Career Planning in Ontario Grade 10 Students: Student Perspectives

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Abstract

Despite the recognized importance of career guidance to postsecondary access and persistence, research on the topic with key stakeholders in Canadian secondary schools is meager at best. This study sought the perspectives of Grade 10 students on the career planning context in selected Ontario high schools. The results show that most students recognized the importance of career planning and perceived it to be an important component of their identity. While some had developed a career plan, most were experiencing difficulty and were trying to decide between competing options. Information to help identify their passions, abilities and related careers was most useful to their planning and, ideally, this would be accessed via 'on the job' experience, speaking with someone in the job they were attracted to or a comprehensive 'one-stop' web site. The findings suggest that increased exposure to experiential learning and comprehensive, computer-based career exploration tools combined with individual guidance could help more Ontario Grade 10 students identify a career path that is consistent with their passions and abilities. The benefits would be increased progression to and suc

cess in postsecondary programs of study.

The dominant theories of the late 20th century posited that with adequate access to good career information and guidance, individuals would acquire the tools to make sound career decisions on their own. These decisions would result in improved human-resource allocation, labor force mobility and productivity, and improved cost-effectiveness of employment, education, and training programs (Krumboltz and Worthington, 1999). However, recent analysis of school-to-work programs globally brings this assumption into question by highlighting the need to empower individuals engaged in locating and processing career information so they are able extract meaning rather than simply providing basic information and guidance. (Lent, Hackett, and Brown, 1999; Savickas, 1999; Worthington and Juntenen, 1997; Grubb, 2002).

The benefits of career guidance programs are well documented. Magnusson and Roest's (2004) meta-analysis and synthesis of the efficacy of career-development interventions has shown that they are by and large positive and enabling tools for Canadian adolescents across the provinces. Despite the lack of longitudinal studies and best

practice analyses, many impact studies conclude that career planning services among adolescents in junior and senior high schools often lead to reduced drop out rates, improved employment prospects, an increase in self-esteem, more efficient use of resources, a greater supply of skilled workers to employers, changed attitudes to increased career choice, and increased motivation to continue learning after high school (McCrea Silva and Phillips, 2007; Bell and Bezanson, 2006). Some, however, have argued that career planning supports could reap greater benefits if they went beyond the typical descriptive format; there must be an active engagement with key stakeholders that goes beyond an information dump (Grubb, 2002; Walker, Alloway, Dalley-Trim and Patterson, 2006).

Barriers to Postsecondary Participation and Persistence

Numerous studies (Barr-Telford et. al., 2003; Ringer-Lepre, 2007; Malatest, 2007; McElroy, 2008; King et. al., 2009) have examined the barriers cited by high school students as reasons for not pursuing postsecondary education immediately after high school. One study (Malatest, 2007), suggests an information gap exists with respect to making decisions about post-

secondary studies. Less than half the high school students surveyed reported they had received enough information to make informed choices about their career path. In addition, over one third felt that high school had not provided enough information to make good postsecondary decisions. The same information was also found to be important for persistence in that half of the respondents who had discontinued their postsecondary studies did so because they were undecided about their career and reported they had not been provided with sufficient information about postsecondary options (Malatest, 2007). Foley (2001) found that nearly thirteen per cent of high school graduates did not pursue PSE because they couldn't decide what to do. A regional analysis found that in Ontario, more than other provinces, this reason was cited by one fifth of those who did not pursue postsecondary education. The findings across many studies are consistent in that career indecision or 'not knowing what I really wanted to do' placed second or third among the reasons given for not pursuing postsecondary education.

The Council of Ministers of Education, Canada and the Canada Millennium Scholarship Foundation (2009) have highlighted the need for more emphasis on career development. Their study concluded that inadequate information about postsecondary choices and the connection to careers led some Grade 11 students to discount the possibility of additional studies after high school. It also found that only a minority of participants had interacted with their school's guidance counsellors. Those who spoke to them typically reviewed grades and courses. Very few participants had approached their guidance counsellors to inquire specifically about postsecondary education and in most cases discussions with guidance counsellors took place after students had already begun considering alternatives to postsecondary studies. An important finding, consistent with the argument made by Grubb (2002), is the need to present information about postsecondary education alongside information about careers. This would not only illustrate how they are linked, but also help students think more about postsecondary education and future careers. Improved career guidance resources at the secondary school level, therefore, is clearly one way to increase college and university participation rates.

