AN EVALUATION OF THE CAREER DEVELOPMENT
OF ELEMENTARY SCHOOL AGE CHILDREN IN
NEWFOUNDLAND, FROM A DEVELOPMENTAL
THEORY OF CAREER CHOICE AND COMMITMENT

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THEORY OF CAREER CHOICE AND COMMITMENT

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Education

Department of Educational Psychology
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August, 1988

St. John's

Newfoundland

ABSTRACT

This study examined the nature of the career dev-
elopment of elementary school children in Newfoundland.
The sample consisted of 189 students (91 females and 98
males) from three schools. Data from grades three and
six were gathered using a survey type of questionnaire,
and principal analysis was performed using chi-square
analysis, rejecting the null hypothesis at the .01 level
of significance.

The theoretical constructs of the research were
based on Donald Super's developmental theory of career
choice, and the research instrument was designed to
analyze the factors contributing to career maturity for
this age group. The research instrument gathered data on
the career and educational aspirations of elementary
school children, and the source of these aspirations, the
occupational knowledge of these students, their work
values, the extent of their contact with selected occupa-
tions, their decision-making ability, their self-know-
ledge, and the extent of their sex-role stereotyping.
Questions were also asked about the number of siblings,
parental occupations, links between school and work, and

the children's perceived strengths and weaknesses as they related to self-understanding.

Many factors such as career role models, knowledge of the world of work, self-understanding, work values, link between school and work, possession of non-stereo-typical attitudes, and decision-making skills, were determined to be associated with the career development, and ultimately, the career maturity of elementary school children.

Recommendations for practice included career guidance interventions that could foster career maturity in young children. Recommendations for future research included more clearly defining career maturity in child-hood and researching more accurate ways of measuring it.

ACKNOWLEDGEMENTS

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CHAPTER I

Introduction to the Study

Statement of Purpose

The purpose of this study was to determine the nature of the career development of elementary school children in this province. The dimensions considered to be part of career maturity for children in the elementary grades were identified and the children in the sample were assessed in terms of their career maturity status. These dimensions were used to diagnose the rate and progress of the elementary children's career development for the purpose of recommending career guidance strategies which will facilitate that development.

Rationale

Although several theorists have suggested that career development begins early in the life of a child (Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Super, 1957; O'Hara, 1968, as cited in Herr & Cramer, 1988), comparatively little has been written about the process of career development and the attainment of career maturity

as it pertains to the young child. The proponents of the developmental theory of career decision-making state that occupational choice is a developmental process; it is not a single decision but a series of decisions made over a period of years. More, particularly, Ginzberg et al. (1951), and Super (1957, as cited in Herr & Cramer, 1988), saw choice as a process delimited by life stages in which certain tasks are faced by preadolescents, adolescents, and adults. Ginzberg et al., 1951, as cited in Herr & Cramer, 1988), have given credibility to the notion that career behavior finds its roots early in the life of a child and develops as the child moves toward adulthood.

Super (1957, as cited in Herr & Cramer, 1988), also described choosing a career as a developmental process characterized by life stages. In particular, he has taken the career developmental tasks of preadolescents, adolescents, and adults and further subdivided these into specific behaviours required to complete the tasks. Development through the life stages is guided by facilitating the maturation of abilities and interests, helping in reality testing, and in the development of self-concept. Super has established a definitive link between career development and personal development.

Career development defined by Super, is a lifelong
process composed of life stages and developmental tasks
which lead to increasing career maturity. The child in
the elementary grades is already involved in a process of
career development which Super has called "The Growth
Stage". This stage is characterized by the development
of self-concept through identification with key figures
in the family, and school needs and fantasy are domin-
ant. According to Super (1957, as cited in Herr &
Cramer, 1988), interest and capacity become more import-
ant with increasing social participation and reality
testing. Essentially, the elementary child is engaged in
the developmental tasks of building a picture of the kind
of person he/she is and is orientating himself/herself to
the world of work and an understanding of the meaning of
work. According to the developmental model of career
choice, career development begins in childhood. However,
the research and the theorists which support the view
that the career development process begins early, have
provided little information on the developmental needs of
young children, and on what constitutes career maturity
at this level. The purpose of this study was to provide
more specific information on the career development of
young children and to provide recommendations for

facilitating that development.

Children in the elementary grades are in the form-
ative years of their career development. As a result of
being at an exploratory stage of this development, they
have not had many years of exposure to distorted percep-
tions of the world of work and sex-role stereotyping; yet
they are vulnerable in the sense that they are readily
influenced by environmental circumstances which foster
inaccurate information about career choices, the world of
work, and sex role stereotyping (Herr & Cramer, 1988).
Students at this stage also develop attitudes regarding
occupations and, are making tentative career choices.
Nelson (1963) has demonstrated that as early as third
grade, children have well developed attitudes regarding
occupations and levels of education, and that as early as
ages 8 and 9, children tend to reject some occupations as
holding no interest for them.

Davis, Hagan, and Strouf (1962) found that out of a
sample of 116 twelve-year olds, 60 percent had already
made tentative career choices. Hales and Fenner (1972,
1973) have reported research findings indicating that
values related to the world of work begin to form in
childhood, and that these values enter into preadolescent
vocational behaviour. Elementary school age children are

at a certain stage in their career development, and are already making tentative career choices and value judgements about the world of work. It becomes critical to assess the nature of this career development so that the school can focus on the developmental needs of students at this life stage. By determining the elements of career maturity for this age group, the school systems can ensure that children in this age group are being provided with career guidance experiences which would lead to increasing career maturity. The role of the school becomes one of helping children relate their personal development and characteristics to their career development.

The school can make students aware of how they are changing developmentally and how they can relate these changes to exploring and preparing for the future. The starting point for these types of interventions is to discover the status quo with respect to career development among elementary school children. It is the findings of this research which many then be used to encourage the school system to facilitate the career development of elementary school children.

Research Questions

There were eight research questions addressed by this study. Each question focused on a component of career maturity and evaluated the developmental differences between children in Grade 3 and Grade 6 on each component. These include:

Research Question 1: To what extent do children in Grade 3 and Grade 6 differ in their self-understanding as it relates to career development? This was investigated by analyzing the (a) differences in the career aspirations of children in the two grades, (b) differences in the educational aspirations of children in the two grades, and (c) differences in the reasons given by children in the two grades for wanting to complete or not complete high school and university.

Research Question 2: To what extent can children in Grade 3 and Grade 6 establish a link between going to school and finding a job? This was investigated by analyzing the differences in the reasons given by children in Grade 3 and Grade 6 for going to school.

Research Questions 3: To what extent do children in Grade 3 and Grade 6 possess occupational knowledge? This was investigated by analyzing the (a) differences in the

ability of children in Grade 3 and Grade 6 to assess the monetary gains from selected occupations, (b) differences in the ability of children in Grade 3 and Grade 6 to assess the educational requirements of selected occupations, and (c) differences in the ability of children in Grade 3 and Grade 6 to accurately match selected occupations with accompanying job descriptions.

Research Question 4: To what extent do children in Grade 3 and Grade 6 have self-knowledge that allows them to identify personal strengths and weaknesses, and to indicate feelings of self-worth? This was investigated by analyzing the (a) differences in the attitude toward self expressed by children in Grade 3 and Grade 6, and (b) differences in the personal strengths and weaknesses identified by children in Grade 3 and Grade 6.

Research Question 5: To what extent do children in Grade 3 and Grade 6 possess work values that show respect for work and pride in accomplishment? This was investigated by analyzing the differences in the work values expressed by children in Grade 3 and Grade 6.

Research Question 6: To what extent do children in Grade 3 and Grade 6 have a non-stereotypical base of knowledge from which to make career choices? This was investigated by analyzing the differences in the

attitudes of children in Grade 3 and Grade 6 regarding the sex role stereotyping of selected occupations.

Research Question 7: To what extent do children in Grade 3 and Grade 6 have a wide variety of occupational role models that would enhance their knowledge about the occupational world? This was investigated by analyzing the (a) differences in the career role models of children in Grade 3 and Grade 6, and (b) differences in the source of the career role models of children in Grade 3 and Grade 6.

Research Question 8: To what extent do children in Grade 3 and Grade 6 possess decision-making ability and the opportunities to make their own decisions? This was investigated by analyzing the differences in the degree of autonomy exercised by children in Grade 3 and Grade 6 in making decisions regarding their day to day lives.

Definition of Terms

Career is the sequence of occupations, jobs, and positions engaged in or occupied throughout the lifetime of a person. Viewed economically, a career is a series of positions occupied by a person as a means of preparing

to earn, earning or withdrawing from the earning of a living. Viewed sociologically, it is a series of roles played by a person, in which the nature of each role played, the way in which it was played, and the situation in which it is played, have some bearing on the next role in the series. Viewed psychologically, a career is also a series of roles played by a person, the choice and success in which are determined in part by attitudes, interests, values, needs, prior experiences, and expectations of the person in question (Super & Bohn, 1970, pp. 113-114).

Career Maturity is the repertoire of behaviours pertinent to identifying, choosing, planning, and executing career goals available to a specific individual as compared with those possessed by an appropriate peer group; being at an average level in career development for one's age (Super, 1957).

Career Development is the total constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to shape the career of any given individual; those aspects of an individual's experience which are pertinent to choice, entry, and progress in educational, vocational, and avocational pursuits; the process by which one develops

and refines such characteristics as self and career identity, planfulness, and career maturity (Herr & Cramer, 1988, p. 17).

Career Guidance is a systematic program of counsellor-coordinated information and experiences designed to facilitate individual career development and, more specifically, career management; a major component of career education is to integrate family, community, and school to facilitate self-direction; a set of multiple processes, techniques, or services designed to assist an individual to understand and to act on self-knowledge, and knowledge of opportunities in work, education, and leisure and to develop the decision-making skills by which to create and manage his or her own career development (Herr & Cramer, 1988, p. 18).

Developmental Task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his/her happiness and success with later tasks; while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks (Havighurst, 1953, p. 2).

Self-Concept is a summary personality description that explicitly takes into account the person's picture

of himself: people tend to choose occupations that they construe as representing the characteristics they see in themselves (Super & Bohn, 1970).

Aspiration is a particular educational or occupational goal a person desires to attain (Wiseman, 1983).

Limitations

This research attempted to identify the nature of the career development of elementary school children, through the use of a survey-type of questionnaire, which delineated the various dimensions considered to be part of career maturity for this age group. Since what constitutes career maturity for this age group is not clearly defined in the literature, the researcher chose dimensions of career maturity outlined by various theorists, as the "general" criteria for career maturity. This study may be limited by the fact that the research instrument used was not an all inclusive construct of career maturity for the elementary school child.

The study was also limited by the fact that there was no assurance that the children answered the questions on the questionnaire truthfully. The questionnaire

compensated for this problem by encouraging the children to supply honest answers.

Another limitation of the study was that the sample chosen did not include all of the elementary grades. Grade 3 and Grade 6 were arbitrarily chosen as being representative of the elementary school population. The rationale for choosing those two grades was that they were at the upper and lower end of the elementary grades, and therefore representative of this developmental period of the elementary school child's life.

One final limitation of this study was that the Grade 3 children were unable to read many parts of the questionnaire, and the writer therefore had to read the instructions in an effort to compensate for their possible difficulties in following instructions. Whether all the children were following directions accurately was difficult to assess among a large class of students.

CHAPTER II

Review of Literature

Introduction

The primary focus of this study was the investigation of the nature of career development of young children at the "Growth Stage". The theoretical framework adopted for the purpose of the study was Donald Super's (1957) developmental model of career choice and commitment, as cited in Herr and Cramer (1988). The literature review focuses on the following elements: (a) choosing a career as a developmental process, (b) theories about the career development of children in the "Growth Stage", (c) the characteristics of the elementary school child, and (d) the dimensions of career maturity for this age group.

