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Occupational information: a critical evaluation of printed occupational booklets in use in secondary schools.

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O C C U P A T I O N A L   I N F O R M A T I O N:

A CRITICAL EVALUATION OF PRINTED OCCUPATIONAL

BOOKLETS IN USE IN SECONDARY SCHOOLS.

Thesis submitted to Durham University for the degree of

Master of Education

by

Dorothy Wilkinson.

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OCCUPATIONAL INFORMATION: A CRITICAL EVALUATION OF PRINTED

OCCUPATIONAL BOOKLETS IN USE IN SECONDARY SCHOOLS.

ABSTRACT.

This work concentrated on part of the field of occupational
information in schools, the area of _printed_ occupational
literature, the most widely used of which is in _booklet_ form.
An attempt is made to evaluate a selection of such booklets by
the use of a constructed Check List and accompanying Notes for
Teachers.

Consideration is given to factors influencing the composition
of the Check List: the school setting within which it will be used,
the user himself (the pupil), and the nature and significance of
work to the pupil.

Moving from a macro to a micro approach, the role of occupational
information in school guidance is explored and criteria of evaluation
for the content, appearance and readability of occupational
booklets are determined.

The construction of the Check List and accompanying Notes is
then undertaken.

An account of the selection of occupational booklets to be rated and the administration of the Check List to 30 experienced teachers follows.

Results are described, analysed and discussed. As a corollary, an account is given of the administration of Cloze tests on the booklets selected to groups of G.C.E. and C.S.E. pupils.

Problems revealed by the results, such as the inconsistency of codifiers, poor readability scores and the lack of psycho-social information, are considered.

Finally, conclusions are drawn and suggestions put forward for the future.

C O N T E N T S.

LIST OF TABLES

ACKNOWLEDGEMENTS.

O C C U P A T I O N A L   I N F O R M A T I O N:

A CRITICAL EVALUATION OF PRINTED OCCUPATIONAL

BOOKLETS IN USE IN SECONDARY SCHOOLS.

VOLUME 1.

INTRODUCTION.

INTRODUCTION

The raison d'etre for this thesis lies originally in the

previous school background of the author.   Ten years ago,

as Head of Business Studies in a Secondary school, the author

was asked to set up and run a Careers Department.   The

basis for the Head Teacher's choice seemed to rest on the

fact that the writer had had seven years industrial experience

and was, de facto, an unofficial source of information about

occupations and the work environment.

Without any specialist training in the field, experience

had to be gained on the job itself.   One of the areas which

was the source of much tribulation was the field of

occupational information: where to get it, how to use it,

and how to determine whether it was 'good' or 'bad'.

Interest in this field was further stimulated by a

series of lectures given by Mr. B.B. Hartop on Guidance

and Counselling, as part of the course leading to the Diploma

in Advanced Studies in Education of the University of Durham.

Since those early days, the field of guidance in schools

has developed considerably. Whilst lack of facilities, time
and training still continue to bedevil such work, nevertheless
the work of the Schools Council Careers Project (1973)[1]
marked a milestone in providing practical assistance to Careers
teachers, helping them to implement, at least in part, the
recommendations of the Department of Education and Science,
Education Survey 18 (1973)[2], "Careers Education in Secondary
Schools".

The problem of how good or bad are the occupational
booklets used in schools is one which has not yet been solved.
When the opportunity came, therefore, for the writer to be
accepted as an M.Ed. candidate, there was no doubt as to
the area of research which seemed most pressing - the
field of Occupational Information - in which so little British
research has been done. It is generally accepted that
occupational literature is one of the main sources of
occupational information in schools, and for that reason it
was decided to concentrate on part of it, and to try to construct
a Check List which could be applied by teachers to occupational
booklets to determine their suitability for use with pupils.

1. Schools Council, Careers Education and Guidance Project,
   Foundation Course Materials, Schools Council Publication, 1973.
2. Department of Education and Science, Education Survey 18:
   Careers Education in Secondary Schools, H.M.S.O., 1973.

Before attempting to construct such a Check List, some consideration had to be given to factors which would have an effect on its composition.

The first of these to be considered in this thesis is the setting within which the Check List will be used: the broad field of vocational guidance in the school situation, its ethos, organisational framework and the decision-making process itself is examined.

The next point to be taken into consideration is the user of occupational information, the pupil himself. His progress towards vocational maturity, the development of his self-concept, and the factors which play a part in occupational choice are considered.

The outcome of the pupil's decision-making vocationally is work. The nature of work and its significance to the pupil is discussed.

Moving from a macro to a micro approach, the more specific role of occupational information in school guidance is explored, together with its implications for decision-making. (This needed to be considered, as use can put constraints on construction.)

At this point, it was felt necessary to precisely
define the meaning of 'Occupational Information' in relation
to this work, as this would determine the philosophy of the
content of the Check List.

Taking these factors into account, the next chapter is
devoted to establishing criteria of evaluation for the
content and appearance of occupational booklets. Relevant
literature is surveyed and criteria are established.

The next chapter deals with the construction of the
Check List itself. Considerations of the role of such
booklets in the decision-making process, their content and
its itemisation, and the importance of appearance and
readability, which had been implicit in much that had gone
before, are now made explicit. Relevant literature on these
points is surveyed and the problems of readability measures
are discussed. Problems of the appearance of the Check
List itself and the scoring to be used are discussed, together
with the type of user envisaged. Finally, Notes for use with
the Check List are produced with the help of relevant literature.

The next section deals with the selection of occupational

booklets and the administration of the Check List and Notes to

30 experienced teachers.   Results are described, analysed

and discussed.   As a corollary, an account is given of

the administration of Cloze tests to groups of G.C.E. and

C.S.E. pupils to determine pupil assessment of the readability

of the literature being rated by the teachers.   As the

literature is produced *for* pupils, an assessment *by* pupils

of whether they could read the booklets was felt to be essential.

Finally, conclusions are drawn, and suggestions put

forward for the future.

In conclusion, a word must be said about terminology.

Within the work itself, definitions of terms are provided for

'Guidance', 'Counselling' and for 'Occupational Information'.

The following definitions may help to clarify words in constant

use throughout:

Pupils≠Children:	used synonymously to describe boys and girls up to the age of 18 who are still engaged in full-time education in the school situation;
Booklets≠ Pamphlets:	used synonymously to describe the specific type of literature being rated;
Codifiers:	The teachers taking part in this work are termed 'codifiers' when results are being described.

CHAPTER ONE

VOCATIONAL GUIDANCE IN THE SCHOOL SITUATION.

What is Guidance, and what reasons can be put forward
for its growth? Brewer (1964)[1] suggests four conditions
which, taken together, gave rise to the Guidance movement:
(a) the division of labour; (b) the growth of technology,
(c) the spread of modern forms of democracy; and
(d) the extention of vocational education. To the
powerful influences of social complexity underlying the
influence of affluence can be added[2] (1) changes in the
family: child rearing practices tend to be more democratic:
weaker social links with relations, and greater family mobility,
and the higher divorce rate; (2) changes in education, in the
content, emphasis and approach in the curriculum, concern
for the disadvantaged and for social class inequality, changing
emphasis on the role of the school which is not now only
concerned with intellectual development but with the all-round
development of the individual[3]; and (3) changes in the world
of work - the diminishing need for unskilled workers, the

1. C.Brewer quoted by C.H.Miller, "Vocational Guidance
   in the Perspective of Cultural Change", in
   Man in a World of Work, Ed. H.Borow, N.V.G.A. Houghton
   Mifflin, Boston 1964, p.3.

2. ibid. p.4 et seq.

3. Schools Council Working Paper No.40, Careers Education
   in the 1970's, Evans Bros., 1971, Chap.5.

increasing need for skilled workers, job insecurity, job change

and the growth of new industries.

These changes have brought about a shift of emphasis from

a view of Guidance as vocational assistance (Parsons 1909)[1]

to a concern for the total development of the individual.

> "Guidance is a process of helping every individual,
> through his own efforts, to discover and
> develop his best potentialities for his personal
> happiness and social usefulness."
> [2]

It may be argued that such a broad view of Guidance is

an unrealistic one in relation to the school situation where,

structurally, Guidance is divided into educational guidance,

personal guidance and vocational guidance. (Moore 1970)[3]

However, the importance of the three parts working together as

a whole is not denied by those operating the different parts.

One of the major problems of this type of specialisation

is communication.

> "Educational guidance is concerned with pupil choice
> of curriculum subjects and courses, with the formulation
> of decisions about further and higher education and
> generally with assisting the pupil to make the most of
> his capabilities and potential in relation to the
> educational resources the school has to offer."[4]

1. F.Parsons, Choosing a Vocation, Houghton Mifflin, Boston 1909.

2. R.Strang, "Guidance viewed broadly", in Counseling and Guidance in the 20th Century: Reflections and Reformulations, ed. W.H. Van Hoos and J.J.Pietrofesa, Houghton Mifflin, Boston 1970, p.270.

3. B.M.Moore, Guidance in the Comprehensive School, N.F.E.R., London 1970, Chap. 1.

4. ibid. p.7.

> "Vocational guidance is concerned essentially with career
> choice and decision-making. It involves assisting
> the pupil with the exploration of career possibilities
> and discussing and appraising occupational suitability
> in relation to ability, aptitude, motivation and
> temperament."[1]

Any rigid division between these various aspects of Guidance

is therefore an artificial one. All parts must operate for

the good of the whole.

In relation to the broad field of Guidance, one further

definition of terms is necessary. As Ginzberg (1971)[2]

points out, theoreticians frequently use the terms Guidance and

Counselling interchangeably. Guidance, for the purpose of

this work, will be used as the broader term, to indicate the

process which includes a wide range of functions directed

towards helping individuals in the decision-making process.

Counselling, on the other hand, is a technique, a specialised

function (Hartop 1969).[3] It

> "denotes a professional relationship between a trained
> counselor and a client which is designed to help
> the client understand and clarify the view of his
> life space so that he may make meaningful and informed
> choices consonant with his essential nature and his
> particular circumstances in those areas where choices
> are available to him." (Stefflre 1971)[4]

1. ibid. p.7.

2. E.Ginzberg, Careers Guidance, Who Needs It, Who Provides
   It, Who Can Improve It?, McGraw Hill 1971, p.6.

3. B.B.Hartop, Lecture to students, Diploma of Advanced
   studies in Education, Univ. of Durham. Oct. 1969.

4. B.Stefflre, A.J.Jones, N.R.Stewart, Principles of Guidance,
   McGraw Hill 1970 p.96.

In the school situation what does the whole process of
vocation guidance consist of?   It must be emphasised that a
significant shift of emphasis has taken place in the last
ten years. Before that time, it would appear that
the emphasis was on matching talents to job specification,
or alternatively advice was given by well-intentioned amateurs,
many of whom were unfamiliar with the world of work.   The
ethos of the school world and the working world were poles
apart and to many the latter was regarded as inferior.   Long
term preparation for choosing a career was not normally undertaken.
Guidance lacked a temporal aspect: it was felt that there
was nothing pertinent to be taught (Hayes and Hopson 1971)[1].
The new movement began in the 1950's with the work of
Ginzberg (1951)[2] and Super (1953)[3] on the development of
vocational thinking.   This represented a break from the
traditional talent-matching model and focused attention on
the individual's need to make decisions on the basis of an
accurate appraisal of himself and his environment.

1. *J.Hayes and B.Hopson, Careers Guidance: The role of*
   the School in Vocational Development, Heinemann, 1971, Chap.1.

2. *E.Ginzberg, S.M.Ginzburg, S.Axelrad, J.L.Herma, Occupational*
   Choice: An Approach to a General Theory, Columbia Univ.
   Press 1963 (3rd printing).

3. *D.E.Super, "A Theory of Vocational Development",*
   American Psychologist, 8, 1953, p.185-190.

"An adequate philosophy of vocational guidance must
be grounded in the developmental history of the
individual." (Dysinger 1950) [1]

What implications has this for secondary schools? There
are still many teachers working in the field of Guidance in
schools who feel that their terms of reference are not made
explicit.   Gelatt (1962) [2] seems to provide such a framework.
In the school situation there is: (a) an individual about whom
a decision is required, and (b) there are two or more
possible courses of action to be taken, and a decision can be
terminal or investigatory. The investigatory decision
becomes a cycle involving gathering information and decision-
making until a terminal decision is reached. Gelatt points
out the implications of this sequential decision-making process
for vocational guidance. Firstly, one basic assumption
is made: the collecting and using of relevant and reliable
information is essential for the process. Secondly, the
broad purpose is to use decision-making opportunities as a basis
for developing the pupil's capacity to make decisions in the

1. W.J.Dysinger, "Motivation and Vocational Guidance",
    Occupations 29, 1950, p.198.
2. H.B.Gelatt, "Decision-Making: A Conceptual Frame of
    Reference for Counselling", Journal of Counseling
    Psychology, Vol.9 No.3, 1962, p.240-245.

future. Thirdly, it helps to tackle the problem of the
inability of pupils and parents to assess accurately the
probable results of various alternatives. Lastly, it
requires the teacher in charge of such a system to be able to
supply information and to analyse its relevance and suitability
in such a way as to be meaningful to the pupil. It is with
this last point that this thesis is concerned.

However, this theoretical framework requires the presence
of various key factors in the school situation. (Moore 1970)[1]
It requires time to know the pupil well, his abilities,
temperament, hopes and fears, and for him to understand
occupational data. It requires time to be made available
for decision-making. It requires co-operation from parents,
from other members of staff and from the pupil himself. It
requires time, on the part of the Guidance team, to sift and
evaluate the information relevant to the pupil's decision-
making. There are, however, material and organisational
constraints to be faced. (Survey 18 1973)[2] Insufficient
accommodation, insufficient time allotted and staffing

1. Op. Cit. p.17.
2. Dept. of Education and Science, Education Survey 18,
   "Careers Education in Secondary Schools", H.M.S.O.
   1973 p.14-17 and p.63.

problems have to be taken into account. But however
inadequate the school situation may be, it is still possible
to use the sequential decision-making theory as the framework
of reference.

Guidance is not an instant problem solver. It is a
constantly developing decision-making process with the pupil
at its centre. Values and choices are not imposed from
without, but stem from the individual himself.

The individual engaged in the decision-making process
is an adolescent, who is still developing physically,
intellectually and emotionally. Any theories as to how and
when choices are made must take account of the turbulence
of this life stage. Before Ginzberg's (1951)[1] work
little had been done to construct a general theory of vocational
development. Ginzberg was able to identify three generalised
approaches used previously. The first of these he classified as
Accident theory approaches as they laid choice at the door of
accident. Biographies of famous men seemed to support this
theory (ibid.)[2] (e.g. David Ricardo reading Adam Smith's

1. Op. Cit. Chap.2.
2. ibid.

'Wealth of Nations'). But these were men of high ability, and lesser men in the same circumstances would not have reacted in the same way. What most people meant by 'accident' was being affected by something beyond their control - an unplanned exposure to a powerful stimulus. This theory overlooked the fact that there may be many such 'accidents' in life, but only a few stimulate with important consequences. Ginzberg felt that whilst the Accident theory was right to the extent that it stressed the importance of external factors in the choice process, it was oversimplified and did not take account of other factors involved.

The second approach studied by Ginzberg he termed 'Impulse' theories, which stated that occupational choice could only be understood through a theory which explained behaviour in terms of unconscious forces, e.g. Ernest Jones reported the case of a boy fond of playing with streams and puddles who became a builder of canals. (ibid.)[1] This theory stressed the importance of internal factors and the overriding importance of unconscious impulses. Assuming

1. ibid. Chap.2.

this theory to be valid, how can the diverse emotional make-up of different people in the same occupation be explained?

Allied to this group of theories is Roe's (1966)[1] use of Maslow's classification of needs, the satisfaction of which is central to choice. These needs are: (1) the physiological needs; (2) the safety needs; (3) the need for happiness and love; (4) the need for importance, respect, self-esteem, independence; (5) the need for information; (6) the need for understanding; (7) the need for beauty; and (8) the need for self-actualisation. Roe argued that the most direct way to develop a life at a higher need level was through gratification of the lower needs.

These theories would appear to be deficient in that they overstress a single factor or set of factors and in which the individual is largely passive, at the mercy of impulses, needs or the whims of fate.

The third approach was concerned with aptitude testing and talent matching. This 'trait and factor' approach (Jones, Stefflre, Stewart 1970)[2] stated that:

1. A.Roe, _The Psychology of Occupations_, J.Wiley and Sons, 1966 (7th printing), p.30.
2. Op. Cit. p.179.

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1. A.Roe, <u>The Psychology of Occupations</u>, J.Wiley and Sons, 1966 (7th printing), p.30.
2. Op. Cit. p.179.

"the traits of an individual which have vocational salience are somehow matched with those required of the occupation."

By discovering the characteristics of the individual and analysing occupational requirements it is possible to match the two together. The major weakness of this viewpoint is: (a) the assumption that vocational development is largely a cognitive process in which the individual uses reasoning to arrive at his decision: but decisions are not based on thinking alone, they may have an emotional basis; and (b) the assumption that occupational choice is a single decision-making event.

Ginzberg (1951)[1] therefore set out to construct a general theory of occupational choice. His basic assumption was that an individual never reaches the ultimate decision at a single moment in time, but through a series of decisions made over a considerable period of time. The cumulative effect is the determining factor.

He argued that the key to the study of occupational choice appears to lie in an appraisal of the way in which the individual, as he matures, reaches such decisions.

1. Op. Cit. Chap.2.
2.

Ginzberg worked with three major factors[1]: the self, reality
and key persons. Establishing the inter-relationship between
these factors he felt could provide a firm basis for a theory
of occupational choice. Turning to the adolescent, Ginzberg
established three stages of occupational decision-making:
(a) fantasy period (pre-adolescence)[2] in which the child
thinks of occupations in terms of his wish to be an adult;
(b) the tentative period (adolescence), in which the individual
recognises the problem of deciding on a future occupation
but thinks in subjective terms; and (c) the realistic period
(young adulthood), in which the individual realises he must
work out a compromise between what he wants and the
opportunities available. It is interesting to note here that
Ginzberg's stages are mirrored in the earlier work of
Dysinger (1950)[3], who summarised vocational maturity in
four stages: (1) the fantasy stage; (2) exploratory;
(3) more mature approach, crystallisation of interests; and
(4) period of specific preparation.

1. Op. Cit. p.29.
2. ibid. Chap.7.
3. Op. Cit. p.128.

Ginzberg's (1951)[1] general theory stressed three important findings:

> "Occupational choice is a process which takes place
> over a minimum of 6 or 7 years and more typically
> over 10 years or more; (2) Since each decision
> during adolescence is related to one's experience
> up to that point, and in turn has an influence on
> the future, the process of decision-making is
> basically irreversible; (3) Finally, since
> occupational choice involves the balancing of a
> series of subjective elements with the opportunities
> and limitations of reality, the crystallisation of
> occupational choice inevitably has the quality of
> a compromise."

This theory had important implications for vocational guidance but was the subject of criticism on the grounds of definition of 'choice', that people are more flexible than Ginzberg considered (Roe 1966)[2], on the severe limitations of the Ginzberg sample (Barry and Wolf 1962)[3] and that the theory was concerned almost entirely with the vocational development of middle class males (Jones, Stefflre and Stewart 1970)[4].

1. Op. Cit. p.195.
2. Op. Cit. p.260-270.
3. R.Barry and B.Wolf, Epitaph for Vocational Guidance, Columbia Univ. Press, 1962, Chap.1.
4. Op. Cit. p.180.

To Super (1953)[1] it had limitations - choice means different
things at different ages, no distinction was made between
'choice' and 'adjustment' and no description of the
compromise process was given.   Super (1953)[1]
put foward a theory of vocational development in a series
of 10 propositions:

"1.   People differ in abilities, interests and personalities.
      The theory of individual differences is one of the
      cornerstones of modern education and vocational
      psychology.

2.   They are qualified, by virtue of these characteristics
      each for a number of occupations.

3.   Each of these occupations requires a characteristic
      pattern of abilities, interests and personality
      traits, with tolerances wide enough, however, to
      allow both some variety of occupation for each
      individual and some variety of individuals in
      each occupation.

4.   Vocational preferences and competencies, the situations
      in which people live and work, and hence their
      self-concepts, change with time and experience,
      making choice and adjustment a continuous process.

5.   This process may be summed up in a series of life
      stages characterised as those of growth,
      exploration, maintenance and decline, and these stages
      may in turn be subdivided into (a) fantasy,
      tentative and realistic phases of the exploratory
      stage, and (b) the trial and stable phases of the
      establishment stage.

