultural values drawing on a large traditional base can be responsive to change through an expedient shifting of priorities (Redding & Hsio, 1990).

A philosophical base to this cultural flexibility stems from the Confucian tenet that "man is a relational being, socially situated and defined within an interactive context" (Bond, 1986, p. 215 and Allinson, 1989 p 14). An exemplar of one prioritized cultural beliefs of these immigrant parents is revealing: Hsu (1967) identifies the most important relationship is the immediate family, a priority subsequently embellished (in Hwang, 1990) as, "his offspring's life is the continuation of his own. One of the most important goals for an individual is to do his best in continuing and making prosperous his family life" (ibid. p. 598).

Parental values however, need not be shared by their offspring (Yu and Yang, 1987; Lau, 1986). Accordingly we now turn to consider the offspring of the above parental cultural – the subjects of this research.

2. Research subjects' culture

Growing up in an indigenous mass-culture whose values are gleaned from parents, the mass media and the school system allows for a heady cocktail of cultural values. Taken chronologically, contemporary research identifies some of these heady mixes.

In 1988 Salili & Mak, found the concept of success to be clustered with four items – a happy family, academic achievement, career success, and having many friends; in 1992 this cluster had shrunk to two - to make their family happy and pride in themselves (Salili & Ching, 1992).

In contrast, some things apparently remain constant over time. In 1971 Solomon and then again in 1979 Baum & Baum show parents employing physical punishment, shaming and ridiculing more commonly than persuasion and reasoning; again in 1980. Ryback et al. noted that although Chinese mothers were close to the young child they neither made the child feel loved nor were sensitive to the child's emotional needs; in 1986 Ho again identified parents relying on power assertion and withdrawal of love though now more with their sons than with their daughters.

The overall impact of such consistent parental behaviour on the school alumni of this period may be judged from a mid-period study (1977) that showed Hong Kong students scoring significantly lower on the cognitive dimension of social control than either American or French students (Bloom, 1977). More recently, Salili (1994) reported a comparison of HK Chinese and British students in terms of their meaning for achievement: her findings suggest that while 'individualistic' and 'affiliative' achievement were equally important to both groups, cultural values and gender influenced the attached meanings.

The emerging research picture is that school-aged children of the 1990's (who form the basis of this research) will have cultural values close to but distinct from those of their parents. The closest values may be those involving family relationships where emotions commonly are filtered as expressions of power, but the most disparate values may be those of a burgeoning individualism countering filial duty.

In essence, the HK Chinese subjects of this research may have cultural values indicative of tension. Allinson (1989, p10) cautions against "*attempting to distill a list of salient characteristics of the Chinese mind*" (as does Moore, 1967), noting instead:

"the Chinese mind (is) distinguished from the Western mind, in its . . . greater emphasis upon, and

consequent development of, the practical as against the theoretical mind. In this sense, the Chinese mind does not differ from the Western mind in terms of representing a different kind of mind but rather a different degree of emphasis (on the practical) . . .” (ibid. p10/11).

This research takes up Allinson’s thesis by investigating how these research subjects engage their lifetime experience of tension to make sense of their move into Tertiary education.

IV. Summation

As this Chapter serves to outline, ‘motivation’ does not take place in a vacuum. The motivational background and scope of this study have set certain parameters that include the Hong Kong cultural milieu.

In Chapter Two that now follows, we turn to consider what progress has been made in the relevant literature towards explicating the complex called ‘human motivation’.

Chapter Two: Literature Review of explanations for individual/group ‘adjustment’

I. Metaphors and Paradigms

An astringent to a review of progression in motivation research is offered by first, comparing conceptual metaphors and personification employed by researchers in the field of motivation and second, reviewing motivational research paradigms.

Metaphors

To first compare conceptual metaphors and personification employed by researchers in the field of motivation we turn to consider the following:

Conceptual Metaphors and Personification for Motivational Research

Conceptual Metaphors Person as a:	Conceptual Personification “Motivation’ as a Person:
machine decision maker, creator of meaning	Why am I doing this? God-like. Can I do this? How do I feel about this?
(Maehr and Meyer, 1997) (Weiner, 1992)	(Pintrich et al 1990, 1992)

Maehr et al (1997) conceptualise a tri-partite metaphor to describe motivational research -citing the person as a machine, as a decision-maker and as a creator of meaning. Weiner (1992) constructs a dichotomous metaphor rooted in Descartes and Darwin that views the person as a machine or as being God-like. Between these two sets of conceptual metaphors there appears little difference, as clearly Maehr’s ‘decision maker and creator of meaning’ are refinements on Weiner’s global ‘God-like’ metaphor. In contrast Pintrich et al (1990,1992) favour a structured ‘interview’ of motivation that delves into three components, namely ‘why’ (value), ‘Can I?’ (expectancy) and ‘How do I feel?’ (affective). The utility of these respective metaphors is manifest – Maehr, Weiner and Pintrich all construct helpful reviews of motivational research structured around their respective concepts. However the descriptive clarity of metaphors (Maehr and Weiner) has been challenged for their potential to distract attention away from an awareness that motivation is not a unitary concept (Leo and Galloway, 1996). In contrast, the conceptual approach offered by Pintrich at al (1990,1992) does embody a view of motivation as being multi-

dimensional.

Weiner himself, offers a definition in terms that acknowledges 'motivation' as a convenient umbrella-term for a range of "determinants":

"Motivation is the study of the determinants of thought and action — it addresses why behaviour is initiated, persists and stops, as well as what choices are made" (Weiner, 1992, P17)

A view made even more explicit by Brophy (1998):

"Motivation is a theoretical construct. . . ." (Brophy, 1998, p3)

The recognition of 'motivation' as an umbrella-term is helpful and supports the review of theories of motivation (see above) that pointed to 'motivation' remaining as yet an unclear target.

Paradigms

Having compared conceptual metaphors employed by researchers in the field of motivation we turn to a review of motivational research paradigms. Maehr and Meyer (1997) offers the following synopsis:

Three Paradigms Commonly Employed in the Study of Motivation

Individual difference paradigm:----->I----->(s) -----> Motivation Behavior
Situational variation paradigm: ----->S ----->(i) -----> Motivation Behavior
Interaction paradigm: Ix S-----> Motivation Behavior

I="individual" difference variables; S situational/contextual variables.

(Maehr and Meyer, 1997)

The above summarises three common paradigms employed in the study of motivation (Maehr and Meyer, 1997): first, in which the individual takes center-stage; second, the situation takes center-stage and third, an interaction paradigm center-stages the interaction between the individual and the situation.

A research confound emerges from a review of the above paradigms. This confound stems from the recognition that each paradigm both concentrates yet simultaneously dilutes researchers' attention. For example, concentrating on the individual may lead to a consideration of socialization history at the expense of the nature of the task, the availability of rewards and punishments, and social power or influence: making interaction the locus, the researcher faces a different challenge, that of overwhelming data.

Summary

In summation, two points emerge. First, despite the descriptive clarity of conceptual metaphors (Maehr and Weiner) the conceptual personification offered by Pintrich et al (1990,1992) does embody a view of motivation as being multi-dimensional. Second, a review of research paradigms highlighted one common confound – namely that each paradigm concentrates yet simultaneously dilutes researchers' attention.

Collectively, the above two summative points provide a conceptual framework for research into human motivation. This conceptual framework comprises a multi-dimensional approach that incorporates an interaction paradigm.

Adopting a multi-dimensional approach that incorporates an interaction paradigm faces one challenge - namely that of overwhelming data. This challenge may be mitigated at the data analysis stage by arbitrarily prioritizing themes. This overall approach allows for the collection of 'rich' data to inform a 'manageable' theme.

Having outlined that the conceptual approach to be adopted in this research involves the collection of 'rich data', the problem remains of identifying precisely which 'manageable theme(s)' this data source can inform. To identify potential 'manageable theme(s)' we now turn to a review of current progression in motivation research.

II. Progression in Motivation: Research

At a meta-theoretical level, theories of motivation have changed from being based on "insights" based on individualized experiences (e.g. Freud, 1934; Maslow, 1954) to an emphasis on replicable evidence (Maehr and Meyer, 1997).

At the theoretical level, perspectives have shifted away from reinforcement to meaning theory. Critical to the creation of meaning is the personal construction of causality (Graham, 1991; Weiner, 1995). Work on this area underpins much of the current research on motivation and achievement. This work has tended to focus primarily on the person's judged capacity to act *effectively* to the detriment of understanding the role of the person's *values*. However, concern with attributions has figured strongly in a

renewed consideration of a close cousin of value: *purpose*, or the perceptions that individuals hold. Considerations of an individual's purpose, or perceptions have embraced not only the *causes* but also the *definition* of success and failure. Allied to this conception is consideration of the *meanings* that an individual holds vis-à-vis the task.

For example, the debate on whether administering extrinsic rewards is always bad in school settings (e.g., Cameron and Pierce, 1994; Eisenberger and Cameron, 1996; Lepper, Keavney, and Drake, 1996; Ryan and Deci, 1996) is now centred on the *meaning* that rewards might have, on how perceptions, mental schemas, and belief systems mediate responses to the stimulus (Maehr, 1989; Maehr and Braskamp, 1986). This focus on *perceptions* gives rise to two different types of schemas: thoughts about *self* and thoughts about *purpose*.

Thoughts about *self* remain a major part of several different theoretical systems (e.g., Baumeister, 1995; Harter, 1992, 1993; Markus and Kitayama, 1991; Markus and Nurius, 1986), and owe something to the construct of self-efficacy as employed by Bandura (1993), Schunk (1982, 1991), Zimmerman (1989), Ashton and Webb (1986).

Thoughts about *purpose* now focus the redefinition of a "goal" as an orientation associated with the definition of the task. This new focus centers on the individual's construction of "success" and "failure"- and how this construction conditions not only the direction and intensity but also the quality of personal investment. This quality is being discerned around two goals: task and ego. Task goals involve a focus on learning and improvement within a particular task. Ego goals involve the individual, and are associated with performing better and demonstrating one's superior ability. The current argument favours viewing such goals as a construction made by individuals in and in response to particular contexts (Ames, 1990; 1992; Ames and Archer, 1988; Maehr, Midgley, *et al.*, 1996). This view of goals is particularly relevant to *group* motivation particularly within learning situations (see, e.g., Anderman and Maehr, 1994; Maehr, 1991; Maehr, Midgley, and Urdan, 1992; Maehr and Midgley, 1991; Maehr and Parker, 1993).

Collectively, the above considerations of *values*, *purpose*, *perceptions*, *causes*, *definitions* and *meanings* are loosely incorporated under the label of "goal orientation theory."

To evaluate the progress that such considerations have brought to an understanding of 'motivation' it is helpful to now turn from the above over-view of "goal orientation theory" to a more detailed review.

III Mapping a way forward: a critique of goal orientation theory.

To help identify where further research may make a meaningful contribution a detailed review of "goal orientation theory" requires to be couched in terms of a critique.

The following critique of the "goal orientation theory" literature begins historically, by reviewing two perceptions of human motivation, first as a drive then second as the pursuit of goals.

Two complementary conceptions of achievement motivation emerge from the motivation literature – motivation as drive and its obverse of motivation as goal. The following review, explores these two conceptions of achievement motivation. First from the perspective of motivation as a drive, then second from the perspective of motivation as a goal.

1. Drives

The perspective of motivation as a drive is variously expressed in terms of an internal state, need, or condition that impels individuals toward action. This perspective has its antecedents in Freud (1934) but evolved without his cognitive mechanisms, assuming instead a direct link between behaviour and basic drives (e.g. Thorndike 1911. Woodworth 1918; Hull 1943; Maslow 1954; Skinner 1974; Bijou and Baer 1961). Difficulties in applying a strictly physiological approach to understanding human behavior (e.g. McClelland 1961) led researchers to broaden their focus to include the *consequences* of such drives and in particular how behaviour is modified through individuals' *interpretations* of these consequences. This focus placed drives as part of the individuals' *learning* and from this perspective these learned drives are linked to such psychological motives as the needs for social approval, power, and achievement.

Rooted firmly in Western cultural values, the first developed theory of learned drives focused on achievement motivation (McClelland 1961; Atkinson 1957, 1964). The antecedents for this theory include Murray (1938) who placed achievement as a basic human need, Lewin's (1938) activity valence, Tolman's (1932) construct of expectancies for success and Edwards' (1954) maximized expected utility.

McClelland's work on the Thematic Apperception Test highlights the strengths (and limitations) of measurement in furthering an understanding of motivation. Atkinson's (1964) theory highlights the challenges of equating laboratory results to real life situations – extensive laboratory results provide empirical support (Atkinson and Feather, 1966) but applications to real-life situations or further research are less encouraging (Wigfield and Eccles, 1992).

Atkinson's (1964) achievement theory held that the drive for achievement comprised motives (strive for success and avoidance of failure), expectancies (of the probabilities for success and failure) and incentive values (attractiveness of success or avoiding failure). Atkinson expressed the relationship between these three components algebraically in terms that characterises achievement motivation as the result of a tension between the polarity of striving for success and avoiding failure. This tension in effect, was the individual's emotional reaction (e.g. pride v shame) that was thought to explain individual differences - why one individual approaches learning with enthusiasm and another with reluctance, and why one chooses tasks for which success is assured and another tasks for which success is exquisitely balanced against failure - a form of motivational decision making common to the Protestant ethic the entrepreneurial spirit (McClelland, 1961, 1971) and schooling in Western cultures (Maehr and Sjogren 1971; Wigfield, 1994).

2. Goals

A second perspective of motivation is not for individuals being driven, but of individuals pursuing goals.

Goal theory (see: Ames and Ames, 1989; Ames 1992; Anderman and Maehr, 1994; Maehr and Pintrich, 1991; Urdan and Maehr, 1995) formed from a merging of the need to explain attributional differences across persons and situations with a revival of interest in cognitive motives (White, 1959, 1960) and "intrinsic motivation" (Csikszentmihalyi, 1978; Csikszentmihalyi and Nakamura, 1989; Deci, 1975).

Of particular note was the influence of a study by Lepper, Greene, and Nisbett (1973) that showed the labels "work" or "play" affected participant behaviour. Following this study the understanding of motivation became focused on the key role of *purpose*, in particular on the range of purposes pursued in the

course of learning - including such culturally determined purposes as social competition and social approval (see Anderman and Maehr, 1994; Urdan and Maehr, 1995; Wentzel, 1991a).

Achievement goal theory emerged from the above background. Achievement goal theory posits a causal link between goals, cognition and achievement. This causal chain links achievement goals to an individual's achievement through the mediation of cognitive actions such as analyzing the demands of tasks, directing their resources to meet these demands, and monitoring their progress towards task completion (Pintrich 1999, Zimmerman 1990, Zimmerman et al 1994).

Two types of achievement goals have attracted attention – learning goals and performance goals. Learning goals imply increasing one's competency, understanding, and appreciation - such as task-goals (Anderman & Midgley 1997, Kaplan & Midgley 1997, Midgley et al 1998, Nicholls 1984) or mastery goals (Ames 1992, Roberts 1992). Performance goals imply outperforming others – such as ego-goals (Nicholls 1989, Thorkildsen & Nicholls 1998) or self-enhancing goals (Skaalvik 1997). The proliferation of research into this learning/performance dichotomy is testimony not of explorative field studies, but the prevalent influence of earlier theories – specifically the untested but attractive need theory. There are clear dangers inherent in building on an untested theory, one such danger is that evidence is subjected to a myopic interpretation.

3. Learning and Performance Goals: a myopic interpretation?

The following section reviews the dichotomy hypothesis of 'learning and performance' goals. An alternative hypothesis is posited of student motivation being a tension between student/school-authority values. Evidence common to both hypothesis is examined in terms of questioning if motivation is energized by internalized goals or external values?

Achievement goal theorists posit two hypotheses: first, that learning goals favor deep-level, strategic-processing of information, which in turn leads to increased school achievement; and second, that performance goals trigger superficial, rote-level processing that exerts a stultifying influence on achievement. The duality of these hypotheses is premised on a myopic interpretation of the available evidence. To explain: the linkage suggested above assumes a direct, untainted connection between goal and

reward (deep learning → school achievement). This naive view ignores other possibilities e.g. that definitions of school achievement are the domain not of students but of the school authorities. Adopting a somewhat less naïve view of 'school achievement' opens the possibility that the behaviour patterns associated with deep-level, strategic-processing of information are those likely to be approved of by school authorities. In contrast, behaviour patterns of superficial, rote-level processing are those likely to be disapproved of by school authorities.

Evidence of a naïve, myopic interpretation appears in the explications of the cited 'learning/performance' research.

Evidence that achievement goals influence the quality of students' self-regulated learning is drawn from both correlational and laboratory studies (Ames 1992, Dweck & Leggett 1988, Pintrich & De Groot 1990, Pintrich & Schrauben 1992). Comparisons of students show those who cite stronger and less strong learning-goal orientation (a) monitor their own understanding (Meece & Holt 1993, Middleton & Midgley 1997), (b) employ organizing strategies (Archer 1994), (c) make positive, adaptive attributions e.g. believe effort is the key to success and that failure signals using the wrong learning strategies (Nicholls 1984, Pintrich & Schunk 1996), and (d) cite learning goals as positively associated with pride and satisfaction in success (Ames 1992, Jagacinski & Nicholls 1984, 1987). Such evidence could validate the hypothesis that achievement goals influence the quality of students' self-regulated learning. However the same evidence equally validates the hypothesis that achievement goals shared by students and school authorities lead to positive associations.

Evidence linking performance goals and the quality of self-regulated learning are thin. Generally, performance goals – as hypothesized - are positively associated with superficial, rote rehearsal strategies and are unrelated or negatively associated with deep-level processing (e.g. Karabenick & Collins-Eaglin 1997, Pintrich et al 1993). However performance-oriented students who approach success engage sophisticated study strategies to outperform others (Wolters et al 1996). In tandem performance-oriented subjects whose goal is to avoid failure display reduced effort but task persistence thereby justifying avoidance of failure (Bouffard et al 1995: Pintrich 1999). Such evidence could validate a view that

performance-oriented students are driven by fears: performance-orientated approach students fear failure and strive to succeed, in contrast performance-orientated avoidance students fear failure and connive to just avoid failure (Covington, 2000). However the same evidence equally validates the hypothesis that achievement goals held by school authorities are exploitable by students who choose to hold independent goals.

Evidence for the quality of different cognitive processing strategies being linked with different achievement outcomes takes two forms. First a number of studies indicate deep-level processing as the optimal condition for achievement in a variety of subject-matter areas (see: Covington 1992). Second, anecdotal observations by Borkowski & Thorpe (1994) point to underachieving students as impulsive and inaccurate in their self-judgments. Conversely, academically successful minority high school students demonstrate a greater degree of self-regulation and willingness to persist on task than their less-successful peers (Wibrowski 1992). Such evidence repeats the same circulatory logic noted above – both validating the posed hypothesis yet also validating the alternative hypothesis that cognitive processing mirrors the individual response to school authority.

Cultural variations reveal intriguing counter perspectives. The cognitive and self-regulation element amongst native Japanese students – academically successful - exhibits memorizing and rote rehearsal strategies when studying and a reliance on feelings of obligation to others as the primary motivating imperative (Purdie & Hattie 1996; Rosenthal & Feldman 1991). This evidence presents two challenges to the ‘learning/performance’ hypothesis. The first challenge is that ‘learning’ differs across cultures (deep-level in the West / memorizing and rote in Japan). A second challenge is that affective imperatives differ across cultures (individualism in the West / obligation to others in Japan). A third challenge to the ‘learning/performance’ hypothesis emerges from the following evidence. The cognition/achievement linkage displayed by the highest achievers in both the Anglo and Japanese groups employed all the above-mentioned strategies - in effect, studying in more-complex ways - compared with the study practices of the low achievers in both groups. This evidence suggests that ‘deep strategies’ are not academic; rather they equate to more complex, inter-linking strategies redolent of the integration of individual and school-authority strategies.

From the above evidence three challenges emerge to the 'learning/performance' hypothesis: first, 'achieving' cognition varies across cultures; second, affective imperatives vary across cultures, and third, that 'deep strategies' equates to more complex, inter-linking strategies redolent of the integration of individual and school-authority strategies.

In contrast the above evidence supports the hypothesis that student motivation is a tension between student/school-authority values. First 'achieving' cognition is imbibed from the culture. Second, affective imperatives are mediated by culture. Third, 'deep strategies' equates to more complex, inter-linking strategies redolent of the integration of individual and school-authority (culture) strategies.

The above analysis would support a view of motivation being energized not by internalized goals but rather by external values.

Summary

The above review highlighted the available evidence that supports the dichotomy between 'learning/ performance' goals. The interpretation of this evidence was shown to support two views of student motivation. The first view presents student motivation as a dichotomy between 'leaning/performance' goals. The second view presents student motivation as a tension between student/school-authority values. The difference between these two views is significant – is motivation energized by internalized goals or external values?

A common body of research evidence was shown to equally support both hypotheses with the exception of cross-cultural research. The cross-cultural research revealed three differences that challenge the 'learning/performance' hypothesis. The first challenge is that 'learning' differs across cultures (deep-level in the West / memorizing and rote in Japan). A second challenge is that affective imperatives differ across cultures (individualism in the West / obligation to others in Japan). A third challenge is that 'deep strategies' are not academic, rather they equate to more complex, inter-linking strategies redolent of the integration of individual and school-authority strategies. These three challenges emerging from cross-cultural evidence, suggest that motivation may be energized by external values.

Having questioned the asserted dichotomy of 'learning/ performance' goals, we now turn to consider a second aspect of the Goal hypothesis that posits the sequence of Goals ---> Cognitions ----> Achievement.

IV. Goals → Cognitions → Achievement: the only sequence?

The following section reviews evidence supporting the hypothesis that sequences Goals translating into Cognitions that then translate into Achievement. An alternative sequence is explored supported by the same body of evidence. This alternative sequence embodies the view that motivation may be energized by external values, accordingly this view posits that Achievement-->Cognitions--->Goals interact within a defining context.

Evidence supporting the entire hypothesis of Goals translating into Cognitions that translate into Achievement is drawn from multiple regression analysis (Elliot et al 1999). This analysis indicates the following links: (goals: performance/avoidance) --> (cognition: superficial processing and inefficient use of study time) -->(achievement decreases). Such evidence would support the Goals ---> Cognitions ----> Achievement sequencing. However the same evidence base equally supports an alternative interpretation – the less naïve one of a tension between student/school-authority values. This alternative perspective rearranges the links as follows: (academic achievement as determined by school authority) -->(mismatch with student values expressed as superficial processing and inefficient use of study time)-->(student adopts performance/avoidance goals). This alternative interpretation is supported by noting that when student behaviour more closely matches school-authority values (superficial processing and inefficient use of study time but displaying a tendency for extra rehearsal) the result is a gain in academic performance as judged by school-authority (Elliot et al 1999). Further support is drawn from noting the observation that achievement gains were equal for both learning-oriented and performance/approach students (Elliot & Harackiewicz 1996). Supported by these three pieces of evidence, the possibility emerges that obtaining academic rewards may have less to do with student motivation and more to do with catching the eye of the school-authority.

The same conclusion can be drawn from studies with younger children – where one might expect to find more candid, less guarded behaviour. Schunk (1996) compared two groups of young children – the first group was directed to work under a learning-goal set, the second group being directed to work under a performance-goal set. Confirming the Goal-->Cognition-->Achievement sequence, the first group demonstrated greater task involvement and greater subsequent achievement as judged by the authority source. These findings however equally support a reversed sequence: (achievement, defined by young children as compliance with authority) -->(cognition, expressed as compliance with directives)-->(goals, students modify). Support for this sequencing lies in the observed compliance and unguarded willingness of these young children to follow directions from an authority-source.

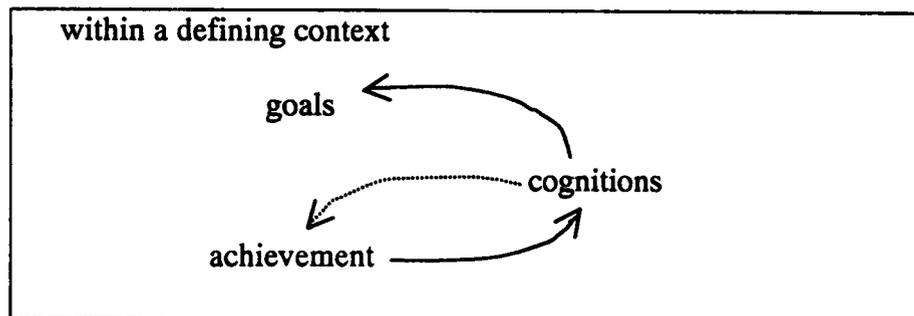
The same conclusion can be drawn from studies with older students. A series of studies, by Roney et al (1995) invited groups of college students to solve anagram problems. The first group was invited to the mind-set of individual/authority agreement - by specifying the number of anagram problems (authority standards) they would be able to solve (individual standards). The second group was invited to the mind-set of individual/authority conflict - by specifying the number of anagram problems (authority standards) they would be unable to solve (individual standards). Armed with these mind-sets, it was the individual/authority agreement group that performed better and was more persistent in working on unsolvable anagrams. This evidence supports the sequence: (achievement, defined as individual/authority agreement) -->(cognition, expressed as positive mind-set)-->(goals, positive approach). Similar differences have been produced by other investigators using a variety of approach/avoidance primers, including solving problems while imagining either positive or negative selves (Ruvolo & Markus 1992) or operating under a self-initiated versus an obligatory achievement set (Roney & Sorrentino 1995). The implication here is that in 'game' situations, identification with 'game' authority standards can be a rewarding individual experience for Western students.

The impact of cultures other than Western, on the significance of the Achievement-authority remains as yet unclear. Chinese Americans (Hess et al 1987, Whang & Hancock 1994), native Japanese (Hamilton et al 1989) and native-born Mexicans (Snyder 1994) reportedly attribute success and failure to personal effort, in contrast to Anglo American students who reportedly hold a triumvirate of attributes - good luck, ability, and effort (Holloway 1988). It is tempting to draw attention to the simplification that in

'group' cultures, the individual is held accountable for adhering to group values. In contrast, in 'individualistic' cultures, the individual enjoys a triumvirate of opportunities to deflect responsibility and so maintain individual values. Clearly further investigation is required to probe these simplified over-views of how culture interacts with human motivation – an area to which this research seeks to contribute.

Summary

In summary, the accumulated evidence from educational contexts supports two sequences of the goal-theory hypothesis. The first sequence posits: Goals ---> Cognitions ---->Achievement. The second posits a reversal of this sequence: Achievement-->Cognitions--->Goals. This latter sequence embraces the following determinants: first, that scholastic achievement is determined not by students but by the school-authority; second, student cognition recognises the power of school-authority but concurs at varying degrees with its specific values, third, student goals reflect the individual's relationship between self-values and school-authority values. To embrace these determinants this second sequence can be modified as follows:



Support for this above sequence derives not only from accumulated evidence but also by a defining logic. Motivational research has for several decades largely been 'cold' - inevitably isolating subjects from varying aspects of their defining contexts. This 'cold' research offers replicable experiments - but experiments repeated within the same simplified contexts. Carrying the fruits of 'cold' research into the field – such as goal theory – raises issues of alternative perceptions. The above review illustrates that one valid alternative perception seeks to recognize that human motivation operates within a range of defining contexts (gender, maturity, experience, social, culture etc). It is from this 'warm' logical base, as much as from accumulated research, that the revised goal theory hypothesis posits achievement --->cognitions--->goals within a defining context.

It is to the study of human motivation operating within a range of defining contexts (gender, maturity, experience, social, culture) that this research seeks to contribute. Specifically this research will consider a case study of non-Western motivation within an educational context.

V. Defining motivational contexts: Prosocial goals

The following section presents the theoretical relationship between achievement and prosocial goals. Evidence of the relationship between prosocial and achievement goals is then reviewed. The focus of this review is to explore if the partnership between academic and prosocial goals is equal or dominant.

In the domains of social and personality development, goals are commonly defined with respect to content – achievement goals focus on the *why* in contrast to the broader prosocial *what* (Austin and Vancouver, 1996; Dodge, Asher, and Parkhurst, 1989; Ford, 1992, 1996; Pervin, 1983). This broader *what* engages motivation within its defining contexts (Eccles, 1993; Maehr, 1984; Sivan, 1986).

One of these defining contexts is education, within which various social goals expressive of the individual's interpersonal world have been recognised - the need for approval, the willingness to variously cooperate, comply with rules, help others, make friends, be responsible, belong, show integrity and gain the respect of others (McClelland 1955; Veroff 1969; Allen 1986; Farmer et al 1991; Ford 1992). Of note in terms of conforming to school-authority is the observation that for young adolescents, social appropriateness appears to take precedence over learning or peer socializing (Wentzel, 1991,1992). As young adolescents mature, the goal of social appropriateness falls from grace - an observation underpinning the later pragmatism that links social and achievement goals to acceptance and success (Schneider et al 1996)

The relationship between social and achievement goals is illustrated by Wentzel (1994) who reports that student peer respect is closely related to being liked. The connection between gaining respect and being liked appears to span generations – as displayed in student evaluations of their teachers (Wentzel, 1996). This evidence suggests that social goals dominate achievement goals.

An explanation for dominant social goals and subordinate achievement goals lies in the former's broader capacity. An example of this broader capacity of social goals is gleaned from noting that being

cooperative, compliant, and willing to share is positively associated with academic success (Wentzel 1989, 1991b, 1993). This association can be explained as follows: tutoring others provides behavioral rehearsal that models achievement-authority standards – in effect being a student-tutor helps to identify with the teacher-authority’s perspective. From this explanation, social goals (here of identifying with peers and teacher) overarch achievement goals (here of matching achievement-authority standards).

Two intriguing insights of how dominant social goals interact with subordinate achievement goals are offered by Wentzel (1996). First, she observes a relationship between the time students spent on homework and students helping their peers and understanding their assignments. This observation repeats a pattern noted above - being a student-tutor helps to identify with the teacher-authority’s perspective – hence social ease gained from helping others overlaps into converting homework from being a drudge to being socially beneficial. Wentzel’s second observation was that increases in effort levels in upper school students depended on both social and learning goals. This observation initially implies that both social and learning goals may exert equal influence on student effort. However the defining context is upper Secondary school, an arena dominated through ‘high-stakes-examinations’ by school-defined ‘achievement’. Given this context, social goals can only fall into one of two groupings – acceptance of school-defined ‘achievement’ with its connective social and learning goals, or reject school-authority and effectively become self-isolating. Such an explanation reminds us that educational contexts can exert a distorting influence on both social and learning goals.

Summary

The above section presented the theoretical relationship between achievement and prosocial goals as a study of the *why* and *what* of motivation. Evidence of the relationship between prosocial and achievement goals were reviewed, indicating an unequal partnership dominated by prosocial goals. Further evidence indicated that context can distort this relationship – specifically the school-context appears to distort both social and learning goals.

The implication that context can distort the relationship between prosocial and achievement goals, adds a further link to the hypothesis that posits achievement --->cognitions--->goals within a defining context. This hypothesis can now be elaborated as follows:

a defining context alters Prosocial /achievement --->cognitions--->goals.

The hypothesis that context impacts on motivation is supported by evidence drawn from an educational context – specifically the predicament of students whose personal and school cultures differ. Extreme examples have been noted (in America see: Arroyo & Zigler 1995, Fordham & Ogbu 1986; Bergin & Cooks 1995, Collins-Eaglin & Karabenick 1993). Equally traumatic are the cases of gender, home/school environment, Primary/Secondary school transfer and exam-driven education.

Having indicated how prosocial and achievement goals are altered by context, we now turn to consider how the individual copes with such experiences - in effect to explicate the relationship between prosocial goals and motivational theory. A way to consider this relationship involves consideration of the self-worth theory (Covington 1998,1992)

VI. Self-worth or societal-worth?

The following section presents the theory of 'self-worth'. Its underpinning assumptions and supporting evidence are questioned in terms of locating where pragmatic interventions may best be targeted.