The Developmental Approach

Super's theory of career development is concerned with longitudinal expressions of career behaviour, and highlights the importance of self-concept. Basically, he looks at choosing a career as a developmental process

which has its roots in early childhood. The approach is
an integrative one which stresses the interaction of
personal and environmental variables in career develop-
ment.

The developmental process may be summed up in a
series of life stages characterized as those of growth,
exploration, establishment, maintenance, and decline, and
these stages may be further subdivided into: (a) fantasy,
tentative, and realistic phases of the exploratory stage,
and (b) the trial and stable phases of the establishment
stage. Super gives prominence to the mastery of develop-
mental tasks at each of the stages of career develop-
ment. Each of the career development tasks can be
further subdivided into specific behaviours required to
complete the tasks. Super defines career maturity, as
"the life stage in which the individual actually is, as
evidenced by the developmental tasks with which he is
dealing in relation to the life stage in which he is
expected to be, in terms of his age" (p. 132). Thus,
this definition introduces the concept of developmental
tasks as the means by which career development pro-
gresses. Development through the life stages can be
aided by facilitating the mastery of developmental tasks.

Super contends that the nature of a person's career

pattern is determined by the person's socioeconomic level, mental ability, personality characteristics and the opportunities to which he/she is exposed. Career preferences, competencies, and self-concepts change with time and experience, making choosing a career a continuous process. Work and life satisfactions depend upon the extent to which an individual finds an adequate outlet for his/her abilities, interests, and personality traits.

Super considers the process of career development as that of developing and implementing a self-concept. The basic theme is that an individual chooses occupations that will allow him/her to function in a role consistent with his/her self-concept, and the self-concept is a function of a person's developmental history. In summary, Super sees career development and personal development as being closely allied.

Career Development in the Growth Stage

Very little has been written about the career development of children in this stage. Donald Super is credited with characterizing this stage into various

developmental tasks, mastery of which are the criteria
for career maturity. A synthesis of Super's conception
of the life stage and developmental tasks of this period
from age 4 to approximately age 14, revealed that very
little is known about the specific behaviours required
for completion of the developmental tasks in this life
stage.

In the "Growth Stage", self-concept develops through
identification with key figures in family, and school
needs and fantasy are dominant in this stage. Interest
and capacity become more important with increasing social
participation and reality testing. The child learns
behaviours associated with self-help, social interaction,
and self-direction. This stage is further subdivided
into substages:

1. Fantasy (4-10 years) in which needs are dominant
and role-playing in fantasy is important.

2. Interest (11-12 years) in which likes are the
major determinant of aspirations and activities.

3. Capacity (13-14 years) in which abilities are
given more weight and job requirements (including
training) are considered.

There are two developmental tasks which the child
must master in this stage: (a) developing a picture of

the kind of person one is, and (b) developing an orient-
ation to the world of work,' and an understanding of the
meaning of work. An overview of the variables impacting
on the career development of children in this stages
gives a clearer picture of Super's conceptualization of
the "Growth Stage" of career development.

Environmental Influences

Rich (1979) has demonstrated that children are most
knowledgeable about occupations located in their own
community. Therefore, children from predominantly rural
communities where there are few occupations, and these
mostly of low status, will likely aspire to these types
of occupations. She argues that this places the rural
student at a disadvantage compared to their urban counts-
erparts, since occupations in urban areas are likely to
be more varied. Rich (1979) further argues that exposing
rural children to non-local, middle and high-class
occupations, could allow them to make more optimal
occupational choices.

Holland (1981) found in a study of 300 randomly
selected sixth grade students, that socioeconomic status

was a more useful predictor of career maturity than self-
concept, race, place of residence, or age. The data
collected showed that the higher the student's socio-
economic status the higher the score obtained on the
Attitude Scale of the Career Maturity Inventory.

Another environmental circumstance which affects the
career attitudes of children are their relationships with
their parents, and their parents attitudes toward work.
Miller (1978) found support for the hypothesis that
parental attitudes and behaviour reported as having
occurred during childhood are positively associated with
career maturity among college students. Parental
attitudes and behaviour, which were considered impedi-
ments to the child's general development, were found to
be associated with attitudes indicative of career
immaturity.

Berry (1979) reported research which indicates that
many problems of older children and adults are the result
of unresolved communication problems between parent and
child during childhood. She further argues that commun-
ication theory "explains human growth and development
itself and is the social matrix from which the self-
concept emerges and takes shape and it is the self-
concept that gives direction to human life" (p. 516).

One can infer from this research that disturbed patterns of communication between parent and child will probably affect the child's view of himself, and consequently with others in school, and possibly in the workplace.

The research indicates that as a function of environmental circumstances, levels of aspiration, achievement motivation, and self-perceptions have their roots in the early years of family and schooling.

Children's Values Toward Work

As elementary school children move through the life stage called the "Growth Stage", work is an important concern to them. By the time they have completed the first six years of school, children are making tentative commitments to fields of work. Parker (1970) for example, found that fewer than 10 percent of 29,000 students in grade seven described themselves as not having career goals. Simmons (1962) found that elementary school age children in his study were very much aware of occupational prestige. Creason and Schilson (1970) found that of a sample of 121 sixth graders who were asked about their career plans, all indicated that

they had career preferences, and only eight indicated that they did not know why they chose their particular preference.

Hales and Fenner (1972, 1973) reported research findings indicating that values relating to work begin to form in childhood and enter into preadolescent career behaviour. In particular, they found that "although sixth-grade pupils differ in the work values which they hold, the work values of different groups (male-female, social classes) are more alike than they are dissimilar" (1973, p. 31). Cooker's (1973) research findings found similar results to that of Hales and Fenner (1973). He did, however, find that there existed sharper sex differences in work values, valuing with boys such things as money and control more than girls. Girls place more importance on altruism and helping others than boys. The Women's Bureau of Canada (1986) found in their study of 700 Canadian school children, ages 6 to 14, significant sex differences in career preferences. While high percentages of both boys and girls believed that when they became adults, both men and women would be engaged in many of the same occupations, there were some statistically significant differences. Participation of women in traditionally masculine occupations, such as dent-

istry and medicine, had a higher level of expectancy than the participation of men in traditionally feminine professions such as secretarial work and nursing. The young girls, however, in their selection of individual career choices, did not express a general belief in the equality of sexes. Many of them seemed to be saying that women can become doctors or lawyers, but they aspired to traditionally female choices like nurses or secretaries.

Characteristics of the Elementary School Child

Theories of childhood development can provide valuable information pertinent to identifying career development goals for the elementary school child. An understanding of the child from his/her social and cognitive developmental patterns will facilitate the planning of career guidance activities.

Havighurst (1953, as cited in Herr & Cramer, 1988), has identified the following developmental tasks as the tasks of middle childhood: learning physical skills necessary for ordinary games, developing wholesome attitudes toward self, getting along with peers, acquiring fundamental skills in reading, writing, and calculation,

becoming aware of appropriate sex roles, developing
concepts necessary for everyday living, developing a
conscience, morality and a scale of values, and forming
attitudes toward social groups and institutions.
Havighurst (1953) describes the period of about six to
twelves years of age as characterized by three outward
pushes: "There is the thrust out of the home and into
the peer group, the physical thrust into the world of
games and work requiring neuromuscular skills, and the
mental thrust into the world of adult concepts, logic,
and symbolism" (p. 15).

Erikson (1950) has characterized the period of
middle childhood as that of industry versus inferiority.
He wrote:

> The child learns to win recognition for pro-
> ducing things ... He develops industry ... He
> can become eager and involved in a unit of
> production situation. His ego boundaries
> include his tools and skills; he learns the
> pleasure of work completion by steady attention
> and preservering diligence. The danger, at this
> stage lies in a sense of inadequacy and infer-
> iority. (p. 259)

By industry, Erikson means a sense of being able to make things and to make them well. He believes that the child must develop a feeling of being a worker. He learns to develop attention by producing things and persisting and problem-solving. The experience of failure in any of these tasks may produce the feeling of inferiority.

Piaget (1970, as cited in Santrock, 1987), has pointed out the importance during this stage of providing children with concrete experiences which will equip the child to perform abstract conceptual operations.

Dinkmeyer and Caldwell (1970) identify the following fundamental needs of childhood:

1. The need to be loved and accepted uncond-
   itionally.

2. The need for security - to be safe and
   relatively free of threat.

3. The need to belong, to be part of the
   group, and to feel identification and
   acceptance.

4. The need to be recognized, to gain
   approval, to feel significant and accepted
   for the way in which he functions.

5. The need to be independent, to take res-

ponsibility, and to make choices. (p. 21)

These authors contend that it is during the early
school years that the child comes to see himself/herself,
and his/her attitude toward self as strongly affected by
his/her interactions with peers and teachers. This is
essentially how the child achieves his/her identity.

Ginzberg et al. (1951, as cited in Herr & Cramer,
1988), look at the elementary school child from a career
perspective. These authors theorized that childhood is a
time of fantasy when children engage in activities that
are intrinsically satisfying, and they make tentative
occupational choices without regard to reality. By the
age of ten or twelve the child has moved away from a play
orientation to a work orientation. From ages eleven to
twelve, children focus on likes and dislikes; from
thirteen to fourteen they emphasize abilities.

Dimensions of Career Maturity in Childhood

Career maturity is a construct that emerges from the
developmental model of career development. If people do
go through life stages and accomplish developmental tasks

along a developmental line, then it should be possible to
measure the rate and progress of that development.
According to Crites (1974) depending on how far one
departs from the expected norm in terms of progression
through the career development stages, one can be class-
ified according to career maturity. According to Crites
(1974) measures of career maturity serve the function of
diagnosing the rate and progress of an individual's
career development, and provides a foundation for inter-
vention strategies to enhance that development. Most
career maturity measures have been developed from samples
of high school or college age students. As of yet, there
is no career maturity measure which assesses any career-
related variables in the Growth Stage of career develop-
ment. However, there have been career guidance programs
developed at the elementary school level, and there is
research which suggests what the elementary school child
should know in terms of his/her career development.

Schmidt (1976) devised a career guidance program
built around two components: (a) enhancing children's
self-concepts, and (b) helping children explore careers.
This is consistent with Super's two developmental tasks
of developing a positive self-concept, and providing an
orientation to the world of work. Schmidt (1976) divides

the self-concept component into the following four areas:

1. Strength building in that students are taught to identify the strengths of others.

2. Values identification by which students, in various grades, can be taught to clarify their own value systems.

3. Goal-setting in which students established mini-goals important to larger aspirations.

4. Life management in which students discussed obstacles to their self-made goals and developed strategies for overcoming them.

The career awareness component of this program focused on role-playing different types of workers, and having real worker models provide actual work examples to children. A second part of the career awareness program focused on different types of people in different jobs, their life styles, their strengths and values, and the goals they brought to their job.

Sander, Westerberg, and Hedstrom (1978) emphasized the importance of exploring decision-making skills with children. They summarized ten stories from children's literature that could be used to teach children the consequences of making unwise choices and the rudiments of self-awareness and economic awareness.

Wircenski, Fales, and Wircenski (1978) reported on a career guidance program in schools in Indianna which focused on having children learn the following concepts:

1. The world of work is composed of many inter-related jobs in order to plan, design, advertise, manufacture, distribute, and service goods.

2. All jobs are important.

3. Cooperation among all workers is very important.

Nelson (1972) has suggested that elementary school age children can be helped to achieve a sense of personal worth, helped to develop the feeling that they have a place in society, helped to see how adults have achieved the place they have, encouraged to learn that success is a personal matter related to a total lifestyle, helped to build positive attitudes about themselves and their potential for success in society.

