The Connection Between Career Education and Career Maturity

Brenda Anne Blancher, B.A., B.Ed.

Department of Graduate and Undergraduate
Studies in Education

Submitted in partial fulfillment of the requirements for the degree of
Master of Education

Faculty of Education, Brock University
St. Catharines, Ontario

© April, 1999
ABSTRACT

The value of career education is measured by the extent to which it enhances students' decision making skills regarding career planning. This is referred to as "career maturity".

The purpose of this study was to examine what connections could be found between career education and career maturity within one career planning course. A senior level career planning class was studied in depth for one semester and five senior students participated in the study. The five students were interviewed three times during the semester to determine whether, and to what extent, students feel more prepared personally to make decisions as a result of a guided course of instruction.

The current trend in education shows an increased emphasis on career education. The government mandates career education, students are in need of career planning courses, and parents want students to learn how to effectively make decisions concerning their future. With this increased emphasis comes the need to evaluate current career education programs which is why this study is significant and useful.

The central findings were as follows: first, as a result of taking a career planning course students did increase their career maturity. Second, current career education planning curriculum was similar to the proposed course of study for career planning which comes into effect in September 1999. Current curriculum does help to prepare students to make informed educational and career decisions, a chief aim of the proposed curriculum. Knowing that this outcome is currently achieved will help when the course is being organized to fit the new curriculum.
ACKNOWLEDGEMENTS

I would like to thank Drs. Coral Mitchell, Jonathan Neufeld and Terrance Boak for their assistance and encouragement.

I wish to thank the career planning class that participated in the study for allowing me to observe and for sharing thoughts and perceptions with me. In particular I am grateful to the students who participated in the interviews for their honesty and their willingness to look into the future.

To my husband Kirk I say thank you for encouraging me to continue when I wanted to stop and for putting up with the mess of books and papers for so long. Your belief in my abilities has always amazed me. I thank my son Ben for his ability to nap for three hours each afternoon while I wrote and for his smile which brings me great joy.

Finally, I owe a great deal to my parents who have always encouraged me to ask questions, to seek answers and to never stop until my better is best.
TABLE OF CONTENTS

Abstract........................................................................................................ ii
Acknowledgments..................................................................................... iii
List of Tables............................................................................................ vi

CHAPTER ONE: INTRODUCTION................................................................. 1

Background............................................................................................... 1
Statement of the Problem.......................................................................... 3
Purpose of the Study................................................................................ 3
Operational Definitions.......................................................................... 4
Significance of the Study.......................................................................... 4
Scope and Delimitation........................................................................... 6
Outline of Remaining Chapters............................................................. 7

CHAPTER TWO: REVIEW OF RELATED LITERATURE................................. 8

The Origins of Career Education........................................................... 8
Rationale for Career Education............................................................. 13
Career Maturity......................................................................................... 15
Career Education Program Models....................................................... 18
Evaluation of Programs.......................................................................... 20
Summary.................................................................................................... 24

CHAPTER THREE: METHODOLOGY AND PROCEDURES.......................... 26

Research Design....................................................................................... 26
Selection of Participants.......................................................................... 26
Pilot Studies............................................................................................... 28
Data Collection......................................................................................... 28
Data Analysis........................................................................................... 31
Methodological Assumptions................................................................. 33
Establishing Credibility.......................................................................... 34
Summary.................................................................................................... 36

CHAPTER FOUR: FINDINGS......................................................................... 37

How the Course Unfolded....................................................................... 37
Student Perceptions................................................................................ 44
Observed Outcomes................................................................................ 51
Comparison of Current Curriculum with Proposed Curriculum........... 58
Summary.................................................................................................... 59
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary.................................................................62
Discussion..............................................................65
Implications for Theory.............................................68
Implications for Practice..........................................69
Implications for Further Research...............................71
A Final Word..........................................................72

REFERENCES..........................................................73

Appendix A: Request for permission to Board of Education...............................77
Appendix B: Approval from Board of Education..............................................78
Appendix C: Letter to students and Consent Form...........................................79
Appendix D: Pilot Questionnaire and Interview One Guide...............................80
Appendix E: Interview Two Guide..................................................81
Appendix F: Observation Guide..................................................82
Appendix G: Course Outline..................................................83
List of Tables

Table 1: Themes which Emerged from the Data .................................................. 32
Table 2: Participants’ and Observed Outcomes .................................................. 57
CHAPTER ONE: INTRODUCTION

This study examines what connections can be found between career education and career maturity in one senior-level career planning course. Career education programs have been in existence through much of this century, but such programming is now in a period of transition. The Ontario Ministry of Education and Training is currently reforming many areas of secondary school education, including career education. The proposed career education curriculum stresses the outcome of increased career maturity for students. A review of the literature on career education did not reveal any evaluation studies of career planning curriculum in Ontario. Thus, during this time of transition it is important to examine current career education curriculum to determine the extent to which connections exist between career education and career maturity.

Background to the Study

The importance of preparing students to enter the work force after secondary school or postsecondary school has never been more at the forefront of education than now in the last few years of the 20th century. As noted in a recent secondary school career education paper, In Common, “We hear almost daily from business, industry, and the community at large that students are not being adequately prepared for the high-tech jobs and career changes of the future” (Ontario Ministry of Education and Training, 1994, p.1). In an attempt to address the concerns about students being ill-prepared for careers, the Ontario Ministry of Education and Training introduced its proposed reforms to guidance and career education policy, Choices into Action, in September 1996. The reform document outlined that change was necessary as “research in Ontario and elsewhere indicates that young people, from the beginning of their schooling, are
concerned with developing their abilities, interests and understanding of the community and the world in which they live . . . parents and students want more and better programming which is designed to assist students in career planning and preparations” (Ontario Ministry of Education and Training, 1996, p. 3). As the global economy changes and technology continues to transform traditional concepts of jobs and careers, society looks towards educational institutions to help prepare youth for the work force. The preparation, however, is not limited to preparing students to be workers; the idea is to help students recognize their place in the world of work by examining their interests, aptitudes, and job preferences. The stress in Choices into Action is on increasing the career maturity of students by preparing them to make educational and career choices.

Career planning, once an optional credit for students, will, as of September 1999, be a compulsory part of every student’s secondary school education in Ontario. The Ontario Ministry of Education and Training has outlined what career programs must offer to students. This outline emphasizes career maturity as an important outcome of the new career education curriculum. Career planning courses as proposed would help students “extend and refine their knowledge of themselves, and assist them to target career options” (Ontario Ministry of Education and Training, 1996, p. 6), both of which are elements of career maturity. Further, proposed career education programming would continue to enhance a student’s career maturity by increasing a student’s information about career alternatives. Now that the first draft of career curriculum is available, educators can evaluate current programs to see if they are consistent with the proposed curriculum.
Statement of the Problem

There is a need to determine to what extent students increase their career maturity and personally feel more prepared to make educational and career decisions as a result of taking a career planning class. This study is timely because of current changes in Ontario. The new Ontario secondary school reforms, which are set to begin in September 1999, leave little time to plan for the proposed curriculum changes. It is apparent from Choices into Action (Ontario Ministry of Education and Training, 1996) that much of what was initially proposed for the new compulsory course in career education was already being accomplished by current career planning programs. In an effort not to be involved in “reinventing the wheel”, a study of current practice in one school was undertaken.

Purpose of the Study

The purpose of this study was to investigate what connections could be found between career education and career maturity within one career planning course. To guide this investigation the following questions were addressed:

1. How did the career planning course unfold during the semester?
2. What were students’ expectations of the career planning course?
3. What growth did students perceive in their career maturity?
4. What measurable level in career maturity did students attain?
5. How did career maturity objectives compare between the existing career planning course and proposed guidelines?

Direct consultation with students involved in the Career Planning class was a key component in understanding the connection between career education and career
maturity. In order to conduct this study, one career planning class at one secondary school was studied throughout a semester. A sample of 5 students was selected to take part in interviews at three points during the class. The career planning class was observed on six separate occasions, and the course material was studied in detail.

**Operational Definitions**

In relation to this study, the following definitions apply:

**Career Maturity**: as related to adolescents, the definition includes such goals as awareness of self, formulation of tentative career goals, obtaining employability skills, and a sense of planfulness within a changing world.

**Career education**: a component of school curriculum that includes learning about individual skills, interests, and aptitudes in relation to the world of work; an ongoing process that spans an individual's entire educational life.

**Career planning**: a particular senior-level secondary school course in career education that helps students make educational and career decisions based on their knowledge of themselves and of the world of work.

**Class period**: a semetered class period, 75 minutes in length.

**Significance of the Study**

Currently, under *Ontario Schools: Intermediate and Senior Divisions, 1989* (OS:IS) (Ontario Ministry of Education, 1989), career planning courses are optional; however, this will soon change. The latest provincial government reform paper, *Choices Into Action: Guidance and Career Education Policy Grades 1 to 12*, (Ontario Ministry of Education and Training, 1996) emphasizes that career education is to be a part of every year of schooling and that the impact and content of career education is to be cumulative.
In June 1998 the Ontario Ministry of Education and Training released an overview of the new Guidance and Career Education curriculum. There will be six courses of study in this area, including the compulsory Civics and Career Studies and a further optional credit in Career Exploration and Planning. The new curriculum is clearly based on the outcome of increased career maturity for students as is evidenced in the five strands around which the career education curriculum is based:

1. developing self knowledge and personal management skills
2. building relationships and communities
3. exploring opportunities
4. learning for life
5. planning for transitions and change. (Education Network of Ontario, 1998a, p. 3)

These five strands together help prepare students to make educational and career choices based on self-knowledge and on the knowledge of educational and career opportunities. The face of career education is changing, and it is important for current programs to be evaluated in light of the changes. As career planning is important in every person’s life, the more information we can acquire in terms of career education the better we will be able to help people obtain the necessary career maturity to make decisions affecting their lives.

The results of this study will be of interest to schools, career educators, students, and society in general. An effective, outcomes-based career planning program will be of benefit to all the stakeholders listed. This study highlights components of current programs that increase career maturity in students and also highlights what needs to be
changed in current programming to make it match the proposed outcome of career maturity highlighted in the new course of study.

**Scope and Delimitation**

The study was delimited to one term of study in one course with one group of 5 students. This delimitation provided an opportunity to delve deeply into both the course material and into student perceptions regarding the course curriculum. As this study is qualitative it seeks to understand one particular set of career planning curriculum and student perceptions of such curriculum. It is not expected that the results of this study are necessarily generalizable to other career planning courses or to another group of students. It is expected, however, that the results could inform other settings.

In the area under investigation, career education, I have experience in individual career and educational counselling for students. As Department Head of Guidance I am responsible for overseeing the delivery of the career planning course offered as an option through the Guidance department. I have never taught the course nor have I developed curriculum for the course. The course, as it is currently taught, falls under the curriculum guidelines set out in the Ontario Ministry of Education document, *Guidance 1984* (1984). The curriculum has been updated over the last 10 years by the addition of materials that cover recent trends in career education delivery. These materials include newspaper articles, documents, pamphlets, and brochures distributed by Human Resources Canada and by provincial ministries and job agencies such as the apprenticeship board.

A major assumption of this study is that career education does benefit students. This assumption has come from the most recent research into the effects of career education on students.
Outline of Remaining Chapters

Chapter Two includes a review of literature relevant to this study. It begins with an historical overview of the origins of vocational education from the early years of this century. Next, the literature highlights the need for career education in schools. The literature further provides evidence that career planning courses are of benefit to students, particularly in the area of career maturity. Research shows that effective career planning courses prepare students to make decisions concerning their educational and career path. Finally, the literature points to evaluation as an important aspect in the development of career planning courses.

Chapter Three outlines the research design of the present study. The chapter also includes a description of the process of selecting participants, the pilot study process, data collection methods, and data analysis. The chapter also includes an outline of methodological assumptions of the study and a section on establishing credibility.