The self worth theory posits a Promethean, life-spanning struggle to establish and maintain a sense of self worth (Covington 1992, 1998; Covington & Beery 1976). This theory assumes two constants: first a uniformity in society that values competency and doing well; second, an educational system that promotes (through grades) these same values. Clearly these two assumptions are not necessarily identical – success in societal and school terms can markedly differ.

Differences between societal and school values are reflected in student concepts of 'success'. For example, success-oriented students (see: Atkinson 1957; Covington 1992) define success not in terms of grades but as becoming the best they can be. These success-orientated students also value ability, but as a tool or resource to achieve personally meaningful goals. Two significant points emerge. First, such

'success-oriented' students hold values that differ from grade-orientated schools. Second, 'success-oriented' students will not be deterred by school-based evaluations. In effect, 'success-oriented' students have a self-confidence that inoculates them from school-based values. Extending this logic, students who are not 'success-oriented' will not have a self-confidence that inoculates them from school-based values. Accordingly, non 'success-oriented' students value ability as a matter of status, define competency in terms of competitiveness and logically then are often forced to avoid the implications of school-based failure. In their search for some safe haven, such students adopt performance goals (Fried-Buchalter 1992, Thompson et al 1998). From such an analysis, 'success-oriented' students are immune to the school experience and accordingly invite little attention. In contrast 'performance goals' students are constantly engaged in a struggle for survival and accordingly attract concerned attention.

The concerned attention attracted by 'performance goals' students shares a common assumption that effective intervention is located within the societal arena – commonly expressed in terms of attaining school-defined success. For example, 'performance goal' students have been assigned three defensive categories - self-worth protection, self-handicapping strategies, and defensive pessimism (Thompson 1993, 1994). Self-worth protection entails manoeuvres that assign failure to not trying rather than incompetence (Mayerson & Rhodewalt 1988, Rhodewalt et al 1991, Thompson et al 1995). Self-handicapping behavior entails creating an impediment as an excuse for failure (McCown & Johnson 1991; Covington 1992). Defensive pessimism entails adopting expectations that minimize feelings of anxiety (Cantor & Harlow 1994, Cantor & Norem 1989, Norem & Illingworth 1993; Martin 1998). Such evidence defines the arena for intervention as being the school and by implication the administrators of such intervention as the school-authorities. Two flaws can be detected in this assumption. The first flaw is to ignore the innate qualities of these 'performance goal' students – the above research describes them as being dexterous, resourceful, energetic and inventive – all noble qualities brought to naught by the second flaw. This second flaw is the Achilles' heel of not being immune to school-defined success.

The prognosis for 'performance goals' students during their school years is predictable and well documented - achieving inconsistently, heightened emotional exhaustion anxiety and neuroticism, (see: Thompson 1993; McCown & Johnson 1991; Higgins & Berglas 1990, Thompson 1994, Topping & Kimmel 1985). Given such a gloomy prognosis, intervention at the root cause is warranted. However agreement on

where the 'root cause' lies remains elusive - at the individual level as implied in the phrase 'self-worth' or the societal level?

Summary

The above section presented the theory of 'self-worth'. Its underpinning assumptions and supporting evidence are questioned revealing that 'success orientated' students were immune to the school experience – either in terms of matching school-authority values or as resolute 'definers of their own success'. In contrast 'performance orientated' students – despite having noble qualities such as being dexterous, resourceful, energetic and inventive – lacked immunity and struggled for survival in a context whose values they could neither meet nor grasp. The prognosis for 'performance goals' students was predictably gloomy.

From the above analysis, pragmatic interventions appear inappropriate for 'success orientated' students but a priority for 'performance orientated' students. This conclusion can be incorporated into the following hypothesis:

a defining context alters

Prosocial /achievement --->cognitions--->goals ('success orientated' ---> no help required)

('performance orientated' ---> help required)

Having identified where help appears to be required, we can now turn to consider what pragmatic interventions may be available.

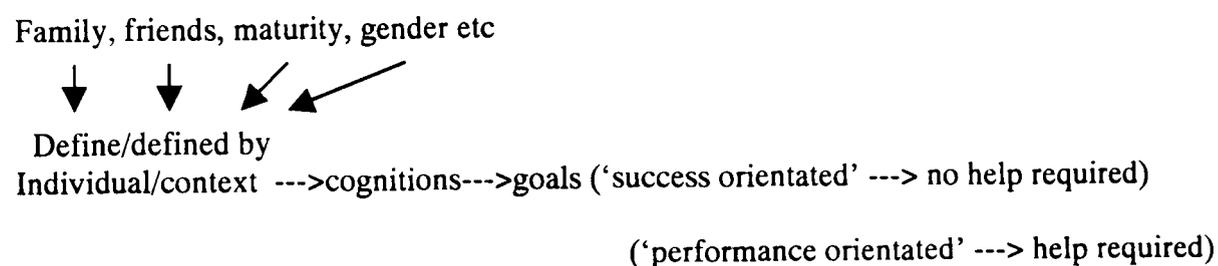
VII. Interventions: individual or context based?

The following section reviews what interventions may be available to help 'performance orientated' students. Two categories are reviewed: first, interventions centred on the individual: second, interventions centred on the context. This review questions the pragmatism of such interventions.

Initial studies centred on family backgrounds point to a chicken-egg conundrum. Parents of success-oriented youngsters are encouraging, warm and nurturing (Winterbottom 1953; Eskilson et al 1986.

Ginsburg & Bronstein 1993, Jacobs et al 1998, Strage 1999, Rosen & D'Andrade 1959, Hermans et al 1972). Parents of failure-oriented students (effectively performance orientated' students) reversed this pattern (Tomiki 1997). Variations to this deterministic polarity are associated with uncertain self-estimates of personal worth among children, chronic achievement anxiety, and an increased likelihood of self-handicapping behavior (Kernis et al 1992, Kimble et al 1990; Kohlmann et al 1988; Mineka & Henderson 1985; Chapin & Vito 1988). Such evidence points to a common dynamic of student self-worth – a mechanism explained (if incompletely) by the assumption that the nurture children receive either promotes or diminishes their own sense of self-worth. Self-worth (as an end product) appears to exert a significant impact (apparently producing 'success orientated' students). However such evidence is correlational not causal, and tends to be deterministic – given family background X the student will become Y.

An alternative approach that may resolve the above chicken-egg conundrum would consider 'family' as simply one defining context. From the student's perspective, there may be a range of 'defining contexts' – friends, maturity, gender etc – amongst which 'family' figures but may not dominate – or at least not dominate continuously. To illustrate:



From this logic, interventions aimed at the individual as family member may be judged not only intrusive but also ineffectual – the full range of 'defining contexts' would dilute them.

An alternative approach to helping 'performance orientated' students, seeks to address self-worth through school-based interventions.

An example of school-based interventions for 'performance orientated' students is the desired transition that schools would substitute 'ability games' (Ames 1990, Covington & Teel 1996) with 'equity games' (Covington 1998, Nicholls 1989). This transition would substitute 'new rules of educational-

engagement'. The first 'new rule' would see teachers setting absolute standards of excellence and making explicit the relationship between goal attainment and payoffs (Covington 1998, Covington & Omelich 1984). The second 'new rule' invokes the climate of an entire school to change through a negotiated, shared instructional vision among teachers, staff, and administration (Maehr & Midgley 1991; Weinstein 1998, Butterworth & Weinstein 1996, Weinstein et al 1995).

These two 'new rules' are underpinned by assumptions that inherently weaken their effectiveness. The first assumption is that school-authorities can function in a context that makes explicit the relationship between students' effort and reward – whether education implies creativity or cramming, the allocation of rewards confounds explication. The second assumption is that educational change is effected at the level of teachers, staff, and administration – organisational change theory points to a larger complex than that embodied in a school staff-room.

Summary

The above section reviewed two categories of interventions available to help 'performance orientated' students.

The first category comprised interventions centred on the individual. Reviewing evidence of family/student behaviour initially produced a deterministic chicken-egg conundrum. This conundrum was apparently resolvable by placing 'family' as one of a range of contexts that alter prosocial/achievement goals.

A second category comprised interventions centred on the addressing self-worth through school-based interventions. Reviewing evidence of such school-based interventions revealed two flawed assumptions. First, that school-based rewards are entirely susceptible to absolute standards; second, that a school staff-room is the center for educational change.

Adding these two conclusions to the evolving hypothesis is helpful in terms of suggesting research directions that may prove helpful:

Individual/context--->cognitions--->goals ('success orientated' ---> no help required)
('performance orientated' ---> help required but
'school-based' help is uncertain)

If, as this review suggests, pragmatic interventions may not be readily available, the above hypothesis can suggest research dimensions that may prove helpful.

First, it appears central to understand the specifics of the prosocial/achievement interaction within real-time contexts. For example, students transferring from secondary to tertiary education may be expected to undergo a transition in the range of contexts presumably reflected in their prosocial/achievement interaction. To monitor this transition within a real-time context, may reveal some of the specifics of this interaction.

Second, 'performance orientated' students appear to 'require help' yet pragmatic interventions appear problematical. It would be revealing to monitor such students within a real-time context – specifically one academic semester. By investigating how these students self-help, how they nurture their own 'self-worth' may offer insights into motivational resilience.

Third, the complexity of motivation has been shown to derive (in part) from being the subject of a multiplicity of perceptions. Research that allows a 'central' voice to be heard – that of the individual subject – offers potential insights into the central issue of how the individual 'sees' their own situation. Research that adopts an ethnographic approach appears to be appropriate.

Chapter Three: Research design and procedures

I. Introduction

The research design and procedures reported here are guided by the notion of ‘fitness for purpose’ a view endorsed by amongst others, Morse et al (1995, 2001), Marshall et al (1995), Kvale (1996) and Denzin et al (2000).

The defining ‘purpose’ here is to probe human motivation within a real-time educational context.

For clarity, the selected research design, data collection and then data analysis procedures that ‘fit’ the purpose of this research is presented in the sequence displayed in Table 3.1.

Table 3.1: Research design and procedures: sequence of presentation

II.	Design		<ol style="list-style-type: none"> 1. Nature and objectives of the study 2. Research questions 3. Methodology 4. Instruments <ol style="list-style-type: none"> a. questionnaires <ol style="list-style-type: none"> i relevance ii validity and reliability iii use as pre & post event measurements b. interviews <ol style="list-style-type: none"> i justification ii design iii standardization iv schedule 5. Research subjects <ol style="list-style-type: none"> a. selection b. justification c. interview group: selected demographics 6. Setting 7. Ethical Issues
III.	Data Collection		<ol style="list-style-type: none"> 1. Biggs’ questionnaires 2. Interviews
IV.	Data Analysis		<ol style="list-style-type: none"> 1. Numerical data 2. Interview transcriptions 3. Stages of data analysis
V.	Summary		

II. Design

1. Nature and objectives of the Study

The nature of this investigation is to investigate human motivation within an educational context.

The objectives of this study are to probe subjects' motivational responses within an educational context, interrogate a working motivational hypothesis and so add to our understanding of human motivation by contributing to motivational theory building.

2. Research Questions

The central research question reflects the essentially investigative nature of this research. Specifically, the central question probes one motivational context:

What is the motivational impact on incoming teacher trainees of English of their first semester at the Hong Kong Institute of Education?

This investigation, and especially the data gathering process, will be guided by the following research questions:

What are incoming teacher trainees' motivations on joining the HKIEd?

How do teacher trainee motivations adjust to the demands of learning at the HKIEd?

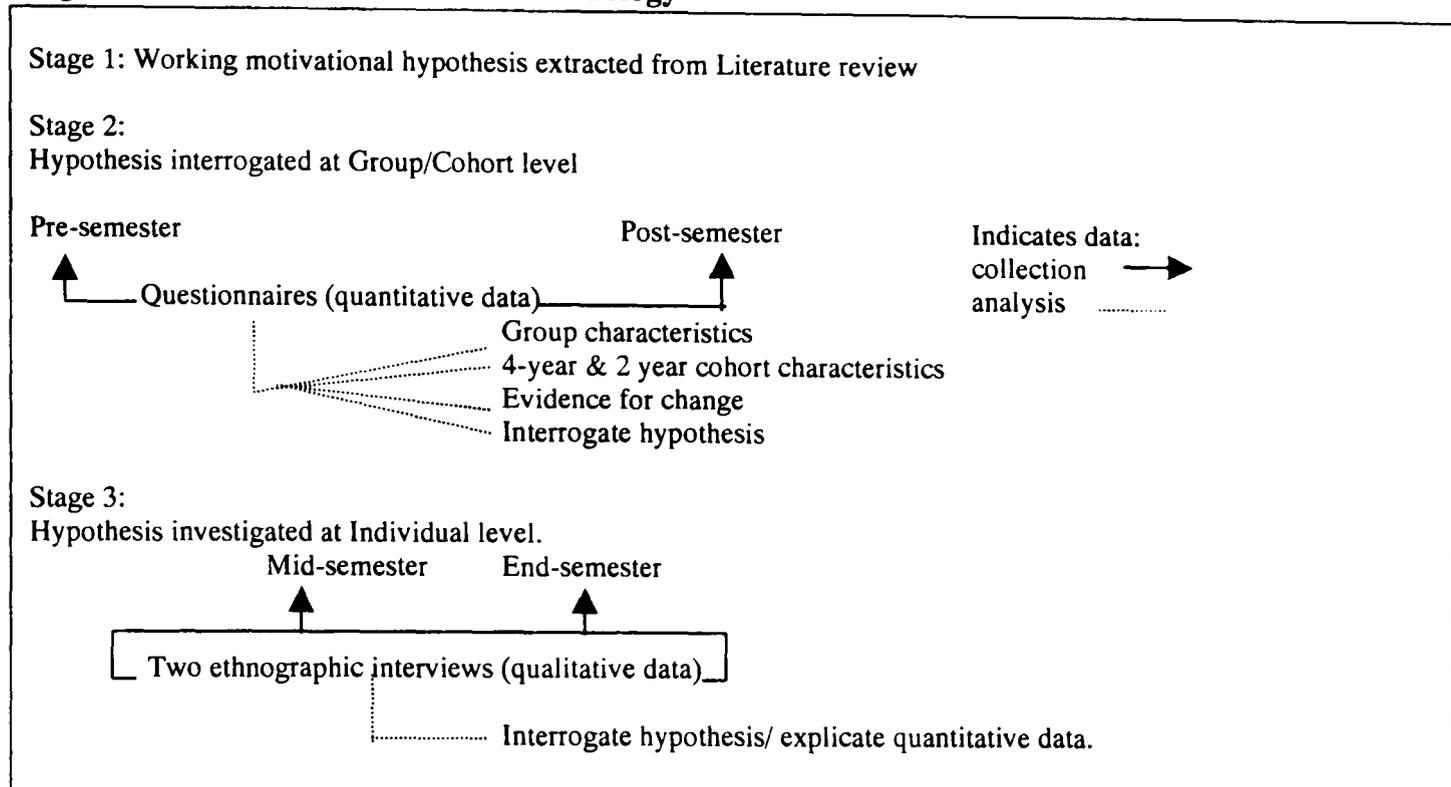
What are the characteristics/features of teacher trainee motivations at the end of their first Semester?

It is anticipated that the above probes will provide insights that should add to our understanding of human nature within an educational context.

3. Methodology

To probe human motivation within an educational context, three stages of investigation are employed. These three stages are presented graphically in Figure 3.1.

Figure 3.1: Overview of research methodology



As displayed in Figure 3.1, the methodology comprises three stages.

First, from a review of the relevant literature is extracted a working motivational hypothesis. Given the lack of any one commonly accepted central theory (see: Wittrock, 1986: Brophy, 1998, Weiner, 1992, Gardner 1993, Pintrich and Schunk 1996) the working hypothesis will function as a stalking horse to be interrogated and reviewed in the light of the following research data.

Second, a pre and post event questionnaire is administered. This questionnaire serves to provide four levels of information - a quantitative appraisal of group and then cohort characteristics, evidence of pre-post event change and finally to interrogate the working motivational hypothesis. This data serves to illuminate in quantitative terms, the three guiding research questions.

Third, volunteer subjects drawn from the group/cohort are interviewed twice- at the mid-semester and then at the end of their first semester. This in-depth qualitative data serves to further interrogate the working motivational hypothesis. This ethnographic interview data serves to illuminate in qualitative terms, the three guiding research questions.

The above combined methodologies enable a motivational theory to be interrogated by a statistical analysis at group level and by individual, ethnographic data. Such an interrogation will contribute towards a motivational theory building.

4. Instruments

The following section reviews first the two questionnaires (2.4.a) and second the ethnographic interview prompts (2.4.b) employed in this research.

a. Questionnaires.

The two questionnaires used in this research and reviewed here in terms of first, their relevance: second, their validity and reliability and third their use as pre and post event measurements.

The two questionnaires under review are the Hong Kong version of both the

- *Study Process Questionnaire*
- *Learning Process Questionnaire Form A*

(Biggs, 1992.)

i. Relevance

This research seeks to interrogate the relationship between student motivation and their learning context. Germane to such an interrogation is the suggested link between students' motives in learning and the strategies they use to learn (e.g., Biggs, 1987; Marton, Hounsell & Entwistle, 1984; Schmeck, 1988). This link posits that students' motives lead to congruent strategies in academic learning and this in turn determines performance outcome (Biggs, 1987). The combination of motive and strategy is referred to as an 'approach'. Three approaches have been identified, each based on its corresponding motives and strategies. These are referred to as 'deep', 'surface' and 'achieving' approaches.

Although not necessarily subscribing to its motivational underpinnings the Biggs' questionnaires are held to be relevant tools to this investigation.

ii. Validity and Reliability

The validity and reliability of each questionnaire has been extensively tested for use within the context of this research, namely Hong Kong secondary and tertiary education (see: Biggs, 1992 pp15-44).

iii. Use as pre and post event measurements

As measurements of the impact of educational interventions within Hong Kong, both questionnaires have proved helpful (see: Gow et al 1989 and Balla et al 1991). Specifically as pre and as post event tests both questionnaires have been independently corroborated - in Hong Kong by Stokes *et al* (1989), in Canada by Volet *et al*, (1994) and in Holland by Vermetten *et al* (1997).

The above review establishes the relevance, validity and reliability and use as pre- and post-event test of the Biggs' questionnaires for use in this research.

This research additionally employs ethnographic interviews. The justification, design and schedule for use are now reviewed in the following section.

b. Ethnographic interviews

i. Justification

Whereas the quantitative, questionnaire data provides a statistical overview of motivational change between pre and post event administration, such an overview is to be enriched and interpreted by comparison with in-depth ethnographic interviews.

In the absence of a commonly accepted central theory (see: Wittrock, 1986: Brophy, 1998: Weiner, 1992: Gardner 1993: Pintrich and Schunk, 1996: Sivan, 1986: Mehan, 1979; Collins and Green, 1992) this research seeks to add an astringent to the on-going debate by exploring motivation as reported by subjects themselves.

Recognising that motivation is dynamic and prone to change, this research follows Strauss and Corbin (1998) view that the study of subjects operating within a real-life context includes an analysis of process. To capture this process two interviews are employed – mid-semester and then end semester.

Combining the qualitative interview and quantitative questionnaire data provides a replicable matrix that validates theory building.

ii. Interview design

The interview design involves three major stages.

The first stage involves the process of ‘unpacking’ the major research questions. This ‘unpacking’ identifies two key areas: first when to explore and second what to explore viz. Areas and underpinning issues.

The second stage involves locating interview probes and prompts within each subject’s contextual experience. This second stage involves a series of pre-interview tasks that produce written self-reflections. Each subject’s written self-reflections serve to inform and guide interview probes.

The third stage unites the previous two major stages by ensuring that both mid and end-semester interviews form a cohesive interview matrix.

A fourth stage involves generating both interview prompts and probes for each underpinning issue. Prompts and probes are contextualised where appropriate within the individual subject’s self-reflections and contribute a clearly defined role within the overall interview matrix.

Additionally, all interviews are standardised with respect to location, protocols and interviewer.

The above stages are described in the following sections.

Table 3.2 displays the first major stage – the process of ‘unpacking’ the three guiding research questions and identifying their respective underpinning issues.

Table 3.2: Guiding research questions: when to interview and what to explore

<u>When to explore:</u>	Semester = 13 teaching weeks.	
Principle research question	relevant teaching weeks	which interview*
1. <i>What is the motivational impact on incoming teacher trainees of English of their first semester at the Hong Kong Institute of Education (HKIEd)?</i>	1-13	both 1 st & 2 nd interviews
Guiding research questions:		
1.a <i>What are incoming teacher trainees' motivations on joining the HKIEd?</i>	1-6	1 st Interview
1.b <i>How do teacher trainees adjust to the demands of learning at the HKIEd?</i>	1-13	both 1 st & 2 nd interviews
1.c <i>What are the characteristics/features of the teacher trainees' motivation the end of their first Semester?</i>	8-13	2 nd Interview
		*1 st interview: weeks 6-7 2 nd interview: weeks 12-13
What to explore: underpinning issues.		
<u>1. Principal research question</u>		
Issues:		
	Subjects' response to Principal Research Question Subject's perception of 'Life' as an incoming student.	
<u>1.a Guiding research question: "motivation on joining"</u>		
areas & issues		
• Relationship between Life-experience and incoming motivation		
Issues:		
	Subject's perception of own Life-experience. Awareness/importance of being 'insider/outsider' Awareness/importance of cultural factors e.g. 'choice' & 'free-will' & 'duty Impact of accommodation (home/Student Dormitory) Shifting motivation – causes/results	
• Operational motivational strategy.		
Issues:		
	Awareness/importance of individual prioritization Subject's perception of individual prioritization – causes/results. Shifting prioritization – causes/impact on self-perceptions.	
<u>1.b Guiding research question:: "adjust to the demands of learning at the HKIEd "</u>		
areas & issues		
• Characteristics of initial study pattern		
Issues:		
	Subject's perception of own study pattern	

Awareness/importance of external influences and internal 'choice'
Sameness/difference with Secondary study pattern

- Individual's learning experience

Issues:

Subject's perception of Tertiary level 'success'
Subject's perception of influences for change
Awareness/importance of 'responsibility for one's own studies'

- Consistency of prioritisation over time.

'Issues:

Subject's awareness of 'prioritisation process'
Subject's 'accommodation' of change.

1.c Guiding research question:: " *characteristics/features of motivation at the end of Semester 1* "
areas & issues

- Characteristics of subjects' motivation towards the close of Semester 1.

Issues:

Subjects' current perception of own expectations.
Subjects' reflections on prior expectations

Subsidiary Area : Subjects' Motivation

Issue:

Subjects' '*wish to please*'

Having outlined above the process of identifying when and what issues require investigating, a second stage is now described.

This second stage involves a series of pre-interview tasks producing written self-reflections.

Justification for this stage goes to the heart of this investigation that seeks to report these subjects' own experience of human motivation. As noted by Straus and Corbin (1998) real-life contexts include an awareness of process. To articulate such a process involves a degree of self-reflection. Subjects' self-reflection was facilitated by two pre-interview tasks.

First, interview subjects read a conference report and then wrote self-reflective responses.

Second, interview subjects participated in a paired '*Mirrors*' classroom observation exercise involving self-reflection on their classroom experience. Concurrently they completed a personal "*Study Log*", then self-reflected on the emerging study pattern over one sample week.

Details of these two pre-interview tasks now follow.

The first task comprised an abridged conference report entitled “*Tertiary student perspectives on factors affecting their learning*” (International Teaching and Education Conference 1998 published by HKIEd 1999). This report, compiled by a previous student cohort, narrated their perspectives on a range of topics affecting their learning. The report was abridged to match the reading ability of incoming students.

Interviewees read a hard copy of this report and then responded to nine reflective questions by typing directly into a computer file. Completion of this task was voluntary and undertaken either collectively in a computer laboratory or individually at home, responding by e-mail .

The second task paired a ‘*Mirrors*’ classroom peer-observation exercise with a concurrent completion of a personal ‘*Study Log*’. These two tasks replicated those reported in the conference report “*Tertiary student perspectives on factors affecting their learning*”. This replication has two aims. First to encourage interviewees to see the value of contrasting ‘reported’ research against ‘personal’ experience. Second to enable interviewees to become practiced in ‘self-reflection’.

The above pre-interview tasks were completed in full before the mid-semester first interview. Specific responses were then incorporated into the first interview (prompts 1,4,5,9,12).

Before the second, end-semester interview, subjects reviewed and up-dated these written self-reflections. These up-dated self-reflections were incorporated into the second-interview (prompts 7,10).

The third stage unites the previous two major stages by ensuring that both mid and end-semester interviews form a cohesive interview matrix (see: Appendix 1)

A fourth stage involves generating both interview prompts and probes for each underpinning issue. Prompts and probes are contextualised where appropriate within the individual subject’s self-reflections and contribute a clearly defined role within the overall interview matrix. For clarity, these prompts and probes are reported in tandem with subjects’ responses in Chapters Five to Eight.

iii. Standardisation

All individual mid and end-semester interviews were held in the same location, observed the same protocols and employed the same interviewer.

Appointments were mutually agreed by e-mail providing at least one week's advance notice.

Interviewees were free to elect to be interviewed as a group, pair or individually. Only two students elected to be interviewed as a pair and this only for the first interview. All other interviews were held individually.

Interview prompts (excluding probes and one 'surprise' question) were issued by e-mail at least three days in advance.

Before recording began, subjects were encouraged to review the interview probes, clarify their comprehension and address any uncertainties.

Each interview began by formally requesting permission to audio and video-record the proceedings and concluded by formally noting that the recording was now at an end.

By observing the above protocols, the interviews are considered as being standardised.

In summation, the above section on interview design is deemed to satisfy the wisdom that interviewing be *'based on an interview guide and with a reflective approach to the knowledge sought and the interpersonal relation of the interview situation'* (Rubin, 1995 p88).

iv. Interview schedule

All interview related activities were scheduled to accommodate subjects' normal responsibilities and work load.

One academic semester comprises thirteen teaching weeks, one non-teaching week and finally one exam week. All interviews were scheduled within the subject's normal timetable and normal class hours (9.00am-5.30pm).

The interviews and related activities were scheduled as displayed in Table 3.3.

Table 3.3: Schedule of interviews and related activities

<u>Teaching week*</u>	<u>Activity</u>	<u>Time</u>
3	Reading/writing task	2 hrs
4-5	'Mirrors' & 'Study Log'	open
6-7	1 st Interview (N=19)	45 mins. within 1 hr.
9-10	Written update on: 1 st reading task response 1 st 'Mirrors' & 'Study Log'	open
11-12	2 nd interview (N=19)	45 mins. within 1 hr.

*(Semester = 13 teaching weeks, 1 non-teaching week followed by 1 exam week)

5. Research Subjects

This section reviews the research subjects in terms of their selection, cohort and interview size and then justification. For the two interview groups only, additional information is provided, specifically academic background and living accommodation.

a. Selection

All selected research subjects are Hong Kong (English-subject) teacher trainees embarking on their first semester (1999-2000) at the Hong Kong Institute of Education.

The research subjects comprise two cohorts.

The first cohort (N= 47) comprises post-secondary students entering a four-year Bachelor of Education programme (4-year group).

The second cohort (N=33) are students who have completed their initial teacher training, may have had teaching/work experience and are now entering a two-year Bachelor of Education (Add-on) programme (2-year group).

Each cohort completed both the pre-semester and then post-semester Biggs' questionnaires (see 2.4.a above)

From both cohorts, interview groups were formed. Each interview group comprised of volunteers. All subjects who volunteered were interviewed.

The respective numbers of each cohort and interview group are displayed in Figure 3.2.

Figure 3.2 Research subjects: cohort and interviewees.

	Cohort	Volunteer interviewees
4-year group	47	11 (23%)
2-year group	33	8 (24%)

b. Justification

The selection of these research subjects is justified as follows.

The subjects:

- conform to the central research question: *“What is the motivational impact on incoming teacher trainees of English of their first semester at the HKIEd?”*
- enrich our understanding of human motivation by providing an Asian cultural study.
- are accessible throughout the period of research

Cohort size: Biggs’ questionnaire

- numerically large enough to provide meaningful statistical analysis
- provides subjects divided into one of two cohorts enabling response comparisons.

Group size: interviewees

- provides subjects accustomed to English as a language of communication.
- provides within and across group contrastive experiences.
- interviewing all volunteers justifies data reportage as though randomly selected.

c. Interview group: selected demographics.

Interview groups' academic background:

- a. 4 year B.Ed. (Honours, Primary). Students are mandated to “normally have completed S7 with six passes in HKCEE, a pass in AS level Use of English, Chinese language and Culture and two relevant Als”. (B.Ed. Handbook p.10) These are therefore *post-Secondary students entering Tertiary education for the first time*.
- b. 2 year B.Ed. (Honours, Primary). Students are mandated to have completed the HKIEd Certificate teacher (three year) course at the HKIEd. Students may also have had some years of school-based teaching experience. These are therefore *'continuing/returning' students to tertiary education*.

Interview groups' living accommodation:

Interviewees' living accommodation differs according to group.

The 4-year group (post-secondary students) live on-campus in newly opened (1999), purpose-built student dormitories.

The 2-year group ('mature' students) is not provided with accommodation and continues to live at home with family/parents. A minority (5%) is married and live in independent accommodation.

The selection of the above subjects facilitates a statistical and ethnographic study of subjects who are 'entering Tertiary education for the first time' contrasted with those of students who are 'mature/returning'. Contrasting these two groups' responses will provide informative features of human motivation within an Asian educational context.

6. Setting

Both cohorts are embarking on their first semester at the Hong Kong Institute of Education, a teacher-training agency for Hong Kong Government's Department of Education.

The period of study extends for thirteen teaching weeks from October 1999 to February 2000.

Their training takes place within the purpose built Taipo Campus (opened 1997) with new programmes (B.Ed. first offerings) and taught by lecturers (local and expatriate) who were actively

engaged over the previous three years in writing these new programmes and in their subsequent accreditation process.

All data collected in this research is drawn from the above setting.

7. Ethical Issues

The investigator is also a lecturer on both the 4-year and 2-year programmes.

To address ethical issues comprehensive safeguards are instigated. Figure 3.3 displays those safeguards explicitly addressed to all participants in both cohorts.

Figure 3.3: Safeguarding researcher/cohort relationship

Both cohorts are advised in a Plenary Session in the first teaching week.

- of this research exercise, its central research focus, duration and schedule of activities
- participation is entirely voluntary
- a volunteer interview group will be formed
- relationship between Lecturer and the volunteer interview group is defined
- volunteer interview groups' academic work is subject to stringent "blind marking"
- formal appeal system against 'favouritism' or grading-advantage is specified
- withdrawal of participation can be made at anytime

Additional procedural safeguards at the cohort level are displayed in Figure 3.4.

Figure 3.4: Procedural safeguards at cohort level

- each participant assigned a unique research number.
- names not recorded on any research instrument
- all records stored within a secure, locked environment
- questionnaires written in English/Cantonese
- responses recorded on machine-readable cards
- time allocated for completion exceeded recommended time (by 15 minutes)

To safeguard the rights of subjects volunteering to be interviewed both the researcher and each volunteer interviewee jointly signed a written, informed-consent agreement. Figure 3.5 displays the specifics of this informed consent.

Figure 3.5: Informed consent of volunteer interviewees

- all research tasks are additional to and independent from any formal cohort assignments
- all participating student's academic assignments will be blind "double-marked" by an independent lecturer.
- a formal appeal system against intrusion or grading is specified
- the students' individual rights to privacy are to be fully respected
- any "general reporting" will incorporate effective strategies to preserve individual anonymity.
- participants informed that they may "opt-out" at anytime.
- participants are provided with a detailed timetable/work-load for this data collection exercise.

Additional procedural safeguards for the interviewees are displayed in Figure 3.6.