1. Op. Cit. p.185-190.

6. *The nature of the Career pattern is determined by
    the individual's parental socio-economic level,
    mental ability and personality characteristics,
    and by the opportunities to which he is exposed.*

7. *Development through life stages can be guided
    partly by facilitating the process of maturation
    of abilities and interests, and partly by aiding
    in reality testing and in the development of the
    self-concept.*

8. *The process of vocational development is essentially
    that of developing and implementing a self-concept.*

9. *The compromise between individual and social factors,
    between self-concept and reality, is one of role
    playing, whether the role is played in fantasy,
    in counselling interviews or in real life activities.*

10. *Work satisfactions and life satisfactions depend
    upon the extent to which the individual finds
    adequate outlets for his abilities, interests,
    personality traits and values."*

The way in which self and reality come to terms with each other

and the way in which this compromise takes place is the hub

of the whole problem.   Throughout his career Super's research

has emphasised the importance of vocational development and

vocational maturity in the decision-making process. D.E. Super (1951;[1]

D.E. Super (1953)[2]*;   D.E. Super and J.O. Crites (1962)*[3] *,*

D.E. Super and P.L. Overstreet (1960)[4]

1. D.E. Super, "Vocational adjustment: implementing a self-
   concept", Occupations, 1951, 30, p.88-92.

2. Op. Cit.

3. D.E. Super and J.O. Crites, Appraising Vocational Fitness,
   Harper and Row, 1962, (Rev.ed.)

4. D.E. Super and P.L. Overstreet, The Vocational Maturity of
   Ninth Grade Boys, Teachers College Bureau of
   Publications, 1960.

"*Vocational maturity is defined as readiness to cope
with the developmental tasks of one's life stages,
to make socially required career decisions, and to
cope appropriately with the tasks with which society
confronts the developing youth and adult.*" (Super 1973)[1]

Both the theories of Ginzberg and Super are developmental

theories in that they lay stress on the vocational development

of the individual, and it is interesting to note that

Ginzberg has shifted in some respects from his earlier position

(Ginzberg 1970)[2]. Perhaps the most significant change is

in the concept of irreversibility. Ginzberg now argues that

whilst most people do not have the opportunity to follow an

alternative, a minority make radical changes after crystallising

their original choice. Opportunities in the world of work

can play a major role in re-opening choice, for example,

G.I.s returning from World War II. Other major shifts in

Ginzberg's theory seem to rest on his realisation of the

importance of sociological implications.

"*We gave short shrift to ways in which environment
limits the choice of a high proportion of young
people.*" (Ginsberg 1970)[3]

1. D.E. Super, "Career Development Theory", British Journal
   of Guidance and Counselling, 1, No.1, Jan.1973, p.3-14.

2. E. Ginzberg, "The Development of a Developmental Theory
   of Occupational Choice", in Careers Guidance in the 20th
   Century: Reflections and Reformulations, ed. W.Van Hoos
   and J.J. Pietrofesa, Houghton Mifflin 1970, p.63-65.

3. ibid. p.63.

This shift is in line with the point made by Roe (1966)[1]

who states that although a person's behaviour is

> "almost always motivated, it is almost always
> biologically, culturally and situationally
> determined as well."

Ginzberg (1970)[2] also points out that research has called

attention to the important influence of peers, the guidance

system, the armed forces, the ideology of minority groups

and the job market.   Major changes are occurring in the

structure of industry and occupations and a comprehensive

theory of occupational choice determination would have to

take account of economic and occupational changes.

On occupational choice for women, Ginzberg is now aware

that many women do not seriously confront the world of

work until they are in their thirties, and _they_ make

decisions in the enlarged framework of home and family.

One element of the original theory Ginzberg feels

does not need radical change - every choice is a

compromise - but he feels it is now necessary to stress

that this is not _one_ compromise at the point of crystallisation,

but repeated compromises made over various options.

1. Op. Cit. p.23-29.
2. Op. Cit. p.63-65.

It is therefore the task of Guidance workers in school
to help the child, at various stages of vocational development,
to build up a realistic picture of himself by getting him
to analyse his interests, his abilities, his needs and
values.   Helping the child to find out as much as possible
about himself and his environment makes the acquiring of
decision-making skills easier.   What sort of a person am I?
What sort of life do I want?   Is work going to be the
dominant factor in life? etc.   In this analysis, occupational
information has a central role to play in that it can provide
the necessary information about alternatives which provide
the opportunity for choice.   However, this information will
only be useful if the child is able to fit it in with his
developing self-concept.   The child's attitude towards
persons, things and events are all aspects of his self-concept.

Super (1957)[1] argues that in entering an occupation
an individual chooses one which is congruent with his
self-concept and his desired way of life.   But the work of
John Hayes (1967)[2] would seem to conflict with this.
Hayes found that the Yorkshire Electricity Board prospective

1. Op. Cit.

2. J.Hayes, "Occupational Perceptions and Occupational
   Information", Institute of Careers Officers, Bromsgrove,
   1967, p.3.

apprentices had not considered the psycho-social aspects of work when thinking about their chosen job. He argues that it would not seem to make psychological sense to argue that an individual has crystallised his self-concept if he has ignored the psycho-social aspects of himself in relation to the job. Hayes argues that occupational choice is made on the basis of an incomplete self-concept which focuses largely on the Economic Man. Psycho-social factors gain more importance after work has begun.

Holland's (1959)[1] theory of vocational choice would seem to shed light here. Holland assumes that at the time of vocational choice the person is the product of the interaction of heredity factors with other personal and cultural forces, including parents, peers, social class and physical environment. Out of this experience the person develops a set of methods for dealing with environmental tasks. At the time of vocational choice, these 'adjustive orientations' correspond to six occupational environments: the motoric, the intellectual, the supportive, the conforming, the persuasive and the aesthetic, each of which represents

1. J.L. Holland, "A Theory of Vocational Choice", Journal of Counseling Psychology, 6, No.1, 1959, p.35-43.

a distinctive life style. The person making the choice

directs himself towards the environment for which he is most

fitted. His behaviour therefore can be explained by the

interaction of his personality pattern and his environment.

Holland also refers to two further dimensions of occupational

choice: the direction of choice is a function of the main

characteristics of his personality pattern, and the

determinant of the level of occupational choice and

achievement is the pattern of personality.

One of the criticisms which can be levelled at

Holland's theory is that individuals can change their

environments and (to some extent) themselves and are not

irrevocably committed to previously selected objectives.

> *"The lack of specific formulations about the*
> *development of personality and its role in*
> *vocational selection makes it difficult to*
> *determine the factors involved so that*
> *realignment or change of the personality can*
> *be engineered." (Norris, Zeran, Hatch, Engelkes 1972)[1]*

The theories so far referred to have been developmental

theories, concerned with giving an account of the mechanisms

1. *W.Norris, F.R.Zeran, R.N.Hatch, J.P.Engelkes,*
   The Information Service in Guidance: For Career
   Development and Planning, Rand McNally Chicago,
   1972, (3rd ed.), p.54.

involved in the move from education to employment from a

predominantly psychological point of view. Occupational

choice, however, has its adherents in the field of sociology:

Roberts (1974)[1]; Musgrave (1967)[2]; and Keil, Riddell and

Green (1966)[3]. Their criticism of the work of Ginzberg (1951)[4]

and Super (1957)[5] stems from the undervaluation of sociological

factors.

Roberts in his article "The entry into employment: an

approach towards a general theory"[6] states:

> *"The ideology of free occupational choice does not*
> *correspond to social reality, but it does possess*
> *widespread currency as a social belief, and, as has*
> *often been pointed out, when people believe a*
> *particular idea to be true, they will react as if it*
> *was in fact valid."[6]*

Evidence for this view came from Roberts' own M.Sc. thesis

(1966:1974)[7] 196 Young men aged 14-21 were selected

1. K.Roberts, "The entry into employment: an approach towards
   a general theory", *Sociological Review,* 16, No.2,
   1974, p.165-184.

2. P.W.Musgrave, "Towards a Sociological Theory of
   Occupational Choice", *Sociological Review,* 15, No.1,
   1967, p.33-36.

3. E.T.Keil, D.S.Riddell and S.R.Green, "Youth and Work:
   Problems and Perspectives", *Sociological Review,* 14 No.2,
   1966, p.117-137.

4. Op. Cit.   5. Op. Cit.

6. Op. Cit. p.166.

7. K.Roberts "Occupational Choice", in *Occupational Choice,*
   (ed.) W.M.Williams, Allen and Unwin, 1974, p.147.

at random in the Greater London Borough for this study

of occupational behaviour and attitudes of young people.

Results suggested that amongst young people in Britain,

occupational choice does not play the key role in the

entry into employment that Super and Ginzberg ascribed to it.

> "The typical pattern of interaction seems not to be
> for jobs to be entered upon the basis of ambition,
> but for ambitions to be adapted to the occupations
> that young people find themselves able to enter."[1]

Roberts points out that the work of Ginzberg and Super accepts

as its central assumption that occupational choice-

making is the critical determinant at work in the transition

from school to work - this is an unproven assumption.

Vocational development is a process, not a moment, and

it does not take place in vacuo. Whilst occupational

information has an important role to play, the child is

also influenced by external factors, the most important

of which is the home. Through the family unit are

transmitted attitudes and values towards society, religion,

work, and education which exert a powerful influence on the

child.

1. Op. Cit. p.147.

"The limits set to vocational choice and opportunity are known to be broadly set by socio-economic and education factors." (Maizels 1970)[1]

The work of Carter (1962)[2], Chown (1958)[3] and Jahoda (1952)[4]

has stressed the central and decisive influence of the family -

children learn about their parents' occupations and their

attitudes towards them, they learn what jobs to avoid and

what is considered to be a 'good job'. Approximately

half the children in the Chown sample claimed to have had

either relatives or friends doing similar work to their

present occupational choice. In the Maizels enquiry (1970)[5]

a higher proportion of sons of manual workers planned

to take up semi-skilled or unskilled work than was the case

1. J.Maizels, Adolescent Needs and the Transition from School to Work, The Athlone Press 1970, p.92.

2. M.P.Carter, Home, School and Work, Pergamon Press 1962.

3. S.M.Chown, "The formation of occupational choice among Grammar school pupils", Occupational Psychology, 32 July 1958, p.171-182.

4. G.Jahoda, "Job Attitudes and Job Choice among Secondary Modern School Leavers, Occupational Psychology, 36, 4 1952, p.206-224.

5. Op. Cit. p.87-102.

with fathers in non-manual work. But even in the lower

socio-economic group, Carter (1966: 1971)[1] categorised

three main types of family: (1) the home centred family

where the parents hope the child will be successful at

school and work; (2) the solid working class family which

does little to encourage the child to consider employment

unfamiliar to them or their friends and relatives; and

(3) the underprivileged family who take little interest

in the child's future career. The child, consciously

and unconsciously, soaks up the attitudes and values

of this unit which become incorporated into his developing

self-concept. This is particularly obvious in what

Veness (1962)[2] terms tradition-directed choice, where

family and neighbourhood traditions are such that no other

choice is seriously considered. Family size, too, is an

important factor. Small families are a better jumping off

ground than large ones. (The Maizels enquiry[3] found that

in large families nine out of ten girls left school at 15.)

1. M.Carter, "Into Work", Penguin 1966; also quoted by
   J.Hayes and B.Hopson, Careers Guidance: The role of
   the school in vocational development, Heinemann 1971,
   Chap.3.
2. T.Veness, Young Leavers, Methuen, 1962, p.180.
3. Op. Cit. p.38-42.

*The school has a significant effect on the child. It
is an important agent of socialisation, with its own aims
and values (Hargreaves) (1967)[1]. The project undertaken by
Hargreaves, which attempted to provide an analysis of the
school as a dynamic system of social relations through an
intensive study of interaction processes and day-to-day
behaviour within the school, revealed the growth of two
subcultures within one Secondary Modern school. Of the
fourth year streams, the higher the stream the greater the
tendency to be committed to the school's values. Moving
towards the lowest streams, the trend tended to reverse itself.[2]
With the lower streams - the 'delinquescent subculture'[3] -
aspirations were towards roles outside the school. Hargreaves
points out that school is founded on middle class values and
fosters them. These middle-class values he lists:[4]*

*(1) Ambition is a virtue; (2) The importance of responsibility.
resourcefulness; (3) Cultivation and possession of skills;
(4) Worldly asceticism; (5) Rationality and planning; and*

1. D.H.Hargreaves, *Social Relations in a Secondary School,*
   International Library of Sociology and Social
   Reconstruction, 1967, p.vii.

2. *Ibid.* p.159.

3. *Ibid.* Chap.8.

4. *Ibid.* p.166-167.

(c) Cultivation of manners, courtesy and personality;

(7) Control of physical aggression; (8) Wholesome recreation;

and (8) Respect for property.   For lower stream boys,

therefore the school value system was alien to their social

background, and the influence of peer groups was strengthened.

The major findings of this project indicated the fundamental

importance of the social system of the school and especially

the structure of peer groups in relation to the education

process.

The influence of school on the level of aspirations of its

pupils is significant.   Indeed, Ford (1969)[1] quarrels with

the use of the term 'occupational choice' which is used to

cover both statements of preference and the process of job

entry.

> *"The term 'occupational choice' .... should be reserved*
> *for the subjective plans made by an individual regarding*
> *his entry into the labour force."*

Research would seem to indicate that there is a significant gulf

between the aspirations and choice of children from different

streams in Secondary schools.   The work of Wilson (1953)[2]

1. J.Ford, Social Class and the Comprehensive School,
   International Library of Sociology and Social
   Reconstruction, Routledge and Kegan Paul, 1969, p.50.

2. M.D.Wilson, "The Vocational Preferences of Secondary
   Modern Children", British Journal of Ed. Psychology,
   XXIII, No.2, 1953, p.95 et seq.

Eppel and Eppel (1963)[1], Hood (1951-2)[2] and Jahoda (1953)[3]

supports the view that within the old Secondary Modern school

structure, children gave realistic and sensible responses

concerning job choice.   Even within the structure of

Comprehensive education, Ford (1969)[4] points out that it is

not different evaluations of occupations which explain the

differences in ambition between Grammar and Secondary Modern

streams.   The difference springs from the perceived

differences in access to occupations.   It would seem that

children are well aware of the stratified society in which

they live.   Those who dislike school cannot wait to leave it.

> "A working life, though not necessarily in a job of
> their first preference, and even with the disciplines
> and conditions, was felt to offer more freedom, independence,
> interest, and, possibly, enjoyment than could school."
>
> (Rodger 1963)[5]

1. E.M.Eppel and M.Eppel, Teenage Idols, New Society,
   LX, 21st Nov. 1963.

2. H.B.Hood, Occupational Preferences of Sec. Mod. Children",
   Educational Review, 1951-2, p.55-64.

3. G.Jahoda, "Social class attitudes and levels of occupational
   aspirations", British Journal of Psychology, XXXXIV,
   1953, p.95-107.

4. Op. Cit. p.62.

5. A.Rodger, Vocational Guidance and the Youth
   Employment Service in Britain", The Health Education
   Journal, 21, March 1963, p.43.

Despite the widespread prevalence of the ideology of free occupational choice, different groups of school leavers have greater or lesser ease of access to various kinds of employment. Home background, educational abilities and attainment, economic climate and job opportunities, all influence occupational choice.

In this context, it would seem that Roberts' (1974)[1] 'opportunity structure' model has a contribution to make to the theoretical field of occupational choice. Both Ginzberg (1951)[2] and Super (1953)[3] state that factors such as education and home background exert influence only in so far as they affect the development of vocational aspirations. Roberts, on the other hand, asserts that the momentum and direction of school leavers' careers are derived from the way in which their job opportunities become structured. This concept incorporates two main ideas. The first concerns structural relationships. Roberts argues that as educational qualifications are among the main criteria used in selection procedures, school leavers stand in varying degrees of administrative proximity to different types of occupation.

1. K.Roberts, "The entry into employment: an approach to a general theory", *Sociological Review*, 16, No.2, 1974, p.165-184.
2. Op. Cit.
3. Op. Cit.

Further, since recruitment to occupations often takes place via informal channels (parents, friends etc.) school leavers also stand in varying degrees of social proximity to different types of occupations. These relationships of administrative proximity and social proximity are structural relationships.

The second concerns what happens to the school leaver after taking a job. Roberts argues that after entry to the first job, subsequent opportunities are cumulatively structured because of the amount of training involved in some jobs which requires a return on the investment by 'staying put'. Considerations of structure tend to stabilise career patterns and to minimise shifts from one occupation to another. Roberts concludes that the ambitions of school leavers adapt to the direction that their careers take, and are not major determinants of the occupations that young people enter.

Whilst this may appear a somewhat extreme view, nevertheless it serves to emphasise the need to take greater account of sociological factors in occupational choice and decision-making. At the present time most writers in the field of occupational choice would agree that job entry is the outcome of a lengthy process in which there has been a growing awareness of internal and external constraints and the relationship between

the two.   The problem of explaining occupational choice

has been approached from various perspectives: via the

psychological characteristics and development of the individual,

via economic factors and their influence on the flow into

occupations, and via the stratified social structure.   Each

of these perspectives, by the very nature of the discipline

from which it derives, excludes some important variables which

may affect choice and selection.   To provide a more cohesive

conceptual framework, representatives from psychology, economics

and sociology collaborated: (Blau, Gustard, Jessor, Parnes

and Wilcock 1968)[1]   The function of this framework was to

call attention to antecedent factors, the exact relationships

between which have yet to be determined.

They point out that occupational choice is a developmental

process extending over many years.   There is no single time

at which young people decide upon one out of all possible

careers, but there are many crossroads where decisions narrow

the range of future alternatives.   Throughout, social experiences

1. P.M.Blau, J.W.Gustard, R.Jessor, H.S.Parnes, R.C.Wilcock,
   "Occupational Choice: A Conceptual Framework",
   Industrial and Labour Relations Review, 9, No.4., 1956,
   p.531-543, reprinted in J.Hopson and B.Hayes in
   The Theory and Practice of Vocational Guidance,
   Pergamon Press, 1968, p.59-74.

are an essential part of the individual's development. The
occupational preferences which finally crystallise do not
directly determine occupational entry - this depends on
decisions of selectors who are influenced by qualifications
and other characteristics, but also by factors outside the
candidate's control, economic conditions and employment policies.
Therefore to explain why people end up in occupations account
must be taken of the process of selection as well as the
process of choice. The social structure has a dual significance:
it influences the personality development of the choosers and
it defines the socio-economic conditions in which selection
takes place. At the same time, the chooser is influenced by
his past social structure, whereas occupational opportunities
and requirements are determined by the present structure.
The authors argue that the analysis of the processes by which
individuals choose one occupation in preference to another
must be complemented by an analysis of the processes by
which some individuals and not others, are selected for
a certain occupation.

"To be sure, it is legitimate scientific procedure to
treat the actions of selectors as given conditions in
the investigation of occupational choice and it is equally
legitimate to treat the actions of choosers as given
conditions in the investigation of occupational selection,
but only the combination of both procedures makes it
possible to explain why people end up in different
occupations." (Blau, Gustard, Jessor, Parnes, Wilcock, 1956)[1]

In conclusion, it may well be aposite to point differences

in approach to occupational choice between the developmental-

psychological approach and the sociological approach, as it

would seem that for the British scene at least, some synthesis

of the two theses could be valuable, especially in relation to

Information. Roberts (1974)[2] argues that the approach of

Ginzberg (1951)[3] and Super (1953)[4] which makes occupational

decision-making the critical determinant at work in the

transition from school to a working life, has great validity

in the context of American society, but the structure of

British society is such that it does not have similar validity

here. Roberts asserts that the momentum and direction of

1. ibid. p.73.
2. Op. Cit. p.165.
3. Op. Cit.
4. Op. Cit.

school leavers' careers are derived from the way in which
job opportunities become cumulatively structured and young
people are placed in varying degrees of social proximity, with
different ease of access to different types of employment,
i.e. occupational choice does not play the key role in the
entry into employment suggested by Ginzberg (1951)[1] and
Super (1953)[2]. To support his argument three types of evidence
can be quoted: (a) the fact that most of the occupational
mobility which takes place among adolescents is not anticipated
in their ambitions, for example, 80 per cent of the Sheffield
boys used by Carter (1962)[3] had no intention of leaving their
existing occupations. Mobility was not planned and ambitions
adjusted to occupational changes rather than changes being
planned to realise previously developed ambitions; (b) although
many school leavers fail to enter their chosen job, few are
dissatisfied with the employment they got and seem to adjust
their ambitions to their new situation (Jahoda 1953[4] and

1. Op. Cit.
2. Op. Cit.
3. Op. Cit.
4. Op. Cit. p.97 et seq.

Wilson (1953)[1]; and (c) British school leavers' ambitions
are relatively modest and appear to be based upon the
occupations they expect to enter (Veness 1962[2]) Roberts (1974)[3]
suggests that ambitions are anticipations of the direction that
careers are going to take, which is contrary to the theories of
Ginzberg and Super. In spite of the widespread acceptance
of the ideology of free occupational choice, the fact remains
that different groups of children have differing degrees of
difficulty in entering various types of employment, influenced
by such factors as educational attainment, social proximity
to different types of occupation and type of home. Ambitions
result from and adapt to the reality factor of the employment
made available.

Whilst it would seem that Roberts' theory can only have
partial validity for the middle class child of good academic
ability, nevertheless in an area like the north-east, with a
young leavers' unemployment rate of 8.5 per cent[4] it perhaps
provides an explanation of the true situation of many school
leavers of less than average ability - the job chose them,
not vice versa.

1. Op. Cit.
2. Op. Cit. p.87.
3. Op. Cit.
4. March 1976. Figure supplied by Sunderland Careers Service.

WORK

For successful decision-making the child must have

adequate information about himself and about the occupation

he hopes to enter.   As Rodger (1963)[1] puts it:

> "To my mind, schemes for the assessment of
> individual needs are time-wasting unless they are
> paralleled by schemes for the consideration of
> available occupations."