Chapter Four includes the results of the interview process and of the classroom observations. The results highlight answers to questions addressed by this study. Also included in this chapter is a section on interpretation of the findings.

Chapter Five is a summary of the study. The chapter relates the findings to recent literature and also outlines implications for practice concerning career education and the proposed reforms to guidance and career education from the Ministry of Education and Training.
CHAPTER TWO: REVIEW OF THE LITERATURE

The Origins of Career Education

There has been a great deal of material written on career education dating back to the early years of this century. Much research has examined how career education benefits people and how career education is a necessary component of formal schooling. Surveys in recent years have shown that many people, including parents, students, educators, and employers, believe that formal career education is important. Career maturity and ways of enhancing career maturity in adolescents are common themes in the literature.

In order to understand the roots of career education it is necessary to go back to the beginning of this century to an area known as vocational guidance. For the first 30 years of this century, vocational guidance emphasized the study of occupations rather than the study of individuals (Herr & Cramer, 1979). Interestingly, however, in 1909, Frank Parsons, who established the Vocations Bureau in Boston, devised a three-step approach to vocational guidance that involved information on individual differences (step one), occupations (step two), and a decision-making process (step three) (Herr and Cramer, 1979, chap. 1). Much of the current trend in career planning uses a system similar to Parsons’s three-step approach.

Unfortunately, in the early years of the century, Parsons’s step one, now considered to be a crucial component of career education, was ignored by the vocational guidance movement. Career planning from the early 1900s until the 1950s became the responsibility primarily of school guidance counsellors. However, since counsellors were
expected to perform many other tasks, career education became a minor part of their job.
The main concern of career education at the time was in predicting a person's
occupational choice or success from test scores prior to entry into the work force. These
tests were a "one shot deal," and participation on such tests was limited to students taking
vocational education courses (Herr & Cramer, p. 5), a relatively small portion of the
student population.

By the 1950s, a movement began towards looking at individual differences as an
important aspect of career planning. There was, at that time, a growing awareness of the
dynamics of personality in career choice and job success. This was the era of Donald
Super, whose research in vocational guidance has been largely responsible for the way
that career programs are set up today. Super rejected the 1937 definition which
suggested that vocational guidance was "the process of assisting the individual to choose
an occupation, prepare for it, enter upon it and progress in it" (Herr & Cramer, 1979, p.
6). Super felt that for career counselling to be effective, it must help a person "to develop
and accept an integrated and adequate picture of himself and of his role in the world of
work, to test his concept against reality, with satisfaction to himself and to society" (Herr
& Cramer, p. 7). With his ideas, Super echoed the concepts of Parsons from 1909, with
an emphasis on the psychological nature of vocational choice. Career counselling began
to be seen as more than an isolated test taken once before entering the labour market.

Towards the late 1960s and into the early 1970s, career guidance became the new
term for vocational guidance. Career guidance emphasized six major organizing themes:

1. Efforts to develop decision making.

2. Concern for the self-concept.
3. Concern for lifestyles, values and leisure.


5. Individual differences.

6. Flexibility and coping with change. (Herr & Cramer, p. 10)

Thus, over 70 years career education had evolved, encompassing the theories of Parsons from 1909 and Super from 1951. The late 1970s were a time of intense research in the area of career guidance; however, the emphasis was still on secondary school courses that would supposedly provide students with all the career knowledge they would need.

By the 1980s, career guidance had become increasingly comprehensive. In Ontario, the document, *Guidance 1984*, for the intermediate and senior divisions set out as one of the aims of guidance that “students will explore career alternatives” (p. 6). As part of this aim, 16 achievement outcomes were listed; however, no concrete suggestions were given for how schools were to achieve these aims other than allowing that “in Grades 9 through 12, the secondary school may provide courses for full or partial credit” (p. 11). Most secondary schools did, and still do, offer an optional senior-level career guidance credit to satisfy these aims, but as it is an option, only a small number of students actually receive formal career education. Indeed *Ontario Schools: Intermediate and Senior Divisions, 1989* (Ontario Ministry of Education, 1989) does set out guidelines for the Guidance Program to satisfy the aims of Super’s theory of vocational development, but again no compulsory courses are listed.

The 1990s ushered in high unemployment, rising tuition costs, and a plea from employers, parents, and society at large for more of an emphasis on career planning in schools. Government ministries of education have become proactive in the issue of
career planning. In 1994, the Ontario Ministry of Education and Training put forth as part of the now defunct "Common Curriculum" an outline on the importance of career education beginning as early as grade one. The goal was that, by the end of Grade 9 students will value work and learning of all types not only for their practical benefits but also for the sense of purpose and satisfaction that they can bring, and be able to develop relevant, well-prepared plans for entering the work force or continuing their education. (Ontario Ministry of Education and Training, 1994)

The new thrust, then, was for career education to be a compulsory ongoing process, not an optional one-course deal. The emphasis was on addressing the academic, social, and career-development needs of all students. For example, even the 1994 Ontario Royal Commission on Learning, *For the Love of Learning*, recommended "that, beginning in Grade 6 or 7 and continuing through Grade 12, all schools have appropriately trained and certified career-education specialists to carry out counselling functions" (vol. II, p. 121). The Royal Commission also recommended that schools "develop a continuum of appropriated learner outcomes in career awareness and career education for Grades 1 - 12" (vol. II, p.123). The trend, therefore, was to a more formal type of career education, one that encompassed a student's entire education through elementary school to the end of secondary school.

The most dramatic changes to the delivery of career education in Ontario came in September 1996 as part of the current provincial government's sweeping educational reforms. *Choices Into Action: Guidance and Career Education Policy Grades 1 to 12*
(Ontario Ministry of Education and Training, 1996) set out what was needed from
guidance and career education in a changing world. *Choices into Action* emphasized that
career education was to be a part of every year of schooling and that the impact and
content of career education were to be cumulative. Further to the classroom component,
the reform document placed a major emphasis on the expansion of cooperative
education/work experience for all students.

In June 1998, the Ministry of Education and Training released a first draft of the
changes to career education in Ontario. Of particular importance was the compulsory
course in Civics and Career Studies, which was to be offered in each secondary school in
Ontario. In this course the Ministry outlined that students would learn to identify and
assess their own skills and qualities, trends in employment, and the organization of
workplaces. Students would also explore postsecondary paths and community-based
learning while designing action plans for reaching their goals (Education Network of
Ontario, 1998a). The emphasis of this compulsory course is on increasing the career
maturity of students.

Career planning is an area of study that is still in transition. Early in September
1998, the Ministry of Education and Training released the third “deliverable” of the
Civics and Career Studies course; while the content of the course remains the same as
that released in June, the organization of the course underwent some changes (Education
Network of Ontario, 1998b). Originally the course was to be worth one full credit
towards the graduation diploma, but the newest release shows that the career component
will be worth half a credit from the guidance area with the other half credit falling under
social science as a civics credit. It is not yet known what the final product of career
planning will look like; however, there is every indication that the emphasis will continue to remain on students achieving the outcome of increased career maturity.

Rationale for Career Education

Students and their parents are concerned about the future in relation to careers. Their level of concern can be seen in the following statistics compiled from a number of studies cited by Levi (1995). When 15-to-19 year-olds were surveyed in 1987 about what common problems bothered them, the number one response, given 56% of the time, was, “What am I going to do when I finish school?” Preparing for a future job or career was listed as very important as a benefit from school by 81% of student respondents on a 1991 Employment and Immigration Canada survey. When parents were polled by the Ontario Institute for Studies in Education in 1992, 97% responded that information about careers and postsecondary education was essential as part of a child’s education. However, only 39% of those same parents responded that their child’s school provided help with career planning. Parental perceptions were also examined by Trusty and Watts (1996), who had parents fill out a questionnaire on sources of career information. Of all the sources of career information included in the study, the school counsellor was most often identified as the best source. These statistics indicate that career education is important to students and parents, and this is certainly a rationale for improving current career education practices.

Parents and students support career planning, but what really is the basic principle of career education? A Saskatchewan study on career education suggested that “career planning is not an event. It is, rather, a developmental process upon which no fixed time line can be placed” (Mitchell, 1995, p. 8). The study goes on to say that “career
education is an integration of family, community, and school to facilitate self-direction for the student” (p. 10). Thus career education is again stressed as an evolving process that involves the student in a continual learning relationship between the self and the society in which the student lives.

Recent research from the United States points to a further rationale for formal career education. A 1995 literature review of career-related education (National Center for Research in Vocational Education, 1995) sets forth the principle that “all secondary-level students can benefit from having the option of pursuing a career-related course of study integrating academic and vocational content with work-based learning” (p. 8) an idea similar to Ontario’s current education reforms.

Further to the above recommendation from the United States is research from a 1996 study from Laval University (Fournier & Pelletier, 1996). This study examined the attitudes towards career education of young adults who were having difficulties entering the job market. The study concluded that career planning was important for students as “young people’s ability to make choices and be active, to put together a plan of action and adopt a long-term perspective, appear to be essential given current employment conditions” (Fournier & Pelletier, 1996, p. 3). Fournier and Pelletier recognized, through their research, the importance of career education that uses a long-term perspective, making it possible for students to learn job search skills while considering several career choices and examining alternative paths.

From the literature several principles of career education emerge. First, schools are seen as responsible for career education and are expected to set up formal career programs. Career education should be a continual process that follows students
throughout their educational career, and such programs could involve work experience.

**Career Maturity**

Research in the field of career education points to some real benefits for students, particularly in the area of career maturity. Career maturity for adolescents is a term coined by Donald Super, meaning readiness to make educational and career decisions (Hutchison, Freeman, Downey, & Kilbreath, 1992). Super (1963 cited in Hutchison et al., 1992) concluded that exploring vocational choice was important to older adolescents and young adults. Senior secondary school students have reached a transitional period in their lives where they begin to focus on the goal of becoming independently functioning adults (Borgen & Amundson, 1995, p. 1). Career education programs meet this transitional need by assisting students in the development of career maturity.

One study that focused on career maturity was conducted in Australia (Trebilco, 1984). In this study, the relationships between career maturity of year 11 students and the career curriculum practices and policies of 38 Melbourne secondary schools were investigated. Career curriculum practices were studied via questionnaires filled out by principals and career studies teachers. The *Career Development Inventory* (CDI; Super & Forrest, 1972) was administered to random samples of year 9 and year 11 students. The results of the research showed that schools with career education programs achieved higher gains in career maturity of students between year 9 and year 11 than schools with no career education program. An important finding was that schools that offered career programs based on Super’s theory of vocational development and that had teachers who actively supported the career education program achieved the highest gains in career maturity. The benefit shown here is in a higher degree of career maturity resulting from
The concept of career maturity was also examined in a 1987 study from the United States (Robbins, 1987), which looked at four different types of career education interventions and their effect on career indecision. This study involved eight career exploration classes from four secondary schools. The eight classes were split into two groups of four classes each. Two of the groups received lessons that were primarily teacher taught while the other two groups were taught with a more self-directed approach to learning. The first two types of career studies were teacher taught daily for 9 weeks and involved two different approaches. The first approach involved students working in groups studying occupational clusters with no individualized programming. The second approach used the Career Management Inventory (CMI; Crites, 1978 cited in Robbins, 1987), a series of five cognitive tests that were class taught but individualized for each student. The next two types of career intervention saw students meeting only once as a group, being given instructions, and then being sent to do their own individual research. The first of these interventions used the Career Survey (CS; Wiggins, 1974 cited in Robbins, 1987) in combination with the Vocational Preference Inventory (VPI; Holland, 1978 cited in Robbins, 1987). Students completed surveys on occupational choices and then organized occupations according to type, such as business skilled, business professional, communications, and service professional. Students were then given free access to occupational materials and could meet with a counsellor as desired. The second individual intervention used the Self-Directed Search (SDS; Holland, 1977 cited in Robbins, 1987), which was similar to the combined CS-VPI. Students completed the SDS and then followed suggestions from materials provided. A counsellor was available
by appointment. All groups were pretested and posttested with the *My Vocational Situation* (Holland, Daiger, & Power, 1979 cited in Robbins, 1987) test instrument, which focuses on three areas: vocational identity, occupational information needs, and environmental or personal barriers. Low scores are desirable as they indicate a higher level of career maturity. For all interventions except the cluster approach, posttest scores were lower than pretest scores. The cluster approach scores remained the same on the pretests and posttests. This study concluded that favourable career programs allow each student to pursue his or her own interests in a self-directed fashion rather than being class taught about all sorts of different careers in which individual students may or may not be interested.