Figure 3.6: Procedural safeguards for interviewees

- 'cooling-off' period of one week was mandated before participation commenced
- volunteers assigned a unique research number
- names not recorded on any written research instrument
- before each interview a formal, explicit consent to being recorded was required.
- interviewees identified only by unique research number and an 'English' name (e.g. Josie).
- time allocated for interviews was 45 minutes within a one-hour time slot
- interview day/date and time agreed at least one-week before appointment.
- interview prompts issued by e-mail at least three days before interview.
- comprehension and clarification of prompts reviewed prior to each interview
- all recorded material stored in a secure, locked environment
- all recorded material, identifiers etc to be destroyed at the conclusion of this research
- access to and use of all recorded material is strictly limited to the stated purposes of this research

At the inception of this research, protocols, process and procedures were scrutinised and then accepted by the School of Education Ethics Committee, Durham University.

III. Data Collection

This section reviews data collection procedures for first the Biggs' questionnaires and second for each of the two interviews.

1. Biggs' questionnaires

Two cohorts (4-year and 2-year: total N=80) completed the Hong Kong version of both the:

- *Study Process Questionnaire*
- *Learning Process Questionnaire Form A*

These two questionnaires were administered twice (see Figure 3.1) to provide pre and then post semester measurements.

Participants entered responses directly onto machine-readable cards.

Data is machine-collated and stored for processing in Excel format.

Data processing was randomly checked manually. Aberrant cases were amended or discarded according to the available evidence.

2. Interviews

Pre-interview activities were completed by all volunteer interviewees (N=19). Their timetable is displayed in Table 3.3.

All responses are recorded in text form directly entered by each participant into Word 6 files.

Both mid and end semester interviews (N=19 x 2= 38: see Table 3.3) were audio recorded with a video-record maintained as a reserve 'back-up'.

Each interview is recorded on an individual cassette, labeled with the subject's unique research number (example: 4-year group 4001 'Josie'. 2-year group 2001 'Sophie').

Audio recordings are transcribed by an independent research assistant experienced in transcription work involving Hong Kong speakers using English.

To meet the needs of this particular enquiry transcriptions display only words and pauses.

Verification of transcriptions is achieved through random checking of segment(s) from each interview (after, Kirk et al 1986, Eisner et al 1990 and Mishler, 1999).

IV. Data Analysis

This section reviews the analysis procedures of first the numerical data obtained from the pre and post semester Biggs' questionnaires and second the transcriptions obtained from the two mid and end semester interviews.

1. Numerical data

Numerical data consists of (N=80) students' likert-scale responses to:

- i) Pre- Semester *Study Process Questionnaire & Learning Process Questionnaire Form A*
- ii) Post- Semester *Study Process Questionnaire & Learning Process Questionnaire Form A*

Data from the above sources is analysed as displayed in Table 3.4.

Table 3.4: Purpose / statistical analysis of responses to Biggs' Likert-scales

<ol style="list-style-type: none">1. Overview of the this particular group of students:<ol style="list-style-type: none">1.1 frequency distribution of their responses to two pre-semester questionnaires1.2 scrutiny of statistical outliers.2. Interrogation of the results: testing Biggs' results clusters.<ol style="list-style-type: none">2.1 Confirmatory factor analysis of pre-semester responses2.2 Exploratory factor analysis3. Comparison of two sub-groups: 'change' over one semester.<ol style="list-style-type: none">3.1 Independent sampled t-test of cohorts' pre-semester responses3.2 Pair sampled t-test based on benchmark (see: 2.1 & 2.2 above)4. Interrogation of the theoretical framework of achievement→cognition→goals.<ol style="list-style-type: none">4.1 Student response clusters contrasted with Biggs' anticipated clusters
--

The above statistical analysis is reported in Chapter Four.

2. Interview transcriptions

Qualitative data consists of (N=19) students' interview responses to (N= 33 questions: 1st interview, N=18; 2nd interview N=15 questions).

Recorded interviews were transcribed (section 3.2 above) into Word 6 files.

Transcribed individual responses are sorted first by cohort (4-year then 2-year) then by interview question.

Informed by Kvale (1996) the interview data is interrogated and then reported as displayed in Table 3.5.

Table 3.5: Questions put to interview texts

- | |
|---|
| <ul style="list-style-type: none">a) Experiential reading . . . the interviewee's perceptionb) Veridical reading . . . confirming interviewee's perception (reporting <i>majority</i> then <i>aberrant</i> views)c) Symptomatic reading . . . locating the underpinning rationaled) Consequential reading . . . interrogating theoretical consequences |
|---|

The above process is reported with the *majority* view detailed in Chapters Five, Six and Seven and the *aberrant* view reported in Chapter Eight.

Validity is addressed by observing Pervin's (1984) insight that validity is "*the extent to which our observations indeed reflect (what) is of interest to us*" (p 48) a view subsequently endorsed by amongst others Tesch (1990), Wolcott (1994) and Miles and Huberman (1994). Specifically, this insight is addressed in three ways.

First, "*(what) is of interest to us*" is derived from an interview matrix (see Table 3.2). Interview prompts cluster around key issues to this investigation. Accordingly the reporting exercise has a valid and verifiable focus.

Second, throughout Chapters Five – Eight contextual interview prompts and related coding is displayed in tandem with each reported experiential, veridical and symptomatic reading.

Third, a consequential reading follows the reporting of each prompt/cluster. In this way, 'theory building' is explicitly linked to underpinning evidence.

Reliability (for Kvale, 1996) is to be addressed throughout the process outlined in Table 3.5. Specifically, reliability of coding is addressed in two ways.

First, random samples (N=2) are selected of responses to each interview question. These samples are 'blind-coded' by an experienced ethnographic researcher and by this researcher. Where variations emerge samples are re-visited and a consensus coding agreed before proceeding to code the remaining responses.

Second, detected commonalties and aberrant responses are addressed by the collation of evidential quotations. This collation is reviewed first by an independent researcher and then selectively cited within the text of this thesis.

3. Stages of Data Analysis

The stages of data analysis reflect the time-sequence of recording student experience throughout their first semester. These stages are displayed in Table 3.6

Table 3.6: Stages of data analysis

Data source	Schedule (1999-2000)	
	Collation	Analysis
1 st Biggs' questionnaires	Oct	April
Responses to 1 st interview	Nov/Dec	May-July
Responses to 2 nd interview	Feb/March	May-July
2 nd Biggs' questionnaires	Feb	April

V. Summary

This investigation seeks to explore human motivation within an educational context. This exploration sets three objectives: namely to probe subjects' motivational responses over a standard academic semester, interrogate a working motivational hypothesis and thereby add to our understanding of human motivation by contributing to motivational theory building.

These three objectives are embodied in one central research question and supported by three guiding research questions. These questions are displayed in Table 3.7.

Table 3.7: Central and guiding research questions

What is the motivational impact on incoming teacher trainees of English of their first semester at the Hong Kong Institute of Education?

guided by the following research questions:

- a) *What are incoming teacher trainees' motivations on joining the HKIEd?*
- b) *How do teacher trainee motivations adjust to the demands of learning at the HKIEd?*
- c) *What are the characteristics/features of teacher trainee motivations at the end of their first Semester?*

To address these questions a combined quantitative and qualitative research methodology is employed.

Quantitative data is collated from two Biggs' questionnaires employed here as pre and then post event measurements of motivational change over on academic semester.

Qualitative data is collated from two ethnographic interviews held at mid and then end semester.

The combination of these two approaches provides data against which to interrogate a working hypothesis for motivation. This working hypothesis is to be extracted from a review of the relevant literature. A working hypothesis is required for there is as yet not one commonly held motivational theory.

The combined research methodology is applied to two cohorts (total N=80 students) of Hong Kong English teacher trainees. The selection of these research subjects is central both to the central research question (see Table 3.7 above) and simultaneously provides a culturally contrastive case study to the majority of motivational studies grounded in the West.

The research subjects comprise two cohorts. The first are post-secondary educated trainees entering teacher training for the first time and living on-campus. The second cohort are post-Certificate in Education trainees who are slightly older, have had some post-secondary work experience and who live off-campus. These contrastive cohorts provide an intriguing data source against which to interrogate motivational theory and add to motivational theory building.

Having reported the research design and procedures, we now turn to examine the fruits of these labours.

Chapters Five, Six and Seven offer an interrogation of a working motivational hypothesis by the *majority* responses to both the mid and then end semester interviews.

Chapter Eight provides a review of the *aberrant* responses and offers a review of the working motivational hypothesis in the light of the preceding findings.

But first we turn to Chapter Four for an overview of group characteristics and change as revealed by a statistical analysis of responses to the Biggs' questionnaires.

Chapter Four: Overview of group characteristics and change.

Statistical review of pre and post Semester responses to Biggs' *Study & Learning* Questionnaires.

I. Introduction

This Chapter presents five sections:

- Origins and validity of the Biggs' questionnaire employed in this research
- Statistical overview of this particular group of students,
- Statistical interrogation of the results: testing Biggs' results clusters.
- Statistical comparison of two sub-groups: 'change' over one semester.

The Chapter then concludes with a discussion of what the response clusters indicate about the underlying relationships within the theoretical framework of achievement→cognition→goals.

II. The questionnaires: origins and validity

Two questionnaires were employed in this study: first the *Study Process Questionnaire*, second the *Learning Process Questionnaire* (see: Appendix 2). The Australian origins and validity of the *Study Process & Learning Process* questionnaires are fully outlined in Biggs (1987). Independent corroboration is available: with Australian students see Hattie and Watkins (1981), with English students see O'Neil and Child (1984), with Nepalese students see Watkins *et al* (1990) and with Canadian students see Andrews *et al* (1994). Validation for the Hong Kong version (the version used in this study) is based on an extensive study involving all of Hong Kong's Tertiary institutions, fully reported in Biggs (1992). Independent corroboration for their use as pre and as post tests is available: in Hong Kong see: Stokes *et al* (1989), in Canada see Volet *et al*, (1994) and in Holland see Vermetten *et al* (1997).

Based on research that suggests the presence of a link between students' motives in learning and the strategies they use to learn (e.g., Biggs, 1987; Marton, Hounsell & Entwistle, 1984; Schmeck, 1988) it is suggested that students' motives lead to congruent strategies in academic learning and this in turn determines performance outcome (Biggs, 1987). In other words, students devise strategies defined by their motives (in learning). The combination of motive and strategy is referred to as an 'approach' to learning.

Three approaches to learning have been identified, each based on its corresponding motives and strategies. These are referred to as ‘deep’, ‘surface’ and ‘achieving’ approaches. Students with deep orientation to learning tend to adopt learning goals, while those with surface approach to learning would be more likely to construe their learning context in terms of performance goals. Students with an achieving approach would adopt performance goals, but seek positive judgment about ability and effort (Ames & Archer, 1988; Elliott & Dweck, 1988), both of which are internal attributions.

The Biggs’ *Study Process & Learning Process* questionnaires comprise six factors each explored by question clusters displayed in Table 4.1

Table 4.1: Biggs’ six factors related to questionnaire items

Factor	Study Questionnaire items	Learning Questionnaire items
Surface Motive (SM)	1,7,13,19,25,31,37	43,49,54,,61,67,73
Deep Motive (DM)	2,8,14,20,26,32,38	44,50,56,62,68,74
Achieving Motive (AM)	3,9,15,21,27,33,39	45,51,57,63,69,75
Surface Strategy (SS)	4,10,16,22,28,34,40	46,52,58,64,70,76
Deep Strategy (DS)	5,11,17,23,29,35,41	47,53,59,65,71,77
Achieving Strategy (AS)	6,12,18,24,30,36,42	48,54,60,66,72,78

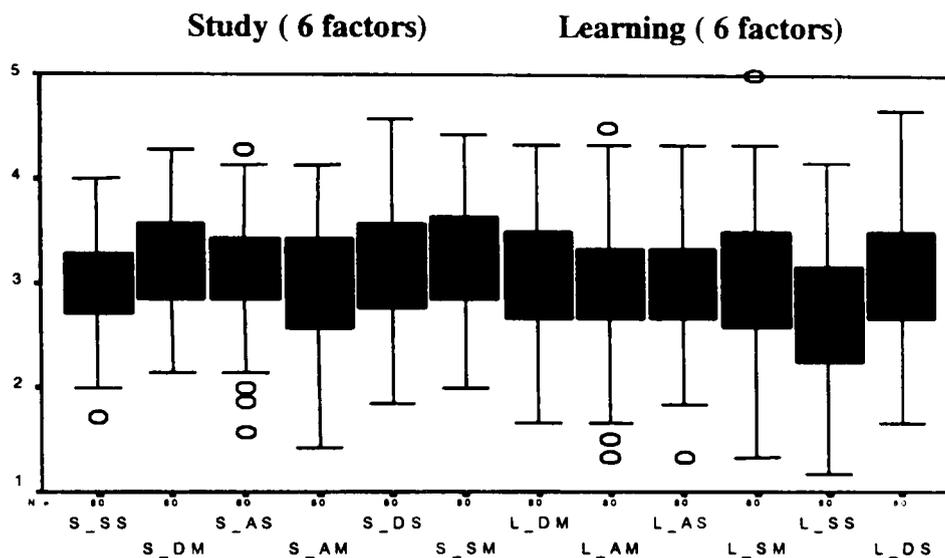
Students responded to these questions by selecting from a five point Likert scale with ordinal scoring. Statistical analysis required these ordinal scores to be re-coded from A=1 to E=5 (Biggs 1992, p18).

III. Statistical overview of research subjects

An overview of this particular group of students (N=80) is provided in the following frequency distribution of their responses to two pre-semester questionnaires (Table 4.2). Each questionnaire investigated six factors. The Study questionnaire comprised 42 questions. The Learning questionnaire comprised 36 questions. To facilitate comparison each student’s cumulative responses to the six factors for Study and then Learning was calculated in terms of the mean. Table 4.2 ‘statistical overview of these students’ displays as box-plots the frequency distribution of these means:

Table 4.2: Statistical overview of these students

**Student (N=80) responses to two pre-semester questionnaires.
Frequency distribution of means: with outliers indicated (○).**



The above table displays student (N=80) responses to six Study (denoted by S_) and then six Learning (denoted by L_) factors underpinning both questionnaires. These six common factors are Surface Motive (SM), Surface Strategy (SS), Deep Motive (DM), Achieving Motive (AM), Deep Strategy (DS) and Achieving Strategy (AS). To add perspective the scale (1-5) refers to the five-point Likert scale responses common to both questionnaires: example “1” = “never or rarely true of me”, “3” = “true for me about half the time” and “5” = “is always or almost always true of me”. Medians in the above distribution are displayed within each box-plot array e.g. median of S_SS appears at “3”.

What Table 4.2 displays is an apparent homogeneity. Two statistical features express this homogeneity. First, the medians and 1st to 3rd quartiles display a narrow range centered on scale 3 (corresponding to the questionnaire response “true for me about half the time”). Second, the ranges of these twelve factors form a normal distribution: narrowest range comprises 3 (25%) factors (S_SS, S_DM, S_AS), middle range comprises 6 factors (50%) and the widest range comprises 3 (25%) factors (L_SM, L_SS, L_DS). This normal distribution (25%/50%/25%) combines with the narrow range of medians and 1st to 3rd quartiles to suggest that responses from this group of students are apparently homogenous.

Returning to the frequency distribution (Table 4.2) attention can now be directed to ten statistical outliers e.g. L_SM, scale 5. In the context of responses to a questionnaire such statistical outliers may be

viewed as responses indicative of individuality. Before accepting these outliers as responses indicative of individuality a careful scrutiny of their data entries is required. This scrutiny is set out in Table 4.3.

Table 4.3: Statistical Outliers: expressions of individuality?

ID Number	Factor	Mean
4002	Learning: Surface Motive (L-SM)	5.0
4010	Learning: Achieving Motive (L-AM)	4.5
4059	Study: Achieving Strategy (S-AS)	4.3
2038	Study: Achieving Strategy (S-AS)	2.3
2004	Study: Achieving Strategy (S-AS)	1.8
4027	Study: Surface Strategy (S-SS) Learning: Achieving Motive (L-AM)	1.7 1.3
4018.	Learning: Achieving Motive (L-AM)	1.5
2007	Study: Achieving Strategy (S-AS) Learning: Achieving Strategy (L-AS)	1.5 1.3

Table 4.3 identifies by student ID number, eight students and then the ten grouped factors to which their responses are identified in Table 4.3 as being statistical outliers. Next, appears the relevant factor followed by the mean. It is these means that identify these responses as statistical outliers.

A careful examination of the original data sets reveals no justification for excluding the above statistical outliers (no evidence of corrections, duplicate responses nor data entry errors). Accordingly, these cases may now be considered as intriguing samples of individuality.

To add a sense of perspective it is helpful to show these ten samples as a percentage of these eight students' total responses to the given twelve factors (10%). A further sense of perspective is gained by recalling that these eight students comprise 10% of this student population (N=80). Accordingly, of all the responses from this student population these ten samples of individuality comprise only 1%

In summary, this group of students (N=80) appears to be homogenous, a feature both enlivened and perhaps reinforced by the presence of eight students whose ten intriguing samples of individualism comprise 1% of all responses.

IV. Statistical interrogation: testing Biggs' question clusters

How should these particular student responses be analyzed?

The Biggs' Study and Learning questionnaires express certain underlying assumptions. The first assumption is that the responses support six discrete factors. To test whether these particular student responses support Biggs' six-factor model a confirmatory factor analysis (using LISREL 8.2) was applied to the numerical Study and Learning data sets. The results of this confirmatory factor analysis now follow:

Table 4.4: Confirmatory factor analysis of pre-semester responses

Study questionnaire.					Indication of Statistical fit:		
Factors:	RMSEA	GFI	AGFI	NFI	Good	Moderate	< Moderate
SM	0.11	0.96	0.92	0.76	*	**	*
DM	0.0	0.98	0.96	0.9	***	*	
AM	0.05	0.98	0.95	0.95	****		
SS	0.12	0.95	0.90	0.64	*	***	
DS	0.0	0.98	0.96	0.94	***	*	
AS	0.0	0.98	0.97	0.96	****		
Learning questionnaire.							
SM	0.39	0.88	0.72	0.62			****
DM	0.12	0.97	0.93	0.91	*	**	*
AM	0.20	0.94	0.87	0.87		*	***
SS	0.20	0.95	0.89	0.93	*	*	**
DS	0.07	0.98	0.95	0.96	***	*	
AS	0.22	0.94	0.87	0.88		*	***
Key:					Indication of Statistical fit:		
					Good	Moderate	< Moderate
RMSEA: Root Mean Square Error of Approximation ¹					0	0.5	0.1 <
GFI: Goodness of Fit Index. ²					1.0	0.95	0.9 <
AGFI: Adjusted Goodness of Fit Index ³ .					1.0	0.95	0.9 <
NFI: Normed Fit Index.					1.0	0.95	0.9 <

Table 4.4 displays four indicators (RMSEA, GFI, AGFI and NFI) of the degree to which these student responses support each of Biggs' six sub-scales (SM,DM,AM,SS,DS and AS). For clarity, these four indicator results are then tabulated according to their Indication of Statistical fit (Good, Moderate and < Moderate: explanation of scales appears above).

¹ See: MacCallum and Hong (1997).

² See: Joreskog and Sorbom, (1986).

³ See: Tanaka and Huba (1985).

The value of Table 4.4 lies in providing answers two related questions. The first question is to what extent do these student responses support Biggs' six-factor model?

In answer to the first question, the Study questionnaire responses record good or moderate but acceptable statistical support for five of Biggs' factors (DM,AM,SS,DS and AS). The Learning questionnaire responses are less promising. Only one factor records good statistical support (DS).

A second question is which if any of Biggs' six factors require further exploration?

In answer to this second question, less than acceptable statistical support is recorded for one Study factor (SM) and five Learning factors (SM,DM,AM,SS and AS).

In conclusion, a confirmatory factor analysis indicates that whereas five Study and one Learning factor is supported by these student responses further exploratory investigation is required of one Study and five Learning factors.

An exploratory factor analysis (employing SPSS principal component analysis, selection criteria Eigenvalue>1. Rotation Method: Varimax with Kaiser Normalisation) was made of the data sets comprising each of the one Study and five Learning factors. The results of this exploratory factor analysis are displayed in Table 4.5.

Table 4.5: Exploratory factor analysis of six data sets

Study	Component extracted.	Explained variance.	Response item(s).	Descriptor.
SM	1 st	26%	13,37	get secure job pragmatics worries (grades)
	2 nd	21%	1,25	
	3 rd	<u>16%</u>	7,19	
		Total: 63%		
Learning SM	1 st	42%	49, 61	worries (grades) get secure job
	2 nd	<u>21%</u>	43, 55	
		Total: 63%		
DM	1 st	36%	56, 62	enjoy learning independent voice find a belief
	2 nd	18%	50, 68	
	3 rd	<u>17%</u>	74	
		Total: 71%		
AM	1 st	42%	51,69	competition public award success first
	2 nd	16%	57	
	3 rd	<u>13%</u>	63	
		Total: 71%		
SS	1 st	38%	76	pragmatics memorisation
	2 nd	<u>20%</u>	52	
		Total: 58%		
AS	1 st	44%	48,78	good study skills regular study
	2 nd	<u>18%</u>	54	
		Total: 62%		

Table 4.5 lists the one Study and five Learning factors (assigned by Biggs) that a confirmatory factor analysis identified as requiring further exploration. Beside each item appears the number of components extracted from that particular data set. The variance in responses explained by each extracted component is then displayed alongside the questionnaire item(s) supporting that component. Finally, a descriptor for each item-cluster is posited.

The value of the above table lies in identifying item clusters that will enable a statistically meaningful explanation of these students' questionnaire responses. For example, the response data to Biggs' Study factor SM (Surface Motive) appear to comprise three components each supported by its own cluster of questions (1st = 13,37: 2nd = 1,25: 3rd = 7,19). The cumulative variance explained by these three components is 63% (26%+21%+16%).

By combining the results from both the confirmatory and the exploratory factor analysis it is now possible to construct a Table of factors that enable this particular group of students' questionnaire responses to be statistically interpreted:

The results from both the confirmatory and the exploratory factor analysis are now combined in the following:

Table 4.6: Factors that statistically explain these students' responses

Study questionnaire:		Learning questionnaire:	
Factor	Response cluster	Factor	Response cluster
DM Deep Motive	2,8,14,20,26,32,38.	DM Deep Motive	
		1. enjoy learning	56, 62
		2. independent voice	50, 68
		3. find a belief	74
AM Achieving Motive	3,9,15,21,27,33,39.	AM Achieving Motive	
		1. competition	51,69
		2. public award	57
		3. success first	63
DS Deep Strategy	5,11,17,23,29,35,41.	DS Deep Strategy	47,53,59,65,70,76
AS Achieving Strategy	6,12,18,24,30,36,42.	AS Achieving Strategy	
		1. good study skills	48,78
		2. regular study	54
SM Surface Motive		SM Surface Motive	
1. get secure job	13,37	1. worries (grades)	49, 61
2. pragmatics	1,25	2. get secure job	43, 55
3. worries (grades)	7,19		
SS Surface Strategy	4,10,16,22,28,34,40.	SS Surface Strategy	
		1. Pragmatics	76
		2. Memorisation	52

Table 4.6 displays the factors with their related questionnaire response clusters that appear to support a statistical interpretation of these students' questionnaire responses.

The response clusters are of value in three particular ways.

First, they form a basis for a statistical comparison of responses from sub-groups within this particular student population.

Second, the response clusters provide a benchmark for measuring change between pre and post semester administrations of the Study and Learning questionnaires.

Third, they suggest something of the underlying relationships in the theoretical framework of motivation that posits prosocial/achievement - - -> cognition - - -> goals.

Each of the above is reviewed in the sections that follow. For clarity, the first two are summarised together as they relate to providing a statistical picture of this particular student population. The third section will then be explored separately, as this relates to a theoretical framework for explicating motivation.

V. Statistical comparison of two sub-groups: 'change' over one semester.

1. Pre-semester responses

This particular student population (N=80) comprises two sub-groups. The first sub-group comprises students enrolled directly from Secondary school and embarking on a four-year undergraduate programme (N=47). The second sub-set comprises students who have completed their initial teacher training and are now embarking on a two-year undergraduate programme (N=33).

Of interest to this study of how students adjust to Tertiary learning, it is relevant to identify any statistically significant differences between the 4-year and 2-year student questionnaire responses at the outset of their studies. To detect statistically significant differences an independent sampled t-test was applied (using SPSS) to the pre-semester questionnaire data. This independent sampled t-test applied to both sub-groups' responses grouped in terms of the factors identified in Table 4.7. The results of this independent sampled t-test are as follows:

Table 4.7: Independent sampled t-test : comparing 4-year and 2-year student pre-semester responses

Study Factors	(2-tailed) <0.05=sig.*	Group with Sig. higher Mean	Learning Factors	(2-tailed) <0.05=sig.*	Group with Sig. Higher Mean
Deep Motive	.03*	4-year	Deep Motive	:1	.09
Achieving Motive	.66			:2	.09
Deep Strategy	.03*	4-year		:3	.04* 4-year
Achieving Strategy	.00*	4-year	Achieving Motive	:1	.52
Surface Motive :1	.92			:2	.61
:2	.59			:3	.25
:3	.73		Deep Strategy		.13
Surface Strategy	.76		Achieving Strategy	:1	.00* 4-year
				:2	.08
			Surface Motive	:1	.48
				:2	.96
			Surface Strategy	:1	.95
				:2	.3

Summary of Results:			
Factors:		Sig.diff.	
Study	8	3	
Learning	13	2	
Total:	21	5	24%

% of factors displaying no Sig.diff: 76%

Table 4.7 shows the results of an independent sample t-test of eight factors in the Study and thirteen factors in the Learning questionnaire responses (total 21 factors). These are the factors identified by confirmatory and exploratory factor analysis to offer a statistically meaningful interpretation of this particular data set⁴. For clarity, significant differences are marked (*) followed by the group with the significantly higher mean: example, Study DM results are indicated as being statistically different (.03*), the 2-year mean is 21.2 the 4-year mean is 23.0, the group with significantly higher mean is shown as 4-year.

Reviewing these results, five factors are displayed as being statistically significantly different (marked *). For each of these factors, it is the four-year group whose responses are more positive (the four-year means are significantly higher). Apparently where differences between groups arise, it is because the 4-year group is more positive.

For convenience, a summary of results box in Table 4.7 displays percentage calculations for factors displaying/ not displaying significantly different results.

⁴ Means are not currently available as some data was lost following the production of this Table.

This summary indicates the four-year and two-year student groups to be reasonably homogeneous. For a total of twenty-one factors no significant difference appears for sixteen: 76% homogeneity).

In conclusion, the pre-semester responses indicate the four-year and two-year student groups to be reasonably homogeneous. Where differences arise, they appear to indicate the 4-year group as being more positive.

2. Indications of change over one semester

The factors identified by confirmatory and exploratory factor analysis provide response clusters that serve as a benchmark to measure change between pre and post administrations of the Study and Learning questionnaires. To measure change between pre and post administrations a paired sample t-test was applied to the 4 and 2-year factor response clusters.

Table 4.8: Indications of change: 4 and 2-year pre & post-semester responses

Study:	Factors	Pair sampled t-test. (2-tailed)		Direction of change				
		<0.05=sig.*		4-year		2-year		
		4-year	2-year					
	DM	.04*	.00*		+ve	-ve		
	AM	.00*	.01*		+ve	-ve		
	DS	.04*	.02*		+ve	-ve		
	AS	.01*	.01*	-ve		-ve		
	SM:1.	.1	.61					
	:2.	.02*	.25		+ve			
	:3.	.00*	.00*		+ve		+ve	
	SS	.08	.00*			-ve		
				Study: Sub-total:	1	5	5	1
Learning:								
	DM:1	.35	.33					
	:2	.09	.06					
	:3	.13	.16					
	AM:1	.87	.43					
	:2	.63	1.0					
	:3	.25	.55					
	DS	.01*	.00*		+ve		+ve	
	AS :1	.54	.02*				+ve	
	:2	.04*	.21	-ve				
	SM:1	.22	.1					
	:2	.83	.5					
	SS :1	.92	.42					
	:2	.4	.16					
				Learning: Sub-total:	1	1		2
Totals:	No of Factors: 21.	No & Direction of change		2-ve	6+ve	5-ve	3+ve	
Summary of Results:								
% of Factors displaying		4-year	2-year	Direction of change				
	Sig.diff:	38%	38%	4-year		2-year		
	no Sig.diff:	62%	62%	-ve	+ve	-ve	+ve	
				Nett %change: - 24% 5% -				

Table 4.8 lists the eight Study and thirteen Learning factors identified by confirmatory and exploratory factor analysis. Significant different results are marked (*). For these marked results the direction of change is indicated (-ve indicates a higher pre-semester mean, +ve a higher post-semester mean). For convenience, a Summary of Results is provided of first those factors displaying/ not displaying significant different results and secondly of the nett direction of change.

Comparing the pre and post semester responses to both the Study and Learning questionnaires, Table 4.8 displays four intriguing indications of change.

First, overall there appears to be only modest change (38% sig. diff. recorded by both year groups).

Second, where modest change is recorded overall it is the 4-year group that displays a modestly positive experience (24% +ve) the 2-year group a marginally negative experience (5% -ve).

A third intriguing feature is the contrast between groups in their responses to Study factors (4-year group record one -ve and five +ve which is an exact mirror opposite of the 2-year responses).

A fourth intriguing feature is the contrast between group responses to Learning factors (4-year group record one -ve and one +ve compared to the 2-year group's two +ve).

In conclusion, the indications of change provided in Table 4.8 suggest an overall modest degree of change (38%). For the 4-year group where change appears it may be a modestly positive experience (24% +ve) centered largely on Study factors. In contrast, change for the 2-year group appears to be a marginally negative experience (5% -ve) occasioned by Study factors.

VI. Summary of statistical review

Drawing together this statistical review, the above combined results present a group of students (N=80) whose apparent homogeneity is both enlivened and emphasised by the presence of eight students whose ten intriguing samples of individualism comprise a very modest 1% of all responses.

This student population (N=80) comprised two sub-groups: 4-year students direct from Secondary school (N=47) and 2-year students who have completed their initial teacher training (N=33). A comparison

of their pre-semester responses suggests these two groups to be homogeneous (comparison across twenty-one factors reveals 81% homogeneity). Where pre-semester differences do appear it is the 4-year group whose responses appear the more positive (the 4-year means are significantly higher).

Comparing change over one semester, these two groups' pre and post-semester responses indicate a modest change (38% sig. diff. recorded by both groups: see Summary of Results inset, Table 4.7). For the 4-year group this change appears to be a modestly positive experience (24% +ve) in contrast, change for the 2-year group appears to be a marginally negative experience (5% -ve).

Overall, their pre semester responses appear to indicate little difference between student groups either coming straight from Secondary school or from having completed three years of initial teacher training. Overall, their pre/post semester responses appear to indicate that for students coming direct from Secondary school, their first semester in Tertiary education is a modestly positive experience, for students having completed three years of initial teacher training, their first semester in Tertiary education is a modestly negative experience.

Having interrogated the statistical analysis in terms of providing an overview of these two student groups we now turn to consider the results of two ethnographic interviews.

Chapter Five: Defining contexts.

I. Introduction

This Chapter seeks to explore motivational aspects of the defining contexts of two groups of post-Secondary Hong Kong students. This exploration serves to add to our understanding of the first link in the hypothetical motivational construct that posits context→cognition→goals.

II. Who should define the 'defining contexts'?

This Chapter seeks to explore the defining contexts of two groups of post-Secondary Hong Kong students. To do so, this Chapter must first address the challenge expressed by Friedman (1997) as 'endosociality' by which he refers to the phenomenon that the individual or group, surrounded by a plethora of contexts and influences, studiously ignore many and focus instead on a prioritized few. To address this challenge this Chapter begins with a clear negative – the aim of this Chapter is not to list all the contexts that may influence these two student groups. Rather this Chapter seeks to identify the contexts that can claim to be 'defining' because they are acknowledged and prioritized by these students.

1. Contexts as defined by interview responses

The contexts that are defined by these two groups of students are collated by analysing responses to longitudinal interviews.

The first interview responses are analysed in two ways. These responses are first analysed in terms of noting the *majority* view and then second, by subjecting this *majority* view to an analysis of its underpinning rationale.