> "What is the point of collecting a mass of data
> about a boy or girl, if you do not have
> corresponding data about the jobs into which he
> or she might be put?"

Whilst the last sentence would seem to indicate a placement

philosophy of guidance, the major point is still valid.[2]

To many teachers working in the field of Vocational

Guidance, "work is still unchartered territory, known only

through visits, literature, films and other second-hand

means.

> "The occupational world of the child is rather
> circumscribed and empty. So, for that matter,
> is the occupational world of many a teacher and
> of other adults."[3]

1. A.Rodger, "Vocational Guidance and the Youth Employment
   Service in Britain", _The Health Educational Journal,_
   March 1963, 21, No.1, p.43.

2. C.H.Miller, "Vocational Guidance in the Perspective of
   Cultural Change", in _Man in a World of Work,_ ed. H.Borow,
   Houghton Mifflin 1964 p.3.

3. B.Fagin, "Guiding the Vocational Interests of the Child",
   Education, Nov.1953, 74, No.3, p.178.

The nature of work, the philosophy underpinning it and its
relation to the decisions to be made in school have received
less attention than vocational development and the decision-
making process. Perhaps this is because most people feel
they 'know about work' - that it is the way in which people
in a highly industrialised society earn their living. But
it may be argued that work has satisfactions beyond material
rewards. Super (1957)[1] in "The Psychology of Careers",
identifies three major needs for which satisfaction is sought
in work: human relations, the activity of work itself, and
livelihood. In developing the pupil's occupational self-
concept it would seem advisable to emphasise that there is
more to an occupation than earning a living. It offers
an outlet for the hostile drive, it provides an opportunity
for the individual to win approval, and it satisfies the
need to develop satisfying social relationships. For some,
an occupation is a way of life.[2] In our culture, social
and economic status depend more on occupation than on
anything else. For some people work is seen as the major

1. D.E.Super, The Psychology of Careers, Harper and Row 1957,p.20-25.
2. H.Borow, Man in a World of Work, Houghton Mifflin 1964,
   p. xvi.

part of their life, but for others most of life's satisfactions

have to be found outside the job.   To give pupils the

impression that all work is intrinsically satisfying is

unfair and unrealistic.

The meaning of work to the individual varies according to

the various outcomes which satisfy particular needs.   The

most obvious outcome is work as a source of income - the

concept of the Economic Man, which receives the lion's share

of attention in occupational information literature (Hough 1970)[1]

Man works to maximise his material well-being and evidence

suggests that to members of the semi-skilled and unskilled group

this is the main meaning that work has for them.   They

> *"sell little pieces of themselves in order to*
> *buy them back each night with the coin of fun."[2]*

Work is also a source of achievement.   The individual

strives and achieves and the resultant feeling is one of

mastery of a particular area of physical or mental activity.

The intelligent child in school has already experienced this

sense of satisfaction in good examination results, being near

1. P.Hough , *Careers Literature: An Investigation into the Content of Careers Pamphlets,* Institute of Careers Officers, Bromsgrove, 1972.

2. W.Wright Mills, *White Collar,* Oxford Univ. Press 1957 p.237.

the top of the class for example, but for some children, school has not provided a sense of achievement.

These findings are also substantiated by the research of Lyman (1955)[1], Centers (1968)[2] and Jurgensen (1947)[3]. Results seem to support the view that those at the lower end of the socio-economic scale tend to emphasise the economic aspects of work, whereas those at the upper end more typically stress the satisfactions given by the work itself.

Another important satisfaction derived from work is the opportunity for social contacts it presents. Evidence from the Maizels enquiry (1970)[4] suggests that this is of particular importance to the girls in her sample.

Perhaps the most significant need satisfied by work is the sense of identity it gives. Eric Fromm in "The Sane Society" (1955)[5] states that in contemporary society

1. E.L.Lyman "Occupational Differences in the value attached to Work", _American Journal of Sociology._ 1955, 61, p.138-144.

2. R.Centers "Motivational Aspects of Occupational Stratification", _Journal of Social Psychology,_ Nov. 1968, XXVIII, p.187-217.

3. C.E.Jurgensen "Selected Factors which influence job preferences", _Journal of Applied Psychology,_ Dec. 1947, XXXI, p.553-564.

4. Op. Cit.

5. E.Fromm, _The Sane Society,_ Rinehart 1955.

there is a crisis of identity. The old order has been

swept away and the individual no longer feels the same close

family or neighbourhood links. As Super (1957)[1] points out

"in a fluid industrial society, occupation is the principal

determinant of social status".

Caplow (1954)[2] in "The Sociology of Work" analyses

five assumptions underlying prestige attitudes in western culture:

(1) the white collar worker is superior to the manual worker;

(2) self-employment is superior to working for others;

(3) clean occupations are superior to dirty ones; (4) larger

enterprises are superior to smaller enterprises in the business

field; and (5) personal service is degrading. The degree to

which these assumptions are held varies from country to country.

In Great Britain, it would seem that (1), (3) and (5) have

particular significance.

Work is not merely a means of earning a living, it is a

way of life, a social role. What factors can be identified under

this head? Some more precise definition of 'way of life' is

necessary in view of the importance of the "Content" aspect of

the Check List which is to be compiled. Super (1957)[3] points

1. Op. Cit. Chap.2.

2. T.T.Caplow, The Sociology of Work, Univ. of Minnesota Press, Minneapolis 1954, p.124.

3. Op. Cit. Chap.2.

out that occupation determines social class, determines

consciousness, moulds values and attitudes and sets patterns

of social behaviour.   Caplow (1954)[1] says that occupation

affects standards of consumption, adherence to family customs

and adherence to standards of dress and decorum.

Classification of factors included under 'way of life' can

be constructed from Miller and Form's (1951)[2] "summarising

sketches" of social characteristics of the six levels of

workers, from unskilled to professional.   However, the

ordering of the factors is not specified by the authors.

Cohen (1964)[3] in an article on "Sociological Studies of

Occupations as a Way of Life" states:

> "We conclude that at present, classification of the way
> of life connected with occupations are subjective,
> not comparable, and have suggested value only."[4]

He sounda a note of warning that sociological studies of

occupations should not be accepted uncritically because they

are often limited geographically, usually involve small

1. Op. Cit. p.124.

2. D.C.Miller and W.H.Form, _Industrial Sociology,_ Harper,
   New York 1951, p.743-747.

3. A.Cohen "Sociological Studies of Occupations as a
   Way of life", _Personnel and Guidance Journal,_1964,
   43, p.267-272.

4. Ibid. p.268.

numbers of cases and the method of collecting the information

is questionable.   To back up his argument, Cohen (1964)[1]

refers to two studies of the dance band musician by

Becker (1953)[2] and Lastrucci (1941)[3] where the stated

methodology of the studies did not permit evaluation of

their reliability.

Much interesting work has been done on the satisfactions

sought by young people from work.   Thelma Venness" (1962)[4]

study of young leavers suggests that choosing a job was still

regarded primarily as a means of earning a living.   The work

of Ford (1969)[5] and Maizels (1970)[6] substantiates the view

that:

> *"Vocational plans are not only made early in secondary
> school life, but that these become fairly specific
> during the last year of school .... The desire to use
> skills, talents and interests, and a liking for things
> and activities central to the job itself would seem to
> have been more important factors influencing job choice
> than were the desire for status or personal security."*

<div align="right">

(Maizels)

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1. *Ibid.*

2. *H.S.D.Becker "Some contingencies of the professional
   dance musician's career", Human Organisations, 1953,
   12, p.22-26.*

3. *C.L.Lastrucci "The Professional Dance Musician",
   Journal Musical, 1941, 8, p.168-172.*

4. *T.Venness, Young Leavers, Methuen, 1962.*

5. *J.Ford, Social Class in the Comprehensive School, Routledge
   and Kegan Paul 1969*

6. *J.Maizels, Adolescent Needs and the Transition from School
   to Work, The Athlone Press 1970 p.102.*

Research into children's awareness of the limitations of

opportunities open to them would suggest that even with

the coming of comprehensive schools, the number of options open

to the individual are limited by other factors.   Liversidge (1961)[1]

Ford (1969)[2], Ginzberg (1971)[3].   Indeed Ginzberg states that

> "Guidance assumes that all people have options to plan
> for their future, in fact many do not."[4]

Factors weighing against a proportion of children arise from

adverse family background, poverty, poor nutrition, poor

housing, and poor homework facilities.

> "The poor suffer not only because they have few options,
> but because they have little faith that they can shape
> their future." (ibid.)

For some, job choice is often a matter of 'Hobson's choice'.

Reynolds[5]   investigation of the choice of unskilled

manual workers showed that it was customary for such workers

to take the first available job.

1. W.Liversidge, "Life Choices, *Sociological Review*, 1962,
   X, p.17-34.

2. Op. Cit.

3. E.Ginzberg, *Careers Guidance: Who Needs It, Who Provides
   It, Who can Improve It?"*, McGraw Hill 1971, Chap.6.

4. ibid. p.76.

5. L.G.Reynolds, *The Structure of the Labor Market*, Harper,
   New York, 1951, p.267.

It should therefore be emphasised that the decision-making process and the Guidance structure in schools within which it operates, depends on the availability of a wide range of opportunities which allows the individual maximum scope for choice within the limits of his physical and intellectual competence.

How important occupational information is in the decision-making process and what part it should play in that process must be taken into account before any assessment of the literature itself can take place.

CHAPTER TWO

THE ROLE OF OCCUPATIONAL INFORMATION IN VOCATIONAL GUIDANCE

IN SCHOOLS.

The place of Occupational Information in Vocational
Guidance in Schools.

As long ago as 1909, Frank Parsons[1] in "Choosing

a Vocation" put forward three broad factors involved in the

wise choice of a vocation:

"(1) a clear understanding of yourself, your aptitudes,
      abilities, interests, ambitions, resources,
      limitations and their causes;

(2)   a knowledge of the requirements and conditions of
      success, advantages and disadvantages, compensation,
      opportunities and prospects in different lines
      of work;

(3)   true reasoning in the relation of these two
      groups of facts."

Defining his mottoes as "Light, Information, Inspiration,

Co-operation"[2] Parsons believed that an individual's entry

into an occupation resulted from learning about himself,

learning about the world of work and deducing an appropriate

relationship between the two.

Certain assumptions underlie this approach. Firstly,

that choice is a single event.   The later work on theories

1. Op. Cit. p.5.
2. ibid. p.92.

of vocational development - Ginzberg (1951) and[1] Super (1957)[2]

have stressed the developmental nature of occupational choice.

Secondly, that

> "vocational development is largely a cognitive
> process in which the individual uses reasoning to
> arrive at his decisions. But thinking is not
> the only process used by decision-makers."[3]

Thirdly, there is a single right goal for everyone making

decisions about work, whereas, in fact, an individual can be

suitable for a number of occupations.

In the Parsonian model, occupational information

fulfilled a basic aim of _informing_. It was one part of a

two part axis.

With the growth and development of vocational guidance,

the role of information in decision-making has changed. The

general task of vocational guidance in schools is to help

pupils to make a series of decisions which will enable them

to achieve a systematic exploration of possibilities open

to them. For decision-making pupils need information about

themselves as well as information about the world of work.

1. Op. Cit.
2. Op. Cit.
3. A.J.Jones, B.Stefflre, N.R.Stewart, _Principles of_
   Guidance, McGraw Hill, 1970, p.181-183.

Norris, Zeran, Hatch and Engelkes (1972)[1] term the

informational aspects of guidance in schools as 'The Information

Service'.   They define this service as:

> "that part of a programme of guidance services
> devoted to an analysis of the current and future
> environment of the student with emphasis upon
> information that is occupational, educational and
> personal-social." [2]

and they define its objectives in relation to the individual

as follows: [3]

"1.   To develop an understanding and acceptance of self.

2.   To develop an awareness of the consequences of
making personal decisions.

3.   To demonstrate that persons need to be recognised
as having dignity and worth.

4.   To provide the opportunity to know that individuals
differ in their interests, abilities, attitudes
and values.

5.   To learn that job specialisation creates inter-
dependency.

6.   To recognise that environment and individual
inter-act to influence career development.

7.   To develop a broad and realistic view of life's
opportunities and problems at all levels of training.

8.   To create an awareness of the need and an active desire
for accurate and valid occupational, educational
and personal-social information.

9.   To provide an understanding of the wide scope of
educational, occupational and social activities
in terms of broad categories of
related activities.

1. W.Norris, F.R.Zeran, R.N.Hatch, J.R.Engelkes, The Information
Service in Guidance: For Career Development and Planning,
Rand McNally Chicago, 1972, p.32.

2. ibid. p.28.

3. ibid. p.32-33.

10. To assist in the mastery of the techniques of
    obtaining and interpreting information for
    progressive self-directiveness."

11. To promote habits and attitudes which will assist
    in the making of choices and adjustments productive
    of personal satisfaction.

12. To provide assistance in narrowing choices
    progressively to specific activities which are
    appropriate to the aptitudes, abilities and
    interests manifested and to the proximity
    of definite decisions.

13. To develop an awareness of possible avocational
    pursuits."

Two important points are worthy of note in this connection:

(a) that occupational information is essentially part of a

wider service in schools which has as its aim the provision

of an all-round framework within which decisions can be made,

and (b) that information is only meaningful when it is used

in conjunction with relevant information about the person

who has to make the decision.

> "The implementation of the self-concept
> vocationally is a compromise between the
> self-concept and the reality of work."
> (Hayes and Hopson 1971)[1]

1. Op. Cit. p.47.

> *"Sound decision making also implies that an individual has reliable information about his alternatives and some indication of the consequences of opting for one over another."*
> *(Ginzberg 1971)[1]*

Ginzberg points out that there are several assumptions underlying the use of information in the decision-making process - the individual may not be aware that he needs to make a choice - he may be uninterested in weighing up alternatives - he may not know how to get relevant facts and even possession of the facts may not help the individual to use the information effectively. Occupational information is an inanimate collection of data. The importance lies in how individuals are helped to use it - to make them aware of options, to encourage them to explore alternatives, and to interpret the information itself. Occupational information is a continuous facet of development for an individual. The young child gets information from home, relatives and the neighbouring community. Ginzberg terms this 'unstructured learning'[2] "exposure". Then the school widens this horizon and the child's occupational

1. E.Ginzberg, *Careers Guidance, Who Nedds It, Who Provides It, Who Can Improve It?*, McGraw Hill 1971, p.186-7.
2. *ibid. p.186.*

understanding grows too.   Within the actual curriculum,

it is an amalgam of textbooks, pamphlets, films, slides,

visits, exhibitions, posters and brochures.   Out of school

it is:

> "a significant blending of daily observation,
> reading of all types, television and radio propaganda,
> interaction with various people, information from
> people ranging from peers to parents to strangers."
> (Barry and Wolf 1962)[1]

Indeed, it could be said that everybody who uses his eyes

and ears is constantly exposed to occupational information.

"The critical question is its relevance and reliability."

(Ginzberg 1971)[2]

The main function of occupational information is to

inform and this information is generally more meaningful

when extended over a period of time.   It is gained throughout

life and is often perceived differently by different people.

> "As the individual is unique, so the information
> he uses must be considered from the subjective
> viewpoint."
> (Hollis and Hollis 1969)[3]

Hollis and Hollis consider that information should be linked up

in three dimensions - the 3D concept of personalizing information.

1. R.Barry and B.Wolf, *Epitaph for Vocational Guidance,* Columbia Univ. Press, 1962, p.76.

2. Op. Cit. p.195.

3. J.W.Hollis and L.W.Hollis, *Personalizing the Information Process,* Macmillan New York, 1969, p.8.

These three dimensions are: people, areas and depth. Any
information must have a group of people in mind, e.g.
adolescents, teachers etc., and this group should be clearly
stated. The area in which the individual is to be helped
must be defined - is it help in the educational, occupational
or personal area that is being sought? Thirdly, what depth
of information is required - is it a preliminary reconnaissance
or an enquiry in depth?

'First depth' information increases awareness and broadens
the pupil's perspectives. 'Second depth' information begins
to help the individual to know the specifics - it puts
colour and detail into the spectrum. 'Third depth'
information: here the individual is able to discard
information which is not applicable to him at this time.
The three dimensions are a continuum extending from the unknown
to awareness. Linking the three dimensional concept to
levels of occupational understanding, the authors also define
five levels:

Level i   in which the individual needs to form an
               attitude about and for work;

Level 2   in which occupational understanding should
               include different occupational fields -
               when the individual should begin to
               realise that different kinds of
               occupations require different abilities.

Level 3	when the individual is capable of understanding the relationship of a group of occupations to his own abilities, desires and potentials;
Level 4	when the individual should be selecting occupations which will permit him to use his talents and advantages;
Level 5	when the individual begins to choose a specific job.

The authors stress that in the school situation occupational information has an important contribution to make to the individual's development, but such information must be appropriate for the level of understanding.

Is there a case, therefore, for different types of literature for the above levels, or, if this is commercially unrealistic, for an even closer look at what goes into printed occupational materials both from the point of view of the concepts employed and the language used?

Much research has been done on the function of occupational information. Brayfield (1951)[1] refers to the informational, readjustive and motivational application of occupational information. Christensen (1949)[2] puts forward

1. A.H. Brayfield, "Dissemination of Occupational Information", *Occupations*, 29, 1951, p.411-413.

2. T.E. Christensen, "Functions of Occupational Information in Counseling", *Occupations*, 28, 1949, p.11-14.

four factors, motivational, instrumental, distributional and therapeutic factors. Kirk and Michels (1950)[1], working at the Counselling Centre, University of California, stress four principles governing the relationship of occupational information in the counselling process: (1) the integration of occupational information to the counselling process; (2) the proper timing for the introduction of occupational materials; (3) active participation of the counselee in formulating the reading plan; and (4) preparation by mutual discussion for the acquisition of occupational information.

From the literature there would seem to be three major uses apart from the informational aspect: adjustive, motivational and distributional. The adjustive function is particularly important in helping the child to reach a compromise between aspirations and the possible. One of the most difficult tasks in vocational guidance in school is adjusting aspirations downwards. Information is needed by the teacher in such circumstances as evidence, on the basis of which the child can make a more realistic decision in the

1. B.A.Kirk and M.E.Michels, "A Study of Counselee Reading of Occupational Materials", Occupations, 28, 1950, p.446-450.

light of his capabilities and the requirements of an

occupation. The motivational aspect is the one most obvious

to the teacher. Information is used to stimulate interest

in occupations and to motivate the child to make educational

and vocational plans. The distributive function focuses on

preparation and selection for an occupation. It is at this

point that the child thinks of an occupation in relation to

his needs.

— — —

> "Information is evidence which contributes to
> making decisions. Information about the world
> of work, if competently developed and used, will
> result in better decisions than would be the case
> if no information or faulty information were to
> be applied."
> (Shartle 1964)[1]

It can be given to the child in many ways in school. Project

work would seem to be one of the most popular and effective

methods, although this requires interest and enthusiasm from

the children and a good knowledge of source material for

1. C.L.Shartle, "Occupational Analysis, Worker
Characteristics and Occupational Classification
Systems", in Man in a World of Work, ed. H.Borow,
Houghton Mifflin Boston, 1964, p.285.

direction by the teacher.   Outside speakers can be used to
personalise information, but finding a good speaker to speak
without bias is not easy.   Various forms of role playing
can be engaged in by the children.   Eye-catching notice-boards
and display boards can focus interest on one occupation at a
time.   Picture displays, newspapers, audio-visual aids, visits,
careers conventions and exhibitions can all help in providing
information.   What is also needed is practice by the pupil
in decision-making.   For information to be used effectively,
the pupil must be given the opportunity, throughout his
school career, to identify day-to-day decisions, to spell out
alternatives and to work out the consequences.

In the school situation, the most obvious place to find
out about work is the Careers Library or the Careers Room.
The danger is, however, that the library may be regarded as the
final panacea for all ills.   Merely to disseminate information
in this way is not enough.   "Careers work' demands guidance
and practice in the use of information.   However, the basic
premise to be emphasised is that occupational information is
the cornerstone of much Careers Education.

"If children are armed with realistic and accurate
information about a wide variety of occupations
and if, on the basis of this knowledge, they are to
develop realistic work role expectations, then the
necessity for many of them to force an unsatisfactory
compromise between their occupational self-concept
and a limited range of jobs will be obviated."
(Hayes 1967)[1]

There are, however, those critics who would question whether

the occupational information provided is realistic and

accurate in content, and others who would deny that such

occupational information did, in fact, develop realistic

work role expectations. (Barry and Wolf 1962[2]; P.Hough 1972)[3].

Barry and Wolf argue that formal information can never be

authentic, realistic and factual, primarily because the society

within which it operates is not static. The vocabulary of

occupational information, for example with regard to work, is

deceptively simple, but work itself has degrees of

meaning and the value attached to it differs from person to

1. J.Hayes, "The Role of Occupational Information in
     Careers Guidance, *Educ. Research*, 9, No.3.,
     June 1967, p.191.