A report based on Statistics Canada's Youth in Transition Survey (Lambert, Zeman, Allen & Brussiere, 2004), concluded that a lack of program fit was the major reason cited by those who had left college or university without completing their program. Ultimately, a notable proportion of postsecondary leavers stated that they had done so either because they didn't like the program or their program wasn't for them. Similarly, the Price of Knowledge (Berger, Motte & Parkin, 2007) concluded that a lack of career direction is a barrier to persistence in and of itself.

Findings from the 2006 – 2008 Ontario College Student Engagement Survey (OCSES) (Dietsche, 2009) also support this conclusion. The study showed that while three in five entering Ontario college students are quite certain about the type of job they will obtain when they graduate, that is they are high in career clarity, approximately one quarter are not. Career clarity was defined by a student's response to the Likert item, "I feel undecided about what my career will be after college". Consistent with the findings of Berger et. al. (2007), the OCSES results demonstrated the importance of career clarity in an educational context where most academic programs are designed to develop occupation-specific knowledge and skills. The study revealed that students who began college with significant doubt regarding their future career and the relationship between their program of study and their eventual career destination were significantly less likely to become engaged in their studies, were more likely to express a preference for working rather than studying after a few months of college experience and more strongly indicated a desire to leave. Other research, both nationally (Finnie and Qiu, 2010) with college and university students and with Ontario college students alone (Finnie, Childs and Qiu, 2010), has produced similar results.

King (2003) and King and Warren (2006) examined access to and perceptions of career guidance activities in Ontario secondary schools. His research found that the vast majority of students had received information from their teachers and guidance counsellors about universities and colleges. For students who had

received career and educational information on colleges, approximately one-half found the information they received from guidance counsellors 'helpful' and 'very helpful', while approximately one quarter viewed the information as 'slightly' or 'not' helpful. Additionally, two-fifths found teachers' information 'helpful' or 'very helpful', and over one third viewed the information as 'slightly' or 'not' helpful. Finally, one fifth of the students claimed they had received 'no information' about colleges from guidance counsellors and teachers.

These results are consistent with those obtained by Bloxom, Bernes, Magnusson, Gunn, Bardick, Orr & McKnight (2008) who showed that Grade 12 students in Alberta generally did not find career planning resources to be very helpful. The authors noted that the results confirm the importance of students being active participants in influencing the development of career services. Further, the Canadian Career Development Foundation (2003) has stressed the need to strengthen student awareness, planning and decision-making with reference to postsecondary education choices. Their study documented students' frustration with not having enough help connecting entrance requirements and courses of study with a career direction or career path; the relatively narrow focus on university as the preferred postsecondary option; the complexity of information and applications; and understanding of costs associated with post-secondary participation. Clearly, more work is re-

quired to identify the types of career information, delivery formats and other supports that will facilitate the career planning efforts of Grade 10 students who are required to select future courses tied to career destinations.

Despite the overwhelming evidence for the importance of career guidance to postsecondary access and persistence, research on this topic with Canadian secondary school stakeholders outside of Alberta (Magnusson and Bernes, 2002; Pyne, Bernes, Magnusson & Poulsen, 2002; Bardick, Bernes, Magnusson & Witko, 2004; Code, Bernes, Gunn & Bardick, 2006; Bloxom, Bernes, Magnusson et. al., 2008), is meager at best. This is particularly true for research on stakeholder groups such as students, teachers and guidance counsellors. The study of student perceptions reported on here was part of a larger research program designed to portray stakeholder views of career planning resources in Ontario secondary schools. Views regarding career information needs, resources and realities were sought from secondary students, school guidance staff and teachers involved in the mandatory Ontario Grade 10 Career Studies course. Research objectives were to: i) identify the understanding, attitudes and plans held by junior high school students toward their future career; ii) identify the types of career information and delivery format(s) desired by adolescent learners iii) identify key agents and activities that influence their career planning; iv) describe the availability, use and helpfulness

of career information, activities and resources typically available to Ontario high school students. This report focuses on the perspectives of students enrolled in the mandatory Grade 10 Career Studies course offered by Ontario secondary schools.