Further to the topic of career maturity is a Canadian study from 1992 that examined the effects of a counselling program on the career maturity of students with learning disabilities and of students at risk of dropping out of school (Hutchison et al., 1992). This study used *Pathways* (Ontario Ministry of Skills Development, 1989), a career studies curriculum involving six modules that could be used either independently or as an entire course of study. The first part of this study involved grades 9 and 10 students from a special integrated class for low achievers. All courses for this class were modified to reflect a career emphasis. The second part of the study involved grades 9 and 10 students who were identified as having a learning disability. Each group was given the *Employability Maturity Interview* (Roessler & Bolton, 1987) as a pretest and posttest. This test, which has been standardized on learning disabled subjects, examines self-awareness, knowledge of career resources, and range of career options. The counselling program took place over 11 sessions of 40 minutes each; during these sessions, students
explored self-awareness, career options, and occupational types. The results of the career intervention showed positive growth on the posttests for each group; however, scores were higher for the low-achieving group, possibly due to the fact that this group studied each course from a career perspective while the learning-disabled group did not have such an integrated program.

Each of the above studies points to obvious benefits from career education in the area of career maturity. The concept of career maturity for adolescents cannot be minimized, as it is exactly the point of current educational reforms; the desired outcome is to produce students who are ready and able to make proper educational and career decisions. The fact that research points to benefits in academic achievement as well as career maturity is a bonus to the teaching of career education.

**Career Education Program Models**

Several models of career education are currently offered. While the focus and delivery methods of the various approaches to career planning differ, all methods aspire to achieve some outcome of increased career maturity for students. Approaches to career education range from stand-alone models that offer a Guidance credit in career planning to cross-curricular approaches which allow for career education to be a part of each secondary school subject. Three models worth examining are infusion, role playing, and partnerships.

**Infusion**

The infusion model of career development (Millar, 1995) involves a cross-curricular approach to career education. Instead of, or in addition to, a single course in career planning, infusion "calls for an infusion or integration of career concepts across all
grade levels and in all subjects” (Millar, 1995, p. 1). The belief is that such an approach will add relevance to students as they are exposed to the career applications of each course of study. Infusion allows teachers to teach career development skills at the same time they teach basic academic skills (Sander, Simpson, & Ward, 1997, p. 212). For example, infusion could involve a senior-level media English class reading magazine articles about occupations in the print media or a metal fabrication class listening to a seminar on careers in the skilled trades.

Proponents of the infusion approach believe that students gain an appreciation of careers as dynamic. It is also believed that when students are exposed to a variety of careers related to specific school subjects they become more aware of various educational paths, and thus students become more able to plan out their own goals.

**Role-Playing Model**

The role-playing model (Sander et al., 1997, p. 272) of career education is a type of infusion method that can be used in a cross-curricular approach. There are many ways to role-model types of careers, paths to careers, and issues in careers.

One approach is called the “Life Study Structure” (Sander et al., p. 272), which involves a case-study approach to careers. Students are exposed to a certain occupation through quotations, photographs, or pictures, and are asked to list the significant experiences that have made up the career history of the person depicted. Students discuss decision making and problem solving and explore educational and career paths through this activity. Research into various careers can also be involved. Role playing can help students to identify with a career role and offers students an experiential application for what they learn in career education.
Partnerships

Partnerships offer a model of career education involving "a relationship between two or more parties charged with the common goal of easing student school-to-work transitions" (Sander et al., p. 289). Most partnerships involve both school-based and work-based learning. Partnerships are one way of achieving the shared goals of preparing a work force for the future and of encouraging lifelong learning. Students involved in partnerships learn about the world of work first hand, and as a result learn about themselves. Partnerships also help students to formulate and to reshape their own educational and career paths.

Evaluation of Programs

In much of the literature reviewed, the purpose of the research was to determine the effectiveness of various career education programs. It is well-recognized, therefore, that evaluation is an important part of the curriculum development process.

A specific example of the evaluation process came from the 1995 review of career-related education from the United States. This review outlined nine proposed principles for new federal legislation on career education. The nine principles were as follows:

1. School-based learning must be integrated with work-based learning.

2. All secondary schools must offer, as an option to students, a career-related course of study that integrates academic and vocational content with work-based learning.

3. Postsecondary institutions should continue to broaden technical preparation courses.
4. Educators need time and support to develop programs that meet new objectives.
5. Career education courses must be improved, expanded, and integrated into curriculum.
6. Employers must take part in providing work-related education.
7. Performance measures and standards should be used to gauge the success of programs.
8. Local jurisdictions should be encouraged to develop their own programs of creating funds for program improvement.
9. Collaboration among career education and training programs in different institutions should be encouraged. (National Center for Research in Vocational Education, p. 8)

These principles clearly outline that improvement is required in the area of career education. The fifth principle, reforming and continually improving career education, was stressed throughout the document. States were required to develop performance measures and standards to gauge the success of programs. Standards were to be put in place to “help students understand what they need to learn, help schools decide what they need to teach, and give employers a stronger sense of the skills and abilities of applicants (National Center for Research in Vocational Education, p. 21). Standards, thus, take into account all of the stakeholders. Only programs that meet the standards would receive funding to continue and to improve. This improvement was expected through ongoing evaluation.

Another report from the United States, this one on school-to-work initiatives
(Lewis, 1997), also stressed the importance of program evaluation. Based on the author’s evaluation of eight documented school-to-work programs, this report outlined six characteristics of successful programs and underscored the need for ongoing assessment. The six characteristics of successful programs were:

1. Initiatives were guided by a comprehensive vision that was set for the linkages expected at each level of the system and encouraged partners to realize the vision in their particular circumstances.

2. Initiatives made special effort to involve employers in their partnerships.

3. There was commitment and support at all levels.

4. Initiatives had adequate financial support, often from a variety of different sources.

5. Students acquired a strong foundation of career information and an awareness of their own interests, goals, and abilities that result from a planned sequence of learning experiences.

6. Academic learning is integrated with and supportive of occupational learning. (Lewis, pp. 7-8)

As Lewis outlined, assessment of current programming is crucial because “the better the information about current conditions, the clearer the vision of the future can be. For this reason, the process of creating a vision often begins with an assessment of the current situation” (Lewis, 1997, p. 11). Evaluation is again noted as integral to a successful program.

The Ministry of Education in Alberta recently outlined its own guidance program evaluation procedures in a document entitled *Comprehensive School Guidance and*
Counselling Programs and Services: Guidelines for Practice, 1997 (Alberta Department of Education, 1997). This document is the result of the evaluation of guidance programming in the province of Alberta in 1996. Part II of the document stresses the need for ongoing evaluation as an important part of program development. Programs were evaluated on the basis of a checklist that set up standards for career education. The chief guideline of the evaluation stated that “the comprehensive school guidance program has been organized to meet the needs of students” (p. 9). The checklist indicated that the program must do the following:

1. utilize student needs assessments to determine program focus and content
2. foster the sequential development and application of skills in the areas of personal/social, educational planning and career planning
3. meet individual student needs through a variety of programs and services
4. allow sufficient and appropriate individual counselling time for all students. (Alberta Department of Education, p. 9)

One of the chief recommendations in this section highlighted the following: “A formal procedure involving staff, parents and community members is used to evaluate the comprehensive school guidance and counselling program on a regular basis” (Alberta Department of Education, 1997, p. 14). Once again, ongoing evaluation is part of program development.

The current changes in education in Ontario can also be placed in the context of evaluation. This evaluation began in recent years with the Royal Commission on Learning, For the Love of Learning (Ontario Ministry of Education and Training, 1995), and continued for guidance educators with Choices into Action: Guidance and Career
Both of these documents evaluated the current state of education in Ontario and offered suggestions for improvement.

Finally, program evaluation can have a further component, the students. As Fournier and Pelletier (1996) point out, it is important to know what young people think they are capable of, how useful they feel career planning is, how they see career possibilities and how well they think their future projects can be combined with the goal of career entry. (p. 5)

Students can offer interesting insight into a program, and as stated it is important to consult students for their views whenever possible.

The importance of evaluation for improvement is stressed in the literature on career education. The present study, by examining the connection between career education and career maturity, seeks to determine whether the present career planning curriculum does indeed achieve the outcome of career maturity. This study may help to suggest areas of change and improvement with respect to the proposed reforms of career education in Ontario.

Summary

A brief review of some of the literature on career education was somewhat of a historical journey from the beginning of this century and continuing into the present. In other words, career education is an evolving topic. Current trends in career education that focus on the individual have their roots in theory that was developed at the beginning of this century. The evolution of career education has seen the concept of individual
differences in career planning discarded during the 1930s and 1940s only to be revisited by Donald Super in the 1950s and then gain in importance through to the present.

Current research into career education emphasizes that both students and parents recognize the need for formal career planning in schools. The research also points out that students can benefit from effective career education programs. The increase in career maturity, a result of career planning classes, enables students to make informed decisions about their futures.

There are many types of career planning programs in existence. Effective programs combine academic skills with experiential learning and stress the importance of individual differences and self-awareness. Ongoing evaluation of programs is one way to make sure that programs stay effective and stay current for students.
CHAPTER THREE: METHODOLOGY AND PROCEDURES

This chapter outlines the research design of the present study. The process of selecting participants is explained, as well as the organization of the pilot study. Data collection methods and data analysis techniques are described in detail. Finally, a section on establishing credibility discusses the reliability and validity measures that were put into place for this study. Through direct observation and participant interviews this study determined whether students increase their career maturity and personally feel more prepared to make educational and career decisions as a result of taking a career planning class.

Research Design

This is a qualitative case study that seeks to understand the connection between career education and career maturity. This design was appropriate for this study in two ways. First, this study was an analysis of one single class or bounded system (Smith, 1978 cited in Merriam, 1998) with the purpose of determining whether that system (the class) achieved the outcome of increased career maturity in students. Secondly, the study involved “policies, practices and innovations” (Peshkin, 1983, p. 27) with respect to a particular career planning class. In order to facilitate this understanding, extensive fieldwork, involving direct observation of the career planning course, individual interviews, and collection of curriculum documents, took place.

Selection of Participants

Before the research began, permission was sought to include students in the study. The local board of education was contacted via a letter (Appendix A) that described the
study. Once approval was received from the board of education (Appendix B), a proposal was presented to the Brock University Human Ethics Committee, and permission was granted to begin the study.

Purposeful sampling, specifically maximum variation sampling, which seeks out the widest possible range of characteristics among a sample (Merriam, 1998, p. 62), was used in choosing research participants. Participants were selected from a semester two, 1998, Grade 11 Career Planning course at an Ontario high school. On the first day of class, each student was given a letter outlining the purpose of the study along with a consent form (Appendix C). Students under 18 years of age were instructed to show the letter to their parents and to get a parental signature if they wished to participate in the study. By the end of the week, 12 of the 18 students enrolled in the course returned signed consent forms.

From the signed consents I used maximum variation sampling (Merriam, p. 63) to choose my 5 participants. Career Planning is a nonprerequisite course offered at the Grade 11 general level but open to any student in any grade above grade 9. To obtain the most diverse sample from these 12 students, students from different grades and from different academic levels were chosen as participants. Of the 5 students who chose to participate, 1 was in grade 10, 2 were in grade 11, 1 was in grade 12, and 1 was in his fifth year of high school and had already applied to college. Two of the participants were advanced-level students, while the other 3 studied at the general level. Maximum variation sampling facilitated an exploration of career planning as it is experienced by students from different grades, different academic levels, and with different reasons for taking the course.
Pilot Studies

In preparation for the study, pilot interviews involving students from the semester one career planning class took place 2 months before the actual study began. The purpose of this pilot study was to field test the questions for the initial interview.