Gysbers and Moore (1981) stated that the facilitation of career development in the elementary school should have as its focus, the following domains: (a) Self Knowledge and Interpersonal Skills; (b) Life Roles, Settings, and Events; and (c) Life Careering Planning. For elementary school children, each of these components implies awareness and exploration of self and others as key activities necessary for career maturity at this

level.

Henjum, Preyma, and Stargarter (1987) advocated that career guidance programs should be focused upon the following list of career developmental needs:

1. To develop positive attitudes toward self and others.

2. To possess information that links school subjects and school experiences with future life-career choices.

3. To possess career information that broadens awareness, horizons, and aspirations related to future career decisions and plans.

4. To have career exploration activities that help children to develop a sense of competence, of worth, and of place in society.

5. To have career awareness activities that help children develop values in respect for the dignity of all work, of pride in accomplishment, and in respect for all individuals regardless of characteristics or occupations.

6. To possess information which minimizes sex-role stereotyping.

7. To have awareness of a variety of career role models.

8. To practice and learn problem-solving and

decision-making skills related to life career choices.

Gibson (1972) viewed career development at the elementary school level as part of the individual's total development. The developmental emphasis should essentially be in helping children view career as a way of life, and education as preparation for life; relate self-understanding to career development; developing understandings of occupational and educational relationships; developing a non-stereotypical base for making career decisions.

Summary

In summary, it appears that the content of existing career guidance interventions or theoretical models share common developmental emphases in the process of facilitating the career development of the elementary school child. These common developmental emphases can be considered the dimensions of career maturity for children in this age group. Therefore, in monitoring the rate and progress of the career development of the elementary school child, one would consider the following dimensions:

1. self-understanding as it relates to career development;

2. an understanding of the link between school experiences and future life-career choices;

3. possession of current occupational information that shows a broadened awareness of future career choices and opportunities;

4. self-understanding as it relates to feelings of competence and self-worth;

5. possession of work values that show respect for work and pride in accomplishment;

6. possession of non-stereotypical information and attitudes in an attempt to consider the fullest range of career choices;

7. exposure to a wide variety of career role models; and

8. possession of problem-solving and decision-making skills related to their day-to-day life as well as future career decisions.

These eight aspects of the career development of young children identified by current literature, are the means by which the investigator examined the career development of elementary school children. These developmental emphases are the foundation of the research

questions addressed by the study, and are discussed in the following chapter.

CHAPTER III

Methodology

Introduction

Included in the present chapter are descriptions of the procedures employed to collect data for the study. Also included are descriptions of the samples and instruments used, and a discussion of the preparation of the data for statistical analysis.

Procedures

The data for this study was collected by means of a survey-type questionnaire, which was designed to assess the elementary school child's status in terms of the dimensions considered to be part of career maturity for this age group.

The questionnaire was administered to students in grades three and six, in one urban and two rural schools in the province.

The Sample

The sample for the study consisted of 189 students (91 females and 98 males) from three schools (one urban and two rural). It consisted of 89 urban students and 100 rural students. There were 86 students in Grade Three and 103 students in Grade Six.

The Instrument

The instrument used to collect the data was a survey-type of questionnaire consisting of twenty-six questions. These questions were generated by examining the literature to determine what constitutes career maturity at this level. Professionals working in the area of career education were consulted on what they considered to be the essential elements of career maturity for children in the elementary grades. They were asked to provide specific information on what knowledge, attitudes, and experiences young children should have as the foundation for later adult career decisions. Eight broad components of career maturity were identified and specific questions were devised to assess each compon-

ent. These questions were revised and reworded to suit
the reading levels and the abilities of children in the
elementary grades. The investigator had had several
years of experience in working with primary and element-
ary school age children and was therefore able to con-
struct questions which were suited to their level of
understanding. The questionnaire was then piloted in a
Grade 6 and a Grade 3 classroom to ensure that children
at this level would easily be able to complete it. This
afforded the investigator the opportunity to rewrite
those questions which the children had difficulty in
answering.

The questionnaire items were generated from each of
the following areas: (a) Self-Understanding and Career
Development; (b) Link Between School and Work; (c)
Occupational Knowledge; (d) Self-Understanding and Self-
Worth; (e) Work Values; (f) Sex-Role Stereotyping; (g)
Career Role Models; and (g) Decision-Making. The
following sections describe how specific questions were
generated from these eight aspects of career maturity.

Self-Understanding and Career Development

To determine whether students had self-understanding
as it related to career development, they were asked to

state their educational and career aspirations, and to
give reasons for their choices.

Link Between School and Work

To determine whether the students had an under-
standing of the link between school experiences and
future career choices, they were simply asked to state
why they felt they needed to go to school. The invest-
igator recognized that school is more than preparation
for work. However, this research considered the major
purpose of schooling to be preparation for work because
this knowledge is considered a major part of career
maturity.

Occupational Knowledge

To determine whether students were in possession of
current occupational information which showed an aware-
ness of future career choices, they were asked to
complete three tasks:

1. Match an occupation with its accompanying
description. The occupations were chosen from John
Holland's classification of occupations according to six
personality types. One occupation was chosen from each
personality type as being representative of the occupa-

tions within that classification.

    2. Determine the educational requirements of selected occupations.

    3. Determine the monetary returns of selected occupations.

The researcher attempted to choose occupations with which children of this age group would have familiarity.

Self-Understanding and Self-Worth

    To determine whether the students had self-understanding as it relates to feelings of competence and self-worth, students were asked to state their strengths and weaknesses, and decide whether statements relating to their own self-concept, their relationships with peers, their relationship with their family, and their competence in completing school work, were true or false for them. The statements were randomly selected from a self-concept scale applicable to this age group.

Work Values

    To determine whether students were in possession of work values which showed respect for work and pride in accomplishment, they were asked to choose from a list of values which would be most important to them. The list

was made up of both materialistic and altruistic types of values. The students were also asked to decide whether eight statements, taken from John Crites' Career Maturity Inventory, were true or false for them. All of the statements were designed to assess how the students felt about working and the occupational world.

Sex-Role Stereotyping

To determine whether the students were in possession of non-stereotypical information and attitudes, regarding future career choices, they were given a list of occupations, and asked to decide whether boys, girls, or both could have these jobs when they grew up.

Career Role Models

To determine whether students had exposure to a wide variety of career role models, the students were asked to look at a list of jobs, and decide whether they knew someone who worked at this job. After they determined whether they knew someone who worked at the job, they were asked to tell from where they knew this person. The second part of the question was designed to find out whether the students' career role models were real persons or persons from media and books.

Decision-Making

To determine whether students were in possession of decision-making skills related to their day-to-day lives, they were simply asked to check who was responsible for making practical decisions. They were asked to check one person from the following list: (a) mother, (b) father, (c) you, (d) sister, (e) brother, and (f) other. This question attempted to assess the degree of autonomy possessed by students in making decisions related to their own lives.

The research instrument also included questions relating to family size, parental occupations, and the absence or presence of parents in the family. Children in the sample often found it difficult to classify their parents' occupations. In such cases, the investigator asked the children for a verbal description of the occupation and then supplied an occupational title for them. Also, reliable reporting of such information as parental occupation and absence or presence of parents was encouraged by reminding the children to make sure they gave honest answers and by reinforcing the anonymity of their responses. While these variables were not directly related to the aspects of career maturity, they were included for the purpose of discussing their effect on

career and educational aspirations, which are a component
of career maturity.

Method of Data Collection

One instrument, a survey-type questionnaire, was
administered on four separate days. The questionnaire
was administered to students in Grades 3 and 6. These
grade levels were chosen because they represented the
lower and upper levels of the elementary grades. This
was important for identifying differences in responses
from a developmental perspective. The questionnaire was
administered to students in a rural area first and in an
urban area the following week. The purpose for the
urban/rural split was to make the sample representative
of children in the elementary grades. However, the
differences in the responses of children in the urban and
rural areas was not a major variable studied. Permission
was sought to question the students by writing the Super-
intendents of the school boards from which this sample
was chosen, and requesting formal permission to carry out
the study in their schools.

The investigator administered the questionnaire to

the students in the sample. This provided the opport-
unity to circulate among the students to offer any needed
clarification of questions. This was especially import-
ant for the Grade 3's who had difficulty reading some of
the questionnaire items which were beyond their reading
capabilities. All students completed each question, one
at a time, while the researcher read the directions.

Confidentiality

In order to protect student anonymity, all students
were given a number which was written on their question-
naire. Therefore, the students were identified by grade,
sex, and place of residence only. All data was subse-
quently handled through the use of numbers which repre-
sented each variable on the questionnaire.

Preparation for Analysis

Once the data were collected, the students' quest-
ionnaires were analyzed to assess patterns of student
responses and to generate a coding scheme. When the

coding scheme was developed, the data was transferred to coding paper to prepare it for entry into the VAX computer system.

Statistical Analysis

The principal analysis procedure used was chi-square analysis, rejecting the null hypothesis at the .01 level of significance. Both grades were compared on all variables, through the use of crosstabulations, to ascertain the extent of developmental differences in career maturity from Grade 3 to Grade 6. Interpretations were made on the basis of the percentage point differences between the responses of children in Grade 3 and children in Grade 6. The chi-square analysis was then used to represent the significance of the relationship on all variables which were crosstabulated by grade.

CHAPTER IV

Results and Statistical Analysis

Introduction

The purpose of this study was to examine the nature of the career development of elementary school age children. The research questions were designed to test the hypothesis that there should exist developmental differences in the responses of the children in Grade 3 and Grade 6 on questionnaire items reflecting increasing career maturity as students approach the upper limit of their elementary school years. Specifically, the questionnaire items assessed student's educational and career aspirations, their perceptions of the link between school and work, the extent of their occupational knowledge, the extent of their self-understanding, their work values, the extent of their sex role stereotyping, their career role models and their sources, and their decision-making ability.

The analysis of the research questions was aimed at identifying the developmental differences between children in Grade 3 and children in Grade 6 on eight aspects of career maturity for this age group.

The analysis consisted of taking each aspect of

career maturity and breaking it down into its component parts as identified by current literature. Secondly, it described the developmental differences which existed between children in Grade 3 and children in Grade 6 on the individual components of career maturity. The following pages describe the various aspects of career maturity and the resulting research questions.

Self-Understanding and Career Development

Self-understanding, as it related to the students' career development was assessed by analyzing their career and educational aspirations. The analysis of this data can be found in Tables 1, 2, and 3.

Career and Educational Aspirations

1. Were there differences in the career aspirations of children in Grade 3 and Grade 6?

The largest number of students in both grades aspired to occupations in the middle income levels. The differences in the percentages of children in Grade 6 and Grade 3 aspiring to the middle income levels was very slight, less than ten percent, with 8.7 percent more of

the children in Grade 3 aspiring to occupations at the
middle income levels. The classification of the income
levels of the occupations to which the children aspired
were based upon the use of the Blishen Scale (Blishen &
McRoberts, 1976). Each occupation on the scale was given
a socioeconomic index based upon the amount of income
earned, the level of education required to enter the
occupation, and the level of prestige afforded to an
individual in such an occupation. The indices corres-
ponding to the career aspirations made by each child were
placed into three separate categories indicating high,
middle, and low levels of socioeconomic status afforded
by these occupations. According to the Blishen Scale the
occupations in the lower status group corresponded to
socioeconomic indices of 22.2 - 38.2. The middle status
occupations corresponded to socioeconomic indices of 40.5
- 57.2. The higher status occupations corresponded to
socioeconomic indices of 60.1 - 74.3.