2. Op. Cit. p.80 et seq.

3. P.Hough, "*An Investigation into the Content of Careers
   Pamphlets*", Institute of Careers Officers, Bromsgrove 1972.

person. The authors argue that information which is
expressed in value ridden terms cannot be authentic and
factual. Similarly on the 'national coverage' aspect,
too many regional variations exist and this makes the
information general.

> "Generalities beget vagueness.   Vagueness in
> turn engenders stereotypes."
> (Barry and Wolf 1962)[1]

Another problem put forward is the nomenclature of certain
occupations in relation to the work performed, which
creates an illusion of sameness that distorts perspective.
On realism in occupational information, Barry and Wolf (1962)
point out that the word 'realism' is essentially a mask for
a value judgement, which is dependent upon time and the
point of view of the person making it.

Whilst the criticism levelled by Barry and Wolf appears
valid, they themselves would seem to be retreating from
reality (the world as it is) in writing the epitaph to
occupational information, and indeed, to vocational guidance.

1. Op. Cit. p.82.

Information may be inaccurate, distorted, even boring, but
it would be illogical to deprecate the importance of
information per se in the decision-making process.

In direct contrast to the criticism of Barry and Wolf
is the analytical approach of Shartle (1964)[1] who advocates
occupational analysis methods for securing occupational
information.

> "Occupational analysis is a term we shall apply
> to a systematic method of obtaining information
> primarily focused on the tasks, positions, jobs,
> occupations, industries and work environment
> in which persons are found rather than on a
> study of persons themselves."
> (Shartle 1964)[2]

Advocating careful occupational analysis, primarily focused
on facts concerning the tasks involved, Shartle sees the
occupation as central to the analysis, regardless of who is
doing it. Analysis may vary in length and scope, from Task,
Position and Job Analysis, to Group and Organisational
analysis. Task, Shartle defines as a unit of work performance:

1. Op. Cit. Chap.13.
2. ibid. p.285.

task analysis is therefore concerned with listing tasks
according to some prescribed order, for example, a list of
tasks for operating a piece of equipment. Position analysis
she defines as a study of the tasks performed by one person.
(This determines the level of the work performed.) Job
analysis is similar, except that it includes two or more
positions which are similar enough to be considered one job.
Team effort is covered by Group analysis, in which a group
of dissimilar positions is analysed. It is interesting to
note that Shartle's (1964)[1] final classification,
Organisational analysis - how organisations function - refers
to the importance of the psycho-social aspects of work.

> "Published occupational information is often
> deficient because the organisational and social
> environment in which the individual works is not
> given sufficient emphasis."
> (Shartle 1964)[2]

This analytical approach to occupations mirrors the earlier
work of Morris Viteles[3] (1961:1965) who advocated a job

1. Op. Cit.
2. ibid. p.289.
3. M.Viteles (1961), referred to by E.G.Williamson,
   Vocational Counselling, McGraw Hill 1965, p.99.

analysis approach to occupational information.   Williamson (1965)[1]

points out that this approach was particularly necessary when

viewed in relation to the use of psychological tests in

job choice.   The validation of psychological tests involved

the use of work criteria against which their accuracy could be

tested experimentally.

The concept of job analysis would seem to have the

advantage of standardisation of description in relation to

jobs and occupations, and could therefore be used as a blue

print for content in this study of occupational booklets.

The obvious danger, however, lies in the emphasis on "the

externalities of job characteristics"[2] (Williamson 1965).

Whilst job characteristics are an important factor in the

description of an occupation, they are not the whole story.

> "Information in counseling and guidance has changed
> from including only information about jobs to
> including information about the individual and
> his characteristics, opportunities available to
> him and the means of relating himself to the
> world of work."
> (Hollis and Hollis 1969)[3]

1. ibid. p.96.

2. ibid. p.132.

3. Op. Cit. p.15.

Super and Bohn (1971)[1] argue that an occupation can be looked at from three points of view: economically as a means of securing a steady flow of income; sociologically as a role with certain socially defined expectations; and psychologically as a set of tasks and role expections, the performance of which requires certain skills and aptitudes and certain rewards. To isolate one of these points of view and use it as the only criteria for content in occupational literature would be to underestimate the developmental approach to guidance and the importance of various types of information needed in the decision-making process. Occupational information needs to be defined in less constricting terms, for example, as

> "information which facilitates the development
> of realistic expectations about an occupational
> role in terms which will enable the individual
> to test out its congruency with his (or her)
> self-concept."
> Hayes (1970)[2]

Whatever criticisms may be levelled against current

1. D.E.Super and M.J.Bohn, *Occupational Psychology,*
   Tavistock Pubs., 1970, p.113 et seq.

2. J.Hayes, *Occupational Perceptions and Occupational*
   Information, The Institute of Careers Officers,
   Bromsgrove, 1970, p.8.

occupational literature in the printed form,

> "it continues to be the major approach used
> to help people learn about the world of
> work."
> (Ginzberg 1971)[1]

But it must be emphasised that the provision of useful and relevant occupational information does not necessarily mean that the message is getting across to the client. Occupational information is an important, but not the sole arbiter in educational and vocational decision-making. Readiness on the part of the client, and knowledge on the part of the teacher are also necessary. As Hoppock (1967)[2] states:

> "The weak counselor pools his own ignorance
> of occupations with the ignorance of the client
> and from this shallow pool tries to help
> the client to select an appropriate occupation."
> (Hoppock 1967)

Such problems are central to the use of occupational information, and whilst the main emphasis of this work is to look at the printed form of occupational information, it

1. Op. Cit. p.200.

2. R.Hoppock, _Occupational Information,_ McGraw Hill, 1967, (3rd ed.), p.134.

would not be right to neglect the way in which such

information is used.

Definition of Occupational Information

At this point it would now seem necessary to accurately define the meaning of 'occupational information' in the context of this thesis.

There are many definitions of occupational information. On analysis, such definitions would seem to divide into four categories, each of which illustrates the main point of emphasis of the authors.

Shartle's (1965)[1] definition (representative of the external approach) emphasises the environmental factors involved:

> "information about the world of work .... a description of man's work and its related environment."

Hoppock (1963)[2] emphasises the factual nature of occupational information:

> "Any and all kinds of information regarding any position, job or occupation, provided only that the information is potentially useful to a person who is choosing an occupation ... Occupational information means facts about jobs for use in vocational guidance."

1. C.L.Shartle, Occupational Information, Its Development and Application, Prentice Hall, 1965, (3rd ed.) p.2.

2. R.Hoppock, Occupational Information, McGraw Hill, 1963, (2nd ed.), p.7.

Hollis and Hollis (1969)[1] emphasise the

personalizing of information:

> *"The occupational information area includes all*
> *information that will facilitate the individual's*
> *understanding of and ability to utilize*
> *information about career fields in general,*
> *specific job requirements, work attitudes*
> *in an industrial society and the occupational*
> *world's potential contribution to his*
> *self-fulfillment."*

Hayes and Hopson (1971)[2] stress the developmental

nature of its use:

> *"Information which facilitates the development*
> *of realistic expectations about an occupational*
> *role in terms which will enable the individual*
> *to test out its congruence with his self-concept."*

These definitions all contribute an important factor

in any definition. A comprehensive definition should

therefore try to take account of these factors - the

external facts, facts themselves and their meaning to the

individual in his developmental stage. The following

1. *Op. Cit. p.15.*
2. *Op. Cit. p.37.*

definition is therefore put forward:

*Occupational information is information about
the work and non-work roles associated with
different types of employment, which has meaning
to the individual and helps him to come to
realistic decisions about his future employment
plans.*

The problem to be solved:

"Occupational information must be collected,
processed and used with the same degree of
accuracy and care that is characteristic of
any scientific investigation in the field of
the social sciences."
(Shartle 1965)[1]

How to come to terms with this amidst the deluge of
literature - how to assess its value to pupils, how to
separate the chaff from the wheat, the worthwhile from
the worthless, is the problem to be solved.

1. Op. Cit. p.19.

The area of occupational information to be studied:

The field is too wide to cover the whole range of occupational information. It therefore seems reasonable to survey the type of information most used in schools. This is in the _printed_ form. Much of this literature is in _booklet_ form, the most widely used being those published by the Careers and Occupational Information Centre of the Employment Service Agency.

This thesis, therefore, will take the form of a critical analysis in which:

(a) established criteria of evaluation are applied to samples of C.O.I.C. literature and to other literature on the same topics from other sources, available in schools;

(b) to rate these samples against a constructed Check List; and

(c) to summarise findings and draw conclusions where appropriate.

CHAPTER THREE

ESTABLISHING CRITERIA OF EVALUATION.

<u>Establishing Criteria of Evaluation</u>

"Occupational information is not the only
aspect of good career planning, but it is
one of the essentials."
(Hoppock 1970)[1]

Good information is therefore of paramount importance.

Several points are worthy of note:

(a)   As Hayes (1967)[2] has pointed out:

"Many schools pay lip service to the idea
of careers work, but few do more than
appoint a teacher as careers master whose
chief duty is to supervise a careers library."
(Hayes 1967)

Whilst the situation is improving, Education Survey 18

(1973)[3] points out that in nearly half of the schools

used in the survey, the total time allotted to

Careers Education and Guidance amounted to no

more than the equivalent of one fifth of the

work load of one full-time member of staff.

1. R.Hoppock, "Occupations and Guidance", in <u>Counseling
   and Guidance in the 20th Century: Reflections and
   Reformulations</u>, ed. W.H.Van Hoos and J.J.Pietrofesa,
   Houghton Mifflin 1970, p.91.

2. Op. Cit. p.191.

3. Dept. of Education and Science, Education Survey 18:
   <u>Careers Education in Secondary Schools</u>, H.M.S.O.
   1973, p.16-17.

This finding seems to underline the continuing

importance of occupational information when so

little teacher time is devoted to guidance.

Quoted by the H.M.I.s in Education Survey 18 (1973)[1]

is the comment of one girl, which they felt was

typical of an all too prevalent situation.

> *"The teachers help us as much as they can,*
> *but the trouble is that there are too*
> *many of us and too few of them."*
> *(Education Survey 18 1973)*

Occupational information may therefore have to play

a larger part in the information process than is

desirable.   The responsibility of providing 'good'

literature is therefore of even greater importance.

Other evidence of the constraints and limitations

of vocational guidance in schools is available:

Schools Council Enquiry 1 (1968)[2];   National Union

of Teachers Survey (1969)[3];   National Association

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1. *Op. Cit. p.13.*
2. *Schools Council Enquiry 1, Young School Leavers,*
   H.M.S.O. 1968, p.126 and 238.
3. *National Union of Teachers, Annual Guide to Careers*
   for Young People, The New Opportunity Press, 1969.

of Careers Teachers (1970)[1], and Education

Survey 18 (1973)[2]. This evidence suggests that

Careers teachers in schools have limited opportunities

to do their work effectively, but there is great

variation from school to school.

(b) Children may be exposed to slanted literature, and

from this gain the wrong impression about an

occupation. Professor Hoppock (1963)[3] in

the U.S.A., for fifteen years edited abstracts of

available literature on more than one hundred

occupations. Over and over again, the literature

was found to be obsolete, inaccurate and biased.

The work of Dobberstein (1963)[4] also substantiates

these findings. Such occupational literature

does not provide reliable evidence on which to base

a career decision. (Brayfield and Mickelson 1951)[5]

1. National Association of Careers Teachers, Time and Facilities for Careers Work in Secondary Schools, Cornmarket Careers Centre 1970, p.2-4.

3. Op. Cit. Chap.1, "What Should a Counsellor know about Occupations?"

2. Op. Cit. p.16-17.

4. W.F.Dobberstein, "Free Occupational Information: How Much, How Good?, Vocational Guidance Quarterly, Winter 1963, p.141-142.

5. A.H.Brayfield and G.T.Mickelson, "Disparities in Occupational Coverage", Occupations, April 1951, p.506-507.

(c) *Occupational literature which omits some aspects*

of the occupation being described can result in distorted

occupational perceptions. (Hayes and Hopson 1971[1];

Barry and Wolf 1962[2]. Hayes (1967)[3] refers to

an occupational survey in the Leeds area. Employers

were asked to state what they thought were the most

common reasons why young people changed jobs. On

analysis it was found that, while better pay and

prospects were important, they were not the most

dominant.

> *"He felt the job did not suit him ... the*
> *work was not what he expected .... he*
> *wanted a more interesting job."*
> *(Hayes 1967)*

These replies suggested that 50 per cent of all job

changes among young people resulted from the job

not matching up to expectations. The Maizels

enquiry (1970)[4] also indicated that there would seem

1. *Op. Cit. p.47.*
2. *Op. Cit. p.85.*
3. *Op. Cit. p.192.*
4. *Op. Cit. p.300-320.*

to be a higher risk of job change for children

who lack sufficient help and information in deciding

what to do.

(d) Information via occupational literature can help to

bring new opportunities to young people.   Hoppock (1964)[1]

in a letter to the Personnel and Guidance Journal

brings out this point:

> *"With the currently increasing concern about*
> *dropouts and unemployed high school graduates,*
> *we may be ready for a re-emphasis on*
> *occupational information. ....*
> *As various groups create new jobs for youth,*
> *new needs and new opportunities arise for*
> *the effective dissemination of knowledge*
> *about new opportunities."*
> *(Hoppock 1964)*

Occupational information therefore must not only be 'good'

in relation to its use as part of a programme of Careers Education,

it must, on occasion, be used as a substitute for it.   This

will influence both content and format in that it will need

to attract the reader as well as provide as many answers

1. R.Hoppock, Letter in Personnel and Guidance Journal,
   XLII, No.6, Feb. 1964, p.620.

as possible on different facets of occupations. There
are two significant factors to be considered: content
and appearance.

In this thesis, therefore, it is proposed to look
at both the content and appearance of occupational booklets,
and to assess them on the basis of criteria of evaluation
(to be established), for use by teachers in the school
situation.

The Content of Occupational Literature

The suggestion put forward by Hoppock (1963)[1] may appeal in its simplicity of approach to many a harassed Careers teacher. He suggests that five questions should be asked about any piece of occupational literature: When? Where? Who? Why? How?

When it was published is of vital importance. It is likely that in many libraries today that there are Careers books of five years old or more rubbing covers with new publications. Information on occupations is rapidly changing from year to year - new wage agreements, new conditions of employment, hazards of the job, technological changes etc. can make a publication so out of date as to present a distorted picture to the pupil.

Where - the geographical limitation of the publication. Some deal with the national picture ('The Dairy Industry'), many cover the activities of one firm on a national basis ('Boots') and some cover local aspects of an industry (National Coal Board). Conditions of employment may vary

1. Op. Cit. Chap.5, p.42-53.

between all three.

Who? (Authors). Writers, working in the industry about
which they are writing, can speak with authority on many aspects
of the industry, but there is a danger of the attitude of the
writer coming through. Specialist occupational information
writers are rare, but they have the skill to produce
interesting, reliable information. If the researcher can
compare his findings with others, the comparison will help
to establish the validity of his own data. Some occupational
literature is written solely for the purpose of presenting
pertinent facts as accurately as possible. Some is written
primarily for entertainment (e.g. articles in women's
magazines). It makes interesting reading to note how
Monica Dickens came to terms with being a nurse ('One Pair of
Feet'). A great quantity of literature is written for
recruitment purposes.

"Journalism

"The call is loud for men of conscience, heart and
brain. The American newspaper needs new blood
to meet the exactions of a progressive civilisation ...
The future is big with opportunity."
(Baer and Roeber 1964)[1]

1. M.F.Baer and E.C.Roeber, Occupational Information: The
   Dynamics of its Nature and Use, Science Research
   Associates Chicago, 1964, (3rd ed.) p.148.

How was the information for the publication collected? Was it taken from other similar literature or based on original work, on industrial visits, or conversations with employers?

It would be difficult to disagree with Hoppock's (1963)[1] five question approach, which provides a broad initial framework of requirements concerning content.

The problem of what information is essential for inclusion in occupational literature has been more at the forefront of American guidance workers than their British counterparts. As early as 1927, Standards were set by the National Vocational Guidance Association[2] and in 1963 the Association's Guidance Information Review Service Committee began to review and rate published literature. These Guidelines for the Preparation and Evaluation of Occupational Materials are periodically reviewed. (see Appendix 1 (1969)

The basic concepts underlying the Standards are briefly:

1. _Op. Cit._
2. National Vocational Guidance Association, _Standards for Preparing and Evaluating Occupational Materials_, N.V.G.A., Washington 1927.;

"1. A basic concept for any occupational publication should be the inclusion of a clear statement as to its purpose and the group to whom it is directed.

2. Occupational information should be related to developmental levels which will vary with age, educational attainment, social, and economic backgrounds.

3. Consideration should be given to the implication of the material for all groups in our society.

4. The description of an occupation should be an accurate and balanced appraisal of opportunities and working conditions which should not be influenced by recruiting, advertising or other special interests.

5. Occupational information should include the nature of personal satisfactions provided, the kinds of demands made and the possible effects on an individual's way of life."
(National Vocational Guidance Association 1969)[1]

Guidelines for Content.

Thirteen points are made in relation to content: definition of the occupation, its history and development, the nature of the work (duties performed), educational and training requirements, certificates required, entry qualifications, opportunities for

1. National Vocational Guidance Association, Guidelines for Preparing and Evaluating Occupational Materials, N.V.G.A., Washington 1969, p.5-6.

part-time experience of employment, lines of advancement,

employment outlook, earnings, employment trends in the industry,

and sources of additional information. Of the thirteen items,

eleven would appear to deal with economic aspects and two

to deal with psycho-social aspects. Under the latter head,

it would seem that what is considered suitable for inclusion

here is the dynamics of the work relationship, relations with

other workers and membership of unions and professional

bodies.

Hoppock, in 1948,[1] had also tackled the problem of

content, and produced his "Check List of Facts about Jobs

for Use in Vocational Guidance". This check list covered:

the nature of the work, the work environment, employment

prospects, entry qualifications, physical and educational

requirements, advancement, salary, and the advantages and

disadvantages of the job. This is the skeleton of

information which seems necessary in all publications.

How much flesh is added depends upon the use to which it is

1. R.Hoppock, "A Check List of Facts about Jobs for Use
   in Vocational Guidance", *American Psychologist*,
   3, 1948, p.417-418.

being put. At the cursory interest level it is only the

bare bones with which the child is concerned. When the

field of occupational choice is narrowed, more detail is

required. The main point to be stressed is that the

> *"description of an occupation should be an*
> *accurate and balanced appraisal of opportunities*
> *and working conditions which should not be*
> *influenced by recruiting, advertising, or other*
> *special interests."*
> *(Baer and Roeber 1964)[1]*

Hopke (1966)[2] in his article on "A New Look at

Occupational Literature", states that one of the main

criticisms of occupational literature during the past

fifteen years has been aimed at the dearth of information of

a psycho-social nature. Samler (1962)[3] makes a similar plea:

> *"We look in vain for a dynamic appreciation of*
> *work in terms of the individual's role, his*
> *self-concept or identity, the exercise of his*
> *attitudes and fulfillment of his values, status*
> *considerations and other related factors."[4]*

1. Op. Cit. p.148.

2. W.Hopke, "A New Look at Occupational Literature",
   Vocational Guidance Quarterly, 15, Sept. 1966, p.18-25.

3. J.Samler, "A Critique of Occupational Information", in
   Vocational Guidance and Career Development: Selected
   Readings, (ed.) H.J.Peters and J.C.Hanson, Macmillan
   1966, p.176.

4. ibid.

Evidence of the significance of the psycho-social aspects

of work has come from Roe (1957)[1], who hypothesised that

different occupations require people with different needs;

from Gonyea (1961)[2], who considered how needs influence the

way in which the individual perceives an occupation; and

from Hayes (1970)[3]. Hayes argues that the basis of most

theories of occupational choice is the relationship between

a personal construct and an environmental construct (the

occupation). The economic theories, the trait and factor

theories, the psycho-analytic theories, the 'self' theories

of occupational choice all describe the process largely in

terms of the matching of a personal and an environmental

construct. It follows that the assumption underlying the

provision of occupational information is that it will

assist the individual in his choice of occupation by helping

him to evaluate and assess the degree to which various

occupations would satisfy those aspects of himself which he

1. Op. Cit. p.33.

2. G. Gonyea, Dimensions of Job Perceptions, *Journal of Counseling Psychology*, 8, 1961, p.305-313.

3. Op. Cit. p.7.

is seeking to satisfy through work.   Hayes advocates:

> "that those concerned with the provision of
> occupational information should devote considerably
> more attention to the psycho-social aspects of
> occupations."
> (Hayes 1970)[1]

(These aspects were defined by Hayes as: S - social work
situation; O - organisational, occupational and product
image; and G - global life style implications.)

George Hill (1966)[2], in his article on "The Evaluation
of Occupational Literature" draws attention to the Check
List and Rating Device for evaluating occupational literature
which has been in use in the training programme for counsellor
education at Ohio University and which has been revised
four times.

The Check List has nine headings covering: Sponsorship,
Purposes and limitations of the booklet, Timeliness, Tabulated
Material and Census Data, Social and Economic Setting, Sources
of Materials, Objectivity in Gathering and Presenting Material,
Style and Format, Contents, Index and Bibliography.   Each

1. Op. Cit. p.38.

2. G.Hill, "The Evaluation of Occupational Literature",
   Vocational Guidance Quarterly, 14, 1966, p.271-277.

category contains simple, to-the-point questions and has

a rating scale of 0 - 4 (poor 0; below average 1; average 2;

good 3; excellent 4.)