Five students were selected at random from the class list. These students were individually interviewed using the pilot set of questions (Appendix D). The participants' responses were tape recorded and later analysed. After each interview, participant responses were synthesized into one paragraph so that responses could be easily read out to each pilot participant individually at a scheduled meeting. This meeting allowed the pilot participants the opportunity to change any answers and to offer feedback about the type of questions.

As a result of the pilot study, the questionnaire was revised before the actual study. One of the questions was deleted from the original list because it caused students to repeat one of their answers, and a question about volunteering was added because several students from the pilot study felt that their volunteer experiences were as important to talk about as their part-time work experiences. The pilot participants all felt that the length of the initial interview, approximately one half hour, was sufficient, and they felt that the questions were easy to answer. The revised interview guide (Appendix D) was used for the first set of interviews in the study.

Data Collection

Three methods of data collection, observations, interviews, and document collection were used in this study. The career planning class was observed six times throughout the semester in order to acquaint the researcher with the way that the
curriculum was delivered and to observe the reactions of the students to the curriculum. Student interviews were held at the beginning of the semester, halfway through the semester, and at the end of the semester. The interviews allowed the researcher to experience the career planning course from the perspective of the students enrolled in the course. The interviews also allowed the students to offer their opinions and views of the course material, and to reflect on their individual level of career maturity. Finally, the collection of curriculum documents was crucial to an understanding of what was expected by the Ontario Ministry of Education and Training in the way of guidelines to the effective delivery of career education. The collection of current curriculum documents also permitted a comparison with the proposed curriculum that comes into effect in 1999.

All three interviews were conducted in a private office in the guidance department of the school where the study took place. Participants were interviewed individually at a mutually agreed upon time that did not interfere with school work. Participant responses were tape recorded and key notes were written down.

This study used a structured questionnaire for the first interview at the beginning of the course. The questionnaire, which had been revised after the pilot study, consisted of eight questions that helped determine why students chose to take career planning, what they expected from the course, how much they knew about their own skills and interests, and what their work experience had been. Interviews were later transcribed and also synthesized into one-paragraph summaries that could easily be read out to participants.

The second interview took place at midsemester. Before this interview began, each participant was read a synthesis of their responses from the first interview. This
allowed each participant the opportunity to clarify, change, or delete anything from the first interview. For interview two (Appendix E), a more open-ended interview style was used. The interview began with one structured question asking students to talk about the interest, abilities, and job values testing that took place in class. This allowed students to explain what they felt was important or worthwhile about the testing. Students were next asked, "Suppose it was my first day in Career Planning; as a student, what sort of things would I do?" The intent of the question was to determine what students considered memorable and important from the material that had already been presented in the career planning class. Responses from interviews were later transcribed and synthesized for reading back to participants before the final interview.

The final interview was conducted in June, one week before the final exam in Career Planning. It involved three parts. During the first part of the session, participants were read a synthesis of their responses from the second interview, and they were given the opportunity to amend any of their answers. Next, participants were interviewed using the Employability Maturity Interview (EMI; Roessler & Bolton, 1987), an instrument commonly used in career planning classes. This instrument tests a person's career maturity level. It consists of 10 questions and involves a structured interview format. The 10 questions result in 11 item scores, as question 5 is scored on two criteria. The questions on the EMI reveal different areas of career maturity including self-awareness, knowledge of career resources, and range of career options. The EMI was used to enable the researcher to observe career maturity outcomes for each participant. Each question on the EMI was asked in sequence, and probes included with each question were used to clarify a question as necessary. The interviews were tape recorded, and the main themes
of each response were recorded on the lines following each question. After the EMI was administered, participants were asked to comment generally on the course they had taken and on their own level of career maturity. This allowed the researcher to obtain student perceptions of the course and of their level of career maturity.

Throughout the semester, the career planning course was observed to further an understanding of the curriculum taught and the teaching methods used. A total of six observations took place and were recorded on an observation guide (Appendix F) that recorded the date, the topic of the lesson, and the behaviours of the teacher or guest speaker and the students.

**Data Analysis**

A combination of inductive and deductive analysis was used to analyze the data collected. All tape-recorded interviews were transcribed and coded. To conduct the inductive analysis, data from each interview were sorted using the constant comparison method. That is, the data were continually compared and pieces of data were sorted into common groupings (Merriam, 1998, p. 179). Each theme was broken down into subthemes. The themes and subthemes were then colour-coded and each interview and observation was coded according to the colour scheme. From this colour-coding, common themes and subthemes were easily distinguished. From the inductive analysis, five major themes emerged: career planning as future planning; prior knowledge of careers, education, and work experience; self-awareness; self-directed learning; and career maturity. The chunks of thematic data were then sorted according to the major questions addressed in this study. Examples of data that correspond to each theme are displayed in Table 1.
### Table 1

**Inductive Themes with Data Examples**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Observational data</th>
<th>Interview data</th>
<th>Document analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Planning</td>
<td>Observation No. 6</td>
<td>Student 1, Interview 1 – the whole purpose for taking career planning “was to figure out what I need to do now so that I end up with a good job in the future”</td>
<td>Levi (1995) found that a common problem of adolescents involved the question, “What am I going to do when I finish school?”</td>
</tr>
<tr>
<td>Prior Knowledge</td>
<td>Observation No. 1</td>
<td>All students had either work or volunteer experience prior to beginning the course</td>
<td>no document data</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>Observation No. 1</td>
<td>Student 5, Interview iii – “I learned so much about myself, that I’m better at some things than others and there are areas where I have to work harder to reach my goals”</td>
<td>Review of proposed career planning curriculum – Developing Self-Knowledge is first skill strand</td>
</tr>
<tr>
<td>Self-Directed Learning</td>
<td>Journal Writing was not well-received by students – many students did not see a direct relationship between reading news articles and learning about individual career paths</td>
<td>Student 5, Interview ii – “The class is the best when you can learn about what interests you and what you want to do in the future”</td>
<td>Choices into Action stresses the individual nature of educational and career planning with student portfolios, individualized education plans and self-directed learning</td>
</tr>
<tr>
<td>Career Maturity</td>
<td>Student Portfolios – results of COPS tests, researched reports of two careers, educational plans</td>
<td>Results of EMI test showed that each participant had a high level of career maturity by the end of the course</td>
<td>Major focus of career education reforms is on increasing career maturity of students</td>
</tr>
</tbody>
</table>
Observational data were analyzed to answer the question of how the course was unfolding throughout the semester. Data collected during the observation were analyzed chronologically for descriptive detail only.

The deductive portion of the analysis involved the scoring of the Employability Maturity Index that was given to participants during the final interview. The EMI is a qualitative instrument that uses quantitative scoring only for the purpose of placing people into one of three categories: low, intermediate, and high. The EMI Manual includes instructions for scoring the test, and these instructions were closely followed. Participants' responses to each question were compared to the three levels of maturity in the EMI scoring guidelines. A score was assigned to each response that best captured the level of maturity evidenced: 0 (low), 1 (intermediate), 2 (high). The 11 scores were then added into a total EMI score that was later converted to a percentile rank using the EMI norms. The EMI norms are based on a sample of 101 clients. It is important to note that the EMI is a qualitative index that elicits qualitative responses from participants.

In order to determine the fit between the current course of study and the proposed Ministry of Education and Training career education curriculum, the aims and objectives of the two programs were compared. The objectives outlined on the course outline of the career planning course being studied were matched with the proposed course objectives for comparison. Common aims and objectives were noted, and any new objectives were listed accordingly.

Methodological Assumptions

This study recognizes several methodological assumptions. First, this study assumes that a course in career planning will lead students to increased career maturity.
Second, it is assumed that students understand the concept of career maturity and that students can assess their level of career maturity. Third, an assumption is made that the current career education program does compare in some way with the new provincial career education guidelines. Finally, the researcher assumes that the Employability Maturity Interview does give some indication of the level of a student’s career maturity.

**Establishing Credibility**

Throughout this study, measures were taken to ensure the credibility of the results. The study relied on multiple sources of data to confirm findings. Interviews were synthesized and read back to participants to check for accuracy. The study took place over an entire semester, which allowed for repeated observations.

To enhance credibility of the deductive results, the instrument used in the final interview to observe levels of career maturity was checked for reliability and validity. Other studies that used this instrument were reviewed. As noted in a 1992 study using the EMI:

In a study involving 106 persons with disabilities, Morelock, Roessler and Bolton (1987) reported split-half correlations using the Spearman-Brown formula for three different rates ranging from .74 to .82 with a mean of .81. The authors also reported satisfactory correlations of the EMI with measures of mental ability, academic achievement, interest differentiation, work interest, and independent indices of employment potential. (Hutchison et al., 1992, p. 294)

Another way this study attempted to increase credibility was through triangulation of findings. One source of data was the participant interviews, which took place three times throughout the semester and allowed the participants to offer their views on the
course material at three different points in the course. Next, the career planning class was observed on six separate occasions, which allowed the researcher to check data across time. A third source of data was the review of curriculum documents, which included the course outline, Ontario Ministry of Education and Training documents, news releases and articles, and text materials for the course. This triangulation of findings allowed for a check of relevant data across several sources and across the time period of an entire career planning course.

Member checking was another way this study sought to establish credibility. Each of the first two interviews were synthesized and read back to participants to ensure accuracy of the data. Interpretations were checked with participants, and they were given the opportunity to delete or change responses.

A further measure of credibility was the length of observation. The career planning class was observed throughout an entire semester, which allowed the researcher to follow the course outline and to experience how each unit of study was delivered. This lengthy observation period assisted the researcher in understanding how the material studied led to increased career maturity among the students involved in this study.

Finally, steps were taken to ensure that there was no teacher bias in the dual role of teacher and researcher. The teacher was chosen for this study as she is the only teacher in the school who teaches career planning. My role in all aspects of this study was strictly confined to that of researcher and not that of Guidance Department Head. As researcher I was not in an evaluative role. I performed all observations as researcher and no questions in any of the interviews reflected on the role of the teacher.
Summary

The procedures for this study were varied and lengthy. These procedures spanned 10 months of time from the point of gaining permission for the study to conducting a pilot study and then to the actual study. The time span of the actual study followed the course of one semester in a career planning class. The data collection during this time involved participant interviews, class observations, and curriculum document analysis. The analysis of such multiple sources of data was ongoing throughout the process, thereby enabling the researcher to establish credibility in the study.
CHAPTER FOUR: FINDINGS

This chapter presents the results of the observations of the career planning class and of the interview process. The report includes observed data as well as participants' perceptions of the career education. The scoring and interpretation of the Employability Maturity Interview and the analysis and comparison of curriculum documents are also included.

How the Course Unfolded

In order to investigate the process of presenting career planning curriculum, examination of the course outline and direct observation of the class were conducted. Of particular interest to the researcher was how the curriculum was delivered, the methods used by the teacher, and the students' responses both to the curriculum and to the delivery.

Data collection for the observations involved an initial examination of the course outline and an understanding of the aims and objectives of the career planning program. As the course outline (Appendix G) illustrates, the Career Planning class, known as NGD3G1, was divided into four units: Unit 1: Self-Awareness, Unit 2: Relationships, Unit 3: Educational Awareness, and Unit 4: Career Awareness. Each unit involved lessons and assignments related to the topic being studied. Units were approximately 4 weeks in length, and time allowances were made for testing, presentations, and field trips. Journal writing, a part of each unit of study, involved students in reading newspaper and magazine articles on careers, job trends, and education and in writing personal reactions to the articles. Students were required to submit 5 journal entries per term for marking,
for a total of 10 journal entries submitted.