2. Were there differences in the educational aspir-
ations of children in Grade 3 and Grade 6?

It was expected that more children in Grade 3 would
indicate that they would complete high school than
children in Grade 6. Research on the drop-out population

in Newfoundland and elsewhere, seems to indicate that
students who drop out of school do so psychologically, by
the time they reach Grade 3, and their profile is even
more apparent by Grade 6. The students in both grades of
this study indicated by a large majority that they wished
to complete high school (95.3 percent of Grade 3's and
94.2 percent of Grade 6's expressed this preference).
Also a large majority of students in both grades indi-
cated that they would attend university (80.7 percent of
Grade 3's and 82.5 percent of Grade 6's). The educa-
tional aspirations of children in both grades were there-
fore very similar. It was surprising that so many
students indicated that further education beyond high
school was one of their goals. Environmental circum-
stances of unemployment and early school leaving among
the rural population would suggest that our young
students would not see further education as an important
goal. It is important to remember, however, that these
children are at the fantasy stage in their career dev-
elopment and their aspirations are based more on desires
and interests than on knowledge of the tasks necessary to
achieve goals or on judgements of their own abilities.
The chi-square also indicated a significant level of
association between grade and educational aspirations.

Table 1

Crosstabulation of Career Aspirations - Socioeconomic Status by Grade

Socioeconomic	20.0		30.0		40.0		50.0		60.0		70.0	
Status	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Grade 3[a]	7	8.3	4	4.8	16	19.0	29	34.5	22	26.1	6	7.1
Grade 6[b]	9	8.8	2	2.0	19	18.6	28	27.4	25	24.5	19	18.6
Total	16		6		35		57		47		25	

$a_n = 84.$ $b_n = 102.$

3.   Were there differences in the reasons given by Grade 3's and Grade 6's for g or not completing high school and university?

Responses on this questionnaire item were analyzed on the basis of whether the children had an understanding of schooling as preparation for work. According to career research this is a fundamental aspect of career maturity. Therefore, responses which indicated that completing an education was an important step to eventually choosing a job were classified as more mature from

a career development perspective.

The Grade 6's gave a rather pragmatic reason for completing high school, whereas the reason given for the Grade 3's was more idealistic. The most frequent reason given by the Grade 6's was "to get a job", whereas the Grade 3's mostly said "they were smart enough" or "were doing well in school". These latter responses were categorized as "a positive attitude toward ability". These responses seem to point to a high degree of self-confidence among the younger children but probably less of an understanding of schooling as preparation for the world of work. The latter appears to be more evident among the older Grade 6's. The Grade 6's also gave the responses "to get a job" much more frequently than the Grade 3's, as the reason for attending university. Only 12.9 percent of the Grade 3's compared to 40.8 percent of the Grade 6's gave "getting a job" as the reason for completing high school. Likewise, the Grade 6's gave this reason for attending university, 61.8 percent of the time, compared to 33.8 percent of the time for Grade 3's. The chi-square indicated a significant relationship between grade and the reason given by students for completing high school and university.

Table 2

Crosstabulation of Complete High School by Grade

Complete High School	Complete		Not Complete	
	No.	%	No.	%
Grade 3[a]	81	95.3	4	4.7
Grade 6[b]	97	94.2	6	5.8
Total	178		10	

$a_n = 85.$ $b_n = 103.$

Chi-square significant at .01

Table 3

Crosstabulation of Attend University by Grade

Attend University	Attend		Not Attend	
	No.	%	No.	%
Grade 3[a]	67	80.7	16	19.3
Grade 6[b]	85	82.5	18	17.5
Total	152		34	

$a_n = 83.$ $b_n = 103.$

Chi-square significant at the .01 level

Link Between School and Work

The ability to establish a link between going to school and eventually choosing a career was considered an important part of career maturity. The developmental differences between the Grade 3's and the Grade 6's on this ability was the focus of the following research question.

1. Were there differences in the reasons given by Grade 3's and Grade 6's for going to school?

It has already been noted in the examination of the educational aspirations of students in both grades that the Grade 6's were more likely to see attaining a formal education as a necessary prerequisite for getting a job. The Grade 3's, on the other hand, did not make such a direct link between schooling and the world of work. On this questionnaire item, which asked the children directly why they thought it was necessary to go to school, the Grade 6's responded that going to school was necessary in order to get a job, indicating a knowledge of the link between schooling and the occupational world. However, only 19 percent of the Grade 3's were able to establish this link compared to 69.6 percent of the Grade 6's. The Grade 3's gave responses which did

Table 4

Crosstabulation of Reasons for Completing or Not

Completing High School by Grade

*Reasons	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
To Get a Job	11	12.9	42	40.8
To Get an Education	8	9.4	24	23.3
Positive Attitude Toward Ability	28	32.9	15	14.6
Positive Attitude Toward Education	12	14.1	5	4.9
Others Expectations	1	1.2	3	2.9
Other	21	24.7	9	8.7
Lack of Ability	3	3.5	4	3.9
Negative Attitude Toward School	1	1.2	1	0.9

$a_n = 84.$ $b_n = 102.$

*Chi-square significant at the .01 level

Table 5

Crosstabulation of Reasons for Attending or Not Attending
University by Grade

*Reasons	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
To Get a Job	27	33.8	63	61.8
To Get an Education	5	6.3	4	3.9
Other's Expectations	4	5.0	1	1.0
Personal Ability	5	6.3	3	2.9
Positive Attitude Toward Education	10	12.5	1	1.0
Other	16	20.0	14	13.7
Lack of Ability	3	3.8	6	5.9
Economic and Time Factor	1	1.3	2	2.0
Unnecessary	5	6.3	5	4.9
Lack of Interest	4	5.0	3	2.9

$a_n = 80.$ $b_n = 102.$

*Chi-square significant at the .01 level

not indicate an understanding of the purpose of schooling, and were placed in a category called "other" because they were so varied. The chi-square indicated a significant level of association between grade and the reasons given for attending school.

Occupational Knowledge

The extent of a child's occupational knowledge, is also related to their ability to establish a link between the world of school and the occupational world. The responses on these questionnaire items were insightful in terms of the previous analysis of the link between school and work. More specifically, occupational knowledge was assessed in terms of the children's awareness of future career choices, monetary gains from future careers, and the educational requirements of future careers. These were the focus of the following research questions.

1. Were there differences in the ability of Grade 3's and Grade 6's to accurately assess the monetary gains from selected occupations?

It was expected that since the Grade 6's were more

Table 6

Crosstabulation of Reasons Given for Going to School by
Grade

	Grade 3[a]		Grade 6[b]	
*Reasons	No.	%	No.	%
To Get a Job	16	19.0	71	69.6
To Get an Education	7	8.3	19	18.6
To Attend a Post-				
Secondary Institution	4	4.8	0	0.0
Other	57	67.9	12	11.8

a_n = 84. b_n = 102.

*Chi-square significant at the .01 level

concerned with getting jobs in the future, they would
better be able to assess the monetary gains from selected
occupations. This expectation proved to be true, since
the Grade 3's answered correctly only 23.3 percent of the
time while the Grade 6's answered correctly 40.8 percent
of the time. The chi-square indicated a significant
level of association between grade and the responses on
this questionnaire item. However, the number of cells

with an expected frequency of less than 5 was higher than 20 percent. Therefore, the investigator cannot say with certainty that this relationship was not due to chance.

2. Were there differences in the ability of Grade 3's and Grade 6's to assess the educational requirements of selected occupations?

In the analysis of previous research questions, the Grade 6's were better able to establish a link between school and work, and chose high school and university training as a means to getting jobs in the future. It was therefore expected that they would be able to assess the educational requirements of jobs quite accurately as compared to Grade 3's. Indeed, the Grade 6's made a correct assessment 70.9 percent of the time whereas the Grade 3's made a correct assessment 41.9 percent of the time. However, the investigator advises caution regarding this finding considering only a small sample of occupations were included, so the ability of the Grade 6's to make an accurate assessment of educational requirements may be exaggerated somewhat. The chi-square did indicate a significant level of association between grade and the educational requirements of occupations.

Table 7

Crosstabulation of Monetary Returns of Job by Grade

Category	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Correctly Interpret Monetary Gain	20	23.3	42	40.8
Incorrectly Interpret Monetary Gain	66	76.7	61	59.2

a_n = 86. b_n = 103.

Chi-square significant at the .01 level

3. Were there differences in the ability of Grade 3's and Grade 6's to accurately match selected occupations with accompanying job descriptions?

Again, it was expected that since the Grade 6's seemed to be more oriented toward the world of work in terms of their future goals, they would be better able to match occupations than Grade 3's. The Grade 3's have also been in school for a shorter period of time and would have had less exposure to occupational role models. The Grade 6's were consistently better able to

match up occupations with accompanying job descriptions.
However the Grade 3's were able to match up the occupa-
tions of air traffic controller, nurse, and pharmacist
with nearly as much accuracy as Grade 6's, but matched
mostly inaccurately on the other occupations. Most
children in the primary grades are exposed to helpers in
the community, so it is not surprising that they were
fairly accurately able to match the occupation of nurse.

Table 8

Crosstabulation of Educational Requirements of Job by
Grade

*Category	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Correctly Interpret Educational Requirements	36	41.9	73	70.9
Incorrectly Interpret Educational Requirements	50	58.1	30	29.1

a_n = 86. b_n = 103.

*Chi-square significant at the .01 level

Self-Understanding and Self-Worth

In keeping with the notion of a career as referring to a person's life in totality from birth to death, and encompassing life stages, self-understanding and self-worth form an integral part of career maturity. This aspect of the research, specifically attempted to find out whether children in the primary and elementary grades were able to express positive feelings about themselves, and were they able to identify personal strengths and weaknesses which are indicative of self-worth. A child's self-knowledge is considered a fundamental part of his or her career maturity.

1. Were there differences in the attitude toward self expressed by the Grade 3's and the Grade 6's?

Children in both grades rated themselves positively on questionnaire items related to feelings of self-worth. However, there was a noticeable difference in the attitude expressed by Grade 3's and the Grade 6's on the questionnaire items related to feelings of competence in completing school work. The Grade 3's expressed feelings of pride and accomplishment in completing school work, whereas the Grade 6's more often indicated that school

Table 9

Crosstabulation of Jobs Matching by Grade

Job	Grade 3[a]				Grade 6[b]			
	Correct		Incorrect		Correct		Incorrect	
	No.	%	No.	%	No.	%	No.	%
Air Traffic Controller	81	94.2	5	5.8	103	100	0	0.0
*Accountant	59	68.6	27	31.4	101	98.1	2	9.1
*Lawyer	61	70.9	25	29.1	103	100	0	0.0
Nurse	82	95.3	4	4.7	103	100	0	0.0
*Architect	60	69.8	26	30.2	98	95.1	5	4.9
Pharmacist	79	91.9	7	8.1	102	99.0	1	.97

a_n = 86. b_n = 103.