Methods

Perspectives on the career planning needs and activities of Ontario secondary students were collected with a parallel version of a questionnaire also administered to teachers and guidance counsellors. Questionnaire content, adapted from a study with high school students in Alberta (Magnusson and Bernes, 2002), examined the relative utility of various types of career planning information and activities, the relative utility of various formats for the delivery of career information, the relative influence of individuals and groups on adolescent career planning, and the availability, use and perceived helpfulness of diverse career planning resources typically available to Ontario secondary school students. The term "career plan" in this study is defined as the outcome of a multi-faceted decision making process resulting in tentative directions regarding course choices for senior high school, intentions regarding postsecondary participation and program of study. While it is clear that these decisions can change over time, within the context of Ontario junior high, all students are required to fashion a "career plan", however tentative.

Student views were collected via an in-class survey ad-

ministered by the researcher during the last week of the Grade 10 Career Studies course in selected Ontario school boards and schools between May 2010 and June 2011. Survey administration began with a brief description of the study emphasizing the goal was to obtain their views on career planning generally and not the Career Studies course specifically. The Career Studies course was selected as the survey venue since students had been intensively involved in career exploration for nine weeks and would be familiar with career planning information and activities. The course teaches students how to develop and achieve personal goals for future learning, work, and community involvement. Students assess their interests, skills, and characteristics and investigate current economic and workplace trends, work opportunities, and ways to search for work. The course explores postsecondary learning and career options, prepares students for managing work and life transitions, and helps students focus on their goals through the development of a career plan (Ontario Ministry of Education, 2006). The study was designed to elicit the participation of both public and Catholic school boards representative of the province of Ontario. Five geographic regions, North, East, Central, Southwestern and Western were targeted and school boards in each region were invited to participate.

The questionnaire consisted of seven sections and included both closed and open response types. In addition to demographic and educational goals questions, four closed response sections examined student perceptions of the information that would be most useful to their career planning, the most useful format for presenting such information and who influenced their career planning. A final section asked respondents to indicate what types of resources were available to them, whether they had utilized these resources and, if so, the degree to which they believed each was helpful in supporting their career planning.

Student perceptions of the most useful resources for career planning in Grade 10 were based on their ratings of fifteen types of information or activities that might be available in their school or community. These were presented in a sequence following Gati and Asher's (2001) characterization of the career decision-making process as involving six tasks. This framework was chosen since the tasks closely parallel the Career Studies course topics and would, therefore, be somewhat familiar to the students. The sequence begins with a student recognizing the need to undertake the planning process followed by self exploration to identify passions, interests, and abilities and progresses to a broad exploration of types of careers available. This is followed by acquiring more in-depth, career-specific information such as annual salary, employment opportunities, required knowledge, skills and duties, information about related postsecondary programs and opportunities for financial support. The last two stages involve deciding between a few possibilities and finally committing to a single career path.

Results

The survey yielded 1,665 completed questionnaires from the 12 Ontario English language school boards who agreed to participate. Four of the six provincial school board regions as defined by the Ontario Ministry of Education were represented. One half of the sample was from the Toronto region, 30% was from the Barrie region, 17% was from London region boards and 3% was drawn from the North Bay/Sudbury region. The 31 participating schools consisted of 22 public and 9 Catholic schools. While it is difficult to determine whether the sample is representative of Ontario Grade 10 students more generally, it is noted that little variation in student responses on core questions was observed between jurisdictions. In addition, profiles of participating schools developed from Ontario Ministry of Education web site information including Grade 10 literacy and Grade 9 math achievement scores, demographic information such as socioeconomic status and first language, and percentage of gifted students showed considerable student diversity across schools. Ninety-two per cent of the sample was enrolled in grade 10 with the remainder in grades 11 and 12. Almost three-quarters (72%) were fifteen years old and one-quarter (23%) was 16 years of age. Males (48%) and females (52%) were almost equally represented.