The course began with a unit on self-awareness. To satisfy the first aim of the program, each student was put through a process of introspection where they began to gain an understanding of personal aptitudes, interests, and future goals. One of the chief instruments used during this unit was the Career Occupational Preference System (COPS, Educational Research and Services, 1997). The COPS instrument measures an individual's interests, abilities, and values through a series of questionnaires and brief quizzes.

Observations done during the abilities portion of the COPS test showed that students were keenly interested in uncovering their own aptitudes. The teacher administered each of the eight tests: mechanical reasoning, spatial relations, verbal reasoning, numerical ability, language usage, word knowledge, perceptual speed and accuracy, and manual speed and dexterity during two class periods. Spreading the testing out over two periods allowed time for self-scoring, questions, and discussion. Students were eased into the testing with an explanation of what aptitude means and what they might expect from the results of this testing. The teacher minimized the testing aspect, which contributed to students being at ease about the assignment. At first when the students were told they were about to take a series of tests, several students inquired about the number of marks that would be allotted. Once the teacher assured them that these tests were not going to be evaluated, but were instead to become part of the personal profile, students appeared more relaxed. Each test was administered within the 5 minute time limit with the use of a timer. At first students were edgy and upset about not completing all of the questions in the 5 minutes, as was evidenced by several students
who commented that the tests were unfair because the time limit was so short. During the initial two tests, comments such as, "This is stupid," and "What does this prove?" were heard from students. To alleviate the students' concerns, the teacher constantly reassured students that they were not necessarily expected to finish each test and that they should just try to answer the questions as accurately as possible. Once students heard that they were not expected to finish each test, they settled down and no further comments were heard.

When all eight parts were completed and scored, students were instructed how to score results on a chart inside their personal scoring booklet. From their results, students were directed to a list of careers in the back of the booklet that related to their particular aptitudes. From observation, this appeared to be a worthwhile and enjoyable task for students as they were able to match up aptitudes with career fields. Several students commented that they were not surprised about which career fields suited them. One student summarized his results by saying, "I always knew I was good with my hands and good in math so it makes sense that I should go into technology skilled or business skilled." A few students were surprised at the recommended career fields, with one student exclaiming, "I never thought I was very artistic but this test says I should consider a career in the arts." Upon inquiry several students commented that much of the aptitude section reinforced their own educational and career plans, while a few others suggested that the results opened up career fields they had not previously considered. Students paid careful attention during the lesson and activity. They asked relevant questions, and they stayed on task throughout the two-period class time observed.

Results from the aptitude portion of the COPS test were placed in individual
student folders, which served as career education portfolios for the course. The other components of the COPS test, interest and job values inventories, were later completed and also became part of the student portfolio. By the end of the semester, the portfolios included the COPS results, copies of resumés, letters of reference, lists of awards and certificates, and samples of writing.

The focus of Unit 2 was on building effective communication skills through relationships with others. Communication skills are an important part of the career education process. Much of the material for this unit came from articles on effective communication from various publications and from doing assignments on relationships and communication. Students worked on listening skills and questioning techniques in an interactive setting. Also, guest speakers representing various career fields were invited into the class during this unit to assist students in gaining valuable communication skills.

Class observation for this unit was done during a career presentation by the director of a local daycare centre. This was the second career presentation in a series of 10, and it was apparent that there was a specific procedure for the speaker format. Most students began the class by picking up a blank speaker summary sheet from the front counter and preparing for the speaker to begin. The summary sheet cued students to general points such as job description and working conditions covered by speakers. The teacher introduced the guest speaker, and students listened carefully and jotted down information to fill the spaces on their summary sheets. The speaker encouraged questions during the presentation, and several students asked questions to clarify points, in particular on government regulations and educational requirements. When the speaker
finished her formal presentation, the teacher encouraged the students to ask any further questions. Few students asked questions at this point. The speaker invited students to come up and look at some pamphlets and literature she had brought with her. Six of the 18 students present went forward and engaged in conversation with the speaker. All 6 were female and showed some interest in daycare or in teaching small children. The rest of the students talked to each other and shared the answers from their summary sheets. The teacher later revealed that this scenario was repeated in different ways with different speakers. She indicated that the class as a whole was good at listening and jotting down questions, but only those truly interested in the career field asked questions after the speaker finished or approached the speaker for more information at the end of the presentation. According to the teacher, the key to making the guest speaker process effective was to have a wide variety of speakers with differing educational and career backgrounds.

Unit 3 focused on the educational aspect of career planning. A key area of this unit involved looking at the differences between colleges and universities as well as examining other paths such as apprenticeships, the military, and private and vocational schools. At this point, students began to plan for their future. Students filled out mock college and university applications after exploring calendars from various institutions. Speakers from the Apprenticeship Branch of the Ministry of Education and Training and from the Armed Forces were invited to give presentations to students about specific career paths. This unit allowed students to take information they had learned about their aptitudes and interests in Unit 1 and apply it to an educational path. For example, students who scored high in the area of science professional on the COPS test spent time
investigating the educational route to becoming a doctor or an engineer. Students who scored high in the area of technology skilled explored various routes, such as apprenticeship and the military, to technologist careers.

A lesson on apprenticeship was observed during this unit. To assist with the lesson, a representative from the Apprenticeship Branch was invited to speak to the students. Students were given an overview of apprenticeship and of the rules and regulations that govern apprenticeship in the province of Ontario. The classroom and workplace components were explained in detail. Many students seemed interested in this information and many questions were asked of the presenter. Students were particularly interested in which colleges had specific apprenticeship programs and which trades were currently in high demand. The speaker handed out brochures to the students and explained that more information was available in the guidance office. The information presented was clear, concise, and easy for the students to understand.

The final unit of the course involved the exploration of career alternatives. In this unit, students were taken through the stages of planning a career. Students built on information already gained in the course, such as their results on the COPS test and information gained from researching educational paths to careers. Lessons involved information about social and economic considerations, future trends, resumé preparation, interview techniques, and labour laws.

The class was observed for this unit while they were conducting an Internet search on careers. Students were instructed to log on to the Human Resources Development Canada website to search careers by National Occupation Classification (NOC) codes. Careers to be searched were individually selected by each student from
information gained during the COPS testing. Each student arrived with five to seven
different occupations to search. Problems arose during this lesson when the computer lab
stopped functioning and the class had to share computers with a senior computer
programming class. This meant that only half the class could do the search while the
other half went back to class to work on journals. The teacher teamed students with
Internet experience with students who had little or no experience, and this strategy
seemed to help the inexperienced students. Students had instruction sheets to fill out that
helped them focus their search to areas such as education requirements, salary, and future
outlook for each occupation. The students worked diligently at the task, but complained
about the slowness of the Internet connection. By the end of the work period, most
students had completed the task for at least four occupations. The teacher later explained
that students were to use this information to narrow their career path to three occupations
they wished to pursue further.

By the end of the course, each student had a career portfolio that consisted of the
following:

1. Results of the COPS testing: aptitude, interest, and job values.
2. Copies of a formal résumé and a skills-based résumé.
3. Letters of reference from three individuals.
4. Personal information such as certificates, first aid qualifications, thank you
   letters, and a writing sample.
5. Researched reports of at least two careers of their choice, including
   educational requirements.

Students took these portfolios with them at the end of class in June. They were instructed
to put these portfolios in a safe place as the information could prove useful to them in the future.

The career planning program unfolded from a theme-based perspective in four units. The four units that comprised the semester were built on the premise that students need to learn about themselves before they can begin to plan their educational and career path. Beginning with establishing a foundation of self-awareness in Unit 1, the course moved into the area of exploring relationships and developing effective communication skills in Unit 2. The course concluded with an exploration of educational and career paths. Much of the course involved a personal journey for students as they learned about themselves and then built on that self-awareness to discover individual educational and career possibilities. As part of this personal journey, students were exposed to a variety of educational and career paths through guest speakers. At the end of the course, students had portfolios filled with information on themselves, educational paths, and careers. They can continue to build these portfolios and to use them in both their educational and career pursuits.

Student Perceptions

As outlined earlier, student responses to career education curriculum were of particular interest to the researcher. In order to properly explore the connection between career education and career maturity, it was essential to hear whether the students involved in the career planning class felt that the course had benefits for them. The chief goal was to experience the career planning course from the perspective of the students in the class. Students were interviewed within the first week of the course in order to discover why they chose the option of career planning and to determine what their
expectations were of the course. Students were again interviewed midway through the semester to establish what learning had taken place to that point and to see whether their expectations of the course were being satisfied. From these interviews, data on student perceptions and the subthemes of student expectations and perceived outcomes were gathered.

**Student Expectations**

The participants in this study did not take Career Planning for the same reasons. Three of the 5 participants chose the course as an original option either because they thought it would be an interesting course or because their guidance counsellor suggested that they might benefit from a course in career education. One student explained his choice this way: “My guidance counsellor helped me choose the course by telling me that it would help me figure out what field I should go into and since I have no clue about my future I agreed it would be a good course” (Student 1, Interview 1). Of the remaining 2 participants, one took the course because she believed it would be an easy course to balance out her heavy academic schedule: “I’m taking lots of hard courses and doubling up on my math so I just thought career planning would be easy and not a lot of work” (Student 3, Interview 1). The other student registered late and found that it was the only course to fit the time slot: “When I registered at the end of August I was told that I could either have career planning this period or a fitness class and there was no way I could pass a fitness class” (Student 4, Interview 1).

Even with these varying reasons for enrolling, all 5 participants had the same expectation of career planning. They each wanted to find out what they should do in the future. As one participant commented, the whole purpose for taking this course “was to
figure out what I need to do now so that I end up with a good career and a job I like in the future” (Student 1, Interview i). The student who chose the course as an easy option stated that she hoped the class would “help you find out what you want to do in the future” (Student 3, Interview i). Even the student who took the class because there were no other options available explained that he expected the class would help students in “finding a suitable plan or future for yourself career and lifestyle wise” (Student 4, Interview i).

Future planning was seen as important to each participant. While planning for the future seems to be an obvious outcome to expect from a career planning course, it is interesting to note the concerns of the participants in relation to their future. All five participants commented that they were fearful of ending up in a job they did not like or a job that was considered “dead-end.” This fear was summed up by one participant as, “I want to make sure that I pick something I’m good at so that I will enjoy it because if you don’t enjoy your job it would be awful and you won’t want to go to work every day” (Student 1, Interview i). Another participant expressed the fear that “if you don’t know what you’re good at you won’t know what to go into and you might get stuck in something you hate—I’m really worried about that” (Student 3, Interview i). It was obvious that, while planning for the future was an important concern for these students, such planning was focused on being successful or at least on being content with the choices made. Students expected that a course in career planning would help them to identify the proper career choices for them specifically. The course was expected to assist students in choosing the correct educational and career paths so that students could be happy with their choices. Future planning manifested itself in a fear of making poor
career decisions. To all of the participants, a course in career planning was one way to conquer that fear and to learn how to make proper career decisions.

Another expectation of each participant was learning which careers would be available in the future. Participants commented that they were bombarded with negative news about jobs in the future. Students found it difficult to sift through the conflicting information about job prospects, and participants stressed that knowledge of which careers would be open to them was important before making educational decisions. The idea of spending a number of years in school working toward a career goal and then ending up with no job was a real concern for each student. One participant who had already applied to college said that one of his biggest concerns was, “Are there any jobs in this field and can I get one after college?” (Student 2, Interview i). He noted that a course in Career Planning should have been taken before he applied to college: “I really wanted to take this course semester one but it wouldn’t fit because I had to retake math” (Student 2, Interview i). The other four participants wanted a clear idea of which jobs would need people before they finalized their own future plans. A participant who originally had considered nursing indicated that “I changed my mind because I kept reading in the papers that there were no jobs and people were having to go to the States for work” (Student 5, Interview i). She expressed confusion about reports of few jobs and then, “a report was posted on the bulletin board from one of the colleges that said Ontario would have a nursing shortage by 2001 because fewer people were going into nursing” (Student 5, Interview i). It became clear that students wanted and needed to cut through the confusion of job prospects.