At this point, the data analysis displays the *majority* view and its underpinning rationale of two student groups at the mid-point of their first Semester. A comparison of the findings from these two groups serves to illuminate the relationship between context and motivation.

A second interview of the same two student groups was held at the end of their first Semester (but not less than one week before their exams). The responses to this second interview are analysed again,

first, in terms of noting the *majority* view and then second, by subjecting this *majority* view to an analysis in terms of the underpinning rationale derived from their first interview.

At this point, the data analysis displays the *majority* view and any developments in the underpinning rationale of two student groups at the end of their first Semester. A comparison of the findings from these two groups serves to illuminate the relationship between context and motivation.

Recognising that aberrant views can be held with equal strength and vigor by the individual, the interview data is then analysed in terms of giving voice to aberrant views.

Aberrant views noted in the first interview responses are detailed and their underpinning rationale noted. Next, aberrant views noted in the second interview responses are detailed and analysed in terms of the underpinning rationale noted in the first interview. A comparison of the findings from these two groups serves to illuminate aberrant views on the relationship between context and motivation.

For clarity and conciseness the aberrant analysis is reported in one section.

Having provided a *majority* and then an aberrant analysis, a comparison is offered which adds additional illumination to the relationship between context and motivation.

III. Reporting interview responses

This section reports an analysis of the first interview responses. First, this analysis notes the *majority* view and then second, an analysis of its underpinning rationale.

For clarity of analysis, first interview responses are presented as three behavioral clusters: first, affective, second, cognitive and third a mixture of affective/cognitive.

1. Affective cluster: Interviewees' reported Life experience and expectations.

The relationship between Life-experience and incoming expectations was probed by five consecutive interview prompts with responses to each prompt coded as follows.

“One of your responses to having read the report states that you are an average student. Could I now ask you what does average mean to you?” 1st Interview: q1

Responses coded: ‘not/average’: supporting rationale noted.

“Some people describe themselves as being an ‘insider’ as being part of the group and sometimes as an ‘outsider’ as feeling themselves as independent. Can I ask would you describe yourself as an ‘insider’ or ‘outsider’?” 1st Interview: q2

Responses coded: ‘insider/outsider/both’: supporting rationale noted.

“Here in Hong Kong, people talk about wanting to have a choice, believing they have free will, others talk about the importance of having a sense of duty. Can I ask you how would you describe your own beliefs?” 1st Interview: q3

Responses coded to reveal which belief(s) are prioritised: supporting rationale noted.

“I see that you are living in the student hall. How does this accommodation affect your study?”
[Note: all 4-year students lived in the student halls of residence] 1st Interview: q4a

Response coded positive/negative and rationale noted.

“I see that you are living at home. How does this accommodation affect your studies in HKIED?”
[Note: all 2-year students lived-off campus in their own family home] 1st Interview: q4b

Responses coded positive/negative and rationale noted.

“You have been in the HKIED for some time. Do you feel that anything has happened to change your expectations from when you were first in the course?” 1st Interview: q5

Responses coded positive/negative and rationale noted.

The following (Table 5:1) displays a summary of each group’s responses to the above five contextualising prompts.

Table 5.1: Summary of responses to 1st interview (q1-q5)

<u>4-year group: (N=11)</u>		
define 'average' student as being academically and socially non-assertive.	(N=8)	q1
display a limited causal link between social awareness social behaviour.	(N=11)	q2
define 'Duty' as variations of self-protection.	(N=11)	q3
show a somewhat negative disposition towards social 'change'.	(N =7)	q4a
show a somewhat positive disposition towards an unfolding career 'change'	(N=7)	q5
<u>2-year group: (N=8)</u>		
define 'average' as an optimistic starting point.	(N=8)	q1
display a growing self-confidence towards living a multi-role life.	(N=8)	q2
indicate 'duty' and 'freewill' as inter-linked personal decisions.	(N=5*)	q3
suffer a daily challenge to Tertiary-level study habits.	(N=6)	q4b
consider 'change' with a certain cynicism.	(N=8)	q5
* (N=2 responses not recorded)		

The above summary displays each group's perception of the relationship between Life-experience and incoming expectations. A comparison of the responses suggests differences between these two groups: differences that may be summarised as follows.

An 'average' student is defined in terms of behavior (4-year) in contrast to attainment (2-year). Social awareness has limited influence on personal behaviour (4-year) in contrast to a confidence in living multi-role lives (2-year). 'Duty ' is defined in terms of self-protection (4-year) in contrast to self-determination (2-year). Life 'on-campus' invokes a somewhat negative disposition (4-year) in contrast to the pragmatic challenges of studying at home (2-year). Career prospects are viewed somewhat positively (4-year) in contrast to a certain cynicism (2-year).

The above contrasting responses suggest that each group is marked by different prior experiences. These different experiences may be exemplified here by contrasting the optimism expressed in the 4-year claim that "*I'm proud to join the Hong Kong Institute of Education*" with the closed ness of the 2-year insight that "*I will not tell my classmates about my results and all of them do the same.*"

The following section now examines these differing *majority* views in terms of explicating their respective underpinning rationales.

a. Underpinning rationale

The 4-year narrations – marked by references to school exams and family - explore the strengths they find in pragmatism. Exemplars of the strengths they find in pragmatism's include: "*It's comfortable . . . [no] discrimination*" and "*Of course happy . . . I fall into a category and may not be rejected by others*". The qualities of 'comfort' and being 'happy' here indicate a pragmatic view of being an 'average student'. Such pragmatism here acts as a defence against "*discrimination*" and being "*rejected by others*". Summarising the 4-year narrations three strengths of pragmatism are identified:

- provides a reference/lens with which to make sense of their Life-experience
- justifies the drive for social acceptance as providing a refuge,
- compartmentalises Life into 'manageable', discrete areas.

Comforting as this may be, their narrations also acknowledge that pragmatism spawns its own tensions. Exemplars of this tension include "*if always in a group you will feel lost*" and "*Sometimes even very late. Even you don't want to talk to them you can't refuse . . .*" Here, tensions are acknowledged between the inter-social demands of group-membership and the need for individual-space. Summarising the 4-year narrations identifies two tensions:

- a drive for social acceptance results in tension with individual maturation
- an individual is left to devise her/his own individual pragmatic solution(s)

The 2-year narrations are marked by references to their maturation and experience - stated in terms of age (2-3 years older on average) and completion of a Certificate in Education course. Despite their different references, the 2-year narrations also focus on the role of pragmatism. Given the 2-year groups' maturation and experience, their narrations reveal a spiraling view of pragmatism. This spiraling view of pragmatism is graphically presented as follows:

attributing social acceptance as a burdensome necessity leads
to an acceptance that Life involves tensions
to three perceptions:
tensions are a test of the individual's maturation
maturation involves a process of re-compartmentalising
the re-compartmentalising process is intensely individual
to acknowledging tensions between individual and social values
to the pragmatic rationalisation that social values provide social protection.

The above graphic presentation follows the 2-year narrations that place social acceptance as a burden, social protection as a virtue and individualism as a means but not as an end.

The above spiraling logic is discernable in the following quotation:

“with your peers, your friends, it is better for you to be average because they will accept you. They will help you . . . if you want to get promote . . . it is better for you not to be average”.

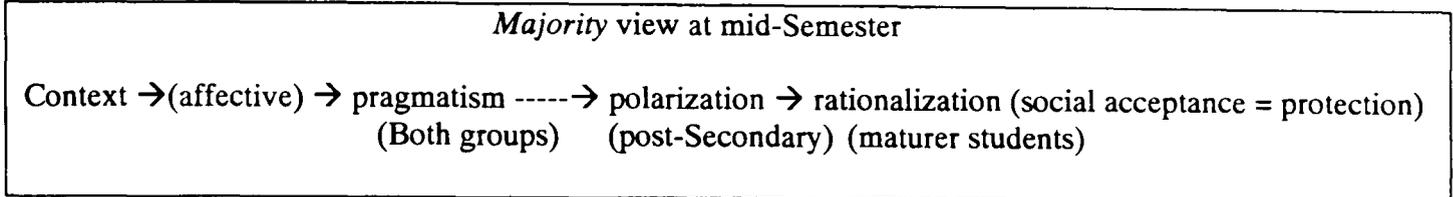
In the above quotation, the phrasing “*it is better for you*” places social acceptance as a burden. The phrase “*because they will accept you*” cites social protection as a virtue while the individualism of “*not to be average*” refers not to self-realisation but pragmatically “*to get promote (sic)*”.

To summarise the above, the 4-year and 2-year narrations reveal a shared concern with exploring their contrasting references through recourse to pragmatism. The difference between their narrations may reflect maturation and experience: the 4-year exploration is tentative, identifying only strengths and weakness; the 2-year exploration is perhaps more developed, producing a spiraling logic.

- b. Adding to an understanding of motivation: context → motivation
(affective)

Incorporating the above rationales into the theoretical model of motivation (see Figure 5.A) reveals the following:

Figure 5.A: Context → motivation (affective)



The above figure indicates that the context of both groups exerts a common affective influence towards fostering a sense of pragmatism. For the 4-year group, this pragmatism induces an affective polarisation – Life for them is divisible into good/bad, black/white. In contrast, the slightly older 2-year group exhibit an affective rationalization that leads from feeling that social acceptance is a ‘burden’ to feeling that it offers protection. This rationalization can be viewed as effectively consolidating the affective value of being pragmatic.

Turning now to review responses to the 2nd interview, it is possible to assess the consistency of the above explication, to consider what these same groups have to say at the end of their first Semester.

- c. Consistency of rationale - 2nd interview

The characteristics and features of student expectations at the close of their first Semester were probed by two interview prompts and coded as follows.

<p><i>“Looking forward to the end of this 1st Semester and the beginning of your 2nd Semester, can I now ask you what expectations do you have?”</i></p>	<p>2nd Interview: q2</p>
<p>Responses coded ‘short/long-term’ duration; rationale coded as ‘pragmatic/abstract’</p>	
<p><i>“In our 1st interview you mentioned _____ When you read this, what would you now say?”</i> (insert from response to 1st interview prompt 5: ‘has anything happened to change your expectations?’).</p>	<p>2nd Interview: q4</p>
<p>Responses coded ‘same/modest change/change’: experienced as ‘positive/negative’.</p>	

The following (Table 5.2) displays a summary of each group’s responses to the above two interview prompts.

Table 5.2: Evidence for “characteristics/features of expectations at the end of Semester 1”

Summary of responses to 2 nd interview (q2 & q4)		
<u>4-year group (N=11)</u>		
• optimistic expectations’ suggesting their experience is largely positive. (N=9)		2 nd interview q2
• experience is a positive experience. (N=8)		2 nd interview q4
<u>2-year group (N=8)</u>		
• experience is positive, if tending towards a short-term myopia. (N=8)		2 nd interview q2
• experience is of ‘modest change’ being a positive experience. (N=5)		2 nd interview q4

The above summary displays each group’s expectations at the close of their first Semester. A comparison of their expectations suggests differences between these two groups: differences that may be summarised as follows.

The 4-year group, display a majority view that is optimistic. Responses indicate a majority (N=9) is optimistic about the transition from 1st to 2nd Semesters. Their responses also indicate a majority (N=8) have had a positive transition from early to late Semester. An exemplar of this positive transition is the surrender of earnings for learning cited in *“I want to pay attention on my study. Recently I quit one of my tutorial jobs . . . now I just give lessons on Sundays”*.

In contrast, the 2-year group appears less exuberant. Although responses indicate a majority (N=9) is optimistic about the transition from 1st to 2nd Semesters, this optimism is pragmatic – *“I do not need to repeat”*. Likewise, for a majority (N=5) the transition from early to late Semester is described in terms that suggest ‘modest change’ is for them, a positive experience.

Explicating the above responses from the view point of an educational provider (lecturer or organisation) a rationale summation may be that whereas the 4-year responses indicate they ‘enjoyed’ their learning, perhaps the 2-year group were less than satisfied.

Explicating the same responses but from the perspective of their own group, a markedly different conclusion may be drawn.

Both groups have (tentatively) been shown (see “*Underpinning rationale*” above) to share a concern with exploring their experiences through recourse to pragmatism. Difference between group narrations has been suggested to reflect maturation and experience.

The 4-year exploration of pragmatism was tentative, identifying only strengths and weakness. Having reached the end of their 1st semester, this group’s perspective (as yet untested by Semester-end exams) is optimistic for the next Semester based on the (as yet) ‘success’ of the current Semester. Likewise, the 4-year’s retrospective view (of the period between 1st and 2nd interviews) is optimistic for their passage – in pragmatic terms – has been a ‘success’. Notably however, in these terms, their exploration of ‘pragmatism’ since the 1st interview here has shown no evidence of any development.

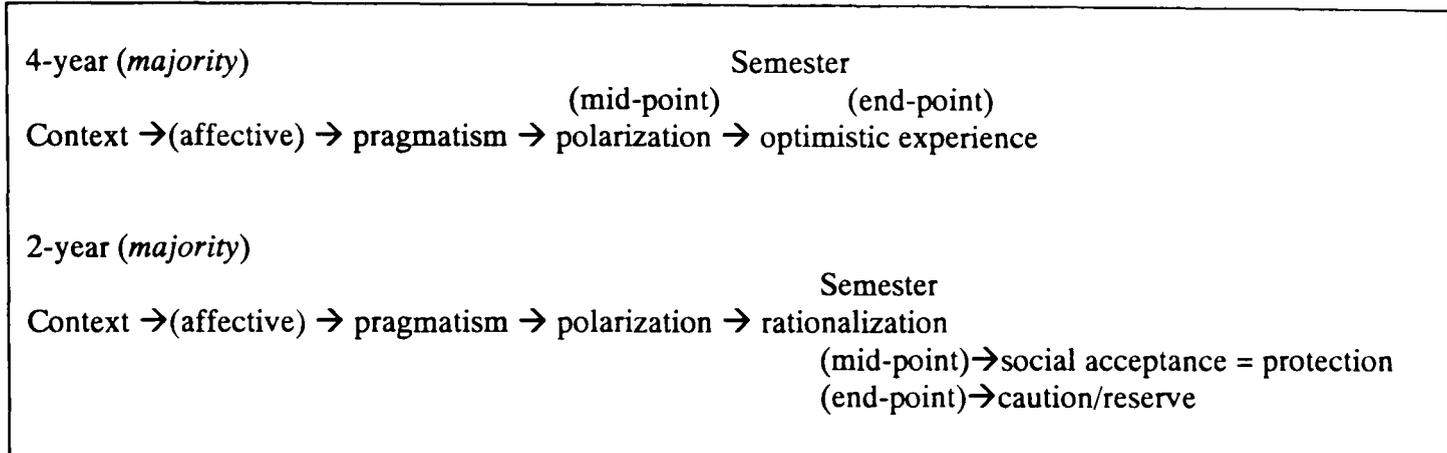
The 2-year exploration of pragmatism was perhaps more developed, producing in their 1st interview narrations, evidence for a spiraling logic. Their responses to the 2nd interview prompts reflect this same spiraling logic. Prompt 2 responses indicate that advancement to Semester 2 means more work, a somber prospect balanced by an ‘escape’ from the work of Semester 1. Their experience of Semester 1 – elicited by prompt 4 – shows that ‘modest change’ with its implication of ‘not being troubled’ is for them, a positive experience.

The above two explications *from the perspective of the narrators* suggest that neither group has developed. In contrast, *from the perspective of educator-providers* it may appear that the 4-year group is ‘progressing’ but the 2-year group requires ‘more effort’. Such a potential mismatch highlights the need for a qualitative approach to understanding the *narrators’* motivation.

- d. Adding to an understanding of motivation: context → motivation
(affective: over time)

Incorporating the above rationales into the theoretical model of motivation (see Figure 5.B) reveals the following.

Figure 5.B: Context → motivation (affective: over time)



The above figure indicates that in contrast with the mid-semester interviews - the context of both groups at the Semester end exerts a common ameliorating affective influence. This ameliorating influence may in part reflect pre-exam euphoria. The impact of this ameliorating context is revealing.

The 4-year group changes from 'polarisation' to a uniform optimism. In affective terms this is a change from tension to ease.

The 2-year group retains its powers of rationalization but turns from concerns with 'protection' to voicing feelings of 'caution' and 'reserve'. In affective terms this is a modest change and indicates that for these 2-year students, tension still dominates.

The above indicates an interaction between context and affective motivation. A change in context appears to modify post-Secondary students' affective motivation but to a lesser extent the affective motivation of marginally more mature 2-year students. This observation points to a resilience amongst mature students that may work against affective motivational change. Such affective resilience against change has significance in educational contexts such as in-service teacher training and the effectiveness of educational reforms.

Having considered affective motivation, we now turn to consider if its twin - cognitive motivation - shares this apparent resilience against change.

2. Cognitive cluster: Interviewees' perception of their Study Pattern.

The characteristics of the subjects' initial study pattern was probed by three consecutive interview prompts with responses coded as follows:

<p><i>"Looking back at your Study Log and Mirrors exercise, your study pattern seems to be concerned with _____ . Could you please explain?"</i> (Insert selected from student's own declared study description).</p>	1 st Interview q9
<p>Responses coded 'internal/external' attribution and 'long/short' duration.</p>	
<p><i>"Do you think your study pattern has changed since your study in the last years in your secondary school?"</i></p>	1 st Interview q11
<p>Responses coded 'no/modest/yes' and rationale noted.</p>	
<p><i>"When studying, do you feel under pressure?"</i></p>	1 st Interview q10
<p>Responses coded 'external/internal' attribution.</p>	

The following (Table5.3) displays a summary of each group's responses to the above three contextualising prompts.

Table 5.3: Summary evidence for characteristics of initial study pattern

<u>4-year group</u> (N=11)		
<ul style="list-style-type: none"> study-difficulty attributions differ in duration: external (short-term) (N=4) internal (long-term). (N=7) 		1 st Interview q9
<ul style="list-style-type: none"> comparison of prior and current study patterns long-term internal factors exerting a somewhat negative influence (N=2) short-term external factors exert a somewhat positive influence. (N=9) 		1 st Interview q11
<ul style="list-style-type: none"> 'study pressure' acknowledged by all (N=11), attributed equally as being external and negative (N=5) internal and positive (N=5) 		1 st Interview q10
<u>2-year group</u> (N=8)		
<ul style="list-style-type: none"> study-difficulty attributions differ in duration: external (short-term) (N=3) internal (long-term). (N=5) 		1 st Interview q9
<ul style="list-style-type: none"> comparison of prior and current study patterns long-term internal factors exerting a somewhat positive influence (N=1) short-term external factors exert a somewhat positive influence. (N=7) 		1 st Interview q11
<ul style="list-style-type: none"> 'study pressure' acknowledged by all (N=8), attributed equally as being a combination and negative (N=6) internal and negative (N=2) 		1 st Interview q10

The above summary displays each group's perception of their initial study pattern. A comparison of the attributions suggests commonalities and differences between these two groups that may be summarised as follows.

The 4-year group reports both external (short-term) and internal (long-term) study difficulties. Comparing their prior and current study patterns – external (short-term) factors are viewed positively; the internal (long term) factors are viewed negatively. When current 'study pressure' is attributed as external it is viewed negatively, if internal it is viewed positively. Two examples demonstrate this internal/external dichotomy:

“Of course when you study, you must feel little bit pressure and then ... you must learn to be find some happiness in the work”

Here, the emphasis of you “*must*” learn with the deprecating “*some*” happiness combine to display external pressure being experienced as a negative force. In contrast, the second example:

“I think that the pressure is from my... need to earn my living . . . If I don't have this pressure maybe my work will not be good because I will only follow my time schedule . . .”

Here, despite the real “*need to earn my living*” this student's experience is positive “*If I don't have this pressure maybe my work will not be good*”.

The 2-year group also reports both external (short-term) and internal (long-term) study difficulties. In contrast, comparison of prior and current study patterns reveals a homogenous positive improvement while their current 'study pressure' is only viewed negatively. One example demonstrates this latter negative experience:

“too many things I need to read. [external] . . . I am really afraid that I can't do well [internal] . . . my shyness (to ask questions) is started from primary school [internal]”

Whether internal or a combination of both internal and external, all cited experiences are negative indicating that for this 2-year student, 'study pressure' is a negative experience.

In the following section the same interview data is reviewed, but here in terms of eliciting a rationale that underpins the above differing *majority* perceptions.

a. Underpinning rationale

The 4-year narratives offer reflections on the transition from Secondary to Tertiary education. They acknowledge feeling ‘under pressure’ – *“I feel I am studying under pressure . . . there’s quite a lot of assignment and . . . it is different from what I do in secondary school. And all the things need me to search by myself”*. Narrating this pressure in terms that signal both a sensitivity and conformity to the demands of a new course. Their willingness to adapt has one caveat: their narrations of ‘study pressure’ clearly display that being ‘pushed’ (by external factors) meets with resistance:

“some subject that I do not want to take and I feel why I need to study them?”

“now I do not pay much pressure to my academic studies. Because I really understand when you force yourself, it doesn’t mean you can get good results.”

Being ‘pushed’ by ‘study pressure’ produces a self-questioning “why” that can lead to reappraisal *“when you force yourself, it doesn’t mean you can get good results.”* In both cases, their narrations of ‘study pressure’ clearly display that being ‘pushed’ (by external factors) meets with resistance.

The 2-year narratives are more complex, suggesting something of the mechanics underpinning their attribution process. A pattern emerges of internal attributions being linked with long-term duration. This pattern is disturbing for their narrations describe long-term internalised attributes as being rooted in fear:

“[you said that you are shy . . . why?] I think maybe due to my brother . . . Because when I do little thing wrong, he will scold me very hard.”

“I am afraid to communicate [why?] . . . my mother will tell me what to do next, not want me to say anything I want”

“I am trained in the primary school not to give wrong answer. I remember when I was in F.1, I am very brave, I put up my hand and then I give the wrong answer and I have to stand up for 15 minutes. Until I answer another question that is correct, then I can sit down. I am very frightened.”

Here sibling, maternal and primary education contrives to instil the long-term behaviour through fear. Such long-term, internalised fear may go some way in explaining the emergent common strategy of ‘learned pragmatism’ – in this context, displayed as a potent combination of ‘acceptance’ and ‘complex understanding’. If, as these narratives signal, fear is both commonplace and inescapable, the 2-year

'acceptance' may be seen as a reasonable response and their 'complex understanding' of pragmatism a reasonable outcome. To illustrate:

I am always under pressure (from) . . . my parents and my family, maybe my sister... actually they don't push me to do anything but . . . The hidden pressure is much stronger. [Can you give a very simple example? How can you identify the hidden pressure?] They may sometimes ask me what is your result and what would you do in future or whether you like continue your study. Something like that because they want to know that they pay the school fees and they want to know that the school fee really worth. [Like an investment?] Yes. [Looking back at your education, has that hidden pressure been there all the time?] A long time. [How do you feel about that pressure? Does it disturb you in any way?] Sometimes disturb because ... I understand why they give the pressure or why I give myself the pressure but I find that it's disturbing because I don't want put the pressure on myself but on the other hand, I feel that the pressure can push me to do better . . . But the pressure I know that sometimes I cry in front of my friends.

The above narrative displays this student's understanding that "hidden" family pressure has been experienced for "a long time". Although she can "understand why they give the pressure" yet the impact continues to be "disturbing" to the extent that "sometimes I cry in front of my friends." Regardless of the empathy such an account may arouse, its importance here is to illustrate why her 'acceptance' may be seen as a reasonable response and her 'complex understanding' of pragmatism a reasonable outcome.

For the above student her 'learned pragmatism' exhibits several key features: the duration is over "A long time", the influence is inescapable "under pressure (from) . . . my parents", the impact is both intellectual "I understand why" and emotional "sometimes I cry". These key features shape this student's 'learned pragmatism' in terms first of 'acceptance' – matter-of-factly she begins "I am always under pressure" - and secondly in terms of a complex understanding – her account voices the interplay between internal and external attributes.

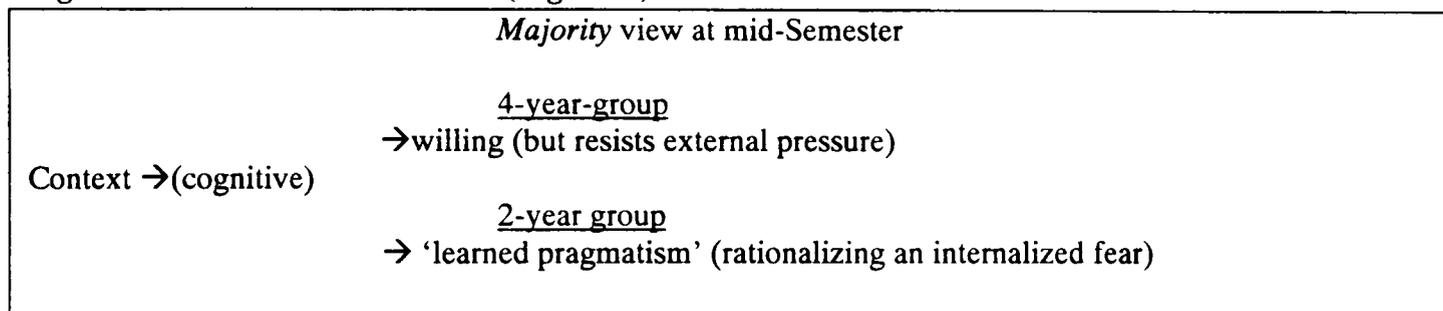
The above case illustrates that the key features of duration, influence and impact appear to shape 'learned pragmatism', leading to goals constructed from a combination of 'acceptance' and 'complex understanding'. Why a combination of 'acceptance' and 'complex understanding' should construct goals is illustrated by noting that this student's narrative presents not a fixed perception rather an active response to actual experience. The distinction between perception (a fixed lens) and experience (temporal, changeable) is significant. The above narration makes this distinction clear, for this student is not 'fixed', not fatalistic; rather her narration embraces the possibility of 'change' through actively seeking a solution. As this case illustrates, goals stem not from a stoic perception, rather from how one embraces experience.

To summarise the above, the 4-year and 2-year narrations reveal a common concern with adjusting their study patterns to the demands of their new courses. The 4-year group's adjustment may be characterized as willing but with one caveat - that being 'pushed' (by external factors) meets with resistance. In contrast the 2-year group reveal a more complex form of adjustment involving not only 'acceptance' but also a 'complex understanding' that tempers candid self-reflection and pragmatism with long-term, internalised fear. Emerging from this 'complex understanding' is evidence that questions the role of perception and emphasises the role of actual experience when setting personal goals.

b. Adding to an understanding of motivation: context → motivation
(cognitive)

Incorporating the above rationales into the theoretical model of motivation (see Figure 5.C) reveals the following:

Figure 5.C: Context → motivation (cognitive)



The above figure indicates that the context of each group exerts apparently different cognitive influences. For the 4-year group, their perceived context induces a cognitive optimism below which lurks a strain of resistance that surfaces when they perceive external pressure. In contrast, the slightly older 2-year group's perceived context induces a form of 'learned pragmatism', here grounded in a rationalizing of an internalized fear (for example see above: 2010).

What both groups display in common, is a cognitive rationalization of their perceived contexts. Both groups rationalize in terms of self-protection – 4-year implicitly in their resistance to external pressure, 2-year explicitly in their 'learned pragmatism'. The implication here is that cognitive responses to contextual influences apparently prioritise self-defence.

Turning now to review responses to the 2nd interview, it is possible to assess the consistency of the above explication, to consider what these same groups have to say at the end of their first Semester.

c. Consistency of rationale - 2nd interview

The characteristics and features of student study pattern at the close of their first Semester were probed by three interview prompts with responses coded as follows:

“Looking back at your 2nd Study Log and 2nd Mirrors exercise, your study pattern seems to be concerned with _____. Could you please explain?” (Insert selected from student’s own declared 2nd study description). 2nd interview q7

Responses coded ‘short/long’ term, ‘internal/external’ attribution and valued as ‘positive/negative’

“When studying, do you feel under pressure or in control?” 2nd interview q8

Responses coded ‘in control/under pressure’ and ‘internal/external’ attribution.

“Do you think your study pattern has changed since your study in the last years in your secondary school?” 2nd interview q9

Responses coded ‘no/modest/change’ and rationale noted.

The following (Table 5.4) displays a summary of each group’s responses to the above three interview prompts.

Table 5.4: Evidence for characteristics of change in their initial study pattern

<u>4-year group (N=11)</u>		
• a near balance between students displaying ‘change’	(N=6)	
being ‘stuck’	(N=5)	2 nd interview q7
• self-confident: internal attributions are cited in positive terms.	(N=9)	2 nd interview q8
• ‘Change’ to be a largely negative experience.	(N=8)	2 nd interview q9
<u>2-year group (N=8)</u>		
• ‘learning’ is short-term and equally a positive and negative experience. (N=4/4)		2 nd interview q7
• ‘study-experience’ is a largely negative.	(N=7)	2 nd interview q8
• ‘Change’ is a largely positive experience.	(N=7)	2 nd interview q9

The above summary displays each group’s characteristics and features of their study patterns at the close of their first Semester. A comparison of their results suggests differences between these two groups: differences that may be summarised as follows.

The 4-year group report themselves as being divided between those who display ‘change’ (N=6) and those being ‘stuck’ (N=5). Self-confidence is evident in all their internal attributions being reported in positive terms viz.: *“I always remind myself the deadline of the assignments ... as I am determined to finish and I am determined not to be late.”* This self-confidence however is challenged by ‘change’ over this semester being viewed as largely a negative experience: *“To be frank . . . I think I have learnt something but I don’t know what.”*

The 2-year group report their ‘learning’ experience as being a short-term and equally positive and negative. Their ‘study experience’ is reported as being largely negative: *“I have difficulties . . . what the lecturers need actually. When I go to clarify but still puzzled”*. Such negativity is however contradicted by ‘change’ in their study pattern being reported as largely a positive experience: *“I stay longer in school . . . It’s more productive. I think it’s good”*.

Explicating the above responses from the viewpoint of an educational provider (lecturer or organisation) a rationale summation may be that the 4-year responses indicate a buoyant self-confidence in the face of a challenging course. In contrast, the 2-year group indicates a somewhat superficial, disappointed response to a course that they seemed to enjoy.

Explicating the same responses but from the perspective of their own group, a markedly different conclusion may be drawn.

Both groups have (tentatively) been shown (see "*Underpinning rationale*" above) to share a concern with adjusting their study patterns to the demands of their new courses.

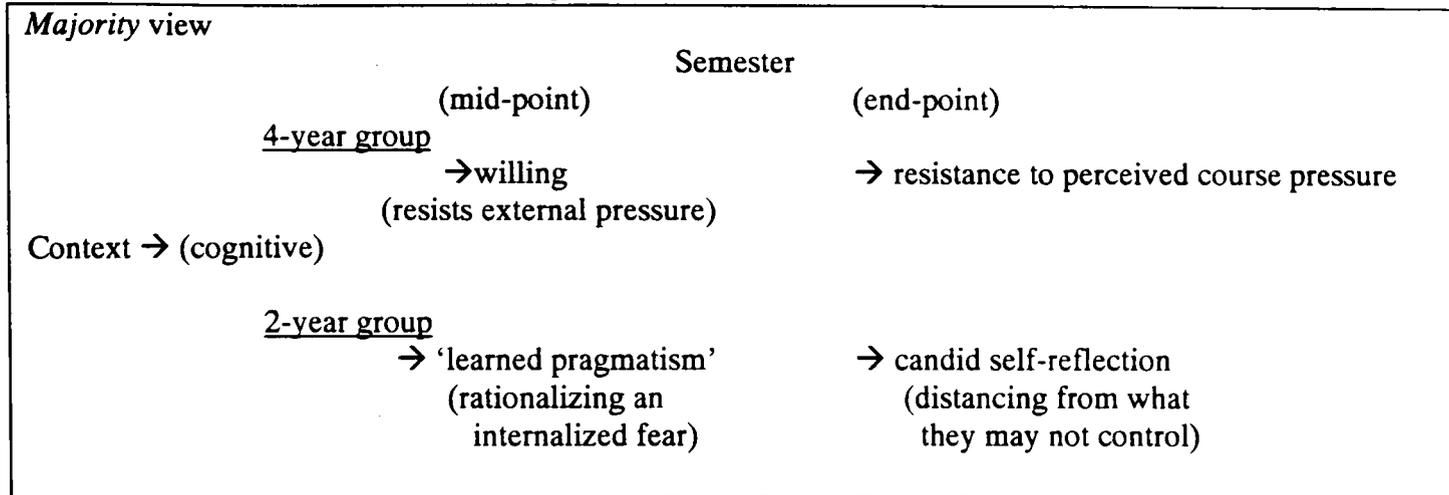
The 4-year group's adjustment was characterized as willing but with the caveat that being 'pushed' (by external factors) met with resistance. From this perspective, the buoyant self-confidence becomes an expression of resistance to being 'pushed' by the course.