Career Understanding, Attitudes and Plans

Because students' understanding of and attitudes toward a career and career planning could influence their level of engagement in the planning process, this study asked students about their understanding of the word "career" with responses ranging from I think I know exactly what the word career means, I kind of know what it means, but not really, I have no idea what it really means, and No opinion. Almost half of respondents (45%) said they knew exactly what "career" meant, one-half reported they kind of knew what it meant, one per cent said they had no idea and three per cent had no opinion. The level of student engagement in career planning was measured with two questionnaire items. The first asked how important career planning was for them at this time in their life with responses ranging from 1 = very important to 5 = not at all important. In spite of the ambiguity about what "career" meant for some, one third said career planning was very important to them at their stage of life and two fifths (44%) said it was quite important. Approximately one-fifth (19%) said it was slightly important and only a very small group (3%) reported career planning was not at all important for them. When the latter group was asked when it would become important, the majority (51%) said in grade 11, one quarter said it would become important in grade 12 and a small number (9%) indicated it would be after high school once they had worked for a while. A

slightly larger group (12%) said they didn't know. In addition, as suggested above, a larger proportion (39%) of students who indicated they knew exactly what the word career meant compared to those who kind of knew what it meant (29%), indicated it was very important to them at this time of their life.

A second measure of engagement in career planning asked about the degree to which having a future career goal describes who you are as an individual. Responses ranged from 1 = very much to 5 = not at all. In keeping with theories of adolescent identity formation (Chickering and Reiser, 1993; Erikson, 1968), the majority reported that defining a career path was an important component of their identity. Almost one quarter (23%) reported it very much defined who they were, slightly less than one half (42%) said quite a bit and over one quarter (29%) said it somewhat defined their individuality. Less than five per cent said it had no bearing on their identity.

To assess the current status of their career planning, students were asked about their career and educational plans and the degree of difficulty they experienced with the activity. Consistent with the importance they attached to planning for a career and the role it played in their identity, one-quarter (26%) reported they had a specific career plan in mind for after high school with almost half (43%) indicating they were trying to decide between a couple of different plans. One-sixth (17%) said they did not know what they would be

doing but had started working on developing a plan and one in ten (8%) did not know what they would be doing and were not worried about it. Slightly fewer (6%) said they did not know what they were doing after high school and were worried about it.

Attending a university was the educational plan most frequently cited (58%) for the year after high school while almost one in five (18%) planned to enter college. Relatively small percentages had no idea (7%), planned to enroll in an apprenticeship program (6%) or enter directly into the work force (3%). Only a very small percentage (0.4%) indicated they would leave before graduating high school and go directly to work. In spite of the fact that students were about to complete a nine week course that provided extensive career guidance and support, substantial numbers reported they found the process quite difficult. When asked, "How difficult would you say planning for a future career is right now", one quarter (23%) said it was very difficult, almost one half (40%) said it was quite difficult and one third (33%) reported it was somewhat difficult. Only a very small minority (5%) said it was not at all difficult.

An analysis of career and educational plans by sex revealed differences that are consistent with the literature. More males (11%) than females (6%) reported they did not have a career plan for after high school but were not worried about it. Differences were also seen in the post-high school educational plans of males and females. More males

(15%) than females (4%) indicated they would enter the labour force or enroll in an apprenticeship program in the year after high school. In contrast, more females (65%) than males (52%) reported they would be attending university.

Career Planning Support and Influences

This study explored the influence of various agents on the career planning of Grade 10 students in three ways. This included ranking individuals they would be most comfortable approaching for help with career planning, the degree to which various agents had influenced their planning and, lastly, the nature of this influence. In the first instance, students were presented with a list of eight individuals that included teachers, counsellors, parents, friends and some-

one working in the field they like, and assigned a '1' to the individual they were most comfortable approaching, with a '2' and '3' assigned to the second and third place individuals, respectively. The results show that parents were overwhelmingly ranked first (M = 1.45) followed by guidance counsellors (M = 2.02), friends (M = 2.20), a school personal/spiritual counsellor (M = 2.25), and other relatives (M = 2.26). Someone working in the field (M = 2.30), classroom teachers (M = 2.31) and other people they knew and trusted (M = 2.32) were ranked last.