The expectation was that the career planning course would help them to make
decisions about career fields based on their interests and abilities so that they would choose an appropriate career. Concern about making proper educational and career choices was a common theme from the first interview. One participant commented that career planning was all about "looking at careers so that you pick something you are good at and something you might enjoy, because if you don't enjoy your job it won't be good" (Student 1, Interview i). Other participants showed similar concerns with comments such as "it's important to learn about what career to go into because the worse thing would be to choose a career you're not really interested in and have to do that job for the rest of your life" (Student 4, Interview i).

Finally, students recognized that a major aspect of career planning was finding out the proper educational path to a career. Participants expected to learn about educational options in the Career Planning course. As one participant noted, "I already know what I want to be but I want to find out what courses I should take and which schools I should consider" (Student 5, Interview i). Another participant acknowledged that his chief reason for taking the course was to "find out more about college since I will be applying soon and I really don't know which program I should go into" (Student 1, Interview i). Several participants looked forward to learning about other educational options such as apprenticeship and private vocational colleges.

Student expectations of the course were paradoxically simple and complex. From the first interview where students were asked to express what they expected from a course in career planning, it was apparent that all 5 participants were looking for the same thing: some assistance with future plans. Quite simply, students were concerned about the future with respect to educational and career decisions, and their hope was that
through a course in career planning they would find themselves better able to make some of the decisions that will affect their lives. The complexity of their concern falls in the area of the future. It was obvious that students felt apprehensive about the future even when they had established some career goals. Student apprehension came from the fear that even when they had decided on a career they could not be sure that they would find a job in that field. The fear of unemployment weighed heavily on students' minds, as did the prospect of ending up in a job that was disliked.

**Students' Perceived Outcomes**

The purpose of the second and third interviews was to further delve into student perceptions of the career planning course. The second interview revealed that the course was meeting student expectations and that they were learning about themselves and about individual career paths. The third interview revealed that students did experience an increase in career maturity that was both perceived by the students and observable by the researcher.

All 5 participants acknowledged the benefits of the COPS testing. This series of tests helped the students to realize their aptitudes and interests and assisted them in focusing on career choices. One comment was that “the COPS test was a good experience for me. It made me think about my future plans and it showed me where my strengths and weaknesses lie and what my interests are so I can focus on jobs that fit me” (Student 1, Interview ii). One participant noted that the COPS test was valuable because “I learned a lot about myself and my abilities. It took a short time to do the test and it made a lot of sense to me” (Student 3, Interview ii). The test was also noted as valuable because it exposed students to other career options and opened up other fields of interest.
Participants acknowledged a greater sense of self-awareness after taking the COPS test.

A further perceived outcome of Career Planning for students was an increased awareness of career opportunities. As one participant commented, "I now have a really good idea of all the different jobs that are out there—a lot that I never knew about" (Student 2, Interview ii). Participants suggested that the Internet searches of careers were instrumental in exposing them to a multitude of occupations that were previously unknown to them: "On the Internet I found out a lot about management jobs, like what education is required and the different types of management positions available" (Student 3, Interview ii). Guest speakers also helped students to become more knowledgeable about different careers: "By listening to the speakers you get to learn the positives and negatives of a lot of different jobs" (Student 4, Interview ii). Several participants noted that speakers had altered the students' preconceived notions about certain careers, particularly those in the construction trades and in the military: "I had no idea that you could learn certain trades in the military or that bricklayers made so much money" (Student 2, Interview ii). A common theme of both the second and third interviews was the concept of self-directed learning. Each participant commented that the best aspect of this course was that it provided opportunities for them to learn about themselves and about the careers in which they were personally interested. As one student summed it up, "The class is the best when you can learn about what interests you and what you want to do in the future" (Student 5, Interview ii). Participants appreciated the individualized nature of the course that gave them many opportunities to research their own interests.

The only negative comments about the course were about having to complete
worksheets and do journal writing. Both the worksheets and journal writing involved material and information of a general career education nature. A common comment on journal writing was expressed by one student when he said, “I don’t like journals. I like reading the articles, even though some aren’t interesting, but I don’t like writing about them—I don’t see the point” (Student 1, Interview ii). It was obvious that students felt spending more time on their own individual goals and plans was much more beneficial: “It’s a waste doing journals because if the articles don’t have anything to do with what I want to do I don’t want to read them or write about them” (Student 4, Interview ii).

By the final interview, all 5 participants were able to state that they believed they had improved their level of career maturity by taking Career Planning. Participants felt that they were more prepared to make educational and career choices because they now knew what they needed to do to get where they wanted to go. They learned about the realities of the workplace: “I learned more about what it takes to get a job. I learned more about myself and that I’m better at some things than others” (Student 1, Interview iii). Learning about themselves was the area that several participants felt gave them the greatest increase in career maturity: “I learned so much about myself, that I’m better at some things than others and that there are areas where I have to work harder to reach my goals” (Student 5, Interview iii). Each participant was positive about the Career Planning course and felt that taking the class had been very worthwhile.

**Observed Outcomes**

While student perceptions of career planning were one way of learning whether career maturity was enhanced, it was also important to take some objective measure of the growth of career maturity. Each of the 5 participants came into the career planning
course with limited career maturity. Student 1 was in grade 10 and had focused his future career by deciding to do what his father did because it looked interesting. It did not occur to this student that his chosen career, engineering, required a strong science background, an area the student was weak at and disliked. Student 2 was in his final year of secondary school and at the time the class began had already applied to a program in hotel and restaurant management at college. His chief reason for choosing such a program was that he thought it would be fun and he hoped to seek employment at a vacation resort. He had little knowledge of whether he had the required skills for such employment. Student 3, in grade 11, was dealing with the belief that her future choices were limited because she did not have high enough academic results to enrol in university. She considered a career in law but felt that her average of 80% was too low for university admission. Somewhere she had acquired the mistaken knowledge that all university programs require an admission average above 90%. Student 4, also in grade 11, had an idea of her future career path but was confused about the difference between college and university. Finally, Student 5, in grade 12, knew from the outset that he wanted a career doing scientific research but was unable to state clearly what sort of skills that job required. He also was unable to identify his own skills or interests. It was clear, that although each student had already begun to consider their future careers, they needed to acquire knowledge about themselves and about educational and career paths.

Over the course of the three interviews, it became apparent that learning was taking place and that students were increasing their level of career maturity. The interview format provided an effective means of observing this outcome, as students were able to articulate in the interviews that they were reaching new levels of self-awareness
and readiness to make career and educational decisions as a direct result of the career planning curriculum. The level of students' self-knowledge and readiness for educational and career decisions appeared to be low during the first interview. By the second interview, students were able to list interests and abilities and to connect self-awareness to career paths. By the final interview, students were ready to make the next step in choosing a postsecondary path and in pursuing career goals.

The increase in career maturity was most significant in the area of self-awareness. During the first interview, participants were asked to list personal skills and interests. For the most part, this question elicited long pauses and confused looks. Students asked for clarification of the question: "You mean what I'm good at? I don't know... I like to watch television and I'm a good reader, is that what you mean?" (Student 4, Interview i). Several participants listed school subjects such as history and science as areas in which they excelled, but it was apparent that they did not really know how to list their own individual skills. Other participants suggested sporting activities such as rollerblading and football as both skills and interests. One participant even listed channel surfing and eating among his skills and interests. Indeed, one participant commented that he was "interested in a lot of stuff but not really that good at anything" (Student 4, Interview i). It was obvious from these responses that the students had a limited understanding of what was meant by skills and interests and a limited capacity for identifying their own skills and interests.

By the second interview, participants progressed a great deal in understanding themselves. In class they had completed the COPS inventory and worked on several self-awareness activities. At this point, all participants were able to list both skills and
interests and to explain the importance of self-awareness to career planning. One participant noted that "the ability area showed I have strengths in business which is good because I want to get into hotel and restaurant management so I need good business skills" (Student 2, Interview ii). For skills, students listed specific areas such as business professional, business skilled, communications, science skilled, and science professional, which are all terms from the COPS inventory. The COPS test designated certain occupations as skilled and others as professional. The jobs under skilled require a college education while those under professional require a bachelor degree or higher. All participants were able to explain the differences between skilled and professional areas, and they understood the different educational requirements for each area. One student suggested that "on my results the professional areas were weaker than the skilled areas. This means I should focus on a college level rather than a university education, something in the technology area" (Student 5, Interview ii). Participants at this time commented that it is important for people to know their skills and interests so that they can choose an appropriate career path. In the words of one participant, "This is a good test for someone to take if they don't know their skills and interests because it helps you pinpoint career fields that fit your particular skills and interests" (Student 3, Interview ii). In the area of interests, students again were able to list specific areas such as outdoors, consumer economics, and technology. Again, students were able to show that they understood the meaning of these areas by listing specific occupations to fit specific interests.

Readiness to make educational and career decisions was another area in which students displayed a lack of knowledge early in the semester. In the first interview,
students were asked what career field they were considering. Their responses to this
question indicated that students were unclear about educational paths. For instance, one
participant suggested that he would like to be an engineer but on further questioning
revealed, "I don’t like science and that much and I’m not very good at it" (Student 1, Interview i). Another participant listed law as an area she would like to go into but she
felt it was a career out of her reach because "I don’t have the marks to be a lawyer. You
have to have marks around 90 to even go to university" (Student 3, Interview i). This
was a grade 11 student who consistently maintained an average in the high 70s in
advanced level academic subjects. She was under the impression that only students with
averages above 90% go to university. Further, another participant was certain that she
was heading for a career as a wildlife biologist, but she had no intention of attending
university. Only 2 participants actually displayed accurate knowledge in the area of
educational requirements, and one of these had already applied to a college program.

By the second interview, participants showed an increased awareness of
appropriate educational paths for particular careers. Knowledge gained in the Career
Planning course helped students to refine their future goals. As one student noted, "I am
much stronger in skilled areas than in professional areas. I think this means I should
focus on a college level rather than university education and I learned that I’m really
looking at a career as a wildlife technologist not a biologist" (Student 5, Interview ii).
Participants noted that class lessons on colleges and universities that involved researching
program areas as well as admission requirements were effective in bringing them to an
increased understanding of where they were really heading. The student interested in a
law career remarked, "Looking at all the different university programs has been good for
me because I have a better idea of what is required; I used to think you needed a 95% average to get into any program” (Student 3, Interview ii). Even more importantly participants realized that they had more than one educational option. Prior to interview two, students mentioned only college and university as educational choices. In interview two, participants listed apprenticeships, the armed forces, career colleges, and private technical colleges as other options available to them.

Interview responses were one way that an increase in career maturity was observed, while the Employability Maturity Interview during the third interview was a further indication of the increased career maturity of each participant. Scores on the EMI showed that each participant had a high level of career maturity. Scoring protocols outlined in the EMI manual were strictly followed, and students were assigned a mark out of a total of 20. This mark was transformed to a percentile rank. While none of the participants scored 20, scores were high, with 2 participants scoring 16, 1 scoring 17, and 2 scoring 19. Percentile ranks ranged from the 85th percentile to the 96th percentile. These scores indicated that participants ended the Career Planning course with a high level of career maturity. Considering that students exhibited low career maturity indicators such as self-awareness and readiness to make educational and career decisions during the first interview, the knowledge gained in the Career Planning course appeared to contribute to the increase in career maturity as exhibited on the EMI.