*Chi-square significant at the .01 level

work was hard for them, and indicated that they had more
problems with figuring out difficult things. This may be
an indication of different experiences children in the
primary, as opposed to upper elementary grades, have with
successes and failures in school. A child in Grade 6

Table 10

Crosstabulation of Self-Concept by Grade

| Category | Grade 3 | | | | Grade 6 | | | |
| | True | | False | | True | | False | |
	No.	%	No.	%	No.	%	No.	%
My parents are interested in the things I do.	79	92.9	6	7.1	90	89.1	11	10.9
I would like to drop out of school.	7	8.2	78	91.8	8	7.8	95	92.2
I am a good person.	80	94.1	5	5.9	88	88.0	12	12.0
I have many friends.	79	92.9	6	7.1	95	93.1	7	6.9
I am a very happy person.	79	92.9	6	7.1	84	84.0	16	16.0
I am among the last to be chosen for teams.	19	22.4	66	77.6	24	23.3	79	76.7
I can usually figure out diff- icult things.	65	76.4	20	23.5	65	64.4	36	35.6

(table continues)

Category	Grade 3 True No.	Grade 3 True %	Grade 3 False No.	Grade 3 False %	Grade 6 True No.	Grade 6 True %	Grade 6 False No.	Grade 6 False %
School work is fairly easy for me.	64	76.2	20	23.8	65	64.4	36	36.6
*I am proud of my school work.	77	90.6	8	9.4	74	74.0	26	26.0
I get along well with other children.	72	84.7	13	15.3	94	93.1	7	6.9
My family listens to me.	65	76.5	20	23.5	82	82.8	17	17.1
*My family and I have a lot of fun together.	80	94.1	5	5.9	83	80.6	20	19.4

*Chi-square significant at the .01 level.

will experience passing or failing a grade more often than a child in Grade 3. The primary curriculum is not as achievement-oriented as the elementary curriculum. Consequently, the differences in attitude of the Grade 3's and Grade 6's may be reflective of the transition

children experience when moving from the exploratory, experiential stages of primary school to the more academic and exam-oriented curriculum of the elementary grades.

Another aspect of self-understanding that is an important part of career development is the ability to identify one's strengths and weaknesses. Children are rarely given an opportunity to engage in any form of self-analysis, as are most adults. Therefore, the research attempted to determine whether children had this capability by examining the results of the following question.

2. Were there differences in the strengths and weaknesses identified by the Grade 3's and Grade 6's?

Children in both grades rarely identified their strengths as being in the academic domain and connected with school work. The majority of students in both grades (63.5 percent of Grade 3's and 64.9 percent of Grade 6's) identified their strengths as being in the sport and recreational categories. Children in both grades mostly identified their weaknesses as being in the same category. It was expected that more Grade 3's would have placed "doing well in school subjects" as one of

Table 11

Crosstabulation of Identified Strengths by Grade

Category	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Academic	5	5.9	9	8.7
Other	54	63.5	69	66.9
Both (academic and				
other)	26	30.6	25	24.3

[a]n = 85. [b]n = 103.

Table 12

Crosstabulation of Identified Weaknesses by Grade

Category	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Academic	16	19.5	20	20.0
Other	52	63.4	50	50.0
Both (academic and				
other)	14	17.0	30	30.0

[a]n = 85. [b]n = 103.

their strengths, since in the analysis of previous
research questions, they had indicated that school was a
positive experience for them. However, children, as do
most adults, may have difficulty expressing personal
traits and qualities that are an inherent part of their
self-concept. The chi-square did not indicate a signif-
icant level of association between grade and the ident-
ified strengths and weaknesses.

Work Values

The studies on values indicated that values related
to work begin to form in childhood and these values enter
into the career behaviour of preadolescents. More spec-
ifically, this research attempted to determine whether
children in the elementary grades expressed work values
that showed respect for work and pride in accomplish-
ment. One would expect that these values would become
more evident with increasing career maturity. The
research, therefore, focused on the following question.

1. Were there differences in the work values
expressed by Grade 3's and Grade 6's?

Children in both grades expressed an attitude that showed respect for work and pride in accomplishment. For example, a majority of students in both grades stated that all jobs are important, that work is interesting, and that they look forward to going to work. There were no significant differences between the Grade 3's and Grade 6's with respect to these values.

The Grade 6's indicated a more autonomous attitude with respect to choosing an occupation. For example, 44.7 percent of the Grade 3's indicated that their parents were the best one to choose a job for them whereas only 30.4 percent of the Grade 6's believed this to be true. Also, 60.5 percent of the Grade 3's believed that finding a good job is a matter of luck, compared 16.5 percent of the Grade 6's. In addition, 84.9 percent of the Grade 3's believed that work is like going to school, whereas only 68.9 percent of the Grade 6's expressed this attitude.

The children in Grade 3 are moving through the elements of fantasy which is characteristic of the growth and learning stage, where identification with key figures in the family is dominant. A child's parents to a Grade 3 child would seem a predictable source of influence in choosing an occupation for them. Also, their occupa-

Table 13

Crosstabulation of Work Values by Grade

| Category | Grade 3 | | | | Grade 6 | | | |
| | True | | False | | True | | False | |
	No.	%	No.	%	No.	%	No.	%
I don't look forward to going to work.	12	14.0	74	86.0	10	9.7	93	90.3
*All jobs are important.	79	91.9	7	8.1	90	88.2	12	11.8
You can do any kind of work you want as long as you try hard.	75	87.2	11	12.8	89	86.4	14	13.6
*Your parents know better than anyone else what kind of work you should do.	38	44.7	47	55.3	31	30.4	71	69.6
Work is boring.	7	8.1	79	91.9	16	15.5	87	84.5
*Work is like going to school.	73	84.9	13	15.1	71	68.9	32	31.1

(table continues)

Category	Grade 3				Grade 6			
	True		False		True		False	
	No.	%	No.	%	No.	%	No.	%
There is only one occupation for each person.	17	19.8	69	80.2	17	16.5	86	83.5
*If you get a good job it is because you are lucky.	52	60.5	34	39.5	17	16.5	86	83.5

*Chi-square significant at the .01 level

tional knowledge, as demonstrated in previous research findings, is not as extensive as that of children in Grade 6, so their perception of work would be much like their perception of school. A child in Grade 6 is at the career development stage, where developing an identity of one's own becomes the primary focus, as well as developing an orientation to the world of work. Therefore, autonomy and independence from one's parents is more prominent.

A large majority of students in both grades (87.2 percent of Grade 3's and 86.4 percent of Grade 6's) believed that you can do any kind of work you want to as

long as you try hard. This finding was not surprising
since the research finding on occupational knowledge
indicated that the students do not possess a large degree
of knowledge on the educational and training requirements
of specific occupations. Simmons (1962) discovered that
elementary school children in his study were very much
aware of occupational prestige. Therefore, children in
the elementary grades would possibly fantasize about
doing any kind of work they desired.

When asked to rate aspects of occupational life that
would be important to them, 64 percent of Grade 3's
expressed materialistic types of values, compared to 33
percent of the Grade 6's. The Grade 6's were much more
altruistic in their values. The Grade 3's tended to
value things like making a lot of money, owning their own
business, and being someone important. The Grade 6's
tended to value things like having plenty of spare time,
making close friends, and being outdoors a lot. This
finding suggests that the valuing process does exist in
the elementary grades and one could speculate that these
values enter into adult career behaviour. The explor-
ation of values by elementary school age children may be
a useful way of initiating an analysis of the world of
work, and therefore lead to increasing career maturity.

The chi-square indicated a significant level of association between grade and work values, but the number of cells with an expected frequency of less than 5 was higher than 20 percent. Therefore, caution is advised in interpreting this finding.

Table 14

Crosstabulation of Work Values by Grade

*Attitude	Grade 3[a] No.	%	Grade 6[b] No.	%
Altruistic	31	36.0	69	67.0
Materialistic	55	64.0	34	33.0

a_n = 86. b_n = 103.

*Chi-square significant at the .01 level

Sex-Role Stereotyping

Children in the elementary grades are at an impressionable stage, in the sense that attitudes and perceptions about life are formative and are readily influenced by the environmental circumstances in which they find

themselves. Therefore, children who are exposed to unnecessary sex-typing of occupations or restricted views on the occupational possibilities for males and females, do not have an unbiased foundation on which to make vocational preferences. The possession of non-stereotypical attitudes regarding career choices becomes an essential element of career maturity. Therefore, the following question becomes the focus of the research:

1. Were there differences in the attitudes of Grade 3's and Grade 6's regarding the sex-role stereotyping of selected occupations?

A majority of students in both grades felt that both boys and girls could aspire to fourteen of the nineteen selected occupations. This would seem to indicate that children in this sample could not really be described as possessing stereotypical attitudes. However, some occupations were classified stereotypically by both grades. A majority of students in both grades, for example, still indicated that only girls should become secretaries and nurses, and only boys should choose religious professions. The investigator sees evidence of stereotyping among school children, despite the growing public awareness of equality between the sexes. The exploration of

non-stereotypical attitudes should therefore be consid-
ered a priority in our school system. Also, professions
like nursing and secretarial work are still mostly
female-dominated, and these are the types of role models
to which children in schools are exposed. An exploration
of career role models will further demonstrate the type
of role models to which the children in this sample were
exposed.

Career Role Models

Children's career development and their later career
preferences, as has been demonstrated in the literature
review, is heavily influenced by the types of occupa-
tional role models to which they are exposed. Specific-
ally, this research tried to determine how varied the
role models of the children in the study were, and what
were the sources of these role models. The following
questions become the focus of analysis.

1. Were there differences in the career role models
of Grade 3's and Grade 6's?

A majority of students in both grades were familiar

Table 15

Crosstabulation of Sex Role Stereotyping by Grade

Occupation	Grade 3						Grade 6					
	Boys		Girls		Both		Boys		Girls		Both	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Astronaut	25	31.6	0	0.0	54	68.4	20	19.8	0	0.0	81	80.2
*Doctor	30	37.5	1	1.3	49	61.3	24	23.3	0	0.0	79	76.7
Store Owner	2	2.5	4	5.0	74	92.5	0	0.0	4	3.9	98	96.1
Secretary	0	0.0	63	79.7	16	20.3	1	1.0	76	73.8	26	25.2
Nurse	2	2.5	61	75.3	18	22.2	0	0.0	68	67.3	33	32.7
*Bank Manager	25	30.9	2	2.5	54	66.7	12	11.7	1	1.0	90	87.4
*Teacher (Elementary School)	5	6.2	11	13.6	65	80.2	0	0.0	6	5.8	96	94.1
*High School Principal	37	46.8	2	2.5	40	50.6	24	23.3	0	0.0	79	76.7
Salesperson	16	19.3	4	4.8	63	75.9	20	19.4	4	3.9	79	76.7
Police Officer	16	19.3	0	0.0	67	80.7	11	10.8	0	0.0	91	89.2
Librarian	3	3.8	23	28.8	54	67.5	3	2.9	37	36.3	62	60.8
*Forest Ranger	57	70.4	3	3.7	21	25.9	68	66.0	0	0.0	35	34.0
Dancer	2	2.5	27	33.3	52	75.9	2	1.9	23	22.3	78	75.7
Dentist	34	41.0	1	1.2	48	57.8	28	27.5	2	2.0	72	70.6
Teacher (High School)	7	8.8	3	3.6	70	87.5	10	9.8	1	1.0	91	89.2
*Model	6	7.3	37	45.1	39	47.6	2	1.9	53	51.5	46	46.6
Grocery Clerk	8	9.9	9	11.1	64	79.0	11	10.7	11	10.7	81	78.6
*Social Worker	12	14.6	5	1.1	65	79.3	6	5.9	12	11.8	84	82.4
Minister/Rabbi/Priest	57	69.5	1	1.2	24	29.3	72	69.9	1	1.0	30	29.1

*Chi-square significant to the .01 level.

with eight of the ten occupations chosen to be represent-
ative of career role models. They were not familiar with
a computer programmer or a social worker. This is not
necessarily a surprising finding, since computer tech-
nology has not yet had a big impact in Newfoundland and
the elementary schools in the province have very little
access to computers. A social worker is still often
referred to in small Newfoundland communities as the
"welfare officer". Also, because of the type of work in
which social workers are involved, they interact with a
certain population of people; those in need of social
services.