From a Careers teacher's point of view, the main

advantage of the Check List and Rating Device would seem

to lite in the fact that the last item (Item X) is headed

"Completeness of Study Check List". There follows a list of

topics which should be included in order to produce a balanced

picture of the occupation. *For simply indicating coverage*

a single check may be used. (For details of the Check

List and Rating Device see pages 89-92).

The value of this Check List and Rating Scale would seem

to lie firstly in the recognition of the authors that a

simple, speedy check list may be all that is required under

certain circumstances (and they have produced this under

item X) and secondly the amount of weighting given to each

category is to be decided by the person doing the rating.

> "One should not total the points to obtain
> an average rating for the final appraisal."
> (Hill 1966)[1]

1. ibid. p.276.

CHECK LIST AND RATING DEVICE FOR EVALUATING

OCCUPATIONAL LITERATURE

(G.Hill, "The Evaluation of Occupational Literature",
 Vocational Guidance Quarterly, 14, 1966, p.271-277)

Rating of Items

Excellent	4 points
Good	3
Average	2
Below Average	1
Inferior or poor	O

I. *SPONSORSHIP:* - dealing with who sponsored the study - who

gathered the material.

II. *PURPOSES AND LIMITATIONS:* are these clearly defined?

LLL.*TIMELINESS:* is the booklet kept up to date?

lIV.*TABULATED MATERIAL AND CENSUS DATA:* emphasises the importance

of accuracy and being up-to-date.

V. *SOCIAL AND ECONOMIC SETTING:* covering number of workers in

the occupation, its social setting both nationally and locally.

VI. *SOURCES OF MATERIALS:*   are the sources referred to in the

text credited to the original authors?

VII.*OBJECTIVITY IN GATHERING AND PRESENTING MATERIAL:* evidence

of how the information was collected. Presentation should

be balanced.

CHECK LIST (contd.)

VIII. *STYLE AND FORMAT:* clear and precise style, pleasing

presentation.

IX. *CONTENTS, INDEX AND BIBLIOGRAPHY:* are these present?

Is there a list of further sources?

X. *COMPLETENESS OF STUDY-CHECK LIST*

A. *Nature of the Work*

1. Definition of occupation.
2. Divisions and specialised branches.
3. Activities of workers.
4. Machines, tools, apparatus, materials used in performance of work.

B. *Personal Requirements*

1. Psychological.
2. Character and personality traits.
3. Physical.
4. Special abilities.
5. Sex.
6. Age.
7. Race, nationality, citizenship or religion.

C. *Preparation*

1. General education required ... considered desirable.
2. Special training required ... considered desirable.
3. Special training; admission requirements; limitations; cost.
4. On-the-job training for entry ... for up-grading on the job.
5. Practical experience required ... considered desirable.

CHECK LIST (contd.)

D. Working conditions

   1. Physical (including safety provisions).
   2. Psychological.
   3. Social connections.
   4. Hours.
   5. Vacations.

E. Economic Returns

   1. Regularity of employment.
   2. Beginning earnings.
   3. Salary increments.
   4. Peak earnings.
   5. Life earnings.
   6. Worker responsibility for uniforms, equipment.
   7. Pensions.
   8. Unemployment compensation.
   9. Other economic benefits.

F. Occupational Relationships

   1. Entry jobs clearly identified.
   2. Lines of advancement described.
   3. Related occupations, both entry and advanced are described.

G. Entry into Occupation

   1. Licensure and certification required.
   2. Membership in union or professional society.
   3. Placement - means and sources of aid.

H. Outlook

   1. Growth or decline of occupation.
   2. Impact of technological change.
   3. Supply and demand of workers.

CHECK LIST (contd.)

I. Advantages and Disadvantages

    1.   Advantages described.
    2.   Disadvantages described.

J. Sources of Further Information

    1.   Sources of further information.

K. Personal Satisfactions to be gained in the Occupation

    1.   Prestige of job.
    2.   Effect on one's way of life.

G.Hill, "The Evaluation of Occupational Literature",
Vocational Guidance Quarterly, 14, 1966, p.271-277.

The evaluator must decide which criteria are most important

for the particular type of material being evaluated.

The main criticism that can be levelled at the Check

List (Hill 1966)[1] would seem to stem from the lack of

precise definition of the categories in the Rating Scale.

How much information is needed for 'Excellent', for example?

However this may be countered by the subjective nature of the

rating device and the use to which the Check List is being put.

As far as the content of occupational booklets is concerned,

the inclusion of conditions of work, entry qualifications, the

tasks involved, earnings etc. does not seem to be in dispute

and a brief look at occupational literature seems to substantiate

the findings of a predominant emphasis on the Economic Man -

a one-dimensional portrait, with a central theme of job analysis.

But, as has been stated earlier (see section on 'Work" pages 40-48   )

the child can find work meaningful in many ways, not just as

a means of earning money.   Therefore only to consider the

economic aspects is to ignore many other important elements

1. Op. Cit.

of the work environment. Research on the validity of
this point has been conducted by Hayes (1970)[1]. Hayes
argues that occupational information

> "must facilitate the development of realistic
> expectations about his (the child's) occupational
> role .... in terms which will enable him to test
> out its congruence with his self-concept."
> (Hayes 1970)

Information which describes occupations in these terms is of
supreme importance to the person involved in the process
of choosing an occupation. Hayes therefore set out to
ascertain whether the occupational information available to
young people helps to develop realistic expectations about
occupational roles. Taking as his sample 68 apprentices
from the Yorkshire Electricity Board in the before-work
situation and then ten months later, he compared the
information presented by Careers teachers, Careers Officers
and Occupational Literature with that thought to be
important by the subjects in the 'before' and 'after'
situation.

1. Op. Cit., p.2.

TABLE 1.

Comparison of the Information Presented by Careers Teachers,
Careers Officers and Occupational Literature with that thought
to be Important in the Before and After Situations:
Rank Orders and Percentage Distributions.[1]

	Electricians		C.Teachers	C.Officers	C.Lit.
Rank	Before	Final			
1	C:34	C:31.2	A:33	I:32.1	C:40.8
2	I:18.6	S:18.1	I:27	A:21.6	I:25.3
3	P:14.3	P:14.9	C:11.9	E:15	A:11.4
4	A:14.3	A:15.5	E:11.6	C:12.2	E:8.9
5	S:9.3	I:9.6	S:5.9	G:11	O:5.3
6	O:3.5	O:5.5	G:5.4	S:4.5	P:4.4
7	E:3.5	S:4.6	P:3.5	P:1.7	G:3.1
8	G:2.5	E:0.7	O:1.7	O:1.7	S:0.8

Table Key:
E: entry requirements and job demands.
C: content and nature of work.
A: administrative work situation.
S: social work situation.
P: physical work environment.
I: information of long term relevance.
O: organisational, occupational and product image.
G: global life style implications.

1. J.Hayes, "Occupational Perceptions and Occupational Information",
   V.G.Research Unit, pub. by The Institute of Careers Officers,
   Bromsgrove, 1970, p.36.

Hayes' research indicated that the economic aspects

of the job (categories E, C, A, P and I) remained the

most important to the boys in both the before and after

situation, but the relative importance of the psycho-social

aspects (categories S, O and G) increased considerably

after a period of work.

The findings of the Veness enquiry (1962)[1] would

seem to substantiate these findings.   Here again, results

showed that pay, prospects and 'getting to the top' were

important in the eyes of children.

Although current research seems to indicate to adults

that there is a place for the psycho-social aspects of work

in occupational information, whether children can be

persuaded of the importance of psycho-social factors and

whether these will be incorporated into their vocational

thinking will depend on the teacher helping in the

decision-making process.   There would certainly seem to be

a need for its inclusion.   The child must be encouraged

1. Op. Cit. p.75 et seq.

to seek the flavour of the job - whether factory work is

so boring that it would drive him 'up the wall'. He

needs to be reminded too that hairdressing and shop work

play havoc with the feet.

> "The heart of the riddle of occupational information
> lies in the omission of a necessary _plus_ in addition
> to the basic information."
> (Peters 1966)

Samler (1966)[2] gives an instance of the 'flavoured'

approach to Nursing:

> "The nurse is faced with the problem of achieving
> a compromise between the functionally specific
> impersonality of her role and the therapeutically
> beneficial expression of interest, warmth, kindness
> and sympathy elicited both by the condition of the
> patient and the expectations of what constitutes
> proper feminine conduct. The nurse, however,
> cannot allow herself to become emotionally involved
> without paying a penalty. Patients are often
> irritating, demanding and unreasonable, they suffer
> intensely, weeping and moaning: they die. If she
> were to take these things to heart, if she were to
> bring her professional cares home with her, the
> nurse would collapse under the strain."
> (Samler 1966)

1. H.J.Peters, "The Riddle of Occupational Information",
   in _Vocational Guidance and Career Development: Selected
   Readings_, (ed.) H.J.Peters and J.C.Hanson, Macmillan,
   1966, p.188.

2. J.Samler, "A Critique of Occupational Information",
   in _Vocational Guidance and Career Development: Selected
   Readings_, (ed.) H.J.Peters and J.C.Hanson, Macmillan,
   1966, p.179.

Whilst the language in which this description is couched
would not be suitable for the adolescent, nevertheless the
sentiment contained therein is valid.

The most recent investigation into the content of Careers
Literature (Hough 1972)[1] had two major aims: to investigate
whether Careers literature in Britain lacked a dynamic
appreciation of work in terms of the individual's self-
concept, and to discuss what information should be transmitted
through written material. The sample used were C.O.I.C.[2]
materials chosen by random numbers and two further similar
publications published by the Home Office and the Civil
Service Commission.

The categories also were selected by random numbers and
within each major group one of the sub-divisions was
randomly selected.

1. P. Hough, *An Investigation into the Content of Careers
   Pamphlets*, Institute of Careers Officers, Bromsgrove,
   1972, p.1-2.

2. Careers and Occupational Information Centre, *Choice
   of Careers* Series, H.M.S.O.

The ten titles used in the analysis were:

	Group	Title	No.
1.	C	Management and Administration: Civil General, Scientific and Scientific Posts	32
2.	H	Publications: Journalism	83
3.	I	Catering and Personal Service: Laundry Work	70
4.	L	Law and its Applications: Law	26
5.	N	Finance: Insurance	93
6.	O	Marketing: Retailing	75
7.	Q	Science: The Mathematician	109
8.	R	Engineering: Radio and TV Servicing	66
9.	U	Building, Civil Engineering and Land Services: Surveyor, Land Agent, Auctioneer and Estate Agent	87
10.	Y	Transport and Materials Handling: Merchant Navy Ratings	73

In addition, 2 pamphlets, not C.O.I.C.:

Home Office: Justice's Clerk

Civil Service Commission   Civil Service

Categories were defined thus:

      E   *Entry requirements, job demands;*

      C   *Content and nature of work;*

      A   *Administrative work situation;*

      S   *Social work situation;*

      P   *Physical work environment;*

      I   *Information of long-term relevance;*

      O   *Organisational, occupational and product image;*

      G   *Global life style implications.*

Two trained judges coded the information in each pamphlet

separately.

The areas defined as psycho-social were: S, O, and G.

      S   *Social work situation, e.g. meeting new people, working alone, relationship with supervisor.*

      O   *The organisational, occupational and product image, e.g. pride in working for the firm, being a craftsman.*

      G   *The global life style implications, e.g. effects on standard of living, use of leisure.*

A unit of information was defined as "an assertion about work,

which may be a whole sentence, or part of a sentence".

Units were enumerated by adding together the total number of

assertions in each category for each pamphlet.

Table 2.

TABLE OF RESULTS

Category	E	C	A	P	I	S	O	G
Civil Service	27.2	35.1	20.6	0.9	11.8	1.3	0.8	2.1
Journalism	14.8	47.7	20.7	0.2	7.9	1.4	5.3	2.6
Laundry	12.9	38.7	22.8	3.0	16.3	1.5	3.7	1.3
Law	38.8	17.3	23.6	0.4	10.2	2.7	5.9	1.0
Insurance	17.8	49.1	23.2	0.0	5.6	0.4	3.7	0.4
Retailing	14.5	24.7	37.0	0.6	17.5	2.5	0.5	0.6
Mathematician	24.1	52.2	14.2	0.3	7.8	0.9	0.5	0.1
Radio and TV	17.6	25.6	37.5	0.0	13.2	1.1	3.1	2.2
Surveyor	21.1	48.9	19.8	0.6	5.5	1.3	2.0	1.0
Merchant Navy	15.3	31.4	37.1	0.8	8.2	1.1	3.5	2.5
Totals:	20.4	37.1	25.7	0.7	10.4	1.4	3.1	1.4

TABLE OF RESULTS (contd.) [1]

Category	E	C	A	P	I	S	O	G
Justice's Clerk	13.7	38.8	28.6	0.0	10.5	3.0	4.4	1.0
Law	39.2	25.5	25.5	0.0	5.3	1.5	2.7	0.4

Hough obviously presented the results for these two pamphlets separately, as they were not from the C.O.I.C. 'Choice of Careers' series.

Hough (1972)[2] concludes, that if the C.Y.E.E. (now C.O.I.C.) material is providing information mainly of an economic nature, this should be made clear so that the material can be supplemented from other sources on the psycho-social aspects of work. It could also be argued, however, that the C.Y.E.E. (now C.O.I.C.) material could be enriched to provide a comprehensive picture by including psycho-social aspects.

1. *Op. Cit. p.10.*
2. *ibid. p.15 et seq.*

The work of Hough has been quoted in some detail for the
following reasons: (a) it is the most recent piece of
British research on occupational information, and (b) it is
highly relevant to one of the major aims of this thesis.
It can be argued that the sample was limited, the judges'
assessment subjective and that content should not be divorced
from readability, style, format and appearance. Nevertheless,
the findings on the ratio of psycho-social to economic content
give a glaring indication of the psycho-social inadequacies
of the material.

From her results Hough calculated. for comparison purposes,
the total percentage of information falling in categories
E, C, A, P and I with that in S, O, and G.

Ratio of Psycho-Social to Economic Information [1]

Table 3.

Ratio	Psycho-Social	Economic
Civil Service	1	22.8
Journalism	1	9.0
Laundry	1	14.4
Law	1	9.4
Insurance	1	21.3
Ewrtailing	1	16.8
Mathematician	1	65.7
Radio and TV	1	14.7
Surveyor	1	22.3
Civil Serviec	1	10.7
Law	1	20.8

1. Op. Cit. p.14.

Given that the inclusion of the psycho-social aspects

of work is necessary for providing a more rounded picture of an

occupation, (see section on work as a way of life pages 40-48   )

in the construction of our Check List, due consideration must

be given to: (a) what constitutes psycho-social information, and

(b) its place and importance within the items of the Check List.

Hough (1972)[1] defines this area under S, O, G, but this

would seem to be too general to quantify psycho-social aspects

of work in any detail.

Whilst the literature reviewed seems to provide a consensus

of what is considered essential for inclusion, before attempting

to construct a new Check List, some definition of an essential

concept needs to be put forward.

The work of Ross (1952)[2] is significant in this respect.

In his article on 'Significant Concepts of Occupational

Information' he defined an essential concept thus:

> "A statement was considered to be an essential concept
> of occupational information if it was an idea or
> element which should be mastered by all high school
> youth, because it is essential, indispensable, necessary,
> or imperative for wise selection of an occupation, for
> job entry, for job adjustment, or for job satisfaction."

1. Op. Cit.

2. M.J.Ross, 'Significant Concepts of Occupational Information',
   Occupations, Feb.1952, p.323-326.

In his research Ross (1952)[1] sets out to find which concepts

were essential, desirable or ineffectual. He analysed

24 textbooks on occupational information for high school pupils.

He then appraised each concept in terms of its usefulness with

general education students. This resulted in a list of

720 concepts which were submitted for appraisal to two

carefully selected juries. These juries were composed of:

> *"master high school teachers of occupational information,*
> *community counsellors, personnel directors in business*
> *or industry and public employment officials."[2]*

Competence of the jurors was of prime importance to the study.

To ensure competence, jurors were also selected who could meet

as many as possible of the following criteria:

> *"Criterion 1: Jurors should have contributed nationally*
> *distributed articles, books or research to the current*
> *professional literature on occupations, or should have*
> *participated in scientific research in the field.*
>
> *Criterion 2: Jurors should hold positions or be engaged in*
> *work which entails teaching, research, or administration*
> *or the continued appraisal of the product of the*
> *secondary school.*
>
> *Criterion 3: Jurors may hold or have held positions of*
> *leadership and responsibility in professional organisations*
> *which are concerned with the study and utilization of*
> *occupational information.*

Op. Cit. p.321.

*Criterion 4: Jurors, in their work or writing, should
be concerned with the general and varied areas of
occupational information rather than with specialised
areas or with occupational information of merely
local significance.*

*Criterion 5: Jurors should be from different regions
of the country.*

*Criterion 6: A variety of experience is desirable -
such as educational experience in different types of
schools, community counseling or placement experience
and business or industrial experience."* [1]

(Ross (1952))

For statistical purposes the numerical ratings of each jury

were considered independently. This permitted the use of two

sets of mean ratings. On the basis of the two separate

scores for each of the 720 concepts, the reliability of the

evaluation of the two juries was"0.56 ± 0.026, a substantial

correlation". [2]

To provide an objective basis for ranking each concept

of occupational information the mean rating of each item was

obtained by using the numerical ratings of all 12 jurors.

Only 28 concepts met the rigid test of essential matter,

659 were adjudged 'desirable' and 33 'ineffectual'.

1. Op. Cit. p.323.

2. ibid. p.326.

Of the 28 essential concepts, the first three listed,
dealing with entry qualifications (both academic and personal)
and the work involved are obviously necessary information in
occupational booklets.

Concept 4, which requires the pupil to obtain a general
view of the occupational world, cannot be included in an
occupational booklet dealing with a specific occupation or group
of occupations.   This is best handled in a programme of
Careers Education, as is Concept 5, dealing with self-awareness.
In 'Education Survey 18' (1973)[1] this point is brought out:

> "14.   A school's policy and practice in careers education
> may be assessed by the extent to which three
> objectives are attained:
>
> 1.   To help boys and girls to achieve an understanding
> of themselves and be realistic about their
> strengths and weaknesses;
>
> 2.   To extend the range of their thinking about
> opportunities in work and in life generally;
>
> 3.   To prepare them to make considered choices."

Concept 6 is a reminder that high scores in aptitude
and interest tests is no guarantee of vocational success.

1. Op. Cit. p.6.

Concept 7, referring to the 'compromise' aspects of occupational choice, is part of the assistance given by members of the Guidance team to pupils engaged in the decision-making process.

Concept 8, dealing with the rewards offered by work (other than economic), is necessary for inclusion in occupational booklets, if the psycho-social aspects of work per se are considered important. (see p.85-7,96-8 of thesis).

Concept 9 and Concept 10, studying occupations thoroughly and comparing pupil qualifications with occupational requirements are again, steps in the decision-making process which require the help of the Guidance team. It is interesting to note that of all the schools surveyed by the Department of Education and Science in connection with their Survey 18 (1973)[1], 62 per cent followed a Careers programme which dealt with the range of occupations open to the pupils and 78 per cent dealt with personal and educational qualifications required for specific occupations.

1. Op. Cit. p.58.

Concept 11 is a reminder concerning differences in ability, which would be an obvious part of self-exploration by the pupil.

Concept 12 and Concept 13 refer to how pupils should conduct themselves in an occupation.   Such concepts are, as the Schools Council Working Paper No. 40 (1971)[1] suggests, one of the suggested curriculum themes for vocational guidance, i.e. understanding the working world and the role of the working adult.

Concepts 14 and 15 are obviously needed for inclusion in the Check List, dealing as they do with conditions of work and the supply and demand for the occupation.

Concept 16, dealing with life-style implications, is also important for the Check List in that in choosing an occupation pupils are choosing a way of life (see pages 40-48 of thesis).

Concept 17 underlines the importance of further and higher education.

Concept 18, dealing with promotion, is necessary for inclusion in the Check List.

1. 1. Op. Cit. Chapter 5.

Concepts 19 and 20, giving general background information, again would be covered by a programme of Careers Education.

Concept 21, dealing with earnings, is allied to concept 18, and is of great importance, indicating as it does, financial rewards.

Concept 22, dealing with the advantages and disadvantages of the occupation, is essential psycho-social information.

Concepts 23 to 28, concerned with background information and attitudes to work, would also be covered in a Careers Education programme.

> "Careers Education is concerned explicitly with preparation for adult life and with the acquisition of knowledge and development of skills which have relevance for the future."
> (Education Survey 18 (1973)) [1]

In sum, therefore, the concepts which it is felt would best be covered as part of a Careers Education programme are concerned with the individual's role in the decision-making process, the development of his self-concept, and general information on occupations.