A summary of the participants and outcomes is presented in Table 2. Overall, the observed outcomes pointed to an increased knowledge in self-awareness and in the ability of the participants in this study to make initial educational and career decisions. Based on these observed outcomes, the career course satisfied its stated aims and objectives.
Table 2

Participants and Observed Outcomes

<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Age</th>
<th>Grade</th>
<th>Program</th>
<th>Observed increase in self-awareness</th>
<th>EMI score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>male</td>
<td>15</td>
<td>10</td>
<td>general</td>
<td>Interview ii</td>
<td>16/20</td>
</tr>
<tr>
<td>2</td>
<td>male</td>
<td>19</td>
<td>12</td>
<td>general</td>
<td>Interview ii</td>
<td>17/20</td>
</tr>
<tr>
<td>3</td>
<td>female</td>
<td>16</td>
<td>11</td>
<td>advanced</td>
<td>Interview ii</td>
<td>19/20</td>
</tr>
<tr>
<td>4</td>
<td>female</td>
<td>17</td>
<td>11</td>
<td>general</td>
<td>Interview ii</td>
<td>16/20</td>
</tr>
<tr>
<td>5</td>
<td>male</td>
<td>17</td>
<td>12</td>
<td>advanced</td>
<td>Interview ii</td>
<td>19/20</td>
</tr>
</tbody>
</table>
Comparison of Current Curriculum with Proposed Curriculum

The purpose of this study was to examine what connections could be found between career education and career maturity. One question of interest to the researcher was the extent to which the current career planning curriculum fit the proposed changes to career education in terms of the outcome of career maturity. In June 1998, the Ontario Ministry of Education and Training published a first draft of the new career education curriculum that will take effect in September 1999. Comparing the results of this study with the draft curriculum provides a foundation for considering what changes to current curriculum are required.

Current Curriculum

The career planning curriculum followed in the observed course focused on four thematic units that were covered throughout the semester. These units were Self-Awareness, Relationships, Educational Awareness, and Career Awareness. Curriculum for these thematic units covered self-evaluation in the area of aptitudes, interests, and future goals; covered communication skills with an emphasis on establishing personal and professional relationships; and exposed students to a variety of educational and career paths. The chief aim of the course was to increase the career maturity of students to enable them to make informed and responsible educational and career choices.

Proposed Curriculum

The proposed compulsory course in career education is entitled “Civics and career studies.” This course is an “open course – designed to be appropriate and valuable for all students regardless of their post-secondary destinations” (Education Network of Ontario,
The new curriculum is organized around five “strands” or major areas of knowledge and skill that students are expected to develop. The five strands are as follows:

1. Developing self-knowledge and personal management skills.
2. Building relationships and communities.
3. Exploring opportunities.
4. Learning for life.
5. Planning for transitions and change. (Education Network of Ontario, 1998a, p.3)

Comparison of Current and Proposed

A review of the overall expectations listed for these two curricula indicates a large degree of consistency. Through the four units of the current career planning curriculum the five strands are addressed: Unit 1 matches Strand 1, Unit 2 matches Strand 2, Unit 3 matches Strand 3, and Unit 4 matches both Strands 3 and 4. With the exception of a new interest on community awareness listed under Strand 2 and part of Strand 4, learning for life, very little change is required. What is required is a reorganization of what is already being taught so that it fits clearly under the strand categories. This reorganization could take the form of reviewing current curriculum content from each unit to consider how much of it fits with proposed curriculum. Thus, most of the proposed curriculum is already being taught, and the new components should fit easily into the current course of study.

Summary

The findings of this study point to a positive relationship between career
education and career maturity. This relationship was shown in the results of this study. First, through an examination of the career planning course as it unfolded during the semester, it was apparent that the main objective of the course was to increase students’ career maturity. By focusing on the three areas of self-awareness, educational awareness, and career awareness, the course aimed to prepare students to make individual educational and career choices.

Next, by exploring students’ expectations of the course, it was clear that students took the career planning class to increase their career maturity. While students did not use the term “career maturity” in stating their expectations, the fact that they expected a course in career planning to assist them with future educational and career plans showed that they did expect the course to enhance their own career maturity.

It is important to note that a secondary finding was uncovered during the exploration of student expectations. While stating that they expected a career planning course to help prepare them for the future, students revealed concern and apprehension about the future in relation to careers. Students’ main concerns involved fear about choosing a career that they would dislike or training for a career and then being unable to find employment. Thus, students expected that a career planning course would help to point them in the direction of suitable and available employment.

After examining the course and student expectations, the study moved on to exploring outcomes, both as perceived by students and as observed by the researcher. Each of these outcome areas pointed to a positive relationship between career education and career maturity.

Students’ perceived outcomes were explored through the interview process. All 5
students involved in the study stated that they experienced an increase in personal career maturity as a result of taking Career Planning. Each student was able to support this statement by explaining how the course had increased their readiness to make educational and career decisions.

Observed outcomes also verified that career maturity had developed through taking Career Planning. As the interview process progressed, it was apparent from their responses and their growing self and career awareness that students were becoming more career mature. The EMI test given at the end of the course validated that the students in the course had achieved a high level of career maturity.

The last area this study explored was the connection between the career maturity objectives of current programming with proposed guidelines. The new curriculum with its focus on developing self-knowledge and exploring opportunities clearly aims to increase students' career maturity. Current programming, as revealed in the findings of this study, already satisfies this aim. Thus, much of the current course material can be included unchanged under the new guidelines.
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of this study was to examine the connection between career education and career maturity. This chapter summarizes the findings of the study, relates those findings to career education theory, and considers implications of the study for theory, practice, and further research.

Summary

This study examined the connections between career education and career maturity. Of interest to the researcher was the extent to which existing curriculum leads to increased career maturity in students and whether the current career planning curriculum fits the proposed changes to career education.

One senior-level career planning course was studied in depth during one semester. The career planning class was observed several times during the semester, and 5 senior-level students participated in three interview sessions scheduled throughout the semester. Two primary findings emerged. The first finding indicates that as a result of taking a career planning course students did increase their career maturity. This finding was arrived at as a result of studying the course in depth, through interviewing students from the career planning class, and from direct observation.

The course was divided into four units that focused on self-awareness, building relationships, educational awareness, and career awareness. It was apparent from the course outline that the main objective of the course was to increase students' career maturity. This objective was achieved in two ways. First, through a series of interest inventories and aptitude tests, students increased their self-knowledge. Next, by exposing
students to a wide variety of educational paths and career fields, the course allowed students to match their interests and aptitudes to various occupations. Much of the course was self-directed, which allowed students to explore only those educational and career paths that were relevant to them. The course was set up and delivered in a fashion that facilitated students to obtain the knowledge that would increase their readiness to make educational and career decisions.

The finding that career education facilitates career maturity was confirmed through participant interviews. Five Career Planning students were interviewed at three points during the class: at the beginning, at midterm, and at the end of the course. Student expectations, as noted from the first interview, were clearly connected with the concept of career maturity. All 5 students expected that a course in career planning would help them to decide on an educational and career path. Each student hoped that the career planning course would help them to choose a career in which they could experience success. Also noted in the first interview was a general lack of self-awareness and limited knowledge of educational and career opportunities. Students also presented some misinformation about education and occupations.

A secondary finding, which emerged during the first interview, was that students were concerned and apprehensive about the future in relation to careers. Students expressed such concerns as a fear of ending up in a job for which they were ill suited. A further fear was being unable to find employment after spending several years in school training for a career. It was apparent that students felt that they did not know enough about specific careers to make a proper choice for themselves, and this led to their fear of the future. As students gained self-awareness and career awareness, they began to reduce
their apprehensions.

By the second interview, students exhibited an increase in self-awareness and a growing knowledge of the different educational and career opportunities that existed. Students were able at this time to state individual skills and interests and relate these to occupations that had been presented in class.

During the third interview students were given the Employability Maturity Interview, an instrument that measures career maturity. All 5 students achieved high scores on this test, which verified an increase in career maturity. Students were also asked to comment on their career maturity, and each student stated that they did feel more prepared to make educational and career decisions as a result of taking the career planning course.

The second finding was that current curriculum was similar to the proposed course of study for the new compulsory career education program. Curriculum documents for the current course and for the proposed course were studied in detail. The current course divided the curriculum into four units: Self-Awareness, Relationships, Educational Awareness, and Career Awareness. The proposed curriculum addresses five skill strands as follows:

1. Developing self-knowledge and personal management skills.
2. Building relationships and communities.
3. Exploring opportunities.
4. Learning for life.

The two courses of study are similar as they both propose to begin with bringing students to a greater self-awareness before exploring educational and career opportunities. Both courses aim to increase career maturity by exposing students to various opportunities and by preparing students to plan for their future. The knowledge gained in comparing the two courses of study will assist teachers to use what is effective from the old curriculum while implementing the new curriculum.

Discussion

The intent of this study was to determine whether students feel more prepared personally to make educational and career decisions as a result of taking a career planning course. The results of this study provide insights into this concern.

The first finding of this study was that the career planning course as it unfolded did increase career maturity. The objectives and desired outcomes of the current curriculum are closely related to career development theory. The course as it is currently delivered fits closely with career education theory first presented at the beginning of this century. As Donald Parsons noted in 1909, there are three important steps in helping people prepare for career decisions: information on individual differences, exposure to different occupations, and a process of decision-making about educational or training paths (Herr & Cramer, 1979, chap. 1). The current course uses similar steps in the units on self-awareness, educational awareness, and career awareness.

In the 1950s, Donald Super revisited Parsons’s theory, in particular the area of
individual differences, with a focus on the dynamics of personality in career choice and job success. From this point on, career education theory included individual differences as an organizing theme in career planning classes. Both Parsons and Super were concerned with increasing an individual's career maturity, but it was Super who first used the phrase career maturity. The present study found that senior secondary school students entered career planning classes with little self-awareness and little appreciation of the connection between their individual differences and career choice. Participants in the present study revealed that the most learning occurred when the career planning class dealt with self-awareness and connected that self-awareness to educational and career paths.

As well as having roots in early career development theory, the first finding is also related to more recent research on the effects of career education. The present study revealed a connection between formal career education and an increase in career maturity. Research done in Australia by Trebilco (1984) showed that schools with formal career education programs produce higher career maturity results in students between grades 9 and 11 than schools without career programs. Robbins (1987) also showed that career exploration classes help students to achieve increased career maturity. Finally, a Canadian study (Hutchison et al., 1992) using the Employability Maturity Interview revealed that students show a positive growth in career maturity as a result of taking part in a career education program. By the end of the course, students involved in the present study had gained the knowledge to identify personal educational and career paths and also presented an increased awareness of their own individual skills and interests. Participants perceived an increase in personal career maturity, and an observed increase
was also evident as interview responses and results on the EMI revealed.

As part of the first finding, it is important to note that students expected that a course in career planning would help them plan for the future. Without explicitly stating it, students had the clear expectation that their career maturity would increase as a result of taking the career planning course. This expectation clearly fits with research done on adolescents and career education. Research into adolescent concerns revealed that one of the common problems of adolescents involved the question, "What am I going to do when I finish school?" (Levi, 1995). This question reveals that adolescents lack career maturity and need to increase their level of educational and career awareness. Concern for the future in relation to educational and career paths is evident in this question. The present study found that this concern was a prevailing reason that students chose a career planning course as an option. A secondary finding of this study showed that students were worried about the future and specifically worried about making the proper career choice. The idea of finding themselves in a job that they would not like to go to each day was something that concerned these students. They expected that a course in career planning would help them plan their future so that they would be less likely to make uninformed educational and career decisions.

The second major finding of this study was that current curriculum was similar to the proposed guidelines for the new compulsory course in career planning which comes into effect in September 1999. This finding shows that current curriculum satisfies the chief aim of helping to prepare students to make informed educational and career decisions set out in Choices into Action (1996), the career guidance reform document from the Ontario Ministry of Education and Training. Knowing that this outcome is
currently achieved will help when the course is being organized to fit the new course of study.

This finding shows that educators do not necessarily have to "reinvent the wheel" while implementing new career education curriculum. Often, an underlying assumption by educators is that we must throw out all the current curriculum whenever the government imposes educational change. This study suggests that this is not the case. Instead, educators need to look at change with a critical eye. It is, at times, easy to ignore changes and hope that they go away. However, as Throne (1994) points out, teachers must work with change so that they "are able to move beyond what they have often done to cope with bureaucratic certainty – that is, to quietly shut their doors and teach" (p. 198). This study suggests that educators know how to teach and that experience brings a certain "wisdom of the past" to various subject areas. The results of this study are encouraging in that they point to realization that educators are currently doing the right thing, whatever the right thing of the moment may be. As things change in education, educators do not necessarily need to discard everything currently in practice.