The second approach to assessing support for career planning asked students the question, Please indicate the degree to which you believe each of the following has influenced your career planning so far. Responses ranged from 0 = Don't Know to 4

= Very Much. Table 1 presents the proportion of respondents rating possible influences as quite a lot and very much and a mean rating for each option excluding Don't Know responses. Consistent with other research, slightly more than two in five students rated parents/guardians as the primary influence on their career planning. Someone they admired who worked at a job they liked was ranked second as the most influential individual by almost one third of respondents. Agents such as other family members, friends, and the media were much less influential. Surprisingly, only one in ten students reported that guidance counsellors and teachers were very influential.

Anecdotal evidence from career guidance staff in colleges and universities and research (Council of Ministers of Education, Canada and Canada Millennium Scholarship Foundation,

Table 1

Sources of Influence

Individual/Group	Quite a Lot (%)	Very Much (%)	Mean
My parent(s) or guardian(s)	31	45	3.12
Someone you admire working in a field/job you like	28	30	2.66
The media (e.g. movies, TV programs, etc)	29	15	2.35
Friend(s)	30	14	2.35
Brother, sister, cousins	25	20	2.32
Teacher(s)	28	13	2.32
Other relative(s)	25	15	2.28
Guidance counsellor(s)	20	9	1.95

2009) indicates that some students are influenced by others to select a career path they are reluctant to follow. In order to gauge the magnitude of this phenomenon, students were asked, To what degree would you say those who have significantly influenced your career planning have suggested a career you are not really interested in? Responses ranged from 1 = Not at all, 2 = Somewhat, 3 = Quite a bit, 4 = Very much and 5 = No opinion. While almost one tenth (8%) had no opinion and an equal percentage said very much, almost one quarter responded with quite a bit and two in five indicated somewhat. Only one fifth said not at all.

Ideal Career Planning Information

Students were asked to indicate the degree to which each of fifteen types of information or activities could help them plan their future career. These were presented in a sequence corresponding to Gati and Asher's (2001) characterization of the career decision-making process as involving six tasks. The process begins with a student committing to undertake the career planning process (Task 1) followed

by self exploration to identify their passions, interests, and abilities (Task 2) along with a broad exploration of types of careers (Task 3). This is followed by collecting more in-depth, career-specific information such as annual salary, employment opportunities, required knowledge, skills and duties, information about related postsecondary programs and opportunities for financial support (Task 4). The last two stages involve selecting between possible alternatives (Task 5) and finally committing to a single career path (Task 6). Usefulness ratings for each type of information or activity ranged from 0 = Don't Know, to 5 = Very Much.

Table 2 presents, in descending order, the types of information students rated as very useful to their career planning and their correspondence to Gati and Asher's sequence of tasks.

One in two students indicated that self-exploration information, Task 2 in Gati and Asher's list, to help identify careers related to things they are really passionate about and related to their interests, talents and abilities would be most useful to their career planning. Slightly less than one half (46%) reported that in-depth exploratory information (Task 4) regarding the knowledge and skills required for specific careers would be very

Table 2

Ratings of Usefulness

Decisional Task	Information/Activity	Very Much (%)	Mean	S.D.
2. Self Exploration	1. Finding careers related to the things you are really passionate about	52	4.28	0.91
2. Self Exploration	2. Help you identify careers related to your interests, talents and abilities	51	4.25	0.93
4. In-depth Exploration	3. Information about the knowledge and skills for specific careers	46	4.21	0.91
3. Broad Exploration	4. Information about career-related postsecondary programs of study	41	4.07	0.98
2. Self Exploration	5. Help you understand / identify your interests, talents and abilities	41	4.04	1.03
4. In-depth Exploration	6. Information about the different types of careers available	39	4.06	0.97
3. Broad Exploration	7. Information about what it's like to take a college / university program	37	3.96	1.04
3. Broad Exploration	8. Information about financial help to continue education after high school	33	3.81	1.09
4. In-depth Exploration	9. Information about the day-to-day tasks / duties for specific careers	32	3.94	0.96
4. In-depth Exploration	10. Information about the salaries associated with specific careers	31	3.83	1.04
4. In-depth Exploration	11. Information about your chances of getting hired in specific careers	30	3.85	1.03
4. In-depth Exploration	12. Obtaining personal one-on-one support to develop your career plan	26	3.60	1.12
5. Decisional Status	13. Help with choosing between two or more career options / choices	24	3.63	1.09
6. Commitment	14. Help with planning the next steps in a career plan already developed	21	3.59	1.06
1. Orientation to Choice	15. Help you understand that career planning is important right now	18	3.46	1.07

useful to them. Approximately two in five said that a mix of information about career-related postsecondary programs of study (Task 3), identifying their interests, talents and abilities (Task 2) and information about the different types of careers available (Task 4) would also be very useful. Approximately one-third felt that information about what it would be like to take a college/university program, financial support available for education after high school and information about the day-to-day tasks/duties for specific careers would be very useful for their career planning.