Thus, from our analysis of the 28 essential concepts, ten are considered to be essential for transmission via

1. Op. Cit. p.62.

occupational booklets.   These are:

Concept

1 and 2 *Education, training, personal qualifications.*

3 *Job specification.*

8 *Rewards of work, economic and psycho-social.*

14 *Conditions of work.*

15 *Supply and demand for the occupation.*

16 *Psycho-social aspects of work - the occupation as a way of life.*

18 *Promotion prospects.*

21 *Earnings.*

22 *Favourable and unfavourable features of the occupation.*

These concepts would seem to be appropriate for inclusion in the Check List.

As a further check, how do these essential concepts match up with the Check Lists and research quoted earlier? (see pages 82-104   of thesis)

The attached Table would seem to indicate that the analysis of Ross' 28 essential concepts into those suited to a programme

of Careers Education and those of particular value for

occupational booklets is a valid one.   Whilst the terminology

used by the authors differ, the content is stable.

What is missing from our final analysis (and which was not part

of Ross' (1962)[1] essential concept remit), is information

concerning: (a) the production of the booklets (authors, date

of publication, target audience, sources of further information),

and (b) appearance, format and style of the publication.

These too are essential.

1. Op. Cit.

TABLE 4.

COMPARISON OF CHECK LIST INPUTS

Source	Entry Cons.	Job Specif.	Rewards	Conditions of work	S. and D.	Psycho-Social	Promotion	Earnings	Advs. and Disadvs.
Hoppock[1] (1948)	X	X	X	X	X	X	X	X	X
N.V.G.A.[2] (1969)	X	X	X	X	X	X	X	X	X
Hill[3] (1966)	X	X	X	X	X	X	X	X	X
Hayes[4] (1970)	X	X	X	X	X	X	X	X	X
Hough[5] (1972)	X	X	X	X	X	X	X	X	X

1 - 5 Op. Cit.

To this point, therefore, our Check List would take the

following shape:

DATE OF PUBLICATION: *(if more than 2 years old, up-dating necessary)*

ENTRY INFORMATION

Qualifications both academic and personal.
Training required and cost.
Special abilities required.

Ross'
concepts

1 - 2

JOB INFORMATION

Definition of job.
Activities of workers.
Tools, apparatus and materials.
Working conditions: physical and psychological;
work environment.
Hours of work; overtime .
Holidays.
Earnings: to begin with, at peak. Incentives, Bonuses.
Pension schemes: contributory or non-contributory.
Sickness benefits.
Supply and demand, locally, nationally.
Growth or declining industry.

3, part of
8, 14,
15, 18,
21.

SOCIAL INFORMATION

(a) Needs and satisfactions

    Materialistic, economic: intrinsically
    satisfying.
    Value-associated needs, serving community,
    serving God.
    Amount of responsibility and, or freedom.
    Status both inside and outside the job.
    Routine predominant or variety and unpredictability.
    Congenial work mates, patients, clients, customers.
    Predictable promotion or dependent on initiative
    and drive.

part of 8,
16, 22.

Snags and Irritations

Irregular or seasonal.
Unsocial hours, split shifts.
Dirty or dangerous work environment.
Health hazards.
Too quiet, too noisy.

part of 8,
16, 22.

"Significant Concepts of Occupational Information'

(Occupations, Feb. 1952)   M.J.Ross.

In studying a specific vocation, one should consider:

1. The education and training needed for the job and obtainability., including the cost of such training, and education.

2. The personal qualifications needed.

3. The work done and ways of entering the occupation.

The steps to take in choosing a vocation are:

4. Obtain a general view of the occupational world.

5. Study of one's self.

6. A high score on an aptitude or interest test does not guarantee that a student or worker will be successful; vocational success depends on a multitude of factors, of which aptitude and interest are only two.

7. Life is so complex that a person may be obliged to choose a vocation that represents a compromise among several considerations.

8. There are several rewards other than the financial reward in any occupation, and in many occupations these other rewards outweigh the financial compensation.

The steps to take in choosing a vocation are:

9. Study possible occupations thoroughly.

10. Comparison of one's qualifications, or the qualifications one can acquire, with the requirements of the occupation.

11. Not all persons have the same abilities.

12. More than half the employees discharged are dismissed because of undesirable personal habits - inability to get along with others, unwillingness to take direction, unreliability, absence, lateness, etc. - rather than to lack of ability or training for the job.

13. *Working hours are for business, not for writing private letters, reading newspapers or idle chatting.*

In studying a specific vocation, one should consider:

14. *The conditions of work.*

15. *The supply and demand for the vocation.*

16. *The choice of a vocation affects one's standard of living, the locality in which he makes his home, his friends and associates, the recreations he enjoys, the security of his old age, his family's place in society, his outlook on life, his happiness, his success, and even the occupation his children will enter.*

17. *Graduation from high school is a requirement in a sufficiently large number of jobs so that a person should try to complete either high or vocational school.*

In studying a specific vocation, one should consider:

18. *The opportunities and paths for promotion in or advancement from the occupation.*

19. *No fortune teller of any kind can help a person to make a wise occupational choice.*

20. *A person's beginning job may be quite different from his ultimate goal; it takes time to work up to most worthwhile positions.*

In studying a specific vocation, one should consider:

21. *The earnings to be expected.*

22. *The favourable and unfavourable features of the occupation.*

23. *Good work habits are an important part of success in occupational life.*

24. *Application blanks should be filled out legibly with ink, neatly, fully, honestly and correctly.*

25. *Workers are not automatically promoted from the bottom to the top simply because they have been employed for a long period of time.*

26. *An individual can succeed and be happy in any one of several vocations.*

27. *While a person can probably earn a living in any one of several different occupations, he will be happiest if he works at something which interests him.*

28. *A professionalk worker is one who performs work based upon the established principles or ethics of a profession and which requires training equivalent to that represented by graduation from a college or university of recognised standing.*

READABILITY.

READABILITY

Whilst occupational information pamphlets need to be
factually correct, there is the problem of presenting the
information in a readable form which will be acceptable and
appealing to readers.

> "In the broadest sense, Readability is the sum
> total of all those elements within a given piece
> of printed material that affects the success
> which a group of readers have with it.   The
> success is the extent to which they understand
> it, read it with optimum speed and find it interesting."[1]
>   *(J.Gilliland 1972)*

Readability therefore is made up of a number of elements:

(a) reading ease;   (b) interest;   and (c) ease of understanding.

The many variables[2] which contribute towards readability
can be grouped under four main headings: (1) factors in
the reader, e.g. age, sex, motivation, state of knowledge;

(2) factors in the content, e.g. fact, fiction, topic;

(3) factors in the print, e.g. type size, format;   and

(4) factors in the language, e.g. vocabulary, grammar, style.

All these factors have an important bearing on the construction
of ourheck List.

1.J.Gilliland, *Readability*, Univ. of London Press 1972, p.12.
2.J.Gilliland, *The assessment of Readability: an Overview,*
   in Reading and the Curriculum, ed. J.E. Merritt, U.K.
   Reading Assoc., Ward Lock, 1971, p.156.

The importance of producing readability predictors is two fold. Firstly, it enables people without special training to determine what proportion of a given population would find a given text acceptable. Secondly, it can be used as a warning device to estimate whether a writer is reaching his target audience. Both these points are germaine to this work.

One of the major problems of readability assessment, however, as Kearl[1] (1948) suggests is that the very word "readability" is a misnomer. No formula attempts to include all the elements which influence readership. As G.H. McLaughlin (1968)[2] states:

> "Each formula samples in effect one or more
> reading skills and involves the selection of
> a sample from a text and the counting of some
> easily identifiable characteristic."

McLaughlin points out that he has always had

> "a soft spot for the genius who predicted
> readability from the percentage of words beginning
> W, H or B (which he considered easy) and of words
> beginning I or E. (considered difficult"[3]

1. B.Kearl, "A Closer Look at Readability Formulas".
   Journalism Quarterly, Fall 1948, p.344-348.

2. G.H.McLaughlin, _Proposals for British Readability Measures_,
   The Third International Reading Symposium, ed. J.Downing
   and A.L.Brown, Cassell, 1968 p.191.

3. ibid p.194.

Any formula therefore which deals only with one group of

factors influencing readability must be recognised as less

than a complete formula of readability. This will need to

be taken into account when deciding upon a readability measure

for our Check List.

The other major difficulty is concerned with the

validity of the various types of readability assessment.

On subjective assessment, Moyle (1970)[1] refers to two studies

involving the grading of books by committees of experienced

teachers. Results showed the grading done by committees

to be more reliable than those done by individuals.

Readability formulae have greater predictability. The

predictability of the Flesch formula (1948)[2] as

recalculated by Powers, Summer and Kearl (1958)[3] has a

standard error of only 0.85. If the formula predicts that

children need to reach a certain reading grade before they

can answer correctly half the comprehension questions on each

of a number of pages, 68 times out of 100 the predicted

grade will be correct within 0.85 of a grade, and 95 times

1. D.Moyle Readability: the Use of the Cloze Procedure,
   Proceedings of the 7th Annual Study Conference, U.K.
   Reading Assoc., Ward Lock 1970

2. R.F.Flesch, "A New Readability Yardstick", Journal of
   Applied Psychology, 32, 1948, p.221-233.

3. R.D.Powers, W.A.Summer and B.E.Kearl, "A recalculation
   of four readability formulas", Journal Educ.Psychology,
   49, 1958 p.99-105.

out of 100 it will be correct within 1.7 grades. McLaughlin (1948)[1]

points out that formulae using word and sentence length are

powerful predictors.   Mean word length correlates -0.6 with

children's comprehension scores and mean sentence length

correlates -0.6.

J.Gilliland (1972)[2] refers to one such typical popular,

easy to apply formula - the Morris and Halverson (1958)[3]

Idea Analysis Technique, in which key words are separated

into four classifications:

Classif. 1	Simplest words learnt early in life, common to all members of the culture;
Classif. 2	Words learned early in life but common to groups of the population;
Classif. 3	Words referring to concrete ideas, e.g. names, places;
Classif. 4	Abstract words.

However, there are a wide number of rules for analysing texts

in this approach which concentrates on semantic aspects of

words.   The main criticism levelled by Gilliland is that

the value of the formula is limited because it reflects

a narrow range of the spectrum of skills which affect readability.

1. Op. cit. p.186-205.
2. Op. cit. p.89-90.
3. Morris and Halverson, Unpublished Thesis, Columbia
   University Library, (1958), referred to above.

From the point of view of its application to occupational
booklets, like many of the formulae to be reviewed, it has
two weaknesses: (a) it samples only some of the factors which
affect readability, and (b) it is too complicated for a
busy teacher to apply.

The same criticism can be levelled at McLaughlin's (1969)[1]
"SMOG" Grading. A syllabic analysis is used by the author.
From a text, ten consecutive sentences must be chosen near
the beginning, ten near the middle and ten near the end of
the text. In the thirty sentences every word of three or
more syllables is counted. Then the square root is
estimated from the number of polysyllabic words counted.
To the square root is added 3. A high score indicates
difficult reading and a low score easy reading. The
range of skills directly assessed is limited to those related
to the identification and processing of words.

A more fruitful approach seemed to lie in the field
of research into verbal learning, where psychologists have
pointed out a close relationship between the meaningfulness
of a word and the frequency of its occurrence in writing or

1. G.N.McLaughlin, "SMOG Grading - a new readability formula",
   Journal of Reading, 12, 1969, p.639-646.

speech.   Underwood and Schultz (1960)[1] point out that

> "without exception all definitions of meaningfulness
> can be translated into frequency terms, thereby leading
> to the principle that the higher the meaningfulness of
> a verbal unit the more frequently has that unit been
> experienced",

i.e. ease of understanding is largely the outcome of frequency

of exposure to the words involved.   Evidence to support

this approach has come from Dale and Chall (1948)[2] and

from Gray and Leary (1935)[3] who found out that the factors

most closely correlated with reading comprehension difficulty

for poor readers was the number of unfamiliar words in the

passage read.   This approach is investigated in some

detail in the work of Elley (1969).[4]   (see page131of thesis)

In relation to finding a readability measure for our Check

List, however, this approach seems to suffer from the same

disadvantages referred to earlier.   As Gilliland (1972)[5]

points out:

> "A researcher may be happy to use a detailed procedure.
> A teacher may not need such a refined procedure and
> will have little use for any procedure which is
> likely to take up a substantial amount of time."

1. B.T.Underwood and B.M.Schultz, Meaningfulness and Verbal
   Learning, Lippincott, Chicago, 1960 p.84.

2. E.Dale and J.S.Chall "A formula for predicting readability",
   Educ. Research Bulletin, 27, 1948, p.11-20.

3. W.S.Gray and B.H.Leary, What Makes a Book Readable?,
   Univ. of Chicago Press, 1935.

4. W.B.Elley "The assessment of readability by noun frequency
   counts", Reading Research Quarterly, 1968, p.411-423.

5. Op. cit. p.85.

It must therefore be borne in mind, that whatever measure

is employed, it must be easy to apply, easy to mark, easy to

calculate, and accurate.

Turning to the problem of investigating the readability

of occupational information booklets in particular, this was

referred to as early as 1915 by Richards (1915)[1] and by

M.C.Schauffler (1927)[2] and by C.L.Shartle (1965)[3].

In 1950 Brayfield and Reed (1950)[4] set out to investigate

how readable occupational information booklets were. They

applied the revised Flesch (1948)[5] readability and human

interest formulae to sample passages from current occupational

information literature (Formula A an index of comprehension

and Formula B human interest). Publications covering a

wide variety of occupations and industries were included

1. C.R.Richards "What we need to know about occupations",
   in *Readings in Vocationaluidance*, ed. M.Blomfield,
   Boston, Ginn and Co., 1915, p.504-514.

2. M.C.Schauffler "Standards for evaluating occupational
   studies for a critical bibliography" in *Practice in
   Vocational Guidance*, McGraw-Hill 1927, p.132-138.

3. C.L.Shartle, *Occupational Information: Its Development
   and Application*, Prentice-Hall 1965.

4. A.H.Brayfield and P.A.Reed, "How readable are Occupational
   Information Booklets?", *Journal of Applied Psychology*,
   34, 1950 p.325-328.

5. R.F.Flesch "A new readability yardstick", *Journal of
   Applied Psychology*, 32, 1948, p.221-233.

from many different publishing sources. In all 78 pieces

of occupational information literature from 24 different

sources were analysed. Reading ease and human interest scores

were determined for these materials as follows: (a) five

samples were chosen from each text; (b) each sample was marked

off to include 100 words, and (c) readability and human interest

scores were computed. The readability standards suggested

by Flesch (1948)[1] were referred to for interpretation of

the findings on readability. With respect to human interest,

Flesch describes five categories ranging from "Dull" to "Dramatic".

Of the 78 pieces of literature, almost two-thirds ranked as

"Very difficult" and another 32% were ranked "Difficult" on

Formula A. On Formula B almost exactly the same proportions

held for the categories "Dull" and "Mildly Interesting".

It is interesting to note that Brayfield and Reed included

publications from business and industrial concerns so as to

determine whether or not the sophisticated advertising

practices of big business had influenced the readability of

their literature. The results of a study of the occupational

information of twelve companies included in the sample showed

1. Op. cit. p.221-233.

that on Reading Ease 83 % rated "Very Difficult" and on

Human Interest, two thirds were judged "Dull".   A

comparison of our readability findings for industrial and

commercial undertakings with those of Brayfield and Reed

should be of interest in this respect.   (see pages 248-9 of thesis)

The work of Splaver (1954)[1] on student text books

and Oxhandler (1950)[2] with Home Economics literature took

the opposite approach: what factors make occupational

information literature popular?   Both found high Reading

Ease and Human Interest scores were essential elements for

popularity.

The work of Watson, Rundquist and Cottle (1959)[3]

in "What's wrong with Occupational Materials?" indicates

that the vocabulary, particularly in describing professional

or semi-professional occupations was more difficult than that

describing other work areas.   The authors comment:

> "Considerable lip service has been given during the
> 1950's to making occupational materials more readable.
> In actuality, these samples would indicate that
> relatively little change has been made from the findings
> of Brayfield and Reed (1950)."

1. S.Splaver "The Career Novel", Personnel and Guidance
   Journal, 31, 1953, p.371-372.

2. A.Oxhandler "What makes an Occupational Information
   Pamphlet Popular?", Occupations, Oct.1950 p.26-29.

3. D.E.Watson, R.M.Rundquist, W.E.Cottle, "What's wrong
   with Occupational Materials?" Journal of Counseling
   Psychology, 6, No.4, 1959 p.288-291.

The authors used in their investigation the readability

formulae of Flesch (1948)[1] and Dale-Chall (1948)[2] on

the following materials: the 1957 edition of the "Occupational

Outlook"Handbook and three pieces of occupational information

selected at random from each of twelve of the leading

publishers of occupational information. Results from

the Flesch formula indicated that 67 % of the material was

readable only at college level. On the Dale-Chall formula,

the major proportion of the material, 52 % was at the 11-12th

grade reading level and 27 % was at the college reading level.

It would appear, therefore, that one of the most obvious

factors requiring further investigation in the production

of occupational information is the reading ease factor.

There are more than 40 readability formulae in existence, the

two best known being the Flesch (1948) and the Dale-Chall (1948)

referred to above. The original Flesch formula contained

three main elements, average sentence length, the number of

affixes (often difficult to apply) and references to people.

Flesch (1948)[3] himself felt that this formula had a structural

deficiency - it did not always show the high readability of

direct, conversational writing. The revised formula

1. op. cit.
2. Op. cit.
3. Op. cit. p.221.

concentrated on sentence length in words, the number of
syllables per 100 words and the average percentage of
'personal' words.   The Dale-Chall (1948)[1] formula is of
similar construction.

Both of these formulae deal only with writing style and
even within this sphere they are not all-embracing.   Flesch (1948)[2]
himself said that comprehensibility was one of the main qualities
his work dealt with.   But this does not give any indication
of whether the writing is appealing.   Both the Flesch and
Dale-Chall formulae have deliberately confined themselves
to two or three characteristics of style - reading ease and
human interest.   The result is that the elements left out
outweigh those left in.   The other point of criticism,
within their mechanical strait-jacket they may encourage
extremes, for example, with regard to sentences, the shorter
the better.   This does not always mean good writing, or even
understsndable writing.   Indeed, the work of Coleman (1961)[3]
failed to produce confirmatory results of this.

> "The maxim that shortening sentences makes them easier
> to read has become widely accepted .... but a detailed
> analysis of the sentences suggested that the overall
> effect may have been small."[4]

1. ibid.

2. Op. cit.

3. E.B.Coleman "Improving Comprehensibility by Shortening
   Sentences", Journal of Applied Psychology 46, No. 2,
   1961, p.131-134.

4. ibid. p.131.

The second point of criticism, both these formulae give an advantage to material containing dialogue or conversation. This would inevitably be a snag in dealing with occupational information literature.   Kearl (1948)[1] in "A Closer Look at Readability Formulas" concludes that these formulae cannot be taken as a recipe for good writing style and that it was a mistake to expect the scores produced to correlate with readership or to provide a valid basis for predicting overall readability.   In effect, these formulae do not determine whether writing is readable.   It would appear therefore that formulae dealing with vocabulary load, sentence construction and syllable analysis would not be comprehensive enough for the material being dealt with here.

Another approach is contained in the work of W.B.Elley (1969)[2] on "The assessment of readability by noun frequency counts." The development of this readability measure was based on three areas of research - studies of the meaningfulness of verbal learning, a grammatical analysis of the English language and a comparison of different readability measures. Psychologists of verbal learning point a clear relationship between the meaningfulness of a word and the frequency of its occurrence

1. Op. Cit.
2. Op. Cit.

in speech or writing.   As has been suggested earlier (see

page 125 of thesis) meaningfulness is largely an outcome of

frequency of exposure.   Elley argues that it can then be

deduced that the comprehension difficulty will be strongly

influenced by the number of times key words, which carry

the weight of the meaning, occur.   The author concentrated

on nouns.   Results confirmed that readability can be accurately

measured by an analysis of the nouns used in the material to

be rated.   However, it is pointed out that the effectiveness

of the method will vary according to the author and that

technical prose and poetry were unsuitable for rating in this

way.

> "Moreover it should be remembered that the method is
> relevant only for the difficulty level and not for
> the interest level of the material rated."[1]

Whilst this approach gives due consideration to the

patterns of language, it is nevertheless concerned only with

level of difficulty.   For the purpose of this work, therefore,

it has no significant advantage over Flesch or Dale-Chall.

Even considering the factor of level of difficulty alone,

to a Careers teacher it would seem a slow and cumbersome

business to apply it.

1. ibid. p.421.

A less complicated approach to this factor has been put forward by C.E.Bjornsson (1968)[1] and his concept of LIX.

In this piece of research 12 readability factors were tested:

1. unusual words (the percentage of words outside the 1,000 most usual of the language);

2. central words (frequency of I, you, he, she, they, has, was, is, but, and, so, then, now, here, then, there, when);

3. different words (the number of different words per 1,000;

4. word length (average number of letters per word;

5. long words (percentage of words with more than 6 letters);

6. polysyllabic words (percentage of words with more than 2 syllables);

7. abstract words (percentage of nouns which are designations of defined persons, animals or things);

8. personal words (occurrence of 3 groups of words: (i) certain pronouns; (ii) substantives of natural or masculine or feminine gender, and (iii) nouns.