**Implications for Theory**

This study suggests that systematic, well-developed career education is a purposeful activity in that it helps to prepare students to enter the world of work. As Borgen and Amundson (1995) pointed out, senior secondary school students have reached a transitional period in their lives where they begin to focus on the goal of becoming independently functioning adults. Part of this goal involves deciding what to do after secondary school in relation to future careers. For many students, this is a difficult transition. Career education can help students with this transition by preparing
them to make educational and career decisions and by increasing their career maturity.

The findings also point to specific components of career education. An effective career program must deal with individual differences and relate those differences to specific educational and career areas. A variety of educational and career paths should be presented to students because often students are unaware of all the options available. Students prefer a class that is self-directed and that allows them to research occupations that fit their specific interests and skills.

Finally, career maturity is an important objective of secondary schooling. Many students enter career planning classes with a low level of career maturity. Many students do not see the relationship between recognizing personal skills and interests and choosing an occupation. It is important that educators spend time fostering self-awareness in students. Only when students reach a certain level of self-awareness can they truly begin to make effective decisions about education and careers.

**Implications for Practice**

The results of this study support the organization of formal career education programs. Participants involved in the study stated that they found the course to be beneficial to them in the way that it helped to prepare them for future decision-making. This benefit cannot be underestimated. Involving students in this type of course enhances their self-awareness and helps them to focus on goals. Students become informed about the choices that they have, and they eliminate career paths that do not fit their interests and aptitudes. The more informed that students become, the better able they are to make effective choices and to later become productive members of their communities. School counsellors in charge of career planning must be accessible to students and
familiar with current employment shifts and trends as well as with postsecondary routes to career fields. Also, schools must stress to students that learning is a lifelong process that will continue in the world of work. Finally, career planning is an important process, and programs must be regularly evaluated and geared to continual change and improvement.

One of the major implications for practice concerns changes in curriculum. For curriculum designers, the implication is that it is important to review current curriculum before changes occur. This study reveals that much of the current curriculum is similar to both the content and outcomes of the proposed curriculum. Designers need to be aware of what is already being taught and the effectiveness of such teaching. This awareness can benefit designers so that they can keep what is effective and change what is ineffective. In many instances, curriculum designers may find that little or no change is necessary.

A further implication for practice involves the evaluation of programs. Recent literature on career education programs reveals that ongoing evaluation of career education programs is necessary to maintain the integrity of such programs and to make sure that career programs are satisfying the aims and objectives set out for them. One of the findings of the current study helped to determine how much change was required to fit the proposed Ministry of Education career planning curriculum, which comes into effect in September 1999. Thus, evaluation of present programming is an important offshoot of this study. In order to ascertain whether current programming fits with proposed curriculum, evaluation of the present curriculum is in order. This evaluation will help educators implement changes without having to rewrite the whole career
planning course.

As part of this evaluation, teachers need to become more reflective of their own practice. One implication for practice is that reflective practitioner courses should be part of preservice teacher education not just of graduate studies in education. New teachers need to understand the ways in which such reflection can empower them to meet the changes that will inevitably occur.

In addition, preservice teacher education must also foster an awareness of the value of career education. Current secondary school reforms stress the importance of career planning beginning in Grade 1. It is vital that faculties of education train teachers in the delivery of career education curriculum so that future teachers have the necessary skills and knowledge to deliver effective career education courses.

**Implications for Further Research**

This study would not be complete without considering other areas of investigation. Although many directions could be pursued, the following stand out as ways to extend the present study:

1. Conduct a similar study with a larger population to investigate the extent to which the themes and patterns found here are generalized.

2. Test a variety of career education models to determine the extent to which they increase career maturity in students.

3. Conduct a similar study using the new career education curriculum.

4. Consider what role teacher advisory groups may play in fostering career maturity.
A Final Word

This study offered the researcher the opportunity to examine a career planning class through direct observation. It also allowed the researcher, through participant interviews, to determine whether students increased their career maturity by taking a course in career planning. The results of this study make it possible to prepare for future changes in career education curriculum. More broadly, in light of many other changes coming from the Ministry of Education and Training, it alerts educators to their ability to “challenge and inform theory just as theory challenges and informs practice” (Throne, 1994, p. 198).
REFERENCES


http://www.enoreo.on.ca/ecoo/test/oagee/htm_docs/guidance_1st.html


http://www.enoreo.on.ca/ecoo/test/curric/htm_docs/guid2nd.html


Appendix A

Request for permission to Board of Education

September, 1997

XXX XXXXXX
Superintendent of Secondary Schools
XXXXXX XXXXX

Dear XXXXXX,

I am writing this letter to seek approval from XXXXXX Board of Education for a research study I would like to conduct involving students at XXXXXX High School.

As part of the requirements of my Master’s Degree in Education I would like to carry out a study investigating student perceptions of, and experiences with, career planning curriculum. My ultimate goal is to further my own understanding of what students need to learn from a senior level career planning course. The current reforms for secondary education include an emphasis on compulsory career education therefore I feel it is important to begin planning for such a reality. I feel that there is a great deal to learn from students and from their experiences with the current curriculum. I would like to begin my data collection in February 1998. My plan is to study students in the semester two Career Planning class at XXXXXX High School.

In January I plan to send home a letter to the parents of each of the students enrolled in the second semester career planning class outlining my research plan and requesting permission from parents and students to conduct interviews with the students. From the initial request I will select five participants for my study. I plan to interview the students at the beginning of the semester about their expectations of the career planning course and about their perceptions of career maturity. I will interview students again at mid-semester and at the end of the semester.

Participant responses will be kept confidential and students will be aware that they may withdraw from the study at any time. Student’s names will not appear on any of the data collected in this study, nor will any student’s status in the classroom be affected by their decision to participate in this study.

If you require any additional information please do not hesitate to contact me.

Sincerely,

Brenda Blancher
Appendix C

Letter to Students and Consent Form

February 11, 1998

Dear Parents:

As part of the requirements of my Master’s Degree in Education, I plan to carry out a study investigating student perceptions of current career planning curriculum. To this end, I would like to interview students in the semester two NGD3G1 course.

Each participant will be interviewed three times throughout the semester, at the beginning, at mid-semester and at the end of the semester. These interviews would be approximately 40 minutes in length and would take place during the career planning class. The participants will not be penalized for missing class time. I am particularly interested in determining, from these interviews, students’ perceptions about the contribution of the course curriculum to the development of their career maturity (readiness to make educational and career decisions).

I believe that these interviews will be beneficial to both myself and the students involved. However, if for any reason, a student indicates that he/she does not wish to continue, the student will be free to withdraw from the study immediately. Students’ names will not appear on any of the data collected in this study, nor will any student’s status in the classroom be affected by their decision to participate in this study.

This study has been officially approved by the XXXXXXXX Board of Education.

Please return the attached consent form to the school as soon as possible indicating whether you give your permission for your son/daughter to participate in this study. If you have any questions or concerns please feel free to contact me at school.

Thank you,

Brenda Blancher
Consent Form

BROCK UNIVERSITY
FACULTY OF EDUCATION
Informed Consent Form

Title of Study: Student perceptions of the effectiveness of a senior level career planning course to their career maturity.

Researcher: Brenda Blancher
Supervising Professor: Coral Mitchell

Participant’s Name: ___________________________________________
I understand that this study in which I have agreed to participate is intended to examine student perceptions of a career planning course. My involvement will include participating in a series of three individual interviews with the researcher to take place at the beginning of the semester, at mid-semester, and at the end of the semester.

I understand that my participation in this study is voluntary and that I may withdraw from the study at any time and for any reason without penalty.

I understand that there is no obligation to answer any question or to participate in any aspect of this project that I consider invasive.

I understand that all personal data collected will be kept strictly confidential. I understand that only the researcher will have access to the data, and, specifically, that my responses to interview questions will not be seen by the course instructor, nor will my responses to interview questions affect my final grade in the course.

_________________________________________  _______________________
Participant Signature                        Date

If you have any questions or concerns regarding your participation in the study, please contact Mrs. Brenda Blancher at (905) 648-4468 or Dr. Coral Mitchell at (905) 688-5550 X4413.

Feedback about the results of the study and the use of the data collected will be available from Brenda Blancher at XXXXXXXX High School after September 1, 1998. A written account will be provided for you upon request. Thank you for your participation in this study.

**************
I have fully explained the procedures of this study to the above participant.

_________________________________________  _______________________
Researcher Signature                        Date
Appendix D

Pilot Questionnaire and Interview One Guide

1. Why did you choose to take NGD3G1 - Career Planning?

2. What does the term "career planning" mean to you?

3. List some things that you think are important to know when you are choosing a post-secondary program or a career field.

4. a) Have you already got some idea about the type of career you would like?

b) If yes, why do you think you would like this career?

       If no, why do you think that you are unsure about your future career?

5. What steps will you need to take to make your career dream a reality or to find out more about careers?

6. a) Give examples of some interests you have.

b) Give examples of some skills you have.

c) Why do you think it is important for a person to know their interests and skills?

7. a) Do you have a part-time job?

b) If yes, what is the job and how did you get it?

       If no, what type of part-time job would you like and why?

8. How will working part-time now, even if you do not currently work, help you in seeking future jobs?

9. Have you done anything, before taking this course, to find out more about different occupations? Explain.
1. Why did you choose to take career planning?

2. What does the term “career planning” mean to you?

3. What are some of the important things you need to know when you are choosing a post-secondary program or career field?

4. a) Do you know what type of career you would like?
   b) If yes, why are you considering this career?
   c) If no, why do you think you are unsure about a career field?

5. What steps can you take to find out more about a career?

6. a) Give me some examples of interests you have.
   b) Give examples of some of your skills.
   c) Why do you think it is important for a person to know their interests and skills?

7. a) Do you have a part-time job? If yes, describe your job.
   b) If no, what kind of part-time job might you like to have?

8. a) Do you have any volunteer experience? If yes, list such experiences.
   b) Do you think that volunteering is beneficial to the job search?
Appendix E

Interview Two Guide

1. Describe for me your experience with the COPS test. Include what you learned about your interests, skills and job values.

2. Do you feel that the COPS test was beneficial for you? Why or why not?

3. Suppose it was my first day in Career Planning; as a student, what sort of things would I do?
Appendix F

Observation Guide

Date:

Topic:

Lesson Type:

Observed Student Behaviours:

Observed Teacher Behaviours:

Activities:
Appendix G

Course Outline

CAREER PLANNING
NGD 3G1

AIMS AND OBJECTIVES

1. To subject each student to a process of introspection, such that they will evaluate aptitudes and interests.
2. To develop the process of socialization through a study of human interaction.
3. To research the various opportunities that are available in the post-secondary educational system.
4. To link up student experiences to current and possible future career trends.

COURSE OUTLINE:

UNIT 1  SELF-AWARENESS: To know and appreciate ourselves

- Autobiography
- Interest Inventory
- Personal Qualities Survey
- Work and basic needs
- Personality
- COPS test

UNIT 2  RELATIONSHIPS: To relate effectively with others

- Peer relations
- Getting along with others
- Perception
- Communication with others and human interaction
- Roles

UNIT 3  EDUCATIONAL AWARENESS: To develop educational plans

- Comparison of post-secondary educational institutions
- C.A.A.T. and University information
- Military information
- Private and vocational school information
- Apprenticeships
UNIT 4 CAREER AWARENESS: To explore career alternatives

Terminology of careers
Stages and planning of a career
Social and economic considerations
Future trends – entrepreneurship
Defined career plan – age-earning profile
Resume
Letters of application
Interviewing techniques
Employer/employee expectations
Legal rights and responsibilities
Unions

EVALUATION:

Assignments 30%
Tests 40%
Notebook/Journals 10%
Speaker summaries 10%
Work habits, participation, and attendance 10%

Total 100%