The degree of familiarity that children have with
various occupations is the best way of determining
whether they do indeed have exposure to real life career
role models. It would appear from an analysis of the
previous research question that children in both grades
are not lacking in exposure to career role models. How-
ever, an analysis of the source of these career role
models was more revealing. The analysis of the following
research question highlighted the importance of the
source of a child's career role models as a clue to their
career maturity.

2. Were there differences in the sources of the career role models of Grade 3's and Grade 6's?

Children in both grades had personal contact with people in occupations that were typically local, such as farmer, fisherman, and mechanic. Occupations of higher status such as an architect, computer programmer, and newspaper reporter, the children were aware of through media influence or books. This finding supports Rich's (1979) study which states that children are mostly knowledgeable about occupations in their own community, and are therefore likely to aspire to low status, low paying occupations typical of rural areas. If a child's career role models are mostly available through books and media (which was mostly television in this study), one would have to question how "real" these role models are. Television has a way of glamourizing various occupations and the role models presented in children's textbooks still tend to be traditional and stereotypical. The most common source of career role models for the Grade 3's was the media whereas the most common source for Grade 6's was personal contact. The Grade 6's would probably have had more exposure to various role models because of their greater age and maturity, and also because of career days held in school which are an important component of the

elementary curriculum as opposed to the primary curriculum.

Table 16

Crosstabulation of Career Role Models by Grade

| | Grade 3[a] | | | | Grade 6[b] | | | |
| | Familiar | | Unfamiliar | | Familiar | | Unfamiliar | |
Occupation	No.	%	No.	%	No.	%	No.	%
Computer Programmer	32	37.2	54	62.8	38	36.9	65	63.1
*Fisherman	72	83.7	14	16.3	88	85.4	15	14.6
Social Worker	21	24.4	65	75.6	45	43.7	58	56.3
*Plumber	49	57.0	37	43.0	44	42.7	59	57.3
Artist	50	58.1	36	41.9	59	57.3	44	42.7
Farmer	58	67.4	28	32.6	58	56.3	45	43.7
Cashier	32	37.2	54	62.8	73	70.9	30	29.1
*Newspaper Reporter	48	55.8	38	44.2	48	46.6	55	53.4
*Auto Mechanic	54	62.8	32	37.2	62	60.2	41	39.8
Architect	23	26.7	63	73.3	33	32.0	70	68.0

$a_n = 86.$ $b_n = 103.$

*Chi-square significant at the .01 level

Table 17

Crosstabulation of Source of Career Role Models by Grade

Source of Career Role Model	Architect			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	10	45.5	9	27.3
Books	8	36.4	13	39.4
Relatives	3	13.6	1	3.0
Personal Contact	1	4.5	9	27.3
Other	0	0.0	1	3.0

$a_n = 22.$ $b_n = 33.$

Table 18

Crosstabulation of Source of Career Role Models by Grade

Source of Career Role Model	Computer Programmer			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	12	37.5	11	28.9
Books	3	9.4	2	5.3
Relatives	9	28.1	10	26.3
Personal Contact	8	25.0	15	39.5
Other	0	0.0	0	0.0

$a_n = 32.$ $b_n = 38.$

Table 19

Crosstabulation of Source of Career Role Models by Grade

*Source of Career Role Model	Fisherman			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	15	20.8	6	6.8
Books	3	4.2	1	1.1
Relatives	40	55.5	30	34.1
Personal Contact	13	18.1	50	56.9
Other	1	1.4	1	1.1

a_n = 72. b_n = 88.

*Chi-square significant at the .01 level

Table 20

Crosstabulation of Source of Career Role Models by Grade

*Source of Career Role Model	Social Worker			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	15	71.4	12	26.0
Books	1	4.8	9	20.0
Relatives	4	19.0	4	8.9
Personal Contact	1	4.8	20	44.4
Other	0	0.0	0	0.0

a_n = 21. b_n = 45.

*Chi-square significant at the .01 level

Table 21

Crosstabulation of Source of Career Role Models by Grade

*Source of Career Role Model	Plumber			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	35	71.4	17	38.6
Books	4	9.2	6	13.6
Relatives	3	6.1	6	13.6
Personal Contact	7	14.3	14	31.8
Other	0	0.0	1	2.3

$a_n = 49$. $b_n = 44$.

*Chi-square significant at the .01 level

Table 22

Crosstabulation of Source of Career Role Models by Grade

*Source of Career Role Model	Artist			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	25	50.0	14	23.7
Books	7	14.0	11	8.6
Relatives	10	20.0	8	13.6
Personal Contact	8	16.0	26	44.1
Other	0	0.0	0	0.0

$a_n = 50$. $b_n = 59$.

*Chi-square significant at the .01 level

Table 23

Crosstabulation of Source of Career Role Models by Grade

*Source of Career Role Model	Farmer			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	13	22.8	11	19.0
Books	9	15.8	6	10.3
Relatives	11	19.3	13	22.4
Personal Contact	24	42.1	28	48.3
Other	0	0.0	0	0.0

$a_n = 57.$ $b_n = 58.$

Table 24

Crosstabulation of Source of Career Role Models by Grade

*Source of Career Role Model	Cashier			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	10	31.2	4	5.5
Books	0	0.0	1	1.4
Relatives	4	12.5	17	23.3
Personal Contact	18	56.2	51	69.9
Other	0	0.0	0	0.0

$a_n = 32.$ $b_n = 73.$

*Chi-square significant at the .01 level

Table 25.

Crosstabulation of Source of Career Role Models by Grade

Source of Career Role Model	Newspaper Reporter			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	26	54.2	29	60.4
Books	5	10.4	3	6.3
Relatives	5	10.4	2	4.2
Personal Contact	12	25.0	13	27.0
Other	0	0.0	1	2.1

$a_n = 48.$ $b_n = 48.$

Table 26

Crosstabulation of Source of Career Role Models by Grade

Source of Career Role Model	Auto Mechanic			
	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Media Influence	8	15.1	11	17.7
Books	2	3.8	2	3.2
Relatives	9	17.0	13	21.0
Personal Contact	34	64.2	36	58.1
Other	0	0.0	0	0.0

$a_n = 53.$ $b_n = 62.$

Decision-Making

Choosing a career can be viewed as a decision one makes after having considered a number of alternatives. The ability to consider alternatives and decide upon a viable outcome is considered an important element of career maturity. The research question on the issue of decision-making, attempted to determine the degree of autonomy children in the primary and elementary grades experience in making decisions regarding their day-to-day lives. The research focused on answering the following question.

1. Were there differences in the degree of autonomy exercised by children in Grade 3 and Grade 6 in making decisions regarding their day-to-day lives?

The children in Grade 6 indicated that they were the ones who made decisions regarding what clothes to wear and what they would have for breakfast. The children in Grade 3 also indicated that they make these kinds of decisions for themselves but the percentages doing so were not as high as that for Grade 6's. For example, only 63.5 percent of the Grade 3's indicated that they are responsible for choosing their own clothes, compared to 92.2 percent of children in Grade 6.

Table 27

Crosstabulation of Decision-Making by Grade

Chooses Breakfast For Me	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Mother	15	18.1	15	15.6
Father	2	2.4	2	2.1
Self	66	79.5	79	82.3

$a_n = 83.$ $b_n = 96.$

Table 28

Crosstabulation of Decision-Making by Grade

Choosing One's Clothes	Grade 3[a]		Grade 6[b]	
	No.	%	No.	%
Mother	30	35.3	7	6.8
Father	1	1.2	1	1.0
Self	54	63.5	95	92.2

$a_n = 85.$ $b_n = 103.$

The extent to which children make their own dec-
isions is considered an important aspect of their overall
career development by career theorists. The investigator
speculates that if children are given the opportunity to
make their own decisions, even at the most fundamental
level, they will learn the process of decision-making; of
choosing from a number of viable alternatives. However,
the results of this research suggest that young children
may not be familiar with the process of decision-making
and that experiences at home and in school could provide
this familiarity. This study did not determine the
extent to which decision-making is taught in school. It
is the writer's speculation, however, that this is not a
priority of the curriculum in the primary and elementary
grades.

Summary

There existed some clear developmental differences
between Grade 3's and Grade 6's on the eight aspects of
career maturity, as identified for this age group. The
attainment of career maturity is a goal which is far too
global to be useful as a means of aiding the career

development of young children in the primary and element-
ary grades. Therefore, the concept of career maturity
was broken down into eight elements which, according to
current literature, are the rudiments of career develop-
ment in the earlier stages of one's life; particularly
the Growth Stage identified by Donald Super (1957). An
inherent aspect of the concept of career maturity is that
its attainment can be placed along a developmental line
from birth to death. However, like any developmental
process, individuals will differ in their readiness for
the various elements of career maturity. The develop-
mental differences which exist between children of
primary school age and upper elementary school age,
should show how the career development process progresses
along the developmental line. If this process can be
enhanced through planned sequential experiences, and this
particular hypothesis still needs testing, then the
degree of readiness for the two different age groups
would have to be taken into account before planning such
experiences. Therefore, it becomes important to deter-
mine the developmental differences which exist between
children in Grade 3 and those in Grade 6.

The overall profile which emerges from an examin-
ation of how children in Grade 3 and Grade 6 respond to

the various elements of career maturity, seems to imply
that they have some well developed attitudes regarding
occupational life, education and training, and their own
self-concepts. They are starting to formulate values
related to work and are engaging in preadolescent career
behaviour.

Children in both grades are aspiring to middle
income occupations of relatively high status, and they
are expressing an interest in completing high school and
going on to post-secondary education. However, children
at the Grade 3 level do not really see a link between
going to school and later finding a job. They also
possess idealistic views on why they should go to
university. These views are not job-related. In
addition, the younger children in the study did not
possess occupational knowledge which allowed them to
determine the level of education required for various
types of jobs and what type of tasks are involved in
performing various types of jobs. The children in Grade
6 however, possessed occupational knowledge which allowed
them to establish a link between schooling and finding a
job. They also possessed knowledge on the educational
requirements of various occupations and the monetary
returns one can expect from performing various types of

jobs.

Children in both grades had difficulty with expressing personal strengths and weaknesses, even though they seemed to have an overall positive view of themselves. They tended to express strengths and weaknesses that pointed to successes and failures in performing recreational or sports-like activities, rather than successes or failures in their school life or at their home life.

The work values of children in both grades were similar in the sense that they both believed in the inherent value of work, but children in Grade 3 expressed much more materialistic reasons for working than the children in Grade 6.

Children in both grades had familiarity with typically local occupations, such as farmer, fisherman, and mechanic. However, the children had very little personal contact with people in various occupational fields. Most of their career role models came from television.

The analysis of stereotypical attitudes among children in both grades revealed that they still regard occupations such as nurse or secretary as being primarily the work of females. However, they indicated that both males and females could aspire to most of the other

occupations presented to them. This indicates that the children in this sample were not predominantly influenced by stereotypical attitudes that would limit their ability to make career choices.

It was determined that children in Grade 6 were given more opportunities to make decisions for themselves than children in Grade 3. However, it could not be generalized from this finding that either group of children were given opportunities to make their own decisions in school or were actually taught the process of decision-making.

The existence of these developmental differences between children of two different age groups, and its relationship to the attainment of career maturity, provide a framework for a continuum of experiences, to which children must be exposed if their career development is to proceed in a systematic and organized fashion. This framework of experiences is the basis for recommendations which will enhance a child's career development, and is the focus of the following chapter.

CHAPTER V

Conclusions, Implications, and Recommendations

Introduction

The purpose of this study was to determine the
nature of the career development of elementary school
children in Newfoundland. The children in the study were
assessed in terms of their status on what constitutes
career maturity for this age group. An examination of
the developmental differences between children in Grade 3
and children in Grade 6 were the main focus for the
research questions.