9. length of sentences (average number of words per sentence);

10. long sentences (percentage of sentences with more than 12 words);

11. substantive clauses per word, properly per 100 words;

12. substantive clauses per sentence, properly per 100 sentences.

1. C.E.Bjornsson, *Lesbarhet*, Bokforlaget, Stockholm 1968.

Results indicated that word length and length of sentences

gave the best gauge of readability. To this point, it would

seem that this research has no advantage over Flesch or

Dale-Chall for the purpose of this work. However, it is in

the method of testing literature that this formula has

certain advantages. The testing is based on the calculation

of "LIX", which is made up of sentence length plus long words –

the words in the sentences are added up together with the

number of words of more than 6 letters. Twenty random

samples of 100 words should be taken. Lix 20 equals very

easy text; Lix 30 equals easy text; Lix 40 medium;

Lix 50 difficult; Lix 60 very difficult. The other factor

involved is the calculation of sentence length by noting

down the number of words in at least 30 sentences. Then the

sentence length (sl) is calculated and divided by 2(hsl).

The reader should then look for how many sentences are

within sl $\pm$ hsl. If nine-tenths are within sl $\pm$ hsl

one may conclude that variations in sentence length are

very small.

The advantages of this method to a Careers teacher is that

no word lists are needed. The calculation is made on the

text alone. A sensible Library prefect in the Careers Library

could be taught to work out the calculation, without having
to concern herself with nouns, pronouns, clauses etc. From
this point of view it would seem valid to settle for this
formula. But, again, its weakness lies in the fact that it
tests language difficulty only and it therefore suffers from
the same defect as the other formulae discussed - it
concentrates on 'element counting' of one type or another
which assumes a high correlation between ease of comprehension
and the frequency of occurrence of selected kinds of language
elements.

> "The basic assumption of such formulas can also be
> directly contracted, respectability has 6 syllables
> and a high level of abstraction, but it is easier for
> the average reader than 'erg'."[1]

The answer, in these circumstances, would appear to lie
in the use of the Cloze procedure, put forward by its author
Wilson J.Taylor (1953)[2] as a new psychological tool for
measuring the effectiveness of communication. The Cloze
procedure is not yet another readability formula, nor just
another form of sentence completion test. In fact, the
author claims it is not a formula at all. It does not

1. W.L.Taylor "Cloze Procedure: A New Tool for Measuring
   Readability", Journalism Quarterly, Fall 1953, p.416-7.
2. ibid. p.416.

resemble 'element counting' formulae as described earlier -

it counts no such elements.

> *"One can think of Cloze procedure as throwing all potential readability influences in a pot, letting these interact, then sampling the results."[1]*

Taylor points out that the main contribution to the idea of Cloze procedure came from the concept of total language content, Osgood's (1952)[2] 'dispositional mechanisms' and statistical random sampling. Under Total Language content is included everything that tends to motivate, guide, assist or hinder - verbal factors, grammatical skills and multitudes of symbols including non-verbal ones. Osgood's learning theory of communication indicates that the individual develops an enormous number of complex verbal skill patterns. Out of his personal experiences the individual develops his own habits of reading, causing him to anticipate words, i.e. it deals with sets of meaning-pattern relationships. The Cloze procedure takes a measure of the likeness between the patterns a writer has used and the patterns the reader is anticipating while he is reading. For statistical purposes Cloze data are treated as true scores.

1. *ibid. p.417.*

2. *C.E.Osgood "The Nature and Measurement of Meaning", Psychological Bulletin, 49, May 1950, p.197-237.*

The methodology of the Cloze procedure is straightforward and easily quantifiable. "A cloze is a fractional unit of measurement"[1] *derived from 'clozure', a term used by Gestalt psychologists to describe the individual's tendency to complete a familiar, but unfinished pattern, e.g. dogs bark and .... roar.* A Cloze unit is

> "any single occurrence of a successful attempt to reproduce accurately a part deleted from a 'message' (any language product) by deciding from the content that remains, what the missing part should be."[2]

The procedure itself is simple. It is

> "a method of intercepting a message from a 'transmitter' (writer or speaker), mutilating its language patterns by deleting parts, and so administering it to 'receivers' (readers or listeners) that their attempts to make the patterns whole again yield a considerable number of cloze units."[3]

Taylor in his experiments deleted every fifth word in a passage the length of which gave him 35 blanks. By deleting enough words at random, the blanks come to represent proportionally all kinds of words. Each mutilated passage is then reproduced with 35 blanks in place of the missing words.

1. *Op. cit. p.417.*
2. *Op. cit. p.416.*
3. *Op. cit. p.415.*

Copies of this extract are then given to a random selection

of the readership for which they were intended.   These

blanks are then filled in by the prospective readers.   The

score is then calculated by totalling the number of times the

original words are correctly placed.   Obviously a passage

with most of the blanks correctly filled in has a higher

readability score than one with many blanks incorrectly

filled in or left blank.

One of the main advantages of this procedure, from the

Careers teacher's point of view, is that the task is purely

clerical and very simple.   It can be used on any sort of

material regardless of topic or difficulty.

In deciding which readability formula to use, the

validity of the Cloze procedure seemed to present problems

in that evidence of its correlating with the more widely

used measures was limited.

L.W.Taylor (1957)[1] himself found a correlation of 0.76

between one Cloze test and a multiple choice test that was

written over the same passage.   J.E.Fletcher (1955)[2] and

1. L.W.Taylor, "Cloze Readability Scores as Indices of
    Individual Differences in Comprehension and Attitude",
    Journal of Applied Psychology, Feb. 1957, p.19-26.

2. J.E.Fletcher "A Study of the Relationships between Ability
    to use Context as an Aid in Reading and other Verbal
    Abilities", Doctor's thesis, Univ. of Washington,
    Seattle 1955 p.95, quoted in J.Bormuth "Cloze as
    a Measure of Readability", International Reading
    Association Conference Proceedings, 1963, 8 p.131-134.

E.J.Rankin (1957)[1] both found significant correlations between scores on Cloze tests and standardised reading tests.

Some evidence was also found that the difficulty of a Cloze test corresponds to the difficulty of the passage from which it is made. S.Sukeyori (1957)[2] made Cloze tests over eight passages which were written in the Japanese language and gave them to native speakers of Japanese. An rho correlation of 0.83 was observed between the difficulty ranks obtained from the Cloze tests and the combined difficulty ratings by three judges. L.W.Taylor (1953)[3] himself found that a set of Cloze test difficulty rankings had a reliability of 0.98.

Item analysis of Cloze tests by E.Fletcher (1955)[4] and E.J.Rankin (1957)[5] also seem to show that almost any Cloze test can be used with subjects who differ greatly in ability. This obviously commends itself in the school situation with mixed ability groups. The readability of occupational booklets could be tested within the Careers Education programme without having to take into consideration

1. E.J.Rankin "Evaluation of the Cloze Procedure as a Technique for Measuring Reading Comprehension, Doctor's thesis, Univ. of Michigan, Ann Arbor 1957 p.221 quoted in J.Bormuth, Op. Cit p.131-134.

2. S.Sukeyori "A Study of readability measurement: Application of Cloze Procedures to Japanese Language", (English Abstract), Japanese Journal of Psychology. 28, Aug.1957, p.135.

3. Op. Cit.

4. Op. Cit.

5. Op. Cit.

the ability range within a class.

The work of J.Bormuth (1963)[1] also substantiates the
above findings. Bormuth set out to test the following
hypotheses: (a) Scores on Cloze tests correlate with scores
on multiple choice tests written over the same passages and
also with scores on tests which contain a different kind of
comprehension item; (b) There is a correlation between the
two sets of difficulty tasks that are obtained from scores
on multiple choice and Cloze tests that are made over the
same passages, and (c) There is a correlation between the
Cloze test difficulty rankings of a set of passages when the
tests are given to groups which differ in Dale-Chall grade
placement levels, and that items in Cloze tests are
distributed over the full range of difficulties.

The sample used three groups of 50 children of
Grades 4, 5 and 6 using nine short passages, three in the
area of social sciences, three from literature and three
from science. Cloze tests were administered before the
children had had any opportunity to read the passages from
which they were made. This is an important point in that

1. J.Bormuth "Cloze as a Measure of Readability",
   International Reading Association Conference Proceedings,
   1963, 8, p.131-134.

as it is intended to proceed in a similar manner with the
Cloze testing of occupational booklets, evidence was needed
to show that familiarity with the text was not an essential
prerequisite for the use of the measure.

Bormuth's findings are best presented in tabular
form.

Table 5 [1]

Correlation Between the Cloze and Multiple Choice Test (M-C)
Over Each Passage and the Reliability of Each Test (N 150)

	Passage from which the tests were made:								
	1	2	3	4	5	6	7	8	9
Cloze vs. M-C	82	84	83	80	73	79	75	75	75
Cloze reliability	86	87	88	87	84	86	86	85	84
M-C reliability	87	85	88	86	86	85	82	85	85

Table 6 [2]

Reliability and Correlations Between Total Scores on Cloze
and Multiple-Choice Tests

Group	Cloze test	Multiple-choice test	r
Group 4	.94	.94	.95
Group 5	.91	.92	.94
Group 6	.84	.81	.85
Total	.95	.91	.95

1. ibid. p.133
2. "   ".

Table 7 [1]

Correlations Between Scores on Cloze Tests and on Tests of
Different Types of Comprehension and the Reliability of
Each Test (N 150)

Type of multiple-choice test

Cloze Test	Vocab- ulary	Facts	Seq- uences	Relation- ships	Main Idea	Infer- ences	Purpose	Reliability
1	89	83	68	83	38	84	73	86
2	83	77	70	79	46	80	70	87
3	85	82	67	80	41	81	71	88
4	87	83	65	82	43	84	70	87
5	82	78	64	78	36	81	70	84
6	88	82	63	81	41	82	69	86
7	84	77	62	75	38	78	68	86
8	82	75	64	80	39	79	70	85
9	83	81	63	76	35	78	70	84
Relia- bility	93	88	71	87	43	88	76	

1. ibid.

Bormuth's conclusions would seem to clinch the argument

concerning the desirability of using Cloze in our Check List:

1. *"Cloze tests are valid and uniform measures of reading comprehension ability;*

2. *The Cloze tests are valid and highly reliable predictors of the comprehension difficulties of the passages;*

3. *Cloze tests are appropriate for use with individuals and groups which may vary widely in comprehension ability."[1]*

Just as the literature to be surveyed is used by a wide spread

of ability in the school, so must the measure be capable of

wide use.

More recent research on the use of the Cloze procedure

has been done by Moyle (1971)[2] and S.Heatlie and E.Ramsay (1971)[3].

Moyle, in his article "The Use of Cloze Procedur-"

gives a preliminary report on a pilot study he conducted using

Cloze procedure in assessing the readability of a reading scheme.

The purpose of this pilot study was to obtain evidence on the

possibility of using Cloze procedure in the grading of books

1. *ibid p.134.*

2. *D.Moyle "The Use of the Cloze Procedure" in Reading and the Curriculum, ed. J.Merritt, U.K.Reading Association 1971 p.1590168.*

3. *S.Heatlie and E.Ramsay "An Investigation into alternative methods of assessing the readability of books used in schools", in Reading and the Curriculum, ed. J.Merritt, U.K. Reading Association 1971 p.169-187.*

for children in the early stages of reading. The Griffin
and Dragon books, written by S.K.McCullagh, published by
E.J.Arnold, were selected. These books were chosen as
they had proved popular with children and were well graded.
Two passages of 100 words were selected from each of the
twenty-four books. Structural deletion was employed on
every tenth word. Children from two schools, varying in age
from 6.0 to 9.10 years were used. The passages chosen were
also submitted to analysis using the Fry (1968)[1] Readability
Graph, which computes a reading level from a combination
of the number of syllables and the number of sentences
per 100 words. Results showed a high correlation between
the readability scores of the Cloze procedure and the reading
age levels according to the Fry Readability Graph.[2]

At Secondary level, S.Heatlie and E.Ramway (1971)[3]
describe a similar investigation. They aimed to test two
hypotheses: firstly, that both teachers and children have
difficulty in assessing the readability of texts with an

1. E.A.Fry "A readability formula that saves time",
   Journal of Reading, 1968, 11, No.7., p.513-516.
2. Op. Cit. p.163-164.
3. Op. Cit. p.170.

acceptable degree of accuracy, and secondly, that a form of Cloze procedure would prove to be a satisfactory and convenient technique for assessing readability.

Two schools were used, 118 children in School 1 and 178 children in School 2 - all were first year Secondary pupils. One test only was used, "Chang" by Elizabeth Morse (1935, published by Dent) as this text was known to have been used with first year pupils.

In administering the Cloze procedure the pupils in each school were equally divided into Groups A and B. Group A used texts which involved tenth word omissions (i.e. word missing entirely) and Group B used texts with tenth word deletions (i.e. word covered by tape). The validity of the two forms of Cloze were then correlated with the reading quotients obtained from the N.F.E.R. test S.R.1.

Results of the investigation showed that both the hypotheses originally propounded were validated by the results. On the subsidiary point as to whether omissions or deletions should be on a structural or lexical basis the researchers found that the two methods produced only minimally different results.[1]

1. Op. Cit. p.180.

TABLE 8.

Cloze Procedure Mean Scores [1]

Chang A	Page 1	Page 2	Page 3
School 1	5.86	8.37	5.06
School 2	6.38	8.01	6.26
Chang B			
School 1	6.99	8.71	6.41
School 2	7.29	8.77	7.11

An interesting footnote concerning the use of Cloze tests occurs in Elley's (1969)[2] "The Assessment of Readability of Noun Frequency Counts" referred to earlier. (see page131of thesis) As part of his research Elley conducted a grammatical analysis to compare the redundancy of nouns with that of other parts of speech, using a Cloze test on ten prose passages, eliminating every sixth word. The test was administered to 70 secondary school pupils. The results were analysed to determine the relationship between parts of speech and the degree of difficulty encountered by the pupils in replacing the omitted word correctly. Elley found that only 28.5 per cent of the nouns were correctly completed. Such a finding is not by itself conclusive, and no corroborative evidence is available.

1. Op. Cit. p.180.
2. Op. Cit. p.415.

One final point concerning the Cloze procedure.

Moyle (1971)[1] points out that in completing the blanks a

child must be able to react according to a number of criteria:

1. Select a word according to grammatical rules.

2. Select a word with the correct meaning.

3. Choose a word which fits in best with the language
   patterns and vocabulary employed by the author.

"Cloze procedure therefore involves accuracy, in that
the child cannot hope to fill in the blanks if he
cannot recognise the majority of words given. It
also involves fluency and a knowledge of grammatical
structure. Further, it necessitates understanding
the test and therefore comprehension. As such it
would seem to measure total readability much more nearly
than any of the formulae or other measures so far
employed."

There remains to consider two further variables:

Visibility and Legibility.

S.Williamson (1964)[2] identified 78 type faces, which he

grouped under three headings: type faces which make use of short

finishing strokes (called serifs) at the bottom and top of a

letter, type faces without these strokes (sans serif) and

type faces which use thickened strokes (bold face).

1. Op. Cit. p.159-160.
2. S.Williamson, Methods of Book Design, Oxford Univ. Press 1964.
   Chp.3.

In addition, size of type is considered by McLaughlin (1968)[1] to be the most important variable for visibility. Investigations by Paterson and Tinker (1940)[2] into the legibility of roman and italic type have shown that the former is easier to read and is more frequently preferred by readers. The amount of leading (space between the lines) was also considered to be a contributory factor.

Legibility may be defined as "the efficiency with which graphenes and combinations of graphenes in a text can be recognised at speed." (McLaughlin 1968)[3] It depends on the reader's perceptual system being given some help in sweeping back from the end of one line of type to the start of the next.

> *"Any setting between 3 and 5 inches wide is acceptable at any age. What matters most is there should be adequate leading between the lines."[4]*

On the width of margins, whilst these have been found to have

1. *Op. Cit. p.189.*

2. *D.G.Paterson and M.A.Tinker, "How to make type readable", Harper Bros., New York 1940, quoted in J.Gilliland, Readability, Univ. of London Press 1972 p.38.*

3. *G.McLaughlin "Proposals for British Readability Measures", in The Third International Reading Symposium, ed. J.Downing and A.L.Brown, Cassell 1968 p.189.*

4. *ibid. p.190.*

no effect on legibility,

> "It must be aesthetic preference which dictates
> that 40 per cent of a normal page should
> consist of blank margin."[1]

Avis Oxhandler (1950)[2] in "What makes an occupational information pamphlet popular?" included in her study of Home Economics pamphlets an investigation of certain aspects of legibility and visibility. Density of appearance of type on a page was measured by (1) finding the proportion of the total space devoted to type, and (2) this figure was then multiplied by the mean number of type lines per inch. The higher the score on density of appearance of type, the more dense the body of type looks.

The space devoted to pictures was measured by computing the proportion of the total space devoted to pictures. In her sample it ranged from zero to 42 per cent of available space.

On the framework of the occupational literature studied, Oxhandler studied the length of the paragraphs, the number of words per paragraph and the number of breakdowns into sections on specific aspects of the subject. Her findings indicated: (1) that the more popular pamphlet had fewer words per heading; (2) that there was more outline of the subject matter . .

1. ibid. p.190.
2. A.Oxhandler, "What makes an Occupational Information pamphlet popular?", Occupations, Oct.1950 p.26-29.

in the better liked pamphlets;   (3) that the more popular the

pamphlet, the higher the interest level;   and (4) the more

popular the pamphlet, the more pictures it had.

Before concluding her research, Oxhandler felt it necessary

to answer one more question: Can a pamphlet give adequate

coverage of important subject matter and still be attractive

and popular with readers?   To answer this question, a tabulation

was made of the number of points on the National Vocational

Guidance Association's "Basic Outline for the Content of a

Good Occupational Monograph" (1940)[1] that were covered in each

of the pamphlets.   The highest number of points covered in any

of the 11 pamphlets was 15 out of 18.   This pamphlet was in

the middle group in "degree of liking" by the girls who

participated in the study.   Both the best and least liked

pamphlets covered a mean of approximately 11 points.

Oxhandler's results overall indicate that the appearance

of the pamphlet is a more important factor in influencing

its popularity than many of us believed.[2]

1. National Vocational Guidance Association, Basic
   Outline for the Content of a Good Occupational Monograph,
   N.V.G.A. 1940, quoted by A.Oxhandler in "What makes an
   Occupational Information pamphlet popular?, Occupations,
   Oct. 1950 p.26.

2. ibid. p.29.

On *Legibility and Visibility - on "appearance" -*
it would seem that the following points can be made:

1. an attractive, colourful front cover, with an eye-
    catching title and pictures seem to draw preliminary
    interest.

2. that the main headings should be clearly defined, so
    that the reader can pick out any particular section
    which is immediately meaningful to him;

3. that it is a mistake to try to cram too much
    information into too small a space. Restricting
    the information to essentials seems better than
    restricting the readability; and

4. that, if possible, it would also appeal to the child's
    sense of touch. It is noticeable that such
    literature is often attractive to the child in the
    first instance because of the desire to feel its
    texture.

To our Check List therefore must be added Visibility and
Legibility, as well as Readability assessment using the Cloze
procedure.

Before proceeding to the chapter on the Construction of
our Check List, it seems appropriate to refer to Oxhandler's

comment on the conclusions of her research:

> *"Any appraisal and rating of occupational*
> *information pamphlets will probably have to be*
> *based on several measures of different aspects*
> *of style and format."*[1]

Measures concerned with elements of style alone, with

format alone, with human interest alone - even with content

alone - by their very isolation, omit more variables than

they measure. Our Check List therefore must not be a

one-dimensional appraisal.

1. *Ibid. p.29.*

CHAPTER FOUR

THE CONSTRUCTION OF THE CHECK LIST.

THE CONSTRUCTION OF THE CHECK LIST

In designing the Check List, six considerations had to
be borne in mind:

(a)   What should be the role of an occupational information

   booklet in the decision-making process, ideally

   and realistically?

(b)   What should be included?

(c)   How should the information be itemised and in

   what order?

(d)   The importance of both appearance and readability

   of occupational booklets, and, a corollary to this,

   the appearance of the Check List itself;

(e)   How to score the Check List;

(f)   Who would be using it?

These considerations have been implicit in much that has gone

before, and it would now seem appropriate to consider them

explicitly.

(a) *The importance and role of occupational information per se*

in vocational guidance and in the decision-making process

has not been called in question by the evidence. *Frank*

Parsons (1909)[1] considered information about the world of

work to be one of the three broad factors necessary in

the wise choice of a vocation. *Gelatt's (1962)[2]*

sequential decision-making model (see page 11-12 of thesis)

depends on the collecting and using of reliable information.

Without it, there would be no sequence of investigatory

decisions leading ultimately to a terminal one.

Ginzberg's (1951)[3] findings on the developmental nature

of choice and decision-making emphasise the central role

of occupational information in that it can provide the

necessary information about alternatives which provides

the opportunity for choice. *(see page 18 of thesis)*

Super (1953)[4] too argues that in entering an occupation

an individual chooses one which is congruent with his

1. *Op. Cit. p.5.*
2. *Op. Cit.*
3. *Op. Cit.*
4. *Op. Cit.*

self-concept.   Here again, information is vital both
for the development of the self-concept and the process
of choice.   Holland (1968)[1] refers to six occupational
environments, one of which the individual directs himself
towards as being the one most fitted to him (see page 24-25
of thesis).