The 2-year group's adjustment was characterized as involving not only 'acceptance' but also a 'complex understanding' that tempered candid self-reflection and pragmatism with long-term, internalised fear. From this perspective the somewhat superficial, disappointed response becomes an expression of pragmatic 'acceptance', their 'course enjoyment' becomes a reflection of candid self-reflection tempered by a 'fear' (or wariness) about being too attached to what they may not control.

- d. Adding to an understanding of motivation: context → motivation
(cognitive: over time)

Incorporating the above rationales into the theoretical model of motivation (see Figure 5.D) reveals the following.

Figure 5.D: Context → motivation (cognitive: over time)



The above figure indicates that at the end of their first Semester the context of each group exerts parallel cognitive influences. For the 4-year group, their earlier cognitive optimism gives way to an increasing resistance to perceived course pressure:

“earlier of this semester, I usually do reading works. The lecturers always say these are mandatory readings, go to the library and search and read. Then I follow them and do so. Now I find that this is useless.”

The above “Now . . . useless” voices an increasing resistance to perceived course pressure.

For the 2-year group, their earlier ‘learned pragmatism’ persists, but now in the form of tortuous attempts to place a safe distance between themselves and the rewards/penalties over which they have little control.

“the lecturer asked us to do many presentations but I think we don’t enough to discuss before. so it makes us feel pressure. [Do you feel in control or only pressure?] We can’t say no if they ask you to do something. We can’t say no.”

For the above student the heart of her problem lies with her classmates “we don’t enough to discuss before”, however this is masked by her allusions to “many presentations (to which repeatedly) we can’t say no.” Her strategy here is to place a safe distance between herself and the rewards/penalties over which she feels she exercises little control.

Emerging from these mid and end Semester observations is the implication that cognitive responses to contextual influences continue to prioritise self-defence.

The above two sections have examined, first the affective and then the cognitive responses to context. Such neat divisions have served the needs of clarity, however the reality may not be so tidy. To explore the ‘untidy’ interaction between affective and cognitive responses, the following third section examines motivation in one specific context – that of volunteering to become a ‘research subject’.

3. Affective/cognitive interactions: why volunteer to be a ‘research subject’?

The interviewees’ motivation was probed by one, final, direct and unannounced interview question, responses to which were coded as follows.

“One last question which is not here. You volunteer to take part in this project and it involves you to do some extra work. Can I ask you why did you volunteer?” 1st interview q18

Responses coded ‘pragmatic/altruistic/combination’ and rationale noted.

The following (Table 5.5) displays a summary of each group’s responses to the above contextualising question.

Table 5.5: Evidence for participant motivation - “why volunteer?”

4-year group (N=11)

- responses coded pragmatic (N=4) altruistic (N=5) combination (N=2) 1st interview q18

2-year group (N=7*)

- a polarity between helping ‘self’ (N=3) and helping others (N=4) 1st interview q18

*(N=1 response not recorded)

The 4-year group reports a near balance between pragmatic (N=4) and altruistic (N=5) reasons with a minority citing a combination of both (N= 2). The pragmatic reasons were uniformly ‘*to practice English*’ (English was the declared interview language). The altruistic reasons equate closely with a sociable curiosity.

The 2-year group also indicates a near balance between pragmatic (N=3) and altruistic (N=4) reasons. Pragmatic reasons centred on 'self-growth' expressed as broadening "research knowledge". Altruistic reasons equate closely with being 'a good citizen' expressed here as "*honestly I think that there may not be a lot of students help you*". These results suggest a polarity between helping 'self' (N=3) and helping 'others' (N=4).

a. Underpinning rationale

Both groups of interviewees are exceptional for both comprise self-selecting volunteers - 4-year group (N=11/ 75: 14.7%): 2-year group (N=8/40:20%). Of interest here is the prompt "why volunteer?"

The 4-year narrations signal an energy – expressed in terms of 'practicing English' and/or 'sociable curiosity'. Such terms express a formalizing of essentially an unformulated intent. The intent is, to gain some entree to understanding, some experience that perhaps later may be of value. This pattern suggests the 4-year group's rationale values 'participatory learning'.

The 2-year narrations signal a similar energy. As with the 4-year group, this energy is formally expressed - here in terms of 'self-growth' and/or 'being a good citizen' – and suggests that the group's rationale values 'participatory learning'.

What marks a difference however, is the inclusion within the 2-year narrations of a more explicit view of 'participatory learning' –

"Because I think actually I ask them to come. I don't know whether you have any volunteer to come here and I don't want you to have trouble in getting people. And I don't think that it will take a lot of my time so I came here."

"Actually honestly I think that there may not be a lot of students help you. I think I can help. [Any other reasons?] No."

The above voice a minority (N=2) view of 'participatory learning' that is revealingly comprehensive:

(intervention): *"I think actually I ask them to come",*

(prediction): *"I don't know whether you have any volunteer to come here"*

(empathy): *"I don't want you to have trouble"*

(integrity): *"I don't think that it will take a lot of my time"*

(frankness): *"Actually honestly I think that there may not be a lot of students help you"*

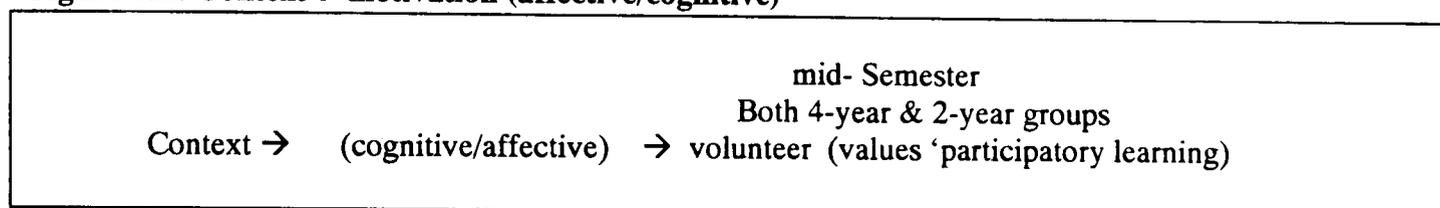
(self-worth): *"I think I can help"*.

The above comprehensive articulation suggests the 2-year group's rationale values and has closely examined 'participatory learning' and has significance in educational contexts such as in-service teacher training and the effectiveness of educational reforms.

- b. Adding to an understanding of motivation: context → motivation
(affective/cognitive)

Incorporating the above rationales into the theoretical model of motivation (see Figure 5.E) reveals the following.

Figure 5.E: Context → motivation (affective/cognitive)



The above figure indicates that for both 4-year and 2-year groups the context of 'why volunteer?' invokes a combined cognitive and affective response characterized as valuing 'participatory learning'.

Discussion of the implications of the above for our understanding of the interaction of affective/cognitive motivation is deferred until we can determine its consistency over time in the following section.

- c. Consistency of rationale - 2nd interview

At the close of their first Semester participants' motivation was probed by one unannounced, direct interview prompt, responses to which were coded as follows.

<p style="margin: 0;"><i>"As a final question: you volunteered to take part in this Research Project, and you have now continued to do so for nearly a whole Semester. Can I now ask you to explain why you've continued with this Project?"</i></p> <p style="text-align: right; margin: 0;">2nd interview q15</p> <p style="margin: 0;">Responses coded 'pragmatic/altruistic/both' and underpinning rational noted.</p>

The following (Table 5.6) displays a summary of each group's responses to the above contextualising interview prompt.

Table 5.6: Evidence for interviewees' motivation (2nd interview)

4-year group: (N=11*)

- underpinning both self-learning and commitment is a sense of 'duty' (N=7) 2nd interview q15

2-year group: (N=7*)

- underpinning both self-learning and commitment is a sense of 'duty' (N=7) 2nd interview q15

*(N=1 response not recorded)

The above summary responses suggest a commonality between both groups lies in them both having developed 'a sense of duty' as expressed in "*I think there is an invisible commitment*" and "*Because I have promised you*". The absence of enthusiasm in such expressions however suggests that this 'sense of duty' may reflect the weight of a semester's investment in this course of studies.

Explicating this common response from the viewpoint of an educational provider (lecturer or organisation) a rationale summation may be that after one semester, both groups have attained parity.

Explicating the same responses but from the perspective of their own group, a markedly different conclusion may be drawn.

The 4-year group's rationale has (tentatively) been ascribed as valuing 'participatory learning' (see: "*Underpinning rationale*" above). If at the end of one semester this group now expresses its motivation in terms of 'a sense of duty' then this may indicate a modest refinement of one aspect of 'participatory learning'.

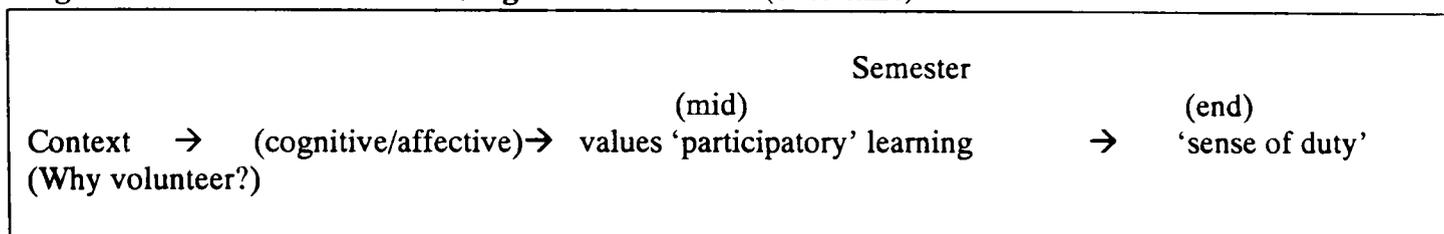
The 2-year group's rationale has (tentatively) been ascribed as valuing and articulating 'participatory learning' (see: "*Underpinning rationale*" above). If at the end of one semester this group now expresses its motivation in terms of 'a sense of duty' then this may indicate a narrowing view, a loss of articulation reflecting the weight of a semester's investment in this course of studies.

From the perspective of their own groups the above explications would place the 4-year group as having made a modest 'change' in contrast to the 2-year group's retrograde 'change'.

- d. Adding to an understanding of motivation: context → motivation
(affective/cognitive) over time.

Incorporating the above rationales into the theoretical model of motivation (see Figure 5.F) reveals the following.

Figure 5.F: Context → affective/cognitive motivation (over time)



The above figure indicates that for both 4-year and 2-year group the passage of time (here from mid to end Semester) modifies their perception of 'why volunteer?' from valuing 'participatory learning' to valuing a 'sense of duty'.

The above change over time implies the impact of 'routine/familiarisation' (here of being a 'research subject') serves to narrow expectations. It has been argued above (see: *Consistency of rationale*) that this 'narrowing' is, for the 4-year group, a modest refinement while for the 2-year group it is 'a loss of articulation'.

Curiously the above 'narrowing' occurs within a context that is 'safe' for the 'routine/familiar' context here offers neither reward nor punishment. The educational implications here are intriguing.

First, it may be argued that education that is 'safe' has the motivational impact of 'narrowing' participant expectations.

Second, education that appears to 'push the envelope' has the motivational impact on maturer students of enhancing 'articulation'.

IV. Summation

This Chapter has explored the first link in the hypothetical motivational construct: context → cognition → goals.

The context explored here is that defined by two groups of post-Secondary Hong Kong students in their mid-end semester interview responses. This context was explored in three ways:

1. context → affective cognition

2. context → cognitive cognition
3. context → affective/cognitive cognition.

1. *context → affective cognition*

Mid-semester responses revealed that the context of both groups exerted a common affective influence towards fostering a sense of pragmatism (Figure 5.A). For the 4-year group, this pragmatism induces an affective polarisation – Life for them is divisible into good/bad, black/white. In contrast, the slightly older 2-year group exhibit an affective rationalization that leads from feeling that social acceptance is a ‘burden’ to feeling that it offers protection. This rationalization can be viewed as effectively consolidating the affective value of being pragmatic.

End-semester responses (Figure 5.B) revealed the 4-year group changing from ‘polarisation’ to a uniform optimism. In affective terms this is a change from tension to ease. In contrast the 2-year group retained its powers of rationalization but turns from concerns with ‘protection’ to voicing feelings of ‘caution’ and ‘reserve’. In affective terms this is a modest change and indicates that for these 2-year students, tension still dominates.

Affective summation

The evidence indicates an interaction between context and affective motivation. A change in context appears to modify post-Secondary students’ affective motivation but to a lesser extent the affective motivation of marginally more mature 2-year students.

2, *context → cognitive cognition.*

Mid-semester responses revealed that the context of each group exerts apparently different cognitive influences (Figure 5:C). For the 4-year group, their perceived context induces a cognitive optimism below which lurks a strain of resistance that surfaces when they perceive external pressure. In contrast, the slightly older 2-year group’s perceived context induces a form of ‘learned pragmatism’, here grounded in a rationalizing of an internalized fear.

What both groups display in common, is a cognitive rationalization of their perceived contexts. Both groups rationalize in terms of self-protection – 4-year implicitly in their resistance to external pressure, 2-year explicitly in their ‘learned pragmatism’. The implication here is that cognitive responses to contextual influences apparently prioritise self-defence.

End-semester responses indicate that the context of each group exerts parallel cognitive influences (Figure 5.D). For the 4-year group, their earlier cognitive optimism gives way to an increasing resistance to perceived course pressure.

For the 2-year group, their earlier ‘learned pragmatism’ persists, but now in the form of candid self-reflections that reflect attempts to place a safe distance between themselves and rewards/penalties which they may not control.

Cognitive summation.

The evidence indicates an interaction between context and cognitive motivation. Emerging from these mid and end Semester interviews is the implication that cognitive responses to contextual influences continue to prioritise self-defence.

3. *context* → *affective/cognitive cognition.*

Mid-semester interview responses indicate that for both 4-year and 2-year groups the context of ‘why volunteer?’ invokes a combined cognitive and affective response characterized as valuing ‘participatory learning’ (Figure 5:E).

End-semester interview responses indicate that the passage of time (from mid to end Semester) modifies both groups’ perceptions of ‘why volunteer?’ from valuing ‘participatory learning’ to valuing a ‘sense of duty’. This change over time implies that the impact of ‘routine/familiarisation’ (here of being a ‘research subject’) serves to narrow expectations.

Affective/cognitive summation:

The 'narrowing' of expectations was noted to occur within a context that is 'safe' - here the 'routine/familiar' context of being a research subject offers neither reward nor punishment.

Two educational implications were then discussed. First, it may be argued that education that is 'safe' has the motivational impact of 'narrowing' participant expectations. Second, education that appears to 'push the envelope' has the motivational impact on maturer students of enhancing 'articulation'.

Having explored the first link in the hypothetical motivational construct of context → cognition → goals, in the next Chapter we now turn to consider the middle link, that of *cognition*.

Chapter Six: Cognition and change

I. Introduction

This Chapter seeks to explore the relationship between cognition and change in two groups of post-Secondary Hong Kong students. This exploration serves to add to our understanding of the role of cognition within the hypothetical motivation construct that posits context-→cognition→ goals.

II. Which 'cognition' and what 'change'?

To explore the relationship between cognition and change we turn first to consider 'cognition'. In this research context – of students entering Tertiary education – the form of cognition to be explored is that expressed through student 'learning'. Specifically, the 'cognition' explored in this Chapter refers to student perceptions of their own learning.

Student perceptions of their own learning were garnered from their responses to two interviews. In the first interview, students reflected back on their learning experience from the vantage point of the mid-Semester.

In the second interview, their reflections looked back from the vantage point of the Semester end.

A comparison between these reflections provides insights into student perceptions of cognition and how these perceptions influence behavioural change.

III. Data collection and analysis

Student responses to two interviews – mid-Semester then end-Semester – form the data base for the following analysis of the students' learning experience and change.

First interview responses are analysed in two ways. Responses are analysed first, in terms of noting the *majority* view and then second, by subjecting this *majority* view to an analysis of its underpinning rationale – specifically in terms of cognition as a precursor of behavioural change.

At this point, the data analysis displays the *majority* view and its underpinning rationale of two student groups at the mid-point of their first Semester. A comparison of the findings from these two groups serves to provide insights into student perceptions of cognition.

A second interview of the same two student groups was made at the end of their first Semester (but not less than one week before their exams). The responses to this second interview are analysed again, first, in terms of noting the *majority* view and then second, by subjecting this *majority* view to an analysis in terms of the underpinning rationale derived from their first interview.

At this point, the data analysis displays the *majority* view and any developments in its underpinning rationale of two student groups at the end of their first Semester. A comparison of the findings from these two groups serves to illuminate how these perceptions influence behavioural change.

IV. Initial Cognition: student perceptions of their own learning

Three questions probed initial perceptions of the 'learning experience' with responses coded as follows.

1st interview question 12 elicited reflections on any connections between self-identified study problems "*and gaining good course marks*".

Responses coded 'external/internal' attribution and rational noted.

1st interview question 13 asked "*suppose you really need to get straight grade As in all your modules, how can you achieve this?*"

Responses coded 'external/internal' attribution and rational noted.

1st interview question 14 queried: "*Would you agree that great teachers make great students? Or great students make great teachers?*"

Responses coded 'student/teacher/both/other' and rational noted.

The following (Table 6.1) displays a summary of each group's responses to the above three contextualising prompts.

Table 6.1: Summative evidence for ‘learning experience’ and its influence for change

<u>4-year group:</u> (11 students)		
• majority view the key to “good course marks” lies within one-self.	(N=8)	1 st interview q12
• “ <i>straight grade A’s</i> ” are viewed as being not attainable	(N=6)	1 st interview q13
• majority view ‘learning’ to be a joint responsibility.	(N=9)	1 st interview q14
<u>2-year group:</u> (8 students)		
“ <i>good course marks</i> ” are not their prime focus.	(N8)	1 st interview q12
little confidence that “ <i>straight grade A’s</i> ” are attained by individual effort.	(N8)	1 st interview q13
effective learning is complex affair in which each individual exerts only a modest influence.	(N8)	1 st interview q14

The above summary displays each group’s perception of the initial perceptions of their ‘learning experience’. A comparison of the responses suggests differences between these two groups: differences that may be summarised as follows.

4-year group responses indicate a majority view (N=8) that the key for “good course marks” lies in one-self. To obtain higher results (viz.: “*straight grade A’s*”) a combination of both internal and external factors are cited signaling a view (N=6) that “*straight grade A’s*” simply are unattainable. For the majority (N=9) responsibility for one’s studies assumed democratic tones espousing that learning is a joint responsibility involving both lecturers and students. This majority view is exemplified in “*I think there’s interrelationship . . . if the teacher is really great, s/he can affect the student’s attitude ... if the student is eager to learn and this will change the teacher’s attitude*”.

2-year group responses indicate a plethora of views indicating, “*good course marks*” are not their prime focus. Responses to obtaining “*straight grade A’s*” display little confidence that “*straight grade A’s*” are to be attained solely by individual effort. Reflecting perhaps his or her practical experience of school teaching, effective learning is perceived as being a complex affair: “*there’s a lot of other factors that affect someone’s study*”. Noticeably, amidst this complexity the individual exerts only a modest influence.

The following section now examines these differing *majority* views in terms of explicating their respective underpinning rationales – specifically in terms of cognition as a precursor of behavioural change.

1. Underpinning rationale

The 4-year narrations suggest that ‘change’ in terms of improved academic results can only operate within a modest range (where “straight grade A’s” are unattainable, “B’s and C’s” offer a modest range). Accordingly, in terms of the relationship between effort and reward, ‘change’ is not a promising investment. For example, student considers the ‘effort’ of moving from grade “C” to “B” to be more a social than an intellectual challenge: “*some questions I cannot think myself but with three or four people, they can create some ideas*”. Adding complexity to this social challenge is the minefield of the student/teacher relationship: “*if the teacher is really great, s/he can affect the student’s attitude ... if the student is eager to learn and this will change the teacher’s attitude*”. The innocence of this view (that teacher/student interactions are entirely democratic) however may be a mask for a form of ‘learned helplessness’. Although espousing the democracy of learning, their narrations also acknowledge teacher-power that invokes form rather than substance as a key to improved grades: “*follow all the deadlines . . . I think I may get a good result*”. Stated independently by two students, the imperative “*follow*” and the uncertain “*may*” point towards student experience of disempowerment.

The 2-year narrations indicate a plethora of approaches that suggests what is at work here is essentially pragmatic individualism. Their individualistic narratives however share two common tensions.

First, they display little confidence that “*straight grade A’s*” are to be attained solely by individual effort: “[grades depend on] *the packaging. Depends on different lecturer*”.

Second, the responsibility for effective learning is perceived as being a complex affair in which the individual exerts only a modest influence: “[grades depend on] *three things. First . . . the criteria of the assessment . . . Second . . . my lecturers because they mark my assignments . . . And third thing I would do is pray to God*”. As this student’s list exemplifies, their experience is that in getting “*straight grade A’s*”, the individual exerts only a modest influence.

These two common tensions of effort and influence combine to suggest that ‘change’ invokes a complex response: “*I always ask my friends, my classmates to see whether they can give me any opinions or comments*”. Here the choice of “*always*”, the implied but omitted negative “*whether (or not)*” and the charitable association of “*give me*” suggests two complex responses. First the experience drives the individual to seek group solace. Second, from the group is sought a cognitive need – expressed above as “*give me*” – in effect practicing within the group an essentially pragmatic individualism.

Summation of underpinning rationale

For ease of reference Table 6.1.A provides a summation of the above underpinning rationale:

Table 6.1.A: Summation of underpinning rationale (1st interview: prompts 12, 13 & 14)

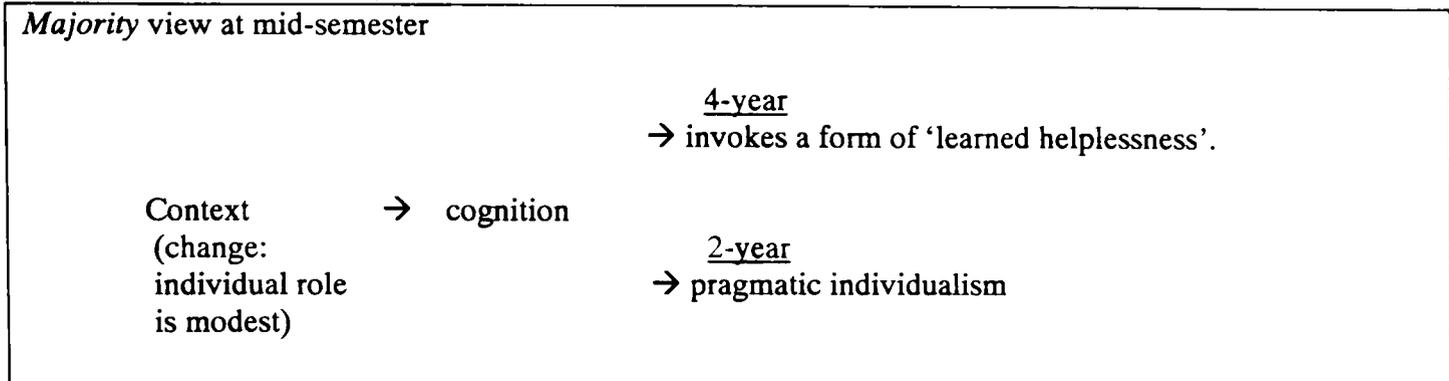
<p>4-year narrations suggest that ‘change’: operates within a modest range is not a promising investment.</p>	<p>} invokes a form of ‘learned helplessness’</p>
<p>2-year narrations suggest that ‘change’ is: not attained solely by individual effort complex: individual influence is modest</p>	<p>} invokes a pragmatic individualism.</p>

Reference to the above will be made later when this Chapter compares the above underpinning rationale with the 2nd interview responses.

2. Adding to an understanding of motivation: cognition→change

Incorporating the above rationales into the hypothetical theory of motivation (see Figure 6.A) reveal the following.

Figure 6.A: Context→cognition



The above figure indicates that at the mid-point of their first semester, the cognition of each group reveals parallel perceptions of 'change' but with markedly different conclusions.

In achieving 'change' – here improved academic results - both groups cite the role of the individual as being modest.

For the 4-year group, they conclude that as the role of the individual is 'modest' this leads to a perception of disempowerment – a form of 'learned helplessness'.

In contrast, the 2-year group concludes a way forward lies in pursuing within the group context, a pragmatic individualism.

The above markedly contrasting conclusions would suggest that whereas the 4-year group is closed to 'change', in contrast, the 2-year group may be open to 'change'.

Turning now to review responses to the 2nd interview, it is possible to assess the consistency of the above explication, to consider what these same groups have to say at the end of their first semester.

3. Consistency of rationale- 2nd interview

The perceptions of their 'learning experience' and its influence for change at the close of their first

Semester were probed by three interview prompts with responses coded as follows.

reflections on study problems “ <i>and gaining good course marks</i> ”.	2 nd interview prompt 10
Responses coded ‘external/internal/both’ factors and rationale noted.	
“ <i>Suppose a friend really needed to get straight grade As in all your modules, what advice would you give to achieve this?</i> ”	2 nd interview: prompt 11
Responses coded ‘external/internal/both’ factors and rationale noted.	
“ <i>Would you agree that great teachers make great students? Or great students make great teachers?</i> ”	2 nd interview prompt 12
Responses coded ‘student/teacher/both/other’ and rationale noted.	

The following (Table 6.2) displays a summary of each group’s responses to the above three contextualising prompts.

Table 6.2: Evidence for their ‘learning experience’ and its influence for change

<u>4-year group: (N=11)</u>	
‘getting good course results’ is largely a positive experience.	(N=8) 2nd interview q10
reasonably confident that ‘success’ is attainable.	(N=9) 2nd interview q11
two-way process (embryonic pragmatic individualism)	(N=6) 2nd interview q12
<u>2-year group: (N=7*)</u>	
‘grades’ do not measure ‘success’	(N=7) 2nd interview q10
‘straight grade A’s’ not attained by individual effort	(N= 4) 2nd interview q11
invokes a pragmatic individualism	(N= 6) 2nd interview q12
*(N=1 response not recorded)	

The above summary displays each group’s end-of-the-semester ‘learning experience’ and its influence for change. A comparison of the responses suggests differences between these two groups: differences that may be summarised as follows.

The 4-year group is reasonably optimistic. For the majority ‘getting good course grades’ is largely a positive experience (N=8) viz. “[studying] can help in widening my horizon . . . [is a means] to make more friends”. They are reasonably confident that ‘success’ is attainable (N=5 internal and N=4 combined internal/external attributes indicate this is within their control) and report ‘feedback’ and teaching as being essentially a two-way process (N=6). For example: “ask . . . be happy and active . . . if you are always very

sad, people are afraid to get close . . . you can't have sharing". This two-way process sites social skills as a mask, social "sharing" as a pragmatic goal. In this respect the 4-year group display an embryonic pragmatic individualism.

The 2-year group is more sanguine. Obtaining "good course results" are independent of their measure of 'success' that defines this course as a "gateway to the teaching profession". They exhibit little confidence that "*straight grade As*" are attained by individual effort and 'learning' is cited as a complex affair in which the individual exerts only a modest influence. For example: "*everyone has different minds. Maybe you think the ideas are very good but others may not think that.*" Here complexity is conveyed in the implied contradiction between the democratic view that "*everyone has different minds*" and the pragmatic recognition that what is "*good*" is defined by "*others*". Here the tone conveys a pragmatic individualism.

What these responses indicate about each group's response to 'change' will now be considered. The following (Table 6.3) tracks the two groups' response to 'change' by comparing the *Underpinning rationale* of their first interview responses (Table 6.1.A) against their second interview responses (Table 6.2).

Table 6.3: Comparing views of 'change'

Underpinning rationale of 1st interview responses*	2nd interview responses**
<u>4-year group cite that 'change':</u>	
operates within a modest range	largely a positive experience
not a promising investment	'success' is attainable
invokes a form of 'learned helplessness'	two-way process (embryonic pragmatic individualism)
<u>2-year group cite that 'change':</u>	
not attained solely by individual effort	'grades' do not measure 'success'
complex: individual influence is modest	'straight grade A's' not attained by individual effort
invokes a pragmatic individualism.	invokes a pragmatic individualism.
Data sources:	
*Table 6.1.A: Summation of underpinning rationale (1st interview: prompts 12, 13 & 14.	
**Table 6.2: Evidence for their 'learning experience' and its influence for change.	

Table 6.3 compares the Underpinning rationale of the first interview responses (Table 6.1.A) against the second interview responses (Table 6.2: Evidence for their 'learning experience' and its influence for change). A comparison of these two views of 'change' may be summarised as follows.

4-year responses indicate that their experience of 'change' invokes a metamorphosis. From perceiving 'change' operating within a modest range to becoming largely a positive experience; from experiencing 'change' as not a promising investment to feeling that 'success' is attainable and thirdly, from invoking a form of 'learned helplessness' to displaying an embryonic pragmatic individualism. This metamorphosis is encapsulated in 'success' cited as "*follow all deadlines*" (1st interview) changing to "*sharing*" (2nd interview). Here the transition is from a variety of 'learned helplessness' ("*deadlines*" are not by individual choice) to a form of pragmatic individualism ("*sharing*" involves individual choice).

One important feature undercuts the above striking metamorphosis: in the 1st interview 'change' refers specifically to "*grades*", in the 2nd interview "*grades*" becomes a synonym for 'progression within the course to becoming a professional teacher'.

Recognising this syntactical shift indicates one mechanism by which the 4-year group accommodates 'change'. The evidence here suggests that adaptation to 'change' involve re-assigning 'goals', effectively replacing that over which there is little control with that which remains in their control. For example, rather than pursue "*grades*" or "*deadlines*" (over which they feel little control) the goal becomes to "*concentrate on the process not the result*" to seek "*sharing*". In motivational terms, this transference appears to result from context operating directly on cognition.

2-year responses to the 1st & 2nd interviews indicate a calcification of pre-dispositions. The pre-disposition to see 'change' as not attained by individual effort deepens to reject 'grades' as a measure of their 'success'. Their experience that 'change' is a complex in which the individual influence is modest deepens to citing 'straight grade A's' as not being attained by individual effort. In both interviews, their experience of 'change' invokes a pragmatic individualism.

A pre-disposition can imply being 'stuck'. However the evidence here is that far from being 'stuck' the 2-year students are actively responding to a consistent context. For example: "*students also need to acquire some skills by themselves not only depend on their teachers*" (2nd interview). To arrive at such an



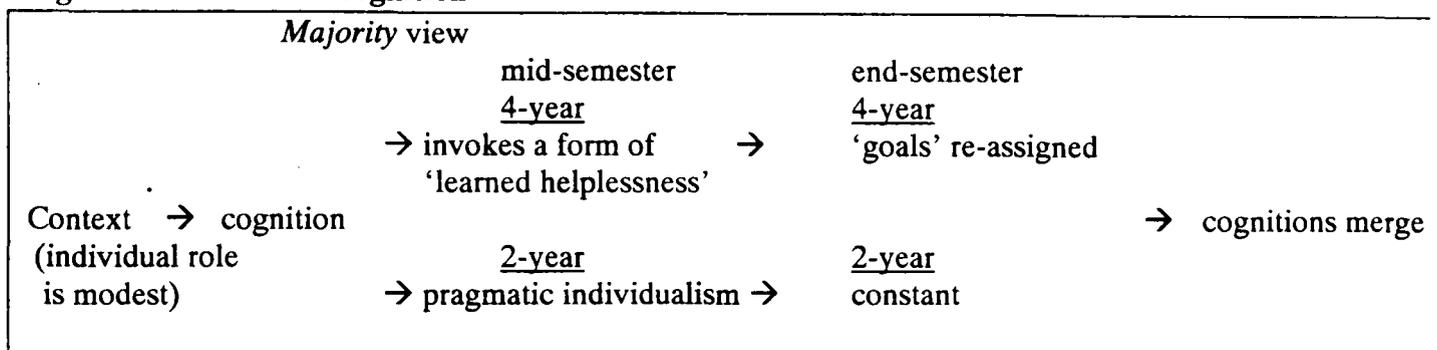
opinion clearly involves reflection on prior experience. Where the experience remains constant (here of “teachers” and student “need”) the disposition remains constant.