The foundation for the research questions lies in
the hypothesis that career development follows a develop-
mental line from birth to death, and therefore progresses
through stages much the same as a person's social or
moral development. Children in Grade 3 and Grade 6 are,
according to Super (1957, as cited in Herr & Cramer,
1988), at the "Growth Stage" of career development. An
examination of current literature indicates that career
maturity for this age group can be classified according
to their status on the following eight areas: (a) Self-
Understanding and Career Aspirations; (b) Link Between
School and Work; (c) Occupational Knowledge; (d) Self-

Understanding and Self-Worth; (e) Work Values; (f) Sex-Role Stereotyping; (g) Career Role Models; and (h) Decision-Making Ability. These eight areas were the focus for eight research questions which investigated the developmental differences between children in Grade 3 and Grade 6 on areas which are considered an important part of career maturity. The interpretation of these developmental differences are the focus of this chapter.

Self-Understanding and Career Aspirations

The largest percentage of children from both grades aspired to occupations in the middle income levels. Sixty percent of children in Grade 3 aspired to this income level as well as 51 percent of children in Grade 6. This is an interesting finding considering that children in rural areas have few occupational role models that are of the high income and high status type. Occupations in the rural parts of Newfoundland are typically low status and are usually at a low income level. The children's aspirations are therefore, well beyond the types of occupations to which they have been exposed. However, it is important to keep in mind, that one of the most common sources of career role models for children in this sample was television. The higher

status occupations to which they are aspiring are therefore probably like the ones they see on television and may not conform to the reality of the occupational role. Also, parents often encourage their children to "do better" than they did, so this may also account for their children's aspirations. Wiseman (1983) found that school personnel are key figures in exposing children to occupational role models. He found that when students discussed their career plans with teachers and counsellors, their career choices became less traditional. The implication arising from this finding is that school personnel can be instrumental in making children aware of various career options and in exposing them to real life occupational role models.

Students in both grades felt, by a large majority, they would complete high school and attend university. However, the reasons given by children in Grade 3 were quite different than the reasons given by children in Grade 6 and are worthy of note. The Grade 6's were more practical in saying that to get a job was the reason for completing high school and university. This is consistent with the stages of career development by identified Super (1957, as cited in Herr & Cramer, 1988). The children in Grade 6 are at the upper limit of the "Growth

Stage" of career development where interest, capacity, and ability determine career goals. In contrast, the Grade 3's are at the lower limit of the "Growth Stage" where needs and fantasy dominate in terms of career goals and aspirations. The children in Grade 3 indicated that they would complete high school and university because they were "smart enough" and were "doing well in school". The children in Grade 3, having been in school for a shorter period than the children in Grade 6, probably have a more positive attitude toward their ability because they have had fewer opportunities to experience failure than the children in Grade 6. The primary curriculum is geared toward providing positive learning experiences for children and for providing more opportunities for the children to experience success. However, once a child leaves the primary grades and moves into the upper elementary grades, school becomes more achievement-oriented with an emphasis on competencies. A child's attitude toward his/her ability is therefore more influenced by his/her marks in school at the Grade 6 level than at the Grade 3 level. Chapman, Cullen, Boersma, and McGuire (1981) found that failure in school could contribute to negative self-perceptions and expect-ations, which in turn could result in reduced confidence

and motivation. If a child has experienced failure in school, then he/she is less likely to express positive feelings about their abilities.

Link Between School and Work

It is not surprising that the Grade 3's were not able to establish a link between going to school and eventually choosing a career. Children in Grade 3 would appear to have had far less exposure to the occupational world than did the children in Grade 6, primarily because they are younger. Also, the opportunities for occupational exploration in the school curriculum are often limited to a few local occupations - for example, fireman, doctor, nurse, and postman. These occupations are typically explored because they are the "helpers" in a child's community. The concepts of helpers and neighbors form a large part of the primary social studies curriculum. A child in Grade 6 who also does not have much of an opportunity to explore the occupational world through school curriculum, is, nevertheless, more mature developmentally, and consequently, more able to make a logical link between going to school and eventually finding a job.

While this study found that the younger children

were unable to establish a link between school and work, Henjum et al. (1987) identified the possession of inform- ation that links school subjects and school experiences with future life career choices, as one of the main career developmental needs of elementary school age children. This type of knowledge would therefore be an essential component of an elementary school guidance program.

Occupational Knowledge

The writer found that children in Grade 6 possessed a broader range of occupational knowledge, than did children in Grade 3, principally because of their greater age and maturity, and exposure to the occupational world. The children in Grade 6, for example, were much better able to assess the monetary gain and the educa- tional requirements of selected occupations. It must be remembered, however, that children in Grade 3 have really only been learning about the concept of money for a short period of time, and it has already been shown that they cannot establish a link between going to school and choosing a job. They were therefore not in a good position to determine how much education is required to be involved in a certain occupational area.

Staley and Mangiesi (1984) found that children at a relatively young age acquire impressions of the work people do, the kinds of people employed, the compensations offered, and the abilities required for acceptable performance. On the basis of this information, they think of some of these occupations as possible careers for themselves, and remove others from consideration. The children in Grade 3 in this study, did not possess the broad range of occupational information that Staley and Mangiesi found among young children in their study. They are therefore, making tentative career choices on the basis of inadequate occupational information. It becomes important, then, to explore occupational knowledge with young children and to provide accurate and current occupational information.

Self-Understanding and Self-Worth

Many of the major career theorists view a person's self-concept as an integral part of their career development. The children in this study are still in the formative stages of their self-concept, so the writer examined only one aspect of this self-concept; self-understanding. Self-understanding was investigated through the child's expressed strengths and weaknesses,

and the expression of positive or negative feelings
toward self.

An interesting finding resulting from the analysis
of the research questions pertaining to self-under-
standing, was that children in Grade 3 rated themselves
more highly on their ability to complete school work than
the children in Grade 6. Apart from this finding,
children in both grades indicated a general feeling of
positive self-worth. The children in Grade 6 are, again,
at the age where they have had more of an opportunity to
experience successes or failures in school, having been
in school for a longer period of time. The Grade 6's,
because of their developmental age, are probably much
better able to determine whether they have ability in
certain school subjects - ability which has already been
influenced by the types of successes or failures they
have experienced in school. The Grade 3 children's
experiences in school are probably more positive, since
they are still in the primary grades where play is still
an integral part of the school curriculum. It would be
interesting to ask the same questions to those Grade 3's
when they reach Grade 6 to see whether their perceived
competence in doing school work has changed.

It is interesting that students in both grades

tended to identify their strengths to be in areas other than academic. When asked what they were good at, students tended to name sports or some other recreational activity. Students also identified their weaknesses in this category. This may be because children in this age range may not yet make a connection between how well they do in school and what happens to them in their adult life. Children at this age also have limited methods of evaluating their own abilities. This is still a process that most adults find difficult to do. Therefore, the children may not have stated that they have strengths and weaknesses in the academic field simply because they are conceptually limited in their ability to do this, and not because they experience more successes or failures in school as opposed to other typical daily activities.

Marsh (1985) found that very young children are egocentric and have highly differentiated self-concepts; these self-concepts may be unrealistic and independent of external criteria. As children grow older their self-concepts tend to be more closely aligned with external criteria. The implication is that as children receive more information about their skills and abilities, their self-concepts and feelings of self-worth will change. This may account for the negative feelings experienced by

children in Grade 6 regarding the completion of school related work. Failures related to school work may be one of the external criteria incorporated into their self-concepts.

Work Values

Consistent with the research which states that values related to work begin to form in childhood, and that these values enter into preadolescent vocational behaviour, students in the study had very definite ideas on the value of work. While a majority of students in both grades stated values that reflected respect for work and pride in accomplishment, there were some noteworthy differences between the two grades on other values. The Grade 3's were more likely to see the responsibility for selecting what work they will do for a living as belonging to someone other than themselves – namely their parents. One would assume that this is because parents tend to allow their older children more autonomy in choosing things or making decisions for themselves than their younger children. Also, according to Miller (1977, as cited Herr & Cramar, 1988), eight and nine year olds probably do not perceive themselves as being responsible for their own behaviour. This may be because

they are not given the opportunities to engage in
responsible behaviour or to act as decision-makers.

The expression of materialistic values of Grade 3's
and altruistic values by children in Grade 6 may reflect
the more egocentric nature of the younger child. The
notions of sharing and helping others have probably not
yet been internalized by this age group, and as Ginzberg
et al. (1951, as cited in Herr & Cramer, 1988) pointed
out, younger children,tend to focus on activities which
are intrinsically satisfying to them.

Sex-Role Stereotyping

Children in both grades can generally be described
as non-stereotypical. They had indicated that both males
and females could aspire to a majority of the occupations
which were presented to them for consideration. This
finding is consistent with the Women's Bureau of Labour
Canada's (1986) finding that high percentages of both
boys and girls believed that when they become adults,
both men and women would be engaged in many of the same
types of occupations. However, the Women's Bureau (1986)
study and this study both concluded that both boys and
girls still consider occupations such as nurse, and
secretary as traditionally feminine occupations. Inter-

estingly, the children did not consider traditionally
masculine occupations such as dentistry and medicine as
being the type of work only men can do. Therefore, part-
icipation of women in traditionally masculine occupations
had a higher level of expectancy than the participation
of men in traditionally feminine occupations such as
secretarial work and nursing. This is not surprising
since, in recent years, there has been a fair bit of
literature published on the importance of preparing girls
for careers in mathematics and science. School boards
and school personnel are probably more cognizant of the
equality of the sexes and the importance of having school
curriculum that is not stereotypical in content.

A higher percentage of children in Grade 3 indicated
that women should do the work of a nurse or secretary and
men the work of a forest ranger or a religious. This was
expected since most parents and teachers probably do not
consider this an appropriate age to discuss sex role
stereotyping. However, sex role stereotyping begins even
at an earlier stage than this, and therefore an effort by
educators is required to eradicate attitudes which do not
give children a broadened base from which to make career
choices in later adult life. Knell and Winer (1979)
found, for example, that as early as 3 to 5.7 years boys

perceptions are more stereotyped than girls, and girls' perceptions of stereotypes are more readily influenced by reading stories that present stereotypical models. However, they also found that well-established stereotypes are not counteracted by reading material. The implication arising from this finding is that reading material has a great effect on young children, and the elimination of sex role stereotyping in school curriculum is necessary.

Miller (1986) has suggested that career education in the elementary grades should counteract the effects of occupational information based on social class inappropriateness or sexual stereotyping. Thus career education at the elementary school level should include exposure to non-traditional career role models and other activities that offset the rejection of occupations based on unnecessary sex-typing.

Career Role Models

The children in both grades were familiar with a variety of local and non-local occupations. However, the most common source through which children were familiar with many occupations was television. The children in the study had very few personal contacts with the occupa-

tions listed. Television, as a medium, can be a powerful source of information and intellectual stimulation. On the other hand, careers which are portrayed on television do not always conform to the reality of that occupation. The occupations are often portrayed as more glamorous than they really are, and are often portrayed in a stereotypical fashion. Television watching is becoming an ever increasing recreational pursuit of young children. If this pursuit is not guided and if school textbooks are also portraying a world of work that does not conform to reality, then children do not have access to occupational role models which could help them make future career choices. Since children enjoy television and videos, they could be used as tools to foster accurate and complete information on various occupations. A school could infuse its social studies curriculum, for example, with films and videos that provide children with a variety of career role models. Wiseman (1983) emphasized the importance of school personnel in influencing students career choices. An effort by school personnel to provide young children with a variety of occupational role models may have a positive effect on their future career choices.