It should be remembered, however, that occupational
information is an inanimate collection of data (see
section on 'The Place of Occupational Information in
School Guidance', pages 50-68   ), the importance
of which lies in how individuals are helped to use it.
Ginzberg (1971)[2] himself points out the assumptions
underlying the use of information in the decision-
making process.   The critical question is its relevance
and reliability   (see pages 54-55 of thesis).
Hollis and Hollis (1969)[3] (see same part of thesis)
reinforce this point by making a plea for personalising

1. Op. Cit. p.35-45.
2. Op. Cit.
3. Op. Cit. p.8.

occupational information - considering it from the
subjective viewpoint of the individual.

Occupational information also has adjustive,
motivational and distributional uses (see same section
of thesis).

Whatever role has been assigned to occupational
information by various writers, the necessity for its
use has not been called into question. The problem
which bedevils the author of the proposed Check List,
however, is whether allowance must be made for an extended
use of occupational booklets in particular in the school
situation. If its use within a programme of Careers
Education was the norm, if its use was being carefully
supervised by a member of a Guidance team, if there was
even evidence that a Careers teacher was given sufficient
time to organise its use, then the role of occupational
information booklets could perhaps be limited to factual
input of the job analysis kind. The evidence from
'Education Survey 18' (1973)[1] and other sources referred

1. Op. Cit.

to earlier (see pages 74-76 of thesis) would seem to

indicate that for some children at least, occupational

literature is the main avenue for learning about occupations.

It would therefore be unwise, in the construction of

the Check List, to assume an "ideal" use, when the

reality of its use seems to prove otherwise.

(b)   This leads us to the question of content - what

should be included, given the situation as described above?

Is a careful job analysis approach, as advocated by

Shartle (1964)[1] and others (see pages 63-65 of thesis)

the safest solution for material which may be used in

isolation by the pupil?   This same question was asked by

Hough (1972)[2] (see pages 98-103 of thesis) - what

information should be transmitted through written materials?

In her conclusions Hough states that if the C.O.I.C. material

is providing information mainly of an economic nature, this

should be made clear so that the material can be

supplemented from other sources.   But, as we have noted

1. Op. Cit. Chap.13.
2. Op. Cit.

from the evidence referred to previously (see pages

of thesis) it could well be that some pupils do not get

the opportunity for 'topping up' on the psycho-social

aspects. Hough herself adds that it could be argued that

the C.O.I.C. literature could be enriched to provide

a comprehensive picture by including psycho-social aspects.

Mindful of our own definition of Occupational

Information as set out on page 71) which refers to the

work and non-work roles associated with different types

of employment which has meaning to the individual, any

Check List which restricted itself to a job analysis

approach would be out of line with our basic definition

and could result in distorted occupational perceptions.

(Hayes and Hopson (1971)[1], Barry and Wolf (1962)[2] and

Hoppock (1963)[3]).

(c) Choice of items. In the previous chapter American Check

Lists which attempt to do the same job as our proposed

Check List were surveyed. This resulted in the production

1. Op. Cit.

2. Op. Cit.

3. Op. Cit.

of a Table showing that there was a consensus as to what

items were essential for inclusion (see page113 of thesis).

These items were checked against our analysis of essential

concepts for occupational booklets taken from Ross's (1952)[1]

research on essential concepts (see pages 104-12of thesis).

Again there appeared to be agreement.   Why then is it

deemed necessary to construct a new Check List? Was no

British Check List available?   To answer the second question

first, whilst the work of Hough (1972)[2] and Hayes (1970)[3]

implicitly involves the content aspect of occupational

information booklets, no attempt has been made, as far as

the writer is aware, to compile a Check List in the mould

of, for example, the National Vocational Guidance

Association's Standards (1969) (see Appendix 1   ).

For use on the British scene the American Check Lists

seemed to suffer from the following disadvantages:

> *(a)   the questions subsumed under the major*
>
> *headings were, in some cases, not expressed*
>
> *in a terminology acceptable to a British user*
>
> *and reflected a different social ethos.*

1. Op. Cit.

2. Op. Cit.

3. Op. Cit.

4. Op. Cit.

(b)   the psycho-social aspects were not defined

clearly enough, for example, the Ohio

University Check List and Rating Scale,

described by Hill[1] (1966) (see pages of thesis)

refers to 'Advantages described', 'Disadvantages

described'. The National Vocational Guidance

Association's 'Standards for Evaluating

Occupational Materials' (1969)[2], under 'Conditions

of Work and their implications for the individual's

way of life', lists work schedules, seasonality,

physical conditions and health hazards.

In essence, whilst these Check Lists paid some regard

to what could be loosely termed the psycho-social

aspects of work, definition and wording used for this

area seemed somewhat nebulous.   If, as has been argued

earlier (see pages 85-87) and (pages 96-98).

> "The heart of the riddle of occupational information
> lies in the omission of a necessary plus in
> addition to the basic information."
> (Peters and Hanson 1966)[3]

what constitutes that omission must be made explicit.

1. Op. Cit.

2. Op. Cit.

3. Op. Cit.

Definitions of psycho-social aspects as
defined by Hough (1972)[1] and Hayes (1970)[2] is
helpful in defining boundaries (see pages
of thesis): S - social work situation;
O - organisational, occupational and product
image; G - global life style implications.
The difficulty likes in more precisely defining
S.O.G. and translating it into terms acceptable
to teachers.

Ross (1952)[3] defines psycho-social in more
tangible terms: concept 16 dealing with the
occupation as a way of life, concept 22 dealing
with favourable and unfavourable features of the
occupation and part of concept 3 dealing with the
rewards of work both economic and otherwise (see
pages 108-10of thesis).

From a review of the literature, it could
be argued that under the umbrella of psycho-
social could be included those aspects which

1. Op. Cit.
2. Op. Cit.
3. Op. Cit.

express a dynamic appreciation of work in terms

of the individual's role within it, the exercise

of his attitudes towards it and the fulfillment

of his values, status considerations and social

role.

(c)   *This raises a related problem, the grouping*

of items.   Ross's essential concepts have no

help to offer here.   The Check Lists reviewed

use traditional groupings of: Entry Qualifications,

Conditions of Work, Duties, Earnings etc.,

Advantages and Disadvantages of the occupation.

Is this the most effective organisation of

items?   Bearing in mind what has been said earlier

concerning the role of occupational information

in the decision-making process (see pages 55-9 of thesis)

and therefore the different needs to be served by

an occupational information booklet, there would

seem to be a case for so organising the items that

when what is required is job analysis information,

it can be obvious from the Check List section on

Job Information whether the booklet is suitable

for such a use. Similarly, if the pupil is seeking

to gain the flavour of an occupation, this too

should be capable of being checked with reasonable

ease. There would seem to be a case, therefore,

for grouping areas of information as follows:

Entry Information, Job Information, Social

Information.

(d)   This leads us to the question of the importance

of the appearance of occupational booklets and

their readability (see pages 120-152 of thesis).

From the evidence put forward in the section on

Readability, style and format both influence

readership. Here again, the argument for constructing

an entirely new Check List is a valid one. Of the

American Check Lists surveyed (see pages 84-93   )

only the National Vocational Guidance Association's

'Standards' (1969)[1] make reference to criteria of

style and format. (See   Appendix 1   )

1. Op. Cit.

Once again, the description of these criteria is

somewhat vague:

> *"Style should be clear, concise, interesting*
> *and adapted to the readership."*
> *(N.V.G.A. 1969)*[1]

How is this measured?

> *"Publishers should be creative and imaginative*
> *in presentation, the total format pleasing."*
> *(ibid.)*

What is more subjective than imagination?

Of other literature surveyed (see pages 128-9; 147-152

of thesis), the work of Oxhandler (1950)[2] *puts*

forward precise methods of measuring density of

appearance of type and the space devoted to

pictures. Bearing in mind, however, the evidence

of constraints of time in the school situation

(see pages 63-65 of thesis) it was not felt

that such mechanistic measures as these were needed

for the Check List. Discussions on this point with

a group of 30 teachers led the writer to compromise

1. *Op. Cit. p.6.*
2. *Op. Cit.*

on this point by including aspects such as clear

type face, colour or monochrome pictures, the

amount of virgin paper in the booklet and front

cover design.   Teachers felt that to ask teachers to

calculate the proportion of total space devoted to

type, then multiply this figure by the mean number

of type lines per inch was not realistic in the

present school situation.

On those aspects of readability concerned with

reading ease, interest and understanding, however,

(see pages $126-136$) it was felt that, in view

of the importance of the pupil being able to _read_

occupational booklets, a more objective standard

was necessary.   The amount of time taken to score

the Cloze test did not appear to be too onerous a

task to the teachers consulted.   (The suggestion

that children's cloze scores should also be

sought was acted upon.   see pages 243-251).

The importance of the appearance of occupational

booklets led, logically to the appearance of the

Check List itself.   Bearing in mind the importance

of clear type, the danger of cramming too much

information into too little space, and the off-putting

effect of too many sheets of paper, it was considered

desirable, if possible, to design the Check List so

that all items were contained on one side of a sheet

of A4 paper.   The American Check Lists referred

to previously (see pages 84-93) the writer found

to be cumbersome in use.   The National Vocational

Guidance Association's 'Standards' (1969) in

booklet form, also had no clearly defined headings

to catch the eye of the user   (see Appendix 1).

Thus was the Check List defined and designed.

(e)   There remained to consider the problem of scoring

it.   Turning again to the National Vocational

Guidance Association's 'Standards' (1969), the

Association points out that the Standards are not

intended as a schedule for analysing occupational

literature, but as a Check List to ensure that a

particular publication contains the necessary

information for its intended use.   There is, therefore,

no question of producing a score. Hoppock (1948)[1]

in preparing his 'Check List about Jobs for Use in

Vocational Guidance', sees it as being used:

> *"to make sure that the client and the*
> *counselor have not overlooked important*
> *considerations not measured in the testing room."*

He points out that:

> *"effective vocational guidance requires both*
> *insight and foresight, as plenty of*
> *disillusioned clients can now testify by*
> *hindsight."*
> *(ibid.)*

The Check List and Rating Scale described by Hill (1966)[2]

does, as its name suggests, include a 5 point rating

scale for each of the items on the Check List. The

only argument, therefore, for producing a total score

would be to provide :

> *"a summary rating of two similar pieces of*
> *occupational literature for purposes of*
> *comparison."*
> *(Hill 1969)*[3]

From this point of view there is obviously an argument

1. *Op. Cit.p.417-418.*
2. *Op. Cit. p.271-277.*
3. *ibid.*

for totalling scores, and for the purpose of this

work, where a range of occupational booklets is to

be looked at, it would seem essential.

A further point of importance to be put forward

in relation to the use of our Check List by teachers

in school: the object of the exercise is not to total

the points or obtain an average rating.

> *"Rather one should decide which criteria are*
> *most important for the particular type of*
> *material being evaluated and note the final*
> *ratings on these particular criteria."*
> *(Hill 1966)[1]*

(f)   *Finally, for whom is the Check List intended?*

In general terms it is for all teachers concerned,

directly or indirectly, with Careers Education in its

widest sense.

> *"Careers education is not a new concept, it*
> *identifies and accentuates certain specific*
> *features in the profile of general*
> *education familiar to every secondary*
> *school teacher."*
> *(D.E.S. Education Survey 18)[2]*

On an organisational plane however, the Check List is

1. Op. Cit. p.276.

2. Op. Cit. p.62.

*specifically designed for those teachers working in the
field of vocational guidance who have a special responsibility
for occupational information. It may be the Careers Librarian,
it may be one member of a Guidance team, it may even be a
willing volunteer who seeks to lighten the load of a colleague.
It is hoped that this Check List will be used by all such teachers
enabling them to place greater reliance on the occupational
booklets they have to hand by providing a check on both
content and readability.*

THE CONSTRUCTION OF THE NOTES FOR TEACHERS

In order to make scoring as standardised as possible, the type and amount of information needed for each item had to be considered. This information was collected and incorporated into Notes for use with the Check List, compiled to assist codifiers in rating booklets. (A copy of the Notes is given on pages 174-178.) The use of the Notes by the codifiers was essential within the framework of this research, in order to establish uniformity of information being sought.

It must be emphasised, however, that it is not intended that the information subsumed under each item should be used as a blueprint ad infinitum by ⌐teachers in the practical school situation. Frequency of use should not only breed ease of use, but should result in a wider and more subjective appraisal of what needs to be included under each item.

The information supplied under each item was obtained from the following sources:

(i)   Ross' (1966) concepts (see pages 116-8 of thesis);

        by reference to Check Lists previously surveyed

        (see pages 84 - 93 of thesis);

The National Vocational Guidance Association's 'Standards

for Evaluating Occupational Materials' (1969) (see

pages 82-84   of thesis).

(ii) by reference to content in the following books and

articles:

W.Hopke, 'A New Look at Occupational Literature',
Vocational Guidance Quarterly, 15, Sept.1966, p.20-21.

R.Hoppock, 'Evaluations of Occupational Literature: No.4',
Occupations, 1945, p.19-21.

R.Ehrle, 'Vocational Planning Information Available to
Employment Service Counselors, Vocational Guidance Quarterly.
13, Winter 1964-5, p.91-94.

(iii) by reference, on analytical job analysis, to:

C.L.Shartle, 'Occupational Analysis, Worker Characteristics
and Occupational Classification Systems', in Man in a
World of Work, (ed.) H.Borow, Houghton Mifflin 1964,
Chapter 13, p.285.

E.G.Williamson, Vocational Counselling, McGraw Hill 1965.

D.E.Super and M.J.Bohn, Occupational Psychology, Tavistock Pubs.,
1971.

(iv) by reference, on psycho-social aspects, to:

A.Cohen, 'Sociological Studies of Occupations as a Way
of Life', Personnel and Guidance Journal, 43, 1964, p.267-272.

D.C.Miller and W.H.Form, Industrial Sociology, Harper, 1951.

D.G.Danskin, 'Occupational Sociology in Occupational
Exploration', Personnel and Guidance Journal, 34, 1955, p.134-136.

CHECK LIST FOR USE WITH OCCUPATIONAL BOOKLETS

<u>O - 4</u>

1. Publisher, Date of Pub., Authors.
   Intended Readership ....

A. ENTRY INFORMATION

2. Qualifications needed for entry ....

3. Training required and given after entry ....

4. Special abilities, aptitudes or temperament
   essential or desirable ....

B. JOB INFORMATION

5. Definition of job or occupation ....

6. Regular or typical duties of the job or occupation ....

7. Tools, special equipment or clothing required ....

8. Work environment ....

9. Hours of work and overtime ....

10. Holidays (Public and Vacation) ....

11. Earnings, by day, hour, week, or month ....

12. Pension Schemes and Sickness Benefits ....

13. Membership of Union or Professional Body ....

14. Supply and demand for the job or occupation ....

C. SOCIAL INFORMATION

   Needs and Satisfactions

15. Life style implications of the job or occupation ....

16. Amount of responsibility and supervision ....

17. Routine predominant or variety predominant ....

18. Social work environment: work mates, patients,
    clients, customers ....

19. Promotion predictable or otherwise ....

   Snags

20. Irregular or season work, unsocial hours, split shifts .....

21. Adverse working conditions ....

22. Health hazards ....

D. READABILITY AND APPEARANCE

23 Visibility and Legibility ....

24 Readability: Cloze Procedure ....

25. Further information from ....

NOTES FOR USE OF CHECK LIST

Rating Scale

Each item scored O - 4. Total max. for 25 items: 100.

O   *No statement on the item, or inaccurate or misleading reference;*

1   *Passing reference only, too generalised to be accurate;*

2   *Statements which give an inadequate representation of information necessary to give an accurate picture;*

3   *Statements which give an adequate picture of the necessary information;*

4   *Accurate, comprehensive statements giving complete coverage of the item.*

1.   *Publisher, Date of Pub., Authors, Intended Readership*

Name of publisher and authors of booklet	1
Target readership	1
Date of original publication	1
Time lag between publication date and now	1
(if more than 2 years, evidence of revision)	

A.   *ENTRY INFORMATION*

2.   *Qualifications needed for entry*

Essential educational requirements	1
Additional desirable entry requirements	1
Age for entry	1
Any details of other routes of entry to the job or occupation.	1

3.   *Training required and given after entry*

Full-time Training, apprenticeship, F.E. or H.E. course	1
Industry or employers' training programmes: on the spot, day release, occasional courses	1
Cost, if any, to employer or employee	1
Awards at end of training or no award	1

4. *Special abilities, aptitudes or temperament essential or desirable*

Physical abilities, e.g. 20-20 vision, freedom
from colour blindness   1
Aptitudes, e.g. mechanical, clerical, finger
dexterity, reaction time   1
Temperament, e.g. patient, calm   1
Social skills desirable, e.g. getting on
with people.   1

B. *JOB INFORMATION*

5. *Definition of job or occupation*

Precise definition of job or occupation   1
Divisions and sub-divisions of the job or
occupation   1
Specialised branches   1
Relationship to other jobs or occupations   1

6. *Regular and typical duties of the job or occupation*

Typical duties of a day or shift   3
Variations and reasons for them   1

7. *Tools, special equipment or clothing required*

Tools, special equipment or clothing necessary
or desirable   1
Safety requirements for tools and equipment   1
Cost of tools, equipment or clothing   1
Who pays for these, worker or employer?   1

8. *Work Environment*

Indoors, outdoors, above ground, below
ground, at sea   1
Alone or with others   1
Legal and safety regulations governing
environment   1
Canteen, sports provision.

9. *Hours of Work and Overtime*

Length of working shift, day, week   1
Overtime regular or otherwise   1
Paid or unpaid 'overtime'   1
Variations in working hours   1

10. **Holidays**

Public holiday entitlement	1
Holiday entitlement on entry	1
Holiday entitlement increasing with service or not	1
Time-off for compassionate reasons	1

11. **Earnings**

Earnings or grants while in training or apprenticeship	1
Earnings per hour, per day, per week, per month on entry	1
Payment weekly, monthly, quarterly or fees	1
Maximum earnings of the job or occupation	1

12. **Pension Schemes and Sickness Benefits**

Non-contributory or contributory pension scheme, if any	1
Age at which retirement occurs and pension is given	1
Sickness, wages or salary paid or not	1
Redundancy provisions	1

13. **Membership of Union or Professional Body**

Membership of Union and or Professional Body essential or desirable	1
Cost	1
Entry requirements for membership	1
Sex discrimination	1

14. **Supply and demand for the job or occupation**

National supply and demand	2
Regional or local supply and demand	2

C. **SOCIAL INFORMATION**

15. **Life style implications of the job or occupation**

Major satisfaction sought: materialistic and economic, intrinsically satisfying, serving community or God	1
Amount of involvement required of the individual	1
Manual, blue collar, white collar or professional work	1
Status of the job in the community	1

16. <u>Amount of responsibility and supervision</u>

Amount of responsibility on entry and later 1
Opportunities and paths of acquiring
responsibility 1
Supervision: total .... minimal or none 1
Incentive schemes 1

17. <u>Routine or variety</u>

Routine standardised procedure predominant
or essential to the job or occupation 1
Description 1
Variety and unpredictability predominant 1
Possibilities of moulding the job to the
individual 1

18. <u>Social work environment</u>

Opportunities for social contact on the job
or in the occupation 1
Type of workmates, patients, clients, customers 1
Leisure activities associated with the job
or occupation 1
Welfare facilities 1

19. <u>Promotion</u>

Methods of promotion, by examination, years
of service, extra effort or unpredictable
by luck or drive 1
Proportion of workers promoted 1
To what? after how long? 1
Restrictions on levels of advancement 1

20. <u>Irregular or Season Work etc.</u>

Irregular or seasonal work, unsocial hours,
split shifts 2
Extra payments for these, if any 1
Problems associated with these 1

21 <u>Adverse Working Conditions</u>

Physical: too hot, too cold, too noisy, too
dirty, too clinical etc. 2
Mental: stressful, boring, monotonous etc. 2

22. <u>Health Hazards</u>

Type of health hazard	1
Effects on the individual and his working life	1
Precautions taken by employer	1
Precautions taken by employee	1

D. <u>APPEARANCE AND READABILITY</u>

23. <u>Visibility and Legibility</u>

Clear type face (roman rather than italic)	1
Pictures (monochrome or colour)	1
Width of margins and leading	1
Front cover design	1

24. <u>Readability</u>

Cloze procedure scores:

Maximum score: 35 blanks correctly filled in.

Score of	35-30	4 marks
"	29-25	3
"	24-20	2
"	19-15	1
"	below 15	0

25. <u>Further information</u>

Further training details and addresses	1
Employers Associations or Training Boards	1
Useful addresses of Careers Officers and others	1
Information on related jobs or occupations	1

TITLE	SOURCE	ITEM 1	SECTION A	SECTION B	SECTION C	SECTION D	TOTAL	CHILDREN'S CLOSE		
								AGE	ABILITY	SCPRE