The ‘calcification of pre-dispositions’ may now be viewed not as evidence of being ‘stuck’; rather the quality of ‘calcification’ may imply a degree of ‘success’ – they adopted an approach that has been as consistent as the context. In motivational terms, this consistency appears to result from context operating directly on cognition.

4. Adding to an understanding of motivation: cognitive perceptions → change (over time)

Incorporating the above rationales into the hypothetical theory of motivation (see Figure 6.B) reveals the following.

Figure 6.B: Context→cognition



The above figure indicates that, in contrast to the mid-semester responses, towards the end of this semester the cognitions of both groups have merged. In effect, the 4-year group indicates an unwitting adoption of the 2-year group’s cognitive stance. The direction of this adoption is interesting. The 4-year group provides evidence that they ‘change’; in contrast it is the 2-year-group that remain ‘constant’. This ‘change’ direction suggests that it is the 2-year group’s cognition that is resilient over time.

The 2-year group’s resilient cognition – and the one adopted by the 4-year group - is that group identity offers protection.

How this cognitive view influences behavioural change is the subject of the following section that explores these students’ evolution of an operational motivational strategy.

V. Evolution of an operational motivational strategy

This section explores how the *majority* in each student group reports the evolution of their operational motivational strategy.

This exploration consists of three parts. First, we begin by presenting the research approach – the ‘what’ and the ‘how’. Second, the collected data analysed in terms of noting the *majority* view. Third, this same data source is re-visited in terms of explicating its underpinning operational motivational strategy.

First, we now turn to review the research approach – the ‘what’, ‘when’ and the ‘how’.

1. the ‘what’, ‘when’ and the ‘how’?

Within the context of this research, operational motivational strategies are defined as patterns of prioritisation that exhibit constancy over time and across contexts.

Such patterns of prioritisation were probed only once – at the mid-semester. This sampling serves to illuminate the findings –related above – on ‘Cognition and change’.

Three prompts were designed to explore student prioritisation over time and in varying contexts - from reflective generalizations on past experience to increasingly concrete reflections on current concerns.

These three prompts and their response coding now follow:

“Some people feel that life for them changes slowly while others are aware of sudden big changes. How would you describe your own experience for change?” 1st interview q6

Responses coded ‘slow/big/no’ changes and rationale noted.

“Can you give me a recent example of you changing your life?” 1st interview q7

Example and result(s) noted.

“Many students consider _____ a challenge. Would you agree?”* 1st interview q8
(*topic selected from individual’s “Having Read the Report”)

Responses coded ‘reiterating/resolving’ and rationale noted.

Having reviewed the research approach we now turn to the collected responses analysed in terms of noting the *majority* view.

Analysis of the *majority* view

Table 6.4 displays a summary of each group's responses to the above three contextualising prompts.

Table 6.4: Summary of reported patterns for prioritization

<u>4-year group</u> (N=11*)		
• 'change' is not an alien concept.	(N=8)	1 st interview q6
• students are responsive when 'change' is manifestly an immediate and personalised experience.	(N=8)	1 st interview q7
• 'change' is manageable where its challenges are perceived within a pragmatic focus.	(N=10)	1 st interview q8
<u>2-year group</u> (N=8)		
• 'change' is not an alien concept.	(N=8)	1 st interview q6
• recent 'change' represents a largely negative experience.	(N=7)	1 st interview q7
• 'change' is manageable where its challenges are perceived within a pragmatic focus.	(N=8)	1 st interview q8
*(N=1 response not recorded)		

The above summary displays each group's reported patterns for prioritization. A comparison of the responses suggests differences between these two groups: differences that may be summarised as follows.

4-year reported patterns for prioritization suggest amenability towards 'change' -an amenability derived from a certain familiarity with various forms of 'change'. For example: "*I act as this for almost 20 years*", "*a best friend commit suicide*" and "[my boyfriend] *help me overcome many problems and think more mature*". From such experience bases, 'change' is met responsively when it is manifestly an immediate and personalised experience. For example "*I want to open my eyes, see more* (exchange student from PRC)" and "*in the past I am introvert and now become more sociable . . . Before my mother always control me (now) I sleep in hostels*". For these 4-year students 'change' is manageable where its challenges are perceived within a pragmatic focus. For example "*may do one job to gain experience . . . After, may change job to find true career path*".

2-year patterns for prioritization suggest a certain caution towards 'change'. In common with the 4-year group, here 'change' is not an alien concept and it is manageable where its challenges are perceived within a pragmatic focus. However the 2-year group record a note of caution for their experience of recent 'change' represents a largely negative experience: "*I don't have enough time to sleep. I think it's really harsh to myself . . . the study routine . . . takes a lot of time. I really have to do a lot of preparation*". For students who feel their study regime is "*harsh*" a certain caution is understandable.

In summation, the 4-year group displays amenability towards 'change': in contrast the 2-year group display a certain caution.

Having reviewed the above response analysis, we now re-visit the same data source but this time in terms of explicating its underpinning operational motivational strategy.

2. Explicating the *majority's* underpinning operational motivational strategy.

The 4-year narratives reveal three relevant issues: first the awareness and then second the subject's perception of individual prioritization; the third issue considered shifting prioritisation caused by the impact of these self-perceptions.

Their narratives display first, a clear awareness of 'change' in their lives and secondly that the prioritisation of 'change' is firmly rooted in satisfying the needs not of society but of the individual.

In satisfying not society's but their own individual needs, the 4-year group can be said to be exercising a degree of freedom – the freedom to respond to 'change' in whichever way they personally find most conducive. However these individualistic responses mask an underlying commonality, that of a pragmatic response that favours being elusive. For example: "*three or four days ago, I cried for the whole night. Why? . . . I shouldn't tell all my things to everyone . . . I need to have a little bit change to protect myself*". The problem here centres on a social betrayal "*all my things to everyone*" to which she responds by acquiring an inhibition "*I shouldn't tell . . . to protect myself*". This response expresses a common pragmatism – an implicit acceptance that the source of the social betrayal is right and that the appropriate individual response is not to challenge but to elude. The 4-year narratives indicate that being 'elusive' is a

successful strategy. Being 'elusive' long enough allows 'change' itself to have changed, for the passage of time to resolve an apparent impasse.

The 2-year narratives also reveal three relevant issues: first the awareness and then second the subject's perception of individual prioritization; the third issue considered shifting prioritisation caused by the impact of these self-perceptions.

Their narratives display that this group is well aware of 'change' across the spectrum of their lives. One example demonstrates the trauma of such experience:

"One of my friend have the disease of lung . . . she died. At the same time another friend have some like heart disease . . . rebels attack my father's ship and then after that my father is found missing".

This spectrum however becomes myopic when discussing 'recent change'. This myopia centres on recent academic studies and displays a negative predisposition. For example: "[colleagues] *challenge me all the time*" and "*people are not as friendly as before*". Narratives on this negative predisposition reveal a pragmatic, defensive strategy.

It is noted that narratives of personal bete-noirs reveal the same pragmatic, defensive strategy. For example:

"We cannot pretend the attitude ...That's my personality. I want to be true in front of people ... As a student, I will be always be open. [Has this caused any problem for you?] No, ... They may know that I am always like that and then they will do something and avoid do something that I like or dislike."

Here the personal perception is one of openness and frankness. However admirable this may be, here we may focus on the sentence "*They may know that I am always like that and then they will do something and avoid do something that I like or dislike.*" This sentence articulates a strategy that because "*I am always like that*" other people will then 'avoid' confrontation. Using other words this same strategy has been expressed as being 'elusive' (here 'headstrong') long enough for the passage of Time to resolve the issues of 'change'.

The strategy of being 'elusive' long enough to allow the passage of time to resolve the issues of 'change' emerges as being common to both the 4-year and 2-year groups.

The above explication has particular implications for the context of Tertiary education. Where Tertiary students have an operational motivational strategy of being 'elusive' the implication is that they will be 'surface' learners. Of particular interest is that such 'surface' learning students will be adept at 'modeling' their behaviour according to the anticipated wishes of their lecturers. This 'need to please' behaviour has its rewards for both students (who get grades) and lecturers (who see willing students'). However its intrinsic educational value must be suspect.

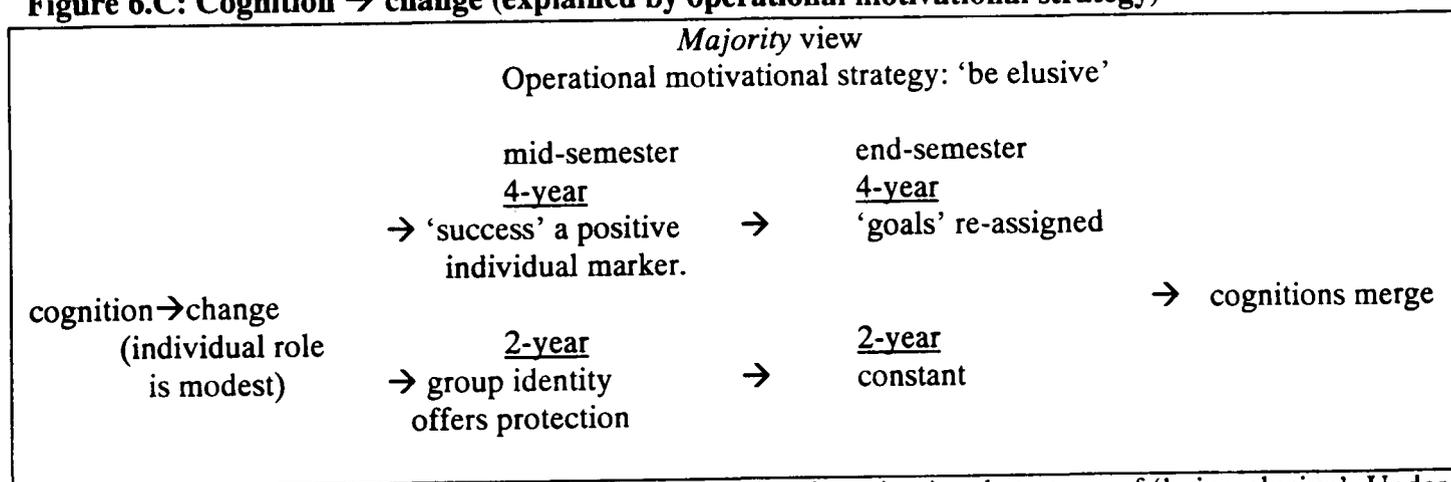
How the 'need to please' behaviour may be transformed, how the intrinsic value of education may be enhanced is the practical aim of this particular research. This is an area that will be discussed in Chapter Eight.

To assist in identifying effective interventions the following section now considers the 4-year and 2-year group responses in terms of their theoretical implications for our understanding of motivational behaviour.

3. Adding to our understanding of motivation:
cognitive perceptions → change (over time)

Incorporating the above explication into the theoretical model of motivation (see Figure 6.C) reveals the following:

Figure 6.C: Cognition → change (explained by operational motivational strategy)



The above figure center-stages the key operational motivational strategy of 'being elusive'. Under this strategy, appears the previously noted cognition → change (see: Figure 6.B).

The above figure now provides a basis for an interpretation of *why* the 4-year group indicates an unwitting adoption of the 2-year group's cognitive stance.

Why the 4-year group ‘follow’ the 2-year group (rather than vice versa) can now be explained in terms of both groups’ common operational motivational strategy.

At mid-semester interviews, the 4-year group reported ‘success’ as being a positive individual marker. By definition, such ‘success’ involves self-assertion – standing-out from other students. However this same group then reported at end-semester that ‘goals’ had been re-assigned – in effect merging with the constant cognitions of the 2-year group that consistently favoured ‘group identity offers protection’.

Why the 4-year group cognition should follow the 2-year group suggests something of their common cognition of ‘change’. The evidence of Figure 6.C (above) suggests that cognition of ‘change’ has the following three characteristics:

- Experimental
- Context driven
- Cultural driven

A discussion of each of the above characteristics now follows.

Cognition of ‘change’ is apparently experimental. At mid-semester, each group appears to be ‘trying out’ alternative cognitions, respectively of either seeking ‘success’ (4-year) or ‘group protection’ (2-year). The fact that cognition involves experimentation is interesting for such experimentation implies active learning, theory testing, positing and adaptability. If, as the evidence suggests, both the 4-year and 2-year students are covertly displaying active learning, theory testing, positing and adaptability, this covert behaviour implies that even apparently ‘stuck’ students are in fact constantly cognitively active.

Cognition of ‘change’ is apparently context driven. In this research the context appears to disempower both groups - each group independently reports having only a ‘modest’ influence on ‘change’ specifically within two contexts – that of overcoming self-identified study-problems and “*gaining good course marks*” (respectively: 1st interview q 12,13 and 2nd interview q 10,11). In an education context such as Hong Kong that stresses grade-attainment, this consistent experience of disempowerment (specifically between 1st and 2nd interviews) takes its toll. One example of this toll is provided by the 4-year group’s ‘change’ from ‘learned helplessness’ to an embryonic pragmatic individualism (Table 6.3). The same consistent disempowerment calcifies the 2-year group’s cognition, leading this group to appear ‘resistant to change’ (Table 6.3). In this respect “stuck” students appear to reflect ‘stuck’ contexts.

Cognition of 'change' is apparently culturally driven. Common to both groups is the operational motivational strategy of being 'elusive'. The very commonality of such a strategy suggests it was 'learned' much earlier than the commencement of Tertiary education. Specifically, prior to enrolment in this research, members of both groups had apparently disparate backgrounds but a common culture – students were drawn from across Hong Kong yet all share a Cantonese culture. Given their disparate backgrounds yet common operational motivational strategy, the implication is that the strategy of being 'elusive' emerged not from individual experience but from imbibing common cultural values.

An astringent to the above discussion is the recognition that only two of the three characteristics are prone to intervention.

Cognition as 'experiment' and as 'context-driven' both lend themselves to intervention – change the immediate context and accordingly the 'experimental' cognition will actively engage in 'change'. The dynamics of this intervention can be seen most clearly in the 4-year group – they 'live on campus' (context change) and accordingly showed an active experimentation with 'success'.

One characteristic of cognition however is not prone to such direct intervention. This resistant characteristic is culture. The resistance of culture can be seen most clearly in eventual merging of the 4-year cognitions with those of the 2-year group – the 2-year group live 'off-campus', are less immersed in 'campus-culture' and resiliently retained their cognition that group identity offers protection.

The role of culture on cognition appears to militate against effective motivational interventions. This is clearly demonstrated in the operational motivational strategy of being 'elusive'. If, as the evidence suggests, being 'elusive' is a culturally derived trait then interventions such as 'campus-life' may appear to effect 'change' but only at the short-term 'surface' level.

The pragmatic and theoretical implications arising from the above discussion will be discussed in the Discussion Chapter 8.

VI. Summation

This Chapter has explored the relationship between cognition and change in two groups of post-Secondary Hong Kong students as revealed in their responses to mid-semester and end-semester interviews (summarized respectively in Table 6.1.A and Table 6.3).

Mid-semester interview responses (Table 6.1.A) display each group's cognition of 'change' – here of attaining improved grades – are parallel yet produce markedly different outcomes. In parallel both groups' experience of attaining improved grades cites the role of the individual as being modest. Different outcomes then emerge from this parallel experience. For the 4-year group, their 'modest' individual role invokes a form of 'learned helplessness' that embraces the confound of social challenges and disempowerment – "*I cannot think (by) myself*" and "*follow (the lecturer)*". In contrast, the 2-year group's experience invokes a pragmatic individualism that sweeps aside social challenges: "*I always ask (peers) . . . to see whether they can give me (help)*".

End-semester interview responses indicated that the 4-year group undergoes a metamorphosis; in contrast the 2-year group displays a calcification of pre-dispositions. Table 6.3 displays the 4-year group as re-assigning 'goals', effectively replacing that over which there is little control (grades) with that which remains in their control (study process). Their re-assigning of goals indicates a metamorphosis e.g. "*concentrate on the process not the result*". In contrast, the 2-year group displays a calcification of pre-dispositions. This calcification implies a degree of 'success' – the adopted approach remains congruent with the context.

In motivational terms, both groups display context operating directly on cognition – 4 year 'learned helplessness' becomes 're-assigning goals'; 2-year 'calcification' signals an approach congruent with their context.

The results were then interrogated in terms of revealing each group's operational motivational strategy. This interrogation revealed that both the 4-year and 2-year groups shared a common operational motivational strategy. Their common strategy was to be 'elusive' long enough to allow 'change' itself to have changed, for the passage of time to resolve an apparent impasse.

The theoretical implications of this common operational motivational strategy were then discussed in terms of revealing that only two of the three underpinning characteristics are prone to intervention. The two characteristics prone to intervention were posited as having a dynamic relationship. The two characteristics are cognition first as 'experiment' and second as 'context driven'. Their dynamic relationship stems from cognition as 'experiment' actively 'scanning' cognition of 'context'. Accordingly interventions aimed at 'context' may have a dynamic impact on behavior through the mediation of the subject's willingness to cognitively 'experiment'.

One characteristic was noted as being resistant to intervention. This resistant characteristic is culture. The resistance of culture was posited as explaining why 'context' interventions (such as 4-year students 'living-on-campus) may appear to produce only 'surface change'.

Having considered cognition, the following Chapter now explores the relationship between cognition→goals.

Chapter Seven: Goals – clusters, consistency and quality.

I. Introduction

This Chapter seeks to explore the relationship between cognition and goals in two groups of post-Secondary Hong Kong students. This exploration should further illuminate the third area in the hypothetical motivational construct that posits context → cognition → goals.

II. Goal clustering, consistency and qualitative nature

It is helpful to recall that an individual may not only hold a range of goals but also display a shifting prioritisation amongst these goals (Urda and Maehr, 1995). Building on this concept of goals as clusters this Chapter will focus on three consecutive areas: first, identifying significant goal clusters, second their consistency over time and third, their qualitative nature.

1. Identifying significant goal clusters:

To identify significant goal clusters it is relevant to consider 'significance' as it is perceived by the goal-holders – in this context two groups of post-secondary Hong Kong students. To obtain student perceptions of their own goals, student responses are reviewed in two ways: first to reveal their prioritisation within an everyday academic context and then secondly to explicate their significant goal clusters.

2. Consistency of goal cluster over time:

Having identified significant goal clusters it is relevant to consider their consistency. Consistency of goal clusters is indicated by durability over time. To provide evidence of consistency, mid-semester and then end-semester student reports are contrasted in terms of their prioritisation and responses to the same everyday situation. Taken together, these mid and end-semester reports provide an evidence-based description of consistent goal clusters.

3. Qualitative nature of consistent goal cluster

Having identified an evidence-based description of consistent goal clusters, this Chapter then considers their qualitative nature. Addressing the qualitative nature of goal clusters is significant at the level of theory building specifically in terms of understanding of the relationship between goal creation and cognition/context.

To address the qualitative nature of consistent goal clusters two forms of evidence are interrogated. First is the evidence - described above - of goal clusters held consistently over one semester. Second, is evidence derived from student reflections on their whole semester experience. Interrogating these consistent goal clusters against their whole semester reflections provides insights into the qualitative nature of consistent goal clusters and the relationship between goal creation and cognition/context.

The following section now reviews the procedures adopted for the data collection and analysis of first, identifying significant goal clusters, second their consistency over time and third, their qualitative nature.

III. Data collection and analysis

1. Identifying significant goal clusters:

Three prompts were common to both mid and end semester interviews. These three interview prompts sought to elicit students' prioritisation within contexts that ranged from personal ranking of four everyday events, predicting future status and responding to a metaphorical challenge.

Student responses to the first, mid-semester interview are analysed in two ways. First they are analysed in terms of identifying the *majority's* prioritisation. Second this majority prioritisation is analysed in terms of tentatively identifying its underpinning *goal cluster*.

At this point, the data analysis displays the *majority's* prioritisation and underpinning goal clusters of two student groups at the mid-point of their first semester.

2. *Consistency of goal clusters over time:*

At the end of the semester a second interview garnered responses to same three prompts. The responses, to this second interview are analysed in two ways: first in terms of noting the *majority* prioritisation. Second this majority prioritisation is interrogated in terms of the underpinning goal cluster derived from the first interview.

At this point, the data analysis displays the *majority* view and the consistency in the underpinning goal cluster of two student groups at the end-point of their first semester.

3. *Qualitative nature of consistent goal clusters:*

Having identified the *majority's* underpinning goal clusters, these goal clusters are further interrogated to assess their qualitative value.

This interrogation involves data collected from two further prompts posed in the second, end-semester interview. These two questions probed pragmatic and then metaphorical self-reflections on individual change over the semester.

These pragmatic and then metaphorical self-reflections are subjected to a two-step analysis. First in terms of noting the *majority* view. The second step then seeks to interrogate this *majority* view against their consistent goal clusters.

At this point, the data analysis displays for two student groups, first the contrastive *majority* view of two groups' reflections on one semester and second an explication of these two majority views in terms of their consistent goal clusters.

A comparison of the qualitative nature of these two groups' consistent goal clusters will then add to our understanding of the relationship between goals and cognition/context.

IV. Reporting Data Analysis

1. Identifying significant goal clusters

Initial perceptions of prioritisation were probed by two 1st interview prompts with responses coded as follows.

“Sometimes everything happens all at once. Imagine you have a lecture to attend, an assignment for another class to complete, a dental appointment because of toothache and friend calls with a problem. What would you do?” 1st interview q15

Responses tabulated to reveal ranking.

“Imagine that your life is like a path in which someone has placed many stones and rocks. What would you do?” 1st interview q17

Responses coded ‘overcome/accept’ and rationale noted.

The following (Table 7.1) displays a summary of each group’s responses to the above three contextualising prompts.

Table 7.1: Prioritisation and responses to influences for ‘change’ – mid-semester

4-year group (N=11)

- personal comfort ranks least important compared with Assignments and Friends (N=11) 1st interview q15
- ‘overcoming change’ as an individual’s responsibility. (N=9) 1st interview q17

2-year group (N=8)

- personal comfort ranks least important, pole position attributed to Assignments. (N=8) 1st interview q15
- diversity of ‘change’ strategies ranging from engagement (N=4) to evasion (N=4) 1st interview q17

The above summary displays each group’s prioritisation and responses to influences for ‘change’.

A comparison of the responses suggests differences between these two groups: differences that may be summarised as follows.

4-year responses impart a sense of stoicism encapsulated in the response: *“Maybe I can afford to stand the pain.”* Compared with assignments and friends, personal comfort is least important and further, ‘overcoming change’ is seen as an individual’s responsibility viz. *“I will by myself first if I can’t do that, I will call for help”*.

2-year responses also impart a degree of stoicism: *“I have the tolerance of pain so I think the assignment is first.”* Personal comfort is clearly sacrificed to the pole position attributed to Assignments while ‘change’ strategies are balanced between engagement (N=4) and evasion (N=4) e.g.:

“Just by myself because . . . there’s a lot for me to treasure”

“[my own Life] *It’s something like a S-shaped road*”

The engagement of “*treasure*” above is in sharp contrast with the second student’s evasive “*S-shaped road*”.

Having contrasted the *majority*’s prioritisations we now turn to tentatively identify their respective underpinning *goal clusters*.

4-year narrations signal a tension between two goals: sociability and individual growth. This tension arises both in the short-term prioritization or when pursuing longer-term goals. When pursuing short-term prioritization, the completion of assignments, attending lectures and meeting friends is all held in higher ranking over individual comfort. As an exemplar: the comment “*Maybe I can afford to stand the pain.*” suggests that physical pain-avoidance is not a significant goal, in contrast, the influence of Assignments, Lectures and Friends form a significant goal cluster within which each item competes for priority.

When pursuing longer-term goals (here of sociability and individual growth) this pursuit is narrated in terms of a struggle ‘to overcome’, a struggle that is held to by a majority (N=8) to be the individual’s responsibility as exemplified in the following.

I like to have this challenge because I believe can make life more colourful. Ups and downs, this picture is dynamic. ... sometimes we feel unhappy or depressed but this is our life ... some friends told me maybe you have already met many stones but you just ignore it. You don’t treat it as stones. [You treat it as an opportunity?] Yes, opportunity.

The above student expresses her view of Life’s challenges as being ‘*dynamic*’ and essentially an expression of individual responsibility albeit eased by a selective myopia “*some friends told me maybe you have already met many stones but you just ignore it.*”

Such narrations (above) suggest a dichotomy between the goal clusters associated with short-term self-negation and long-term self-responsibility.

2-year narrations reveal a clear goal of operationalising pragmatism. Their pursuit of the goal cluster associated with being pragmatic prioritises assignment completion above either lecture attendance or helping a friend. Such pragmatism however creates a complex tension with a second goal cluster – those goals associated with being individualistic. The complexity of this tension is two-fold. First, they uniformly prioritise personal pain as least important compared with the pole position attributed to Assignments. This result suggests personal comfort – the individual - is least important compared with the pole position attributed to Assignments. Second, the nature of this tension between pragmatism and individualism is complex as exemplified by:

if my life is content, that is I do not need to worry about my living then I think I will be happy. . . [Your living means your physical comfort?] Yes. [Can I ask you in your life so far, has your living been comfortable?] I think not really.

if I go any way this way or that way, then I feel it's interesting and funny. I can go here and there. But if you force me to go here and then go here, then I think it is not good and maybe there's some dangerous things and I don't want go into there.

[How would you describe your own life?] It's something like a S-shape road, not really much obstacles but I need to solve some kind of problems.

For one the priority is 'pain-avoidance', for another 'drifting' and a third it is 'evasion' detectable in the contradictory "*not really much obstacles but I need to solve some kind of problems*".

As a group, the majority of 2-year students express a tension between the goal clusters associated with pragmatism and individualism, a dichotomy that may be summarised as invoking a form of pointless martyrdom.

Summary

The above explications reveal apparent differences between the two groups in terms of their significant goal clusters.

The 4-year explications signal a dichotomy between two goal clusters: between first short-term self-negation and second long-term self-responsibility.

In contrast, the 2-year explications signal a tension between two goal clusters - pragmatism and individualism. This combination of goal clusters produces for the majority of 2-year group a form of pointless martyrdom.

Having identified goal clusters at the mid-point of a semester, we now turn to consider if these same goal clusters are consistent over time – specifically at the close of semester one.

2. Consistency of goal clusters over time

To assess consistency over time, two 1st interview prompts were posed here at the close of the first Semester. These repeated questions probed student perceptions of prioritisation with responses coded as follows.

“Sometimes everything happens all at once. Imagine you have a lecture to attend, an assignment for another class to complete, a dental appointment because of toothache and a friend calls with a problem. What would you do?” 2nd interview q13

Responses tabulated to reveal ranking.

“How would YOU now describe your own ‘journey’ through this 1st Semester?” and here focusing here on responses to the follow-up question *“What should someone do when Life is like that?”*

2nd interview q 3b

Responses coded ‘overcome/accept’ with rational noted.

The following (Table 7.2) displays a summary of each group’s responses to the above three contextualising prompts.

Table 7.2: Prioritisation and responses to influences for ‘change’ – end semester

<u>4-year group (N=11)</u>		
• ‘Friends’(N=5) and ‘Assignment completion’ (N=4) rank 1 st		2 nd interview q13
• ‘personal comfort’(N=7) ranks last.		
• an ambivalent experience of ‘change’: incurring strategies of		
‘learning’	(N=4)	
‘socialising’	(N=3)	
‘accepting individual responsibility’	(N=2)	
‘duty’	(N=1)	
‘endure’	(N=1)	2 nd interview q3b
<u>2-year group (N=7*)</u>		*(N=1 response not recorded)
• ‘Assignment completion’ (N=6) ranks 1 st		2 nd interview q13
• ‘personal comfort’ (N=6) ranks last.		
a negative experience of ‘change’: incurring strategies of		
‘optimistic’	(N=3)	
‘pragmatic’	(N=2)	
‘fatalistic’	(N=2)	2 nd interview q3b

Table 7.2 (above) displays each group's end-semester prioritisation and responses to influences for 'change'. A comparison of the responses suggests differences between these two groups: differences that may be summarised as follows.

4-year responses indicate a fragmentation of views. Priority ranking reveals 'Friends' (N=5) ranked just above 'assignment completion' (N=4) with 'personal comfort' ranked last (N=7). Second, there is an ambivalent experience of 'change' that seeks solutions through the strategies of 'learning' (N=4) and 'socialising' (N=3) with 'accepting individual responsibility' (N=2), 'duty' (N=1) and 'endure' (N=1) as alternate responses. This range of prioritisations and responses suggests a fragmentation of views

2-year responses are more sanguine. 'Assignment completion' (N=6) is ranked first with 'personal comfort' (N=6) ranked last. Coping strategies range from being 'optimistic' (N=3), 'pragmatic' (N=2) or simply 'fatalistic' (N=1). This combination of clear prioritisation and a range of coping strategies suggest a view that is sanguine.

Having summarised above each group's prioritisation and responses to influences for 'change' we now turn to compare these end semester responses with their mid-semester responses. This comparison serves to identify the consistency of these students' goals.

The argument presented in the following section is drawn from contrasting the evidence presented in Table 7.1 (mid-semester prioritisation) and Table 7.2 (end-semester prioritisation).

The 4-year group's 1st interview has tentatively displayed a goal cluster characterised by a dichotomy between short-term self-negation and long-term self-responsibility (see above '*Significant goal clusters: Summary*'). This dichotomy of their 1st interview responses can now be compared with their responses to 2nd interview prompts 13 and 3b (see above Table 7.2).

Responses to 2nd interview prompt 13 revealed a polarity – at one pole friendship rivals assignment completion and at the opposite low priority pole was 'personal comfort'. This polarity may now be interrogated in terms of this group's goal clusters.

Their significant goal cluster included a dichotomy between short-term self-negation and long-term self-responsibility. The goal of short-term self-negation is consonant with the low priority pole of 'personal comfort'. The goal of long-term self-responsibility is consonant with the feature of (current) friendship rivaling (long-term rewards from) assignment completion. The dichotomy within the students' significant goal cluster appears consonant with their 2nd interview responses. This consonance indicates that the 4-year students' significant goal cluster appears consistent over time – specifically between 1st and 2nd interviews.

Responses to 2nd interview prompt 3b revealed an ambivalence that sought solutions through the strategies of 'learning', 'socialising' or 'individual responsibility', 'duty' and fatalistically simply 'enduring'. This range of coping strategies may now be interrogated in terms of this group's goal clusters.

Their significant goal cluster included a dichotomy between short-term self-negation and long-term self-responsibility. The dichotomy within the range of coping strategies is consonant with the dichotomy within this group's goal cluster – effectively these strategies and goals support the premise of individuals seeking solutions to a common dichotomy. In this light, the 4-year students' significant goal cluster appears consistent over time – specifically between 1st and 2nd interviews.

In summation, the 4-year group's significant goal cluster appears consistent over time – specifically between 1st and 2nd interviews.

The 2-year group's 1st interview has tentatively displayed a goal cluster characterised by a form of pointless martyrdom – this pointless martyrdom is shown to comprise a dichotomy between a self-negation and the pursuit of 'hollow learning' (see above "*Significant goal clusters: Summary*"). This 'pointless martyrdom' of their 1st interview responses can now be compared with their responses to 2nd interview prompts 13 and 3b (see above Table 7.2).