Shave (1984) and Darcy (1987) discussed the import-

ance of family members on their children's career choices. McKay and Miller (1982) found that elementary school children's levels of aspirations in occupations is related to the socioeconomic index of their parents' occupations. Parents can contribute to the career guidance of their children by encouraging them to explore a wide variety of educational and occupational alternatives and providing information on a variety of career role models. This may prevent some children from aspiring to the low paying and low status occupations of their parents.

Decision-Making

In most career guidance programs at the senior high school level, helping students acquire decision-making skills is a major objective. The promotion of decision-making behaviour among students can be viewed as a developmental process, starting in the formative years when young children make decisions regarding their day-to-day life. Therefore, the acquisition of decision-making skills need not be delayed until the senior high school years. The importance of the decision process has become a central construct in career guidance and counselling, and a major focus of career theory and

research. Herr and Cramer (1988) present making a career choice as a decision-making process that occurs over a lifetime.

A person can acquire skills in evaluating various alternatives and the influences on these alternatives before making a choice. The investigator found that it was very difficult to evaluate whether a young child possessed decision-making ability. It could be determined that the older children in Grade 6 were given more autonomy in making decisions regarding their day-to-day lives than the younger Grade 3 children. This was expected since parents are more likely to allow their older children, who are supposedly more mature, greater responsibility in making their own decisions. However, the investigator could not determine whether the children in the study were given a formal or informal training in the decision-making process. A more sophisticated method of assessing a child's decision-making ability is required.

Summary

The primary focus of this study was to identify the

developmental differences with respect to vocational development, which exist between children of primary school age and those in the upper elementary grades. The components essential to career maturity for this age group were identified, and the two different age groups were compared on the extent to which they had attained these components. The underlying premise was that career development is a developmental process and therefore different age groups will differ in their rate and progress towards career maturity. The way in which children in Grade 3 and Grade 6 differed in their career development was the main focus of this study.

The investigator found that there were some clear differences in the career development of children in Grade 3 and children in Grade 6. These developmental differences pointed to increasing career maturity as children approached the upper elementary school years. The older children in the study were better able to identify the link between school and work; they possessed accurate occupational knowledge; they were able to predict the benefits of a post-secondary education; they possessed more autonomy in making decisions regarding their daily lives; they possessed work values which reflected a good balance between altruistic and material-

ist values; and they had personal contact with a wider variety of career role models. However, children in Grade 3 and children in Grade 6 had very definite career aspirations. Both groups of children had aspirations in the middle income levels and indicated that a post-secondary education was important to them. Also, children in both grades rated themselves positively with respect to their self-concept and were able to identify personal strengths and weaknesses. Both groups of children expressed work values that showed pride in accomplishment but children in Grade 3 more frequently indicated that work was like going to school and finding a job was more often a matter of luck. The two groups of children were similar in the sense that they believed that as adults they could enter into a wide variety of occupations. However, both groups also believed that occupations such as nurse and secretary are still the work of females.

Finally, the investigator was not able to determine whether either group of children possessed decision-making ability, but that the children in Grade 6 appeared to be given more autonomy in making their own decisions than children in Grade 3.

Comparatively little has been written about the

career development of young children, and even less so
about the means by which career development progresses.
There does not seem to be any clear delineation of what
knowledge, attitudes, or behaviours one must posses
before career maturity is attained at any given age
level. For instance, career maturity at age 10 will not
be the same as career maturity at age 16 or 25. There-
fore, the eight elements which were identified as the
components of career maturity for this age group were
based on what current literature and research identified
as the career development needs of young children.

Recommendations for Programming Arising From
the Findings of This Study

1. Efforts be made to make teachers and other
educators aware that career choices and commitments of
adults are directly affected by developmental experiences
in childhood, and the early school years are therefore a
logical starting point for career guidance activities.

2. Efforts be made to change or eliminate materials
and texts used in elementary schools which portray the
world of work inaccurately or foster unnecessary sex-

typing of occupations or restricted views of educational or occupational possibilities.

3. Educators in elementary schools provide opportunities for young children to have exposure to a wide variety of "real life" career role models to foster accurate perceptions of various occupations.

4. Educators in elementary schools provide situations so that children can experience decision-making and carry responsibility for the consequences of their decisions.

5. Educators in elementary schools encourage and assist young children to analyze their interests, capabilities, and limitations and to relate these to tentative career choices.

6. Educators in elementary schools help children recognize the relationship between academic skills - reading, writing arithmetic computation, and preparation for the occupational world.

7. Educators in elementary schools help children express and explore their strengths, weaknesses, and values, and therefore provide a foundation for future educational and occupational choices.

8. Effort be made to devise a systematic and sequential career guidance program at the elementary

school level which can be continued at the junior high and senior high school levels.

Recommendations for Future Research Arising
From the Findings of This Study

1. In order to foster vocational maturity in young children, it is essential that research be undertaken to define what knowledge, attitudes, or behaviours differentiate among children at different age levels and at supposedly various levels of career maturity.

2. Research be undertaken to determine what the developmental emphasis of career guidance in the elementary school should be.

3. Research be undertaken to test the relative efficacy of various career education activities in the promotion or facilitation of career development.

4. Research be undertaken to devise ways of collecting career information that is pertinent to the career development of young children that is less descriptive and more quantifiable.

5. Research be undertaken to determine the effects of tentative career choice and goal setting among pre-

adolescent youth on later adult career choices and commitments.

6. In future, longitudinal studies of career development should include aspects of childhood so that the developmental nature of career maturity is more clearly delineated.

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APPENDIX A

·Career Maturity Survey

1. Student Number: _____

2. Grade: _____

3. Age: _____

4. Boy: _____   Girl: _____

5. Mother's Job: _____

6. Father's Job: _____

7. How many children are in your family? _____

8. Does your mother live with you? _____

9. Does your father live with you? _____

10. (a) What do you want to be when you grow up?

_____

_____

(b) Where did you get this idea?

_____

_____

11. Why do we need to go to school to learn things?

_____

_____

12. (a) Do you think you will finish high school?

       YES   NO

     (go to Part B)   (go to Part C)

(b) If yes, why? _____

_____

_____

(c) If no, why not? _____

_____

_____

13. (a) Do you think you will go to university?

       YES   NO

     (go to Part B)   (go to Part C)

(b) If yes, why?_____

_____

_____

(c) If no, why not? _____

_____

_____

14. Match each job with the sentence that describes it by putting the letter by the job in the blank by the correct sentence.

(a) air traffic   _____ cares for patients in hospitals, nursing

(b) accountant   homes, and doctors' offices.

(c) lawyer   _____ helps people to manage their money.

(d) nurse   _____ sells drugs that were prescribed by a doctor.

(e) architect   _____ tells airplane pilots when to take off and

(f) pharmacist   land.

                _____ designs buildings and homes.

                _____ works in a courtroom on law and order matters.

15. For which of these occupations would you have to go to school the longest?

       Lawyer   Secretary   Teacher

16. In which of these occupations do you think you would earn the most money?

       Dentist   Police Officer   Librarian

17. (a) Many jobs are involved with helping people with their problems from home and school. Name one of these jobs.

       _____

(b) Name one job that involves danger or adventure.

_____

(c) Name one job that involves working outdoors.

_____

18. When I grow up I would like to have a job which
    would allow me to: (Check the **3** things which are
    most important to you.)

    _____ have some spare time.

    _____ make a lot of money.

    _____ own my own business.

    _____ make close friends.

    _____ be someone important.

    _____ be outdoors a lot.

19. Different things are important to different people.
    Check the **4** things which are most important to you.

    _____ to share

    _____ to be easy to get along with

    _____ to be honest

    _____ to make my own decisions

    _____ to be kind to others

    _____ to get the things I enjoy most

    _____ to be happy

    _____ to be accepted

20. Read each of the sentences below and decide whether they are true or false for you.

    (a) I guess everybody has to go to work but I don't look forward to going to work. _____

    (b) All jobs are important. _____

    (c) You can do any kind of work you want to as long as you try hard. _____

    (d) Your parents probably know better than anyone else which job you should enter. _____

    (e) Work is boring. _____

    (f) Work is much like going to school. _____

    (g) There is only one occupation for each person. _____

    (h) If you get a good job it is because you are lucky. _____

21. Below is a list of jobs which many people do. Look at each job and if you know a person who works at this job, put a check mark by it.

_____ Architect   From where?_____

_____ Computer Programmer   From where?_____

_____ Fisherman   From where?_____

_____ Social Worker   From where?_____

_____ Plumber   From where?_____

_____	Artist	From where?_____.
_____	Farmer	From where?_____
_____	Cashier	From where?_____
_____	Newspaper Reporter	From where?_____
_____	Auto Mechanic	From where?_____

22. (a) Who decides what you would have for breakfast?

      _____ mother   _____ sister

      _____ father   _____ brother

      _____ you   _____ other

    (b) Who decides what clothes you will wear for the day?

      _____ mother   _____ sister

      _____ father   _____ brother

      _____ you   _____ other

23. (a) It is ten thirty in the morning and the bell has just rung for recess. You go to your locker to get your snack and you discover that you have left your lunch box on the school bus. What are three things you could do to solve this problem?

    1. _____

    2. _____

    3. _____

(b) From the three ideas you have written above tell which is the best solution to your problem.

_____

_____

(c) Why is the answer you chose in Part B the best solution?

_____

_____

24. (a) Name 2 things that you can do well.

_____

_____

(b) Name 2 things that you cannot do very well.

_____

_____

25. Read each sentence and decide whether it is TRUE or FALSE for you. Write T or F in each blank.

(a) My parents are interested in the things I do. _____

(b) I would like to drop out of school. _____

(c) I am a good person. _____

(d) I have many friends. _____

(e) I am a very happy person. _____

(f) I am among the last to be chosen for teams. _____

(g) I can usually figure out difficult things. _____

(h) School work is fairly easy for me. _____

(i) I am proud of my school work. _____

(j) I get along well with other children. _____

(k) My family listens to me. _____

(l) My family and I have a lot of fun together. _____

26. Look at the jobs listed below. Then think of the boys and girls in your class or that are your age. What jobs do you think these children will have when they are grown up? Put a check mark in the space that best tells what these children could be when they grow up.

	Girls	Boys	Both Girls and Boys
(a) Astronaut	_____	_____	_____
(b) Doctor	_____	_____	_____
(c) Store Owner	_____	_____	_____
(d) Secretary	_____	_____	_____
(e) Nurse	_____	_____	_____
(f) Bank Manager	_____	_____	_____

(g) Teacher
    (elementary school)   ____   ____   ____

(h) School Principal   ____   ____   ____

(i) Sales Person   ____   ____   ____

(j) Police Officer   ____   ____   ____

(k) Librarian   ____   ____   ____

(l) Forest Ranger   ____   ____   ____

(m) Dancer   ____   ____   ____

(n) Dentist   ____   ____   ____

(o) Teacher (high school)   ____   ____   ____

(p) Model   ____   ____   ____

(q) Grocery Clerk   ____   ____   ____

(r) Social Worker   ____   ____   ____

(s) Minister/Rabbi/Priest   ____   ____   ____

APPENDIX B

Distribution of Sample by Major Variables Studied

Grade				Urban-Rural Classification				Sex				Mother Working			
Grade 3		Grade 6		Urban		Rural		Male		Female		Employed		Unemployed	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
86	46	103	54	89	47	100	53	98	52	91	48	79	42	110	58

Mother Present				Father Present				Age																			
Present		Not Present		Present		Not Present		8		9		10		11		12		13		14	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
188	99	1	1	172	91	16	9	44	23	38	20	3	2	56	30	38	20	8	4	2	1

Family Size																	
1		2		3		4		5		6		7		8		9	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
19	10	60	32	56	30	28	15	10	5	6	3	4	2	4	2	2	1