Responses to 2nd interview prompt 13 revealed 'assignments' were prioritized above 'personal comfort'. This prioritization may now be interrogated in terms of this group's goal clusters.

Their significant goal cluster comprised a dichotomy between a self-negation and the pursuit of 'hollow learning'. Prioritising 'assignments' above 'personal comfort' is consonant with the goal of self-

negation. Prioritising 'assignments' above 'friendship' (see Table 7.2: in terms of negating peer support) is consonant with 'hollow learning'. This consonance indicates that the 2-year students' significant goal cluster appears consistent over time – specifically between 1st and 2nd interviews.

Responses to 2nd interview prompt 3b revealed coping strategies ranging from being 'optimistic', 'pragmatic' or simply 'fatalistic'. This range of coping strategies may now be interrogated in terms of this group's goal clusters.

Their significant goal cluster comprised a dichotomy between a self-negation and the pursuit of 'hollow learning'. Being 'optimistic' appears to be counter to the significant goal cluster. However, this aberrance may be resolved by noting that being 'optimistic' is consonant with the goal cluster's overarching characteristic of being 'sanguine' ('optimistic' is cited as a personal resolve, not an expression naive innocence). In this light, being 'optimistic' is consonant with this group's goal clusters.

Being 'pragmatic' or simply 'fatalistic' are both consonant with the 1st interview goals of self-negation and the pursuit of 'hollow learning'.

In summation, the 2-year group's significant goal cluster appears consistent over time – specifically between 1st and 2nd interviews.

Summary

The above explications reveal apparent differences between the two groups.

The 4-year explications point to individuals responding to a common dichotomy between short-term self-negation and long-term self-responsibility. The 4-year's responses to this dichotomy were characterised as 'fragmented'.

The 2-year explications point to individuals facing a form of 'martyrdom' comprising a self-negation and the pursuit of hollow 'learning'. The 2-year's responses to this 'martyrdom' was characterised as 'sanguine'.

The significance of holding goal clusters that are 'fragmented' or 'sanguine' is dependent on the qualitative and value-laden assignments afforded such terms. The relevant assignees here are the students

themselves. To address the prompt of how such goal clusters as 'fragmented' or 'sanguine' are valued by these students we now turn to assess the qualitative nature of consistent goal clusters.

3. Qualitative nature of consistent goal clusters

Responses to two 2nd interview prompts form an evidence base with which to assess the qualitative and value-laden assignments to goal clusters held by the 4-year and 2-year students.

Two prompts probed the students' pragmatic and then metaphorical self-reflections on their overall experience of this first semester. These two prompts with response coding now follow.

"Our major research question throughout this Semester has been: "How do incoming students adjust to Tertiary education at the HKIEd?" Looking back at your own experiences this Semester, how would you now answer this question?"

2nd interview q1

Responses coded 'positive/negative/both/no change' and rationale noted.

"How would YOU now describe your own 'journey' through this 1st Semester?"

2nd interview q3a

Responses coded 'positive/negative/both' and image/picture noted.

[Note: Interview question 3 provides a shared evidence base.
Earlier, question 3 b probed 'accommodation of change'.
Here question 3 a. probes for 'change' metaphors.]

The following (Table 7.3) displays a summary of each group's *majority* responses to the above two contextualising questions.

Table 7.3: Summative reflections at the close of a Semester

4-year group: (N=10*)	*(N=1 response not recorded)	
• emergent pattern, cited as affecting the individual but within the individual's control.	(N=8)	2 nd interview q1
• the 'change experience' is not pleasant, involving a: partial self-negation - self-deprecating - emotionally challenging struggle for new acceptance.	(N=3) (N=4) (N=3)	2 nd interview q3a
2-year group: (N=7*)		
• "change" is: individual painful and disturbing.	(N=8) (N=5)	2 nd interview q1
• 'change experience' is not pleasant involving either a: defensive use of cynicism response to a form of compulsion.	(N=1) (N=6)	2 nd interview q3a

The above summary displays the *majority's* view in each group's summative reflections as the Semester closes. A comparison of these majority responses suggests differences between these two groups: differences that may be summarised as follows.

4-year summative reflections (responses to q1) depict for the majority (N=8) a progressive, three-step understanding of 'how incoming students adjust'. First they narrate an emergent pattern, second they cite this pattern as affecting the individual and third that this pattern is viewed as a progression that is within the individual's control. For example: "*at first I think that come here is . . . play rather than study . . . I think the competition is not great. But now . . . you find some students very good . . . you have to prepare for your self-study. Otherwise you will lost ways*" In this example, the student narrates an emergent pattern that moves essentially from "*play*" to "*study*". Her progression stems from "*competition*" but this progression is voiced as within her control "*prepare*". Collectively, such a three-step progression may be characterised as a progressive pragmatism.

Summative reflections in their metaphors (responses to q3a) add texture to the above progressive pragmatism: these metaphors portray the 'change experience' as not pleasant:

"as a forest with many paths . . . sometimes I will feel scared"

"hills and rain and sun and having to follow a group"

As the above display, the 'change experience' can involve emotional challenges and a struggle for new acceptance.

2-year reflections (responses to q1) portray a one step pragmatism – responsibility lies with the individual (N=8), a responsibility that is both painful and disturbing (N=5). For example: “*competition . . . it will affect our friendship*”, “*it’s not easy and not very pleasant to study*” and “*my father saving is almost used . . . it is a great pressure*”.

Summative reflections in their metaphors (q3a) add texture to the above one step pragmatism. These metaphors portray the 'change experience' as not pleasant for it incurs a defensive use of cynicism (N=1) “*the road is like this, somewhere they dig a hole and one may (fall) into the hole*”. More commonly, the 'change experience' is viewed as a compulsion (N=6) “*a competition. Maybe a racing competition*”.

Having identified the 4-year and 2-year groups' majority summative reflections on their overall experience of this semester, we now turn to interrogate these summative reflections in terms of assessing the qualitative nature of each group's consistent goal clusters.

Qualitative nature of a consistent goal cluster: 'fragmented'

The 4-year group's summative experience identifies a progressive, three-step understanding of 'how incoming students adjust'. This three-step understanding begins first, as an emergent pattern second this pattern incurs a partial negation of the former-self and a struggle for new acceptance and third, this pattern is viewed as a progression that is within the individual's control.

This three-step pattern can now be interrogated in terms of assessing this 4-year group's consistent goal cluster –assigned the qualitative and value-laden term 'fragmented'. The following interrogates sequentially each step of their three-step pattern.

First, to summarise 'how incoming students adjust' as an emergent pattern depicts 'fragmented' not as a destructive, external blow but rather as a constructive internal expansion.

Second, to summarise 'how incoming students adjust' as a partial negation of the former-self and a struggle for new acceptance depicts 'fragmented' as a test of the individual's inner resources and social skills.

Third, to summarise 'how incoming students adjust' as being within the individual's control depicts 'fragmented' as isolating, a test of survivor's skills.

Summary

In summation, the 4-year group's consistent goal cluster has been described as 'fragmented'. From the students' perspective the qualitative and value-laden term 'fragmented' carries the characteristics of an isolating if constructive individual growth that puts to the test one's inner abilities, particularly those of social and survival skills.

In this light, the term 'fragmented' may be assessed as being descriptive but neutral – implying internal growth which may be experienced but over which the individual has no control and for which she cannot be held responsible.

Qualitative nature of a consistent goal cluster: 'sanguine'

The 2-year group's summative experience identifies that 'incoming students adjust' by taking one pragmatic step – recognize it is not a pleasant experience and adopt either a defensive use of cynicism or view it as a compulsion.

This one-step pattern can now be interrogated in terms of assessing this 2-year group's consistent goal cluster –assigned the qualitative and value-laden term 'sanguine'.

To summarise 'how incoming students adjust' as a response to an unpleasant experience depicts 'sanguine' as being essentially defensive. To narrate this defensive response as adopting either a defensive use of cynicism or viewing it as a compulsion depicts 'sanguine' as being in possession of a knowledge that is either perplexing (cynicism) or painful (unpleasant compulsion).

Summary

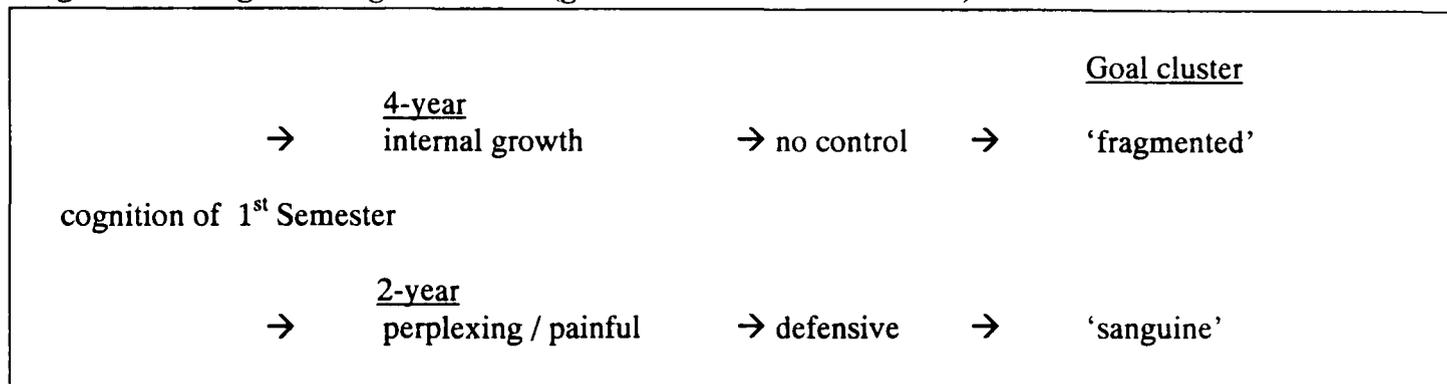
In summation, the 2-year group's consistent goal cluster has been described as 'sanguine'. From the *students' perspective* the qualitative and value-laden term 'sanguine' carries the characteristics of a defensive response to an experience that is either perplexing or painful.

Having located the qualitative assignment of 'fragmented' and 'sanguine' within the summative reflections of consecutively the 4-year then 2-year groups, we now turn to consider how this knowledge adds to our understanding of motivation.

V. Adding to an understanding of motivation

There is a clear distinction between these two group's progression to 'change': 4-year group is 'fragmented' in contrast the 2-year group is 'sanguine'. Incorporating this information into the theoretical model of motivation (see Figure 7.A) reveals the following.

Figure 7.A: Cognition → goal clusters (goal-holders summative view)



The above figure displays the summative cognition → goal cluster reported by the majority of the 4-year and 2-year groups.

Contrasting the 4-year and 2 year cognition → goal cluster paths suggests that cognition exerts a linear impact on goal cluster – cognition of 'internal growth' or 'perplexing / painful' leads to contrasting goal clusters of 'fragmented' or 'sanguine'.

The above linear path is significant in terms of indicating that cognition of context has a linear impact on resultant goal clusters. Expressed diagrammatically:

Cognition (of context) → goals

If the linear impact of cognition on goals is accepted, this opens the way to effective motivational intervention. To explain, rather than addressing an individual's goals, the above linear model implies that effective motivational intervention may lie in addressing an individual's cognition of context.

VI. Summation

This Chapter has examined the following four topics.

1. Significant goal clusters were identified for the 4-year and 2-year groups.
 - The 4-year displayed a dichotomy between the goal clusters associated with short-term self-negation and long-term self-responsibility. This 4-year goal cluster was characterised as being 'fragmented'.
 - The 2-year group displayed a dichotomy between pragmatism and individualism, characterised as a form of pointless martyrdom.
2. The significant goal clusters were then shown to be consistent over time – specifically between 1st and 2nd interview.
3. The qualitative nature of these goals was assessed.
 - The 4-year group's goal cluster characterised as 'fragmented' was assessed as being descriptive but neutral – implying internal growth which may be experienced but over which the individual has no control and hence cannot be held responsible.
 - The 2-year group's goal cluster of 'sanguine' was assessed as being a defensive response to an experience that is either perplexing or painful.
4. Adding to our understanding of motivation.
 - Noting that the above evidence suggests a linear relationship for motivation enhanced our understanding of motivation. This linear relationship implies that effective motivational intervention may lie in addressing an individual's cognition of context.

Having explored the relationship between cognition → goals the following, concluding Chapter now addresses first, aberrant evidence then second, theoretical implications and third, practical motivational interventions.

Chapter 8: Aberrant views, research collation and conclusions.

I. Introduction

This chapter presents first, aberrant evidence and second a collation of the findings of this research. The findings are interrogated in two ways: first in terms of their theoretical implications and second, in terms of suggesting practical motivational interventions. The chapter then closes with a review of the research limitations and implications for further studies.

The evidence presented in Chapters Two to Seven has been that of the *majority*. Before reviewing the findings from this evidence base, it is relevant here to consider first if this majority view differs from the aberrant view.

II. Aberrant views?

A statistical analysis of both cohorts identified eight statistically aberrant students (see Chapter 4, Table 4.2). Four of these students were members of the interview groups. A review of these four students' interview responses and then a review of all the remaining interviewees' responses identifies not one student who can be claimed to consistently hold 'aberrant' views (19 interviewees each provided 36 responses: highest individual aberrant tally N= 3. 8%). The highest individual aberrant tally (N=3:8%) was recorded by 'Sophie' - not one of the four statistically aberrant students. This interview evidence displays a homogenous clustering with aberrant views being expressed somewhat erratically throughout the range of interview responses.

To illustrate first from the 4-year group: Sophie is the only member of the 4-year interview group (N=11) who is an exchange student from the People's Republic of China (PRC). Sophie acknowledges that to come to Hong Kong she had to be "*competitive*" and starts her interview with the self-perception that in Mainland China her education paid "*too much attention on the books and on the knowledge [failing to] give students enough room to think things by themselves.*" Like all 4-year students, Sophie lives on campus in a Student Hostel.

Given the disparate educational background one might assume that aberrant views would consistently emerge from Sophie. However the evidence - displayed in Table 8.1 - does not support such an assumption.

Table 8.1: Comparison of majority and ‘aberrant’ responses in 4-year group

4-year group (N=11) Sophie’s response is the SAME as the *Majority view* except:

1st Interview q 1:

Majority (N= 8): ‘average’ student as being academically and socially non-assertive.

Sophie: “*competitive*” and “*a good chance for me to go out and see some others*”

2nd Interview q10:

Majority (N=8) ‘getting good course results’ is largely a positive experience.

Sophie: “*when you are studying, more and more difficulties will come out*”

2nd Interview q15:

Majority (N=7): underpinning both self-learning and commitment is a sense of ‘duty’

Sophie: “*topic . . . is ourselves . . . help me to think more . . . to speak more English.*”

The above Table 8.1 displays that the 4-year *majority* responses are the same as those provided by Sophie in all but three cases. Of these three aberrant views, only one appear in the first interview: rather than being ‘non-assertive’ Sophie reports being “*competitive*” and socially out-going. In the end-semester interview Sophie displays two aberrant views: ‘getting good results’ is not ‘positive’ but ‘difficult’ and second, rather than displaying a sense of ‘duty’ Sophie narrates ‘self-learning’ traits such as “*to think . . . to speak more*”.

Despite Sophie’s different contextual background, the conformity of her responses with the *majority view* is notable (36 responses: 3 aberrant. 8%).

Turning now to consider the 2-year group. ‘Joan’ (not her real name), a Hong Kong resident, is the only member of the 2-year interview group who is married, has a child and has had prior work experience – both as a teacher and as a nurse. Of her background context Joan remarks, “*I can observe the development of my child, to grow up and help her and help me to study*” and about her nursing experience “*working in*

hospital, you can see the sudden change of life.” Of this sudden life change Joan cites one friend dying “*of lung disease*”, a second friend of “*heart disease*” and her father “*missing*” following his ship being attacked off “*Sri Lanka by rebels*”. Like all 2-year students Joan lives off-campus – in her case at home with her husband, child and maid.

Given her disparate contextual background one might assume that aberrant views would consistently emerge from Joan. However the evidence - displayed in Table 8.2 - does not support such an assumption.

Table 8.2: Comparison of majority and ‘aberrant’ responses in 2-year group

2-year group (N=8): Joan’s response is the SAME as the *Majority response* to all prompts, for example:

1st Interview q 1:

Majority (N=8): define ‘average’ as an optimistic starting point.

Joan: “*I am not average . . . marital status . . . my child . . . I was a nurse in a hospital . . . [average means?] I think it’s safe . . . Maybe I am [average].*”

2nd Interview q8:

Majority (N=7): ‘study experience’ is largely negative.

Joan: “[the topic] *is too interesting but actually there’s not enough time.*”

2nd Interview q10:

Majority (N=7): ‘Change’ is largely a positive experience.

Joan: “*I now stay longer . . . Hardwork and still enjoyable.*”

The above Table 8.2 displays that the 2-year *majority* responses are consistently the same as those provided by Joan. Three examples of this consistent view are displayed. From the first interview Joan’s response to the first interview question begins as an aberrant view “*I am not average*” however when talking specifically about herself as a student, her view accords with the *majority*, citing ‘average student’ as being “*safe*” and then acknowledges herself as seeking this ‘safety’. In the second interview, Joan’s views continue to accord with the *majority* view of her fellow group members: both cite ‘study experience’ as largely negative and both cite ‘change’ as largely a positive experience.

Despite Joan’s different contextual background, the conformity of her responses with the *majority* view is notable (36 responses: 0 aberrant. 0%).

Given the background contextual differences between Sophie, Joan and their respective fellow interview group members the above results are intriguing. The above evidence does not support the assumption that aberrant views would consistently emerge from individuals drawn from disparate contexts.

One pragmatic conclusion and two theoretically intriguing conclusions may be drawn from the above evidence base.

From the above evidence one pragmatic conclusion may be drawn – specifically that the *majority* view represents a homogenous clustering against which there is no consistent aberrant view. On the strength of this conclusion we may proceed to discuss the motivational implications of this majority view.

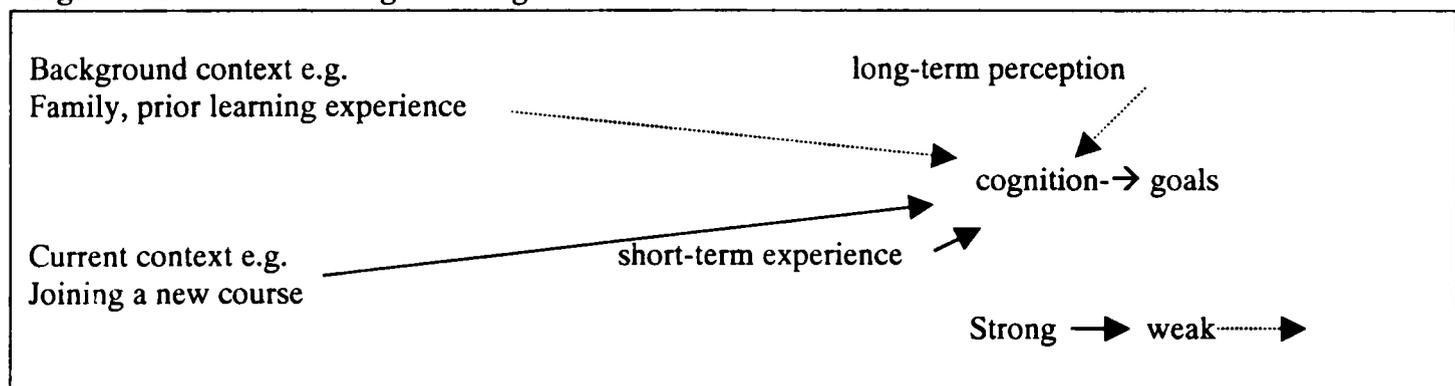
Two intriguing theoretical conclusions may also be noted.

First, the lack of consistently aberrant views supports a conclusion that background diversity has less motivational strength than current context.

Second, that cognition may be dominated not by long-term perception but by short-term experience.

This dominance of current over background context and experience over perception adds to our understanding of the specifics of motivational theory as illustrated in Figure 8.1:

Figure 8.1: Context → cognition → goals



In the above, Figure 8.1 displays the relative strengths of contextual influences on both the 4-year and 2-year groups' cognition. In terms of adding to our understanding of motivation, the significance of these relative strengths will be discussed later, immediately after the following collation of the findings of this research.

III. Collation of research findings

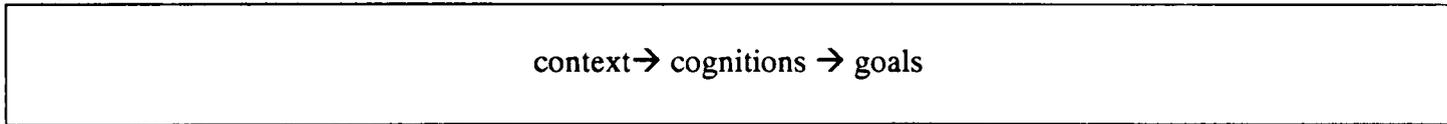
The following section draws together the argument displayed in the previous Chapters, starting first with the review of explanations that address the central research question “*what is the . . . impact . . .*” of an educational context on human motivation?

1. Literature Review

The literature review presented in Chapter Two concluded with the assertion that where pragmatic motivational interventions are flawed, their underlying hypothesis merits close scrutiny. Accordingly this research adopts a ‘stalking horse’ approach in which a working hypothesis extracted from the literature review is interrogated against the research findings.

This working hypothesis is displayed in Figure 8.2.

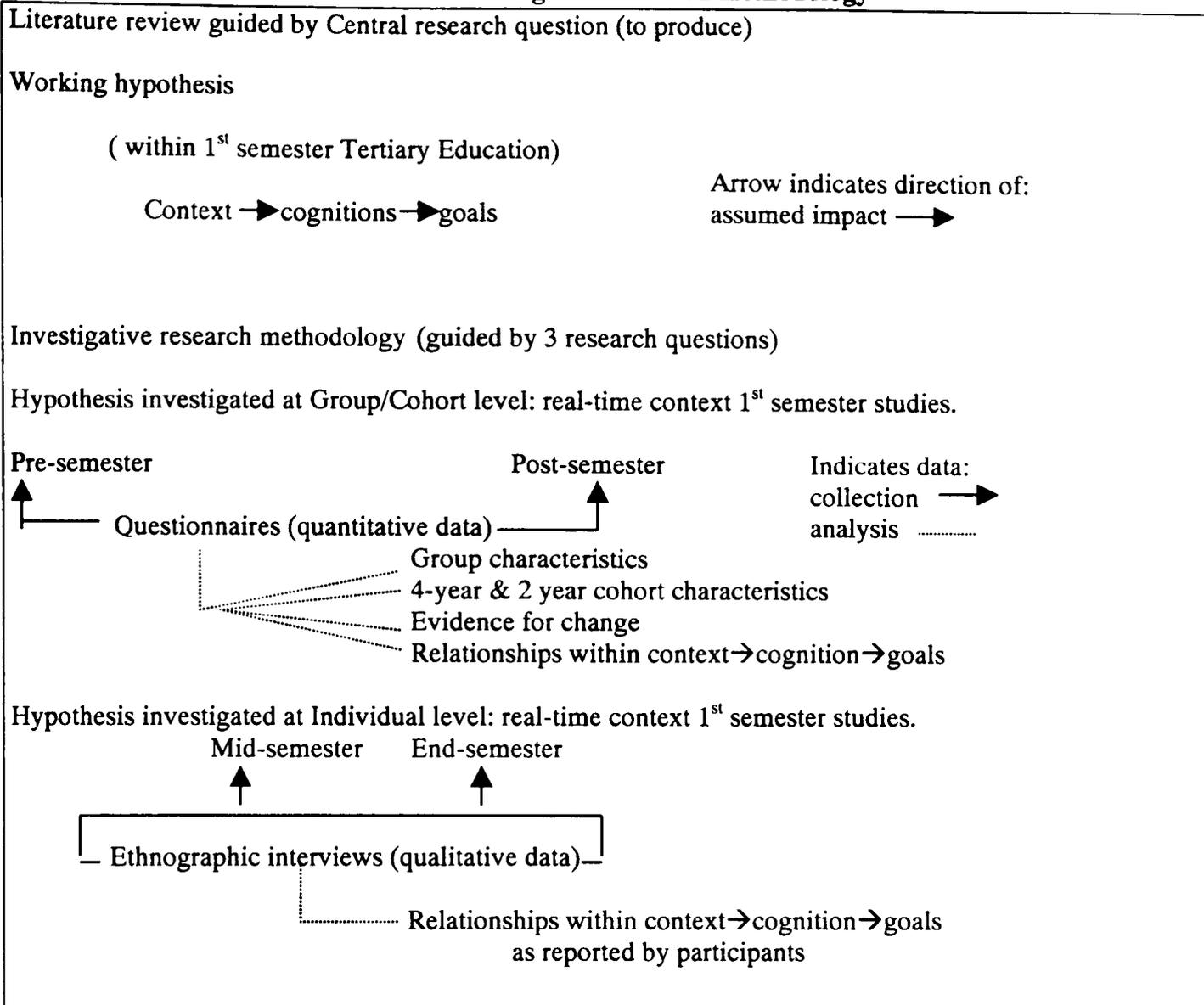
Figure 8.2: Working hypothesis



2. Research Methodology

This research considers evidence drawn from two contrastive student groups. First, a statistical overview is reviewed. Second, ethnographic evidence drawn from mid and then end-semester interviews is used to interrogate the above working hypothesis of motivation. A summary of this research methodology is provided in Figure 8.3.

Figure 8.3: Theoretical overview and investigative research methodology



3. Statistical overview of group characteristics

Chapter Four presented a statistical overview of the group characteristics that addresses the research question “*What are incoming (subjects’) motivations. . . .?*” This statistical review displayed a group of students (N=80) that are apparently homogenous - aberrant questionnaire responses, compared with the whole group responses, comprised a very modest 1%.

This student population (N=80) comprised two sub-groups: 4-year students direct from Secondary school (N=47) and 2-year students who have completed their initial teacher training (N=33).

The statistical evidence appears to indicate two significant features.

- little motivational difference between these two student groups (4-year coming straight from Secondary school; 2-year having completed three years of initial teacher training).

- for students coming direct from Secondary school, their first semester in Tertiary education was a modestly positive experience (24% +ve), in contrast for students having completed three years of initial teacher training, their first semester in Tertiary education was apparently a modestly negative experience (5% -ve) – see Table 4.6.

To enrich our understanding of the above statistical evidence the research considered the results of two ethnographic interviews.

4. Ethnographic evidence

Responses to two ethnographic interviews (mid-semester then end-semester) are reported in Chapters Five to Seven. The sequence of this reporting into three chapters serves to interrogate the interview responses in terms of explicating the tri-partite hypothesis that posits the motivational construct context→cognition→goals.

a. Context

Chapter Five reported three influences of context:

- context→ affective
- context→cognitive
- context→affective/cognitive
- Reporting *context* → *affective*.

Mid and end-semester *context* → *affective* responses are summarised in Figure 5.B (reproduced from Chapter 5 below):

Figure 5.B: Context→ motivation (affective: over time)

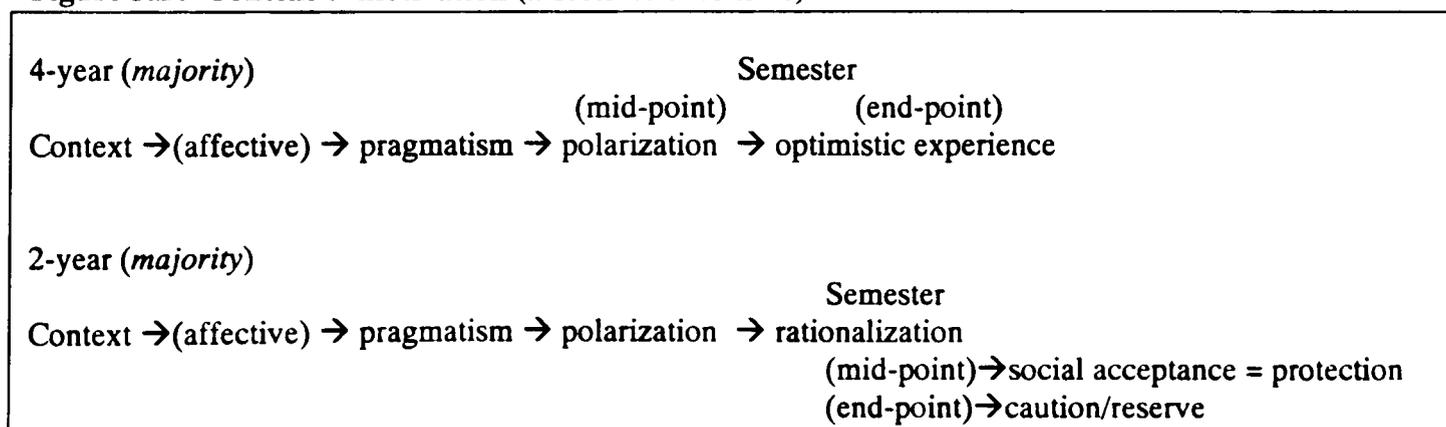


Figure 5.B displays the 4-year group changing from ‘polarization’ (mid-Semester) to a uniform optimism (end-semester). In affective terms this heralded a change from tension to ease.

In contrast the 2-year group retained its powers of rationalization but turned from concerns with ‘protection’ (mid-semester) to voicing feelings of ‘caution’ and ‘reserve’ (end-semester). In affective terms this was noted as signaling a modest change, indicating that for these 2-year students, tension still was dominant.

- Reporting *context* → *cognitive*.

Mid and end-semester *context* → *cognitive* responses are summarised in Figure 5.D (reproduced from Chapter 5 below):

Figure 5.D: Context → motivation (cognitive: over time)

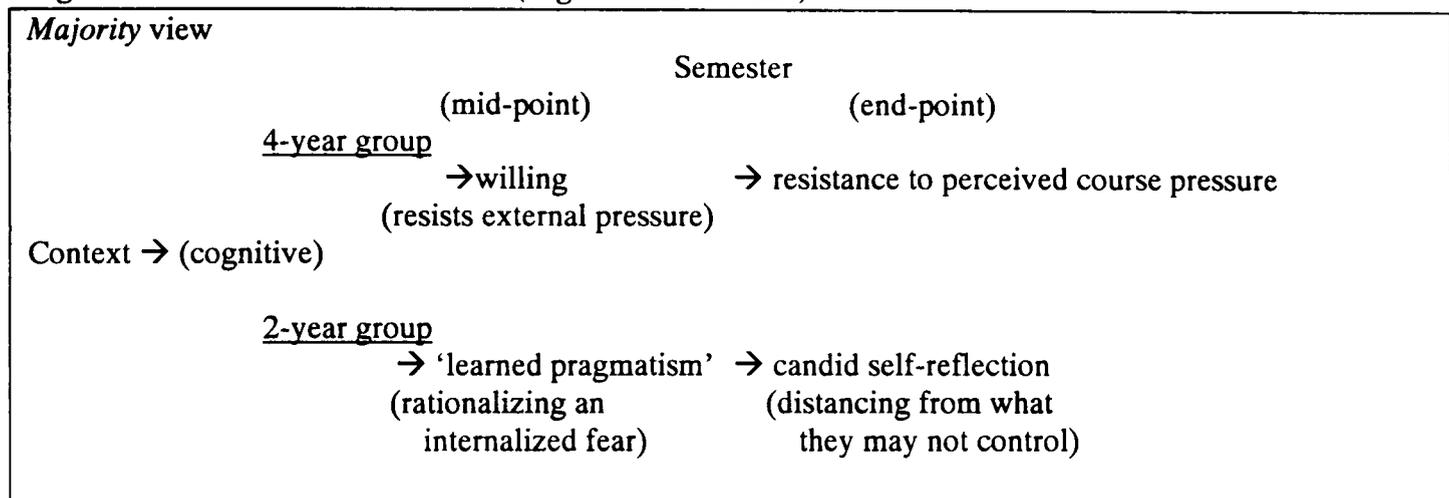


Figure 5.D displays that for the 4-year group, their earlier cognitive optimism (‘willing’: mid-semester) gave way to an increasing resistance to perceived course pressure (end-semester).

For the 2-year group, their earlier ‘learned pragmatism’ (mid-semester) persisted, but now in the form of candid self-reflections that reflect attempts to place a safe distance between themselves and rewards/penalties which they may not control (end-semester).

- Reporting *context* → *affective/cognitive*

Mid and end-semester *context* → *affective/cognitive* responses are summarised in Figure 5.F (reproduced from Chapter 5 below):

Figure 5.F: Context → affective/cognitive motivation (over time)

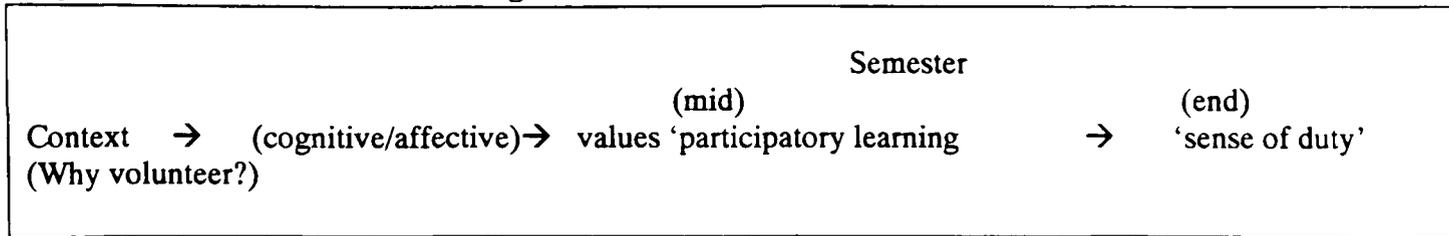


Figure 5F displays both 4-year and 2-year groups shifting from valuing 'participatory learning' (mid-semester) to valuing a 'sense of duty' (end-semester) .

This change over time implied that the impact of 'routine/familiarisation' (here of being a 'research subject') serves to narrow expectations.

Adding to our knowledge of context → cognition (affective, cognitive and affective/cognitive)

The above interview responses highlight some specifics of the impact of context on cognition.

- Context appears to have only a modest impact on affective cognition (compare 'mid/end-semester' Figure 5:B).
- Context appears to have only a modest impact on cognitive cognition (compare 'mid/end-semester' Figure 5:D).
- Context appears to exert a common if 'narrowing' impact on affective/cognitive motivation (compare 'mid/end-semester' Figure 5:F).

Summation

The ethnographic evidence suggests that within this first academic semester the impact of context → cognition is modest. This is perhaps surprising given that one student group lived at home, the other student group lived on-campus.

The modest impact of context → cognition appears to have significance for educational contexts. As illustrated in Figure 5.F - a 'safe' context in itself fails to sustain 'participatory learning'. Neither does a 'traditional' educational context appear to help – the 'not safe', grade-orientated context of Figure 5.D incurs 'resistance' or 'distancing'.

Having identified an apparent educational conundrum – both ‘safe’ and ‘not safe’ contexts fail to sustain ‘participatory learning’ – this research turned to question if the key to effective motivational intervention lies not in context but in cognition.

b. Cognition

Chapter Six questioned if the ethnographic evidence supported a significant role for the middle-link in the hypothetical motivational construct of context→ cognition→ goals. Specifically, Chapter Six explored each group’s cognition of ‘change’ – here of attaining improved grades.

The ethnographic evidence from mid and end semester interviews is displayed in Figure 6.B.

Reproduced from Chapter 6

Figure 6.B: context→cognition

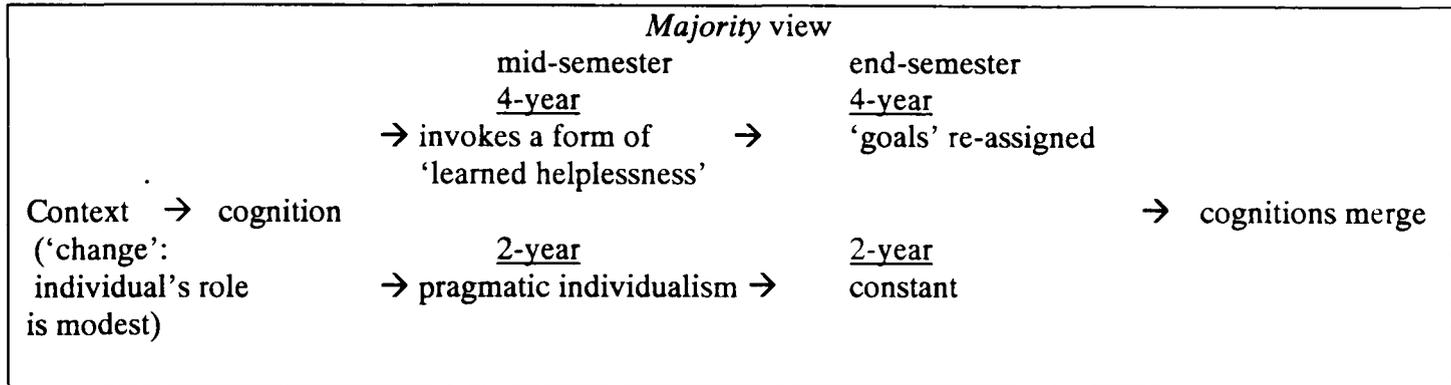


Figure 6.B displays that differences at mid-semester are resolved by the end-semester (4-year group ‘learned helplessness’ becomes ‘goals re-assigned’ effectively merging cognitions with the ‘constant’ 2-year’s ‘pragmatic individualism’). Why one group’s cognition should change, while another’s remains constant implies the latter is congruent with the context. An explanation of this ‘merging’ process is gleaned from recalling that (in Chapter 5) the evidence suggested the central motivational issue for these students was ‘self-defence’. Here, (in Chapter 6) this ‘self-defence’ may now be understood as reflecting a cognition of their context as disempowering the individual.

To explore the impact of a cognition of context as disempowering the individual chapter six continued with an exploration of each group’s operational motivational strategy.

Both the 4-year and 2-year group shared a common operational motivational strategy (see Figure 6.C reproduced from Chapter 6 below).

Figure 6.C: cognition → change (explained by operational motivational strategy)

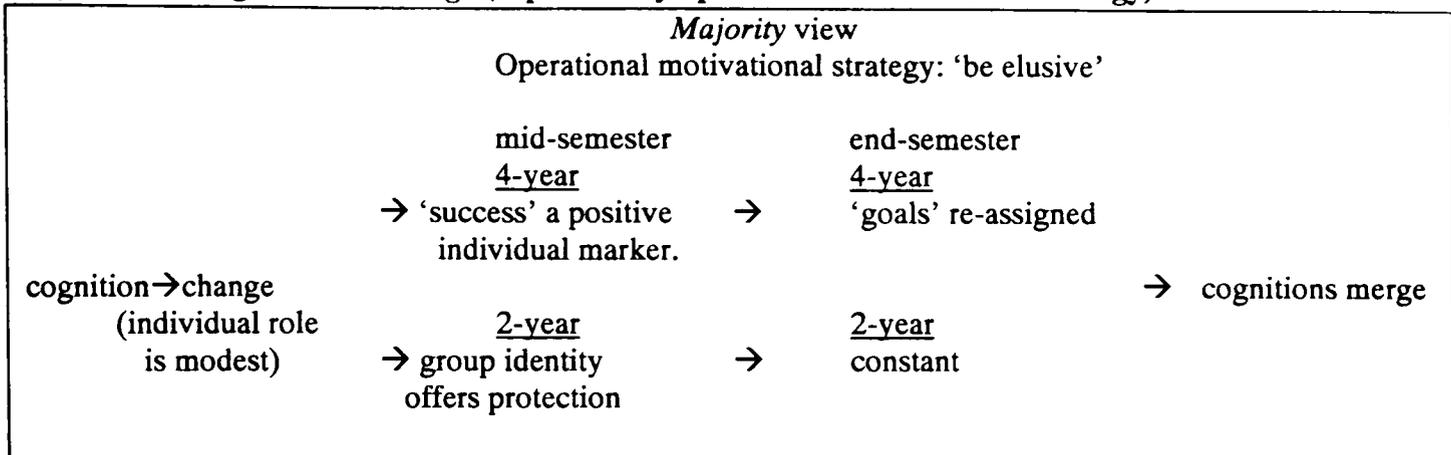


Figure 6.C above displays both groups' common strategy as inherently defensive - to be 'elusive' long enough to allow 'change' to have changed, for the passage of time to resolve an apparent impasse.

Adding to our knowledge of cognition

The ethnographic evidence suggests that *cognition* may exert two contradictory roles - being both dynamic and static.

- Dynamic roles: to 'experiment' and to actively 'scan the context'.
- Static role: 'resistance to interventions'.

Summation

Intriguingly, cognition as 'experiment' that actively 'scans the context' unlocks the context/cognition conundrum. The 'key' to why interventions aimed at 'context' may have a dynamic impact on motivation lies in the mediation of the subject's willingness to cognitively 'experiment'. In this light, context and cognition appear to be interactive.

One characteristic however was noted as being resistant to intervention. This resistant characteristic is culture. The resistance of culture was posited as explaining why 'context' interventions appear to produce only 'surface' change' (4-year students live on-campus, 2-year students live off-campus yet both cognitions merge: see Figure 6.C). A parallel possibility is that the resistance of culture to

intervention corresponds to the individual's need for 'self-defence' (culture here being viewed as providing an identity).

To investigate the dynamics of culture as identity and the individual's need for 'self-defence' Chapter Seven then explored an expression of these dynamics, namely the relationship between cognition → goals.

c. Goals.

In Chapter Seven, an examination of the relationship between cognition and its impact on motivational goals explored three dimensions.

First, significant goal clusters were identified for the 4-year and 2-year groups. The 4-year group displayed a dichotomy between goal clusters associated with short-term self-negation and long-term self-responsibility. This 4-year goal cluster was characterised as being 'fragmented'. The 2-year group displayed a dichotomy between pragmatism and individualism, characterised as a form of pointless martyrdom.

Second, their respective goal clusters were then shown to be consistent over time – specifically between the 1st and 2nd interview.

Third, these goals were interrogated to reveal their qualitative nature. The 4-year group's goal cluster characterised as 'fragmented' was revealed as being descriptive but neutral – implying internal growth which may be experienced but over which the individual cannot be held responsible. The 2-year group's goal cluster of 'sanguine' was revealed as being a defensive response to an experience that is either perplexing or painful.

Adding to our knowledge of context → cognition → goals

Chapter Seven concluded by noting that the three dimensions (goal cluster, consistency and qualitative nature) suggest a linear model for motivation. This linear model suggests a dynamic inter-relationship: context inter-reacts with cognition ('self-defence': see Chapter 6 review above) generating

motivational goal clusters that are either 'neutral' (4-year awaits 'internal growth') or 'sanguine' (2-year's goal cluster is 'defensive').

IV. Investigative Summation

An astringent to the above collation is provided in Figure 8.4.

Figure 8.4: Investigative summation
"What is the motivational impact on incoming teacher trainees of English of their first semester at the Hong Kong Institute of Education?"

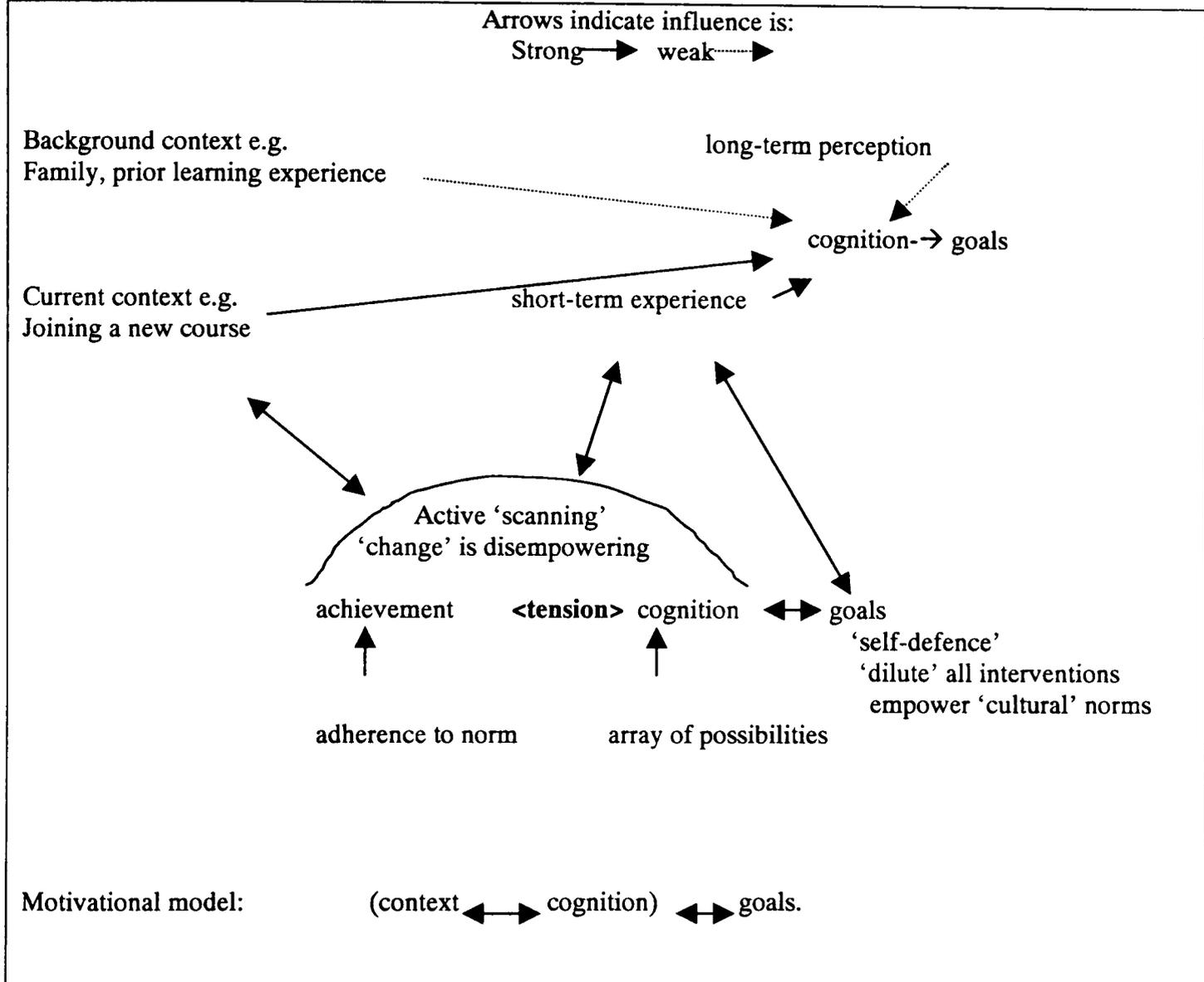


Figure 8.4 displays graphically the summative findings of this investigation into the central research question *"What is the motivational impact on incoming teacher trainees of English of their first semester at the Hong Kong Institute of Education?"*

Within the context of this research, the ethnographic evidence points to three additions to our understanding of motivation.

- a dominant motivational role is ascribed not to long-term perception but to short-term experience.
- the dominant short-term experience is actively ‘scanned’ and its evaluation constantly monitored.
- active ‘scanning’ points to a dynamic inter-relationship between achievement, cognition and goals, a relationship portrayed with two-way arrows and brackets, viz.

(context ↔ cognition) ↔ goals.

The dynamics of this active ‘scanning’ display two intriguing manifestations.

First, by definition, within a dynamic inter-relationship the relationship between achievement, cognition and goals is viscous, not fixed.

Second, motivational intervention is confounded by the dynamics of ‘self-defence’ whose function is to ‘dilute’ any such interventions.

A brief discussion of these two intriguing manifestations now follows first in terms of theoretical implications and then second in terms of pragmatic implications.

V. Research findings: theoretical implications

The first research finding characterises the relationship between context, cognition and goals as not fixed but viscous. Four theoretical implications thus follow.

1. The relation between context, cognition and goals is not linear (as argued by Covington 2000 see Literature Review).
2. The fluid, viscous relation between context, cognition and goals denotes their function as a malleable, responsive line of ‘defence’ – specifically as the individual interacts with others.
3. Theoretically, what defines the dominance of any one component (context/cognition/goals) is not an internal hierarchy but the individuals short-term experience.
4. Theoretically, what confounds motivational intervention appears to be an individual’s viscous ‘defensive’ reaction whose nature confounds external rationalisation. In simpler terms, motivational interventions work, but not in predictable ways.

The implications for our understanding of motivation within educational contexts are profound. Theoretically, where context/cognition/goals are held to be a responsive line of 'defence' then the role of 'motivation' may be a chimera, deflecting attention from an underpinning conflict between competing value systems.

VI. Research findings: pragmatic implications

If, as this research concludes, human motivation operates within a dynamic inter-relationship, this highlights four pragmatic implications.

1. The prognosis for selective pragmatic interventions appears unpromising. Simply, the result of a selective motivational intervention cannot be predicted with any certainty.
2. Where selective intervention is fruitless an alternative view of 'motivation' emerges - that motivational intervention is a value-laden action rarely applied in cases of 'success' but promptly sought in cases of 'failure'. However if as this research suggests, a function of motivation is 'self-defence' then a perceived 'motivational' downward spiral may in effect be an active rebellion against oppressive values.
3. Pragmatic motivational interventions may either seek to re-negotiate 'values' or respect individual freedom of choice.
4. Whether 'values' or individual 'respect' predominates appears to be a function of the cultural context.

To evaluate the above theoretical and pragmatic implications we now turn to address this current research's limitations.

VII. Research limitations

In addition to the limitations of a selective research base (see Chapter 1.3.5) three remaining limitations are noted here.

The first limitation is the veracity of extracting from an interview data source, the 'voice' of these participants. The very act of extraction, synthesis and reporting creates a distance between 'sources' and

'findings'. In a research that concludes with the possibility of giving due cognition to "individual freedom of choice" the gap between 'voice' and text is disturbing.

The second limitation lies in interrogating subjects' 'voice' for its underpinning motivational dynamics. In a research that challenges 'perception' and extols 'personal experience' the identification of underpinning dynamics places an inconsistent methodological stress on the researcher's personal perception.

A third limitation is the researcher's ability to mediate between subjects' experience, the researcher's perception of that experience and the readers' perception of that mediation. Simply, the 'truth' may be in the data but has it been revealed in this text?

These three limitations – veracity, perception and articulation – underscore and enliven the challenge of investigating 'human motivation'.

Acknowledging the above research limitations we now turn finally, to consider the implications for further studies.

VIII. Implications for further studies

This research concludes that human motivation involves 'self-defence' - an element that confounds by diluting attempts at pragmatic intervention. The implications of this conclusion for further studies may be illustrated by referring first to the theoretical and pragmatic dimensions of human motivation and then second to the cultural dimensions of Chinese ethnicity, cultural resilience and cultural transmission.

The theoretical conception of human motivation may be enriched by further considerations of both the role and nature of 'self defence'. Such considerations may include not only further contrastive investigations across a range of value-laden contexts but also a cross-discipline approach drawing particularly on the literature on 'change management'. At the theoretical level, further studies may question is 'self-defence' an inhibitor or - as this research suggests - an expression of individual choice? If the latter, theoretical studies may then question whether or not the miasma of human motivation is something to be 'fixed' or is it an expression of the human condition?

At the pragmatic level of motivational intervention, a central confound to such interventions may be conflicting values. Simply, the individual may confound - either in the short or long-term - interventions that simply seek to 'replace' or 'correct' values. An additional confound is the logic that, where conflicting values are acknowledged, interventions pose the ethical dilemma of the individual's rights to be individual. In order to validate pragmatic motivational interventions, further studies may explore not only the ethics of motivational interventions but also their underpinning agenda.

Moving away from considerations of motivation to those of cultural studies, the prioritising of 'self-defence' may suggest further studies within the arena of cultural cohesiveness. This research points to 'self-defence' amongst two groups of ethnic Chinese occasioning cultural cohesiveness. This cohesiveness appears to be constructed through a shared but essentially individual experience. Of significance here is that this cultural cohesiveness would appear to operate not collectively but individually. For clarity, the significance for further research into cultural studies is highlighted by the following three points

Studies of ethnic Chinese culture may probe the relationship between mass conformity and the individual's experience. Specifically, further studies may question to what degree within a group, is the individual taking a part or seeking a refuge?

Studies of cultural resilience may consider the role of the individual member's pragmatic evaluation of that specific culture's capacity to offer 'protection'. Simply, is there a significant correlation between a culture's resilience and its ability to meet the needs of the individual?

Studies of cultural transmission may reflect on the possible mechanism offered by successive generations, each member of which is experiencing an individual's need for 'self-protection'. To this end, one may wish to enquire what is transmitted between generations and what does each generation member learn anew?

The above implications for further studies have highlighted first, the theoretical and pragmatic dimensions of motivation then second, the cultural dimensions of Chinese ethnicity, cultural resilience and cultural transmission.

By definition, such further studies are beyond the limitations of this particular study. Their range however serves here as a reminder that - as the adjective '*human*' denotes - human motivation is a complex and pervasive being.

-----*End*-----

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Appendix 1: Interview Matrix

Matrix: Issues / Research Instruments
Teaching weeks 1-7

1st "Having read 1st Mirrors & the Report" 1st Study Log

1st Interview (Prompt No)

1.a: "motivations on joining"

- Relationship between Life-experience and incoming expectations

Issues:

Subject's perception of own Life-experience.	1	-	1
Awareness/importance of being 'insider/outsider'	4&7	-	2
Awareness/importance of cultural factors e.g. 'choice' & 'free-will' & 'duty'	5	1&2	3
Impact of accommodation (home/Student Dormitory)	3	2	4
Shifting expectations – causes/results	-	1	5

- Operational motivational strategy.

Issues:

Awareness/importance of individual prioritization	6	1	6
Subject's perception of individual prioritization	8	1	7
Shifting prioritization/impact on self-perceptions.	-	1	8

1.b: "adjust to the demands of learning at the HKIEd "

- Characteristics of initial study pattern

Issues:

Subject's perception of own study pattern	-	1&2	9
External influences and internal 'choice'	-	1&2	10
Sameness/difference with Secondary study pattern	-	-	11

- Individual learning experience

Issues:

Subject's perception of Tertiary level 'success'	5	-	12
Subject's perception of influences for change	9	1	13
'responsibility for one's own studies'	-	1&2	14

- Individual prioritization of & response(s) to influences for change.

Issues:

Subject's awareness of 'prioritisation process'	5	1	15
Subject's 'accommodation' of change.	8	1	16

- Subsidiary Area: Subject's 'wish to please'


 No's refer to 1st Interview prompts

1.b: "adjust to the demands of learning at the HKIEd"

• Characteristics of initial study pattern			
Issues:			
Subject's perception of own study pattern	10	1&2	7
External influences and internal 'choice'	10	1&2	8
Sameness/difference with previous study pattern	-	-	9
• Individual learning experience and 'change'			
Issues:			
Subject's perception of Tertiary level 'success'	11	-	10
Subject's perception of influences for change	10	1	11
'Responsibility for one's own studies'	-	1&2	12
• Consistency of prioritization over time.			
Issues:			
Subject's awareness of 'prioritisation process'	5	1	13
Subject's perception of 'change'	-	1	14
Subject's 'accommodation' of change.	8-10	1	3b

1.c. "characteristics/features of motivation at the end of Semester 1"

• Characteristics of students' expectations towards the close of Semester 1.			
Issues:			
Subjects' current perception of own expectations.	9	-	2
Subjects' reflections on prior expectations	9	-	4

1. Principal Research question:

"subjects' informed/reflective response to the Principal Research Question"			
Issues:			
Subjects' response to Principal Research Question	-	-	1
Subjects' perception of 'Life' as incoming student	-	-	3a

Subsidiary Area: Subject's motivation

Issue:			
Subjects' 'wish to please'	-	-	15


 No's refer to 2nd Interview prompts

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Appendix 2
Biggs' Study & Learning Questionnaires



The purpose of this survey is to collect information for the purposes of research. Particulars of individual students will be kept strictly **CONFIDENTIAL** and data will only be used for the said purpose.

To protect your identity, each student will be given an **INDIVIDUAL CODE NUMBER** (not your student ID number).

Please write this individual code number clearly on the **TOP RIGHT CORNER** of the answer sheet.

What is the Study Process Questionnaire?

This questionnaire looks at my attitudes both towards my studies and to my usual way of studying.

I know that different people study in different ways – therefore, when I answer the following questions the only person I have in mind is ME.

I also know that that when I study, much depends on the course that I am studying. For all of these questions, the course I have in mind is the B.Ed degree, major subject: English.

What do I do?

First, I read each item, and then I choose ONE response from the following:

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

then I enter the letter of my chosen response on the answer sheet provided.

Any questions? I can ask them now.

The Study Process Questionnaire.

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

Item No:

1. I chose my present course largely with a view to the job situation when I graduate rather than because of how much it interests me.
2. I find that studying gives me a feeling of deep personal satisfaction.
3. I want top grades in most or all of my courses so that I will be able to select from among the best positions available when I graduate.
4. I think browsing around is a waste of time, so I only study seriously what's given out in class or in the course outlines.
5. While I am studying, I think of real life situations to which the material that I am learning would be useful.
6. I summarise suggested readings and include these as part of my notes on a topic.
7. I am discouraged by a poor mark on a test and worry about how I will do on the next test.
8. While I realise that truth is forever changing as knowledge is increasing, I need to discover what is truth for me right now.
9. I have a strong desire to excel in all my studies.
10. I learn some things by rote, going over and over them until I know them by heart.
11. In reading new material I find that I'm continually reminded of material I already know and see the latter in a new light.
12. I try to work consistently throughout the term and review regularly when the exams are close.

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

Item:

13. Whether I like it or not, I can see that further education is for me a good way to get a well-paid or secure job.
14. I feel that most topics can be highly interesting once I become involved in them.
15. I would see myself basically as an ambitious person and want to get to the top, whatever I do.
16. I tend to choose subjects with a lot of factual content rather than theoretical kinds of subjects.
17. I find that I have to do enough work on a topic so that I can form my own point of view before I am satisfied.
18. I try to do all of my assignments as soon as possible after they are given out.
19. Even when I have studied hard for a test, I worry that I may not be able to do well in it.
20. I find that studying academic topics can be as exciting as a good novel or movie.
21. If it came to the point, I would be prepared to sacrifice immediate popularity with my fellow students for success in my studies and subsequent career.
22. I restrict my study to what is specifically set as I think it is unnecessary to do anything extra.
23. I try to relate what I have learned in one subject to that in another.
24. After a class/lecture I re-read my notes to make sure they are legible and that I understand them.

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

Item:

25. Teachers/lecturers should not expect students to spend significant amounts of time studying material everyone knows won't be examined.
26. I become increasingly absorbed in my work the more I do.
27. One of the most important considerations in choosing a course is whether or not I will be able to get top marks in it.
28. I learn best from teachers/lecturers who work from carefully prepared notes and outline major points neatly on the blackboard.
29. I find most new topics interesting and spend extra time trying to obtain more information about them.
30. I test myself on important topics until I understand them completely.
31. I almost resent having to spend more years studying after leaving school, but feel that the end results will make it all worth while.
32. I believe strongly that my main aim in life is to discover my own philosophy and belief system and to act strictly in accordance with it.
33. I see getting high grades as a kind of competitive game, and I play it to win.
34. I find it best to accept the statements and ideas of my teachers/lecturers and question them only under special circumstances.
35. I spend a lot of my free time finding out more about interesting topics which have been discussed in different classes.
36. I make a point of looking at most of the suggested readings that go with the lectures/class presentation.

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

Item:

37. I am joined the HKIEd mainly because I feel that I will be able to obtain a better job if I have a tertiary qualification.
38. My experience with education has changed my views about such things as politics, my religion and my philosophy of life.
39. I believe that society is based on competition and schooling and the HKIEd should reflect this.
40. I am very aware that teachers/lecturers know a lot more than I do and so I concentrate on what they say is important rather than rely on my own judgement.
41. I try to relate new material, as I am reading it, to what I already know on that topic.
42. I keep neat, well-organised notes for most subjects.

This is the end of the Study Process Questionnaire.

I am due a BIG THANKS ☺

Now I am asked (when I feel ready) to complete the following Learning Process Questionnaire

The purpose of this survey is to collect information for the purposes of research. Particulars of individual students will be kept strictly **CONFIDENTIAL** and data will only be used for the said purpose.

What is the Learning Process Questionnaire?

This questionnaire looks at my attitudes both towards my studies and to my usual way of learning.

I know that different people learn in different ways – therefore, when I answer the following questions the only person I have in mind is ME.

I also know that how I learn, depends on my course work. For all of these questions, the course I have in mind is where I was learning **BEFORE studying for the B.Ed degree.**

What do I do?

First, I read each item, and then I choose ONE response from the following:

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

then I enter the letter of my chosen response on the answer sheet provided.
(please use the SAME answer Sheet as before)

If I have any questions I can ask them now.

Learning Process Questionnaire

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

Item No:

43. I see education mainly as a way to get a good job, not because of any particular interest.
44. I found that my previous studies gave me a feeling of real satisfaction.
45. I try to obtain high marks in all my subjects because of the advantage this gives me in competing with others.
46. I tend to study only what's set; I don't do anything extra.
47. While I am studying, I try to think of how useful the material that I am learning would be in real life.
48. I regularly take notes from suggested readings and put them with my class notes on a topic.
49. I am upset by a poor mark on a test and worry about how I will do on the next test.
50. I feel I have to say what I think is right, although others may know better than I do.
51. I really want to do better than anyone else in my schoolwork.
52. I find that the best way to learn many subjects is to memorise them by heart.
53. In reading new material, I am reminded of things I already know, and see them in a new light.
54. I try to work solidly throughout the term and revise regularly when the exams are close.

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

Item No:

55. Whether I like it or not, I can see that studying is for me a good way to get a well-paid or secure job.
56. I find that many subjects can become very interesting once you get into them.
57. I like the results of tests to be put up publicly so I can see by how much I beat some others in the class.
58. I prefer subjects requiring me to learn facts and details, to subjects requiring a lot of reading and understanding.
59. I like to do enough work on a topic to form my own point of view before I am satisfied.
60. I try to do all of my assignments as soon as they are given to me.
61. Even when I have studied hard for a test, I worry that I may not be able to do well on it.
62. I find that studying some topics can be really exciting.
63. I would rather be highly successful in my studies than be popular with my classmates.
64. In most subjects I try to do enough just to make sure I pass, and no more.
65. I try to relate what I learn in one subject to what I have learned in other subjects.
66. Soon after a class or lab, I re-read my notes to make sure I can read them and understand them.
67. Teachers should not expect secondary school students to work on topics that are outside the set course.

My Response	Response Code
<i>never or only rarely true of me</i>	= (A)
<i>sometimes true of me</i>	= (B)
<i>is true of me about half the time</i>	= (C)
<i>is frequently true of me</i>	= (D)
<i>is always or almost always true of me</i>	= (E)

Item No:

68. I feel that one day I might be able to change things in the world that I see now to be wrong.

69. I will work for top marks in a subject whether or not I like that subject.

70. I find it better to learn just the facts and details about a topic rather than try to understand all about it.

71. I find most new topics interesting and spend extra time trying to find out more about them.

72. When a test is returned, I correct all the errors I made and try to understand why I made them.

73. I will continue my studies only for as long as necessary to get a good job.

74. My main aim in life is to find out what to believe in and then to act accordingly.

75. I see doing well in school as a competition, and I am determined to win.

76. I don't spend time on learning things that I know won't be asked in the exams.

77. I spend much of my free time finding out more about interesting topics which have been discussed in different classes.

78. I try to read all the references and things my teacher says we should.

Before handing-in my response sheet . . .

- Have I written MY INDIVIDUAL CODE NUMBER at the TOP RIGHT CORNER?

This is the end of the Learning Process Questionnaire.

I am due a (second!) BIG THANKS ☺

Please return all papers and question sheets to Victor.