Overall, less than one-third of students indicated that information involving in-depth exploration such as the salaries and hiring potential associated with specific careers would be useful to them. Fewer respondents reported that information related to Gati and Asher's final stages would be helpful as only one quarter felt that they needed help deciding between more than one career plan (Task 5), and one in five believed help with a career plan they had developed (Task 6) would be very useful. Finally, only one in five students reported that 'orientation to choice' information (Task 1), or creating an awareness of the need to make a career decision, would be very useful to them.

Utility of Information Delivery Formats

Information about careers may be provided to students in a number of ways including workplace experiences, conversations with individuals working in various careers, watching videos profiling specific careers or reading print or web-based text. Which of these formats Grade 10 students considered most useful to their career planning was assessed with the question, Information on careers can be presented in different ways. How useful you think each of the following would be to you? Responses ranged from 0 = Don't Know, to 4 = Very Useful.

Table 3 shows that almost two thirds (65%) of students ranked spending time on the job first in usefulness and that three fifths (59%) rated talking to people working in their area of career interest second. A web-based tool that provides all the information needed to select a future career that matches their interests and abilities was third with almost two in five (39%) indicating this would be a very useful format. One third ranked speaking with college or university students about their career planning strategies, interactive web sites with surveys and quizzes and videos of people describing their careers as very useful. Text-based career information on web sites and printed materials were only seen as very useful by one fifth of respondents.

Availability, Use and Helpfulness of Current Career Planning Resources

The final closed response section of the questionnaire focused on the current career planning resource context as perceived by Grade 10 students. This was assessed by asking respondents to indicate whether a particular planning resource was available to them, how often they had used it and, if used, how helpful they thought it was. Availability responses varied from, Don't Know, Not Available and Is Available; degree of use responses were Never, Once or Two or more times; helpfulness ratings were, Don't Know, Not at all, Somewhat, or Very Much.

Table 4 shows the perceived availability and reported use of career planning resources

Table 3

Utility of Career Information Formats

Delivery Format	Very Useful (%)	Mean
Spending time 'on the job' exploring what the career involves on a day-to-day basis	65	3.54
Talking to people working in the career area you are interested in	59	3.46
A web-based tool that provides all the information you need to select a future career that matches your interests and abilities	39	3.13
Meeting with students in college or university to hear about the career planning strategies they used	32	2.96
Interactive web sites (e.g. surveys, quizzes, careers game etc.)	30	2.88
Video clips of people talking about what they do in their career.	29	2.82
Text-based information on web sites describing potential careers	21	2.80
Printed materials (e.g. books, brochures etc.)	17	2.64

that might be accessed within most Ontario secondary schools or the community. While Grade 10 students indicated a substantial number of career planning resources were available to them, many were used infrequently. The mandatory Career Studies course, the provincially required participation in volunteer work, co-op courses, computer programs such as Career Cruising and written materials were reported to be available by four out of five students. Working individually with a guidance counsellor, paid work experience and a school career library were available to three in four students. Two thirds indicated they had access to career-related videos, community agencies such as the YMCA, career interest questionnaires and information sessions with guest speakers. Approximately one half indicated they could access a career fair, job shadowing, internet sites such as myBlueprint and the Ontario Youth Apprenticeship program. Speaking with college or university guidance staff, working in a group with a high school guidance counsellor, and workplace or industry tours were available to only two in five students.

In spite of the reported availability of many career planning resources, only a few were used by the majority of students. Participation in the Grade 10 Career Studies course was universal since it is an Ontario Ministry of Education required course. Table 4 also indicates that four in five students used Career Cruising software and volunteered in the community. Seven in ten had accessed a career interest questionnaire, sessions with guest speakers and career-related written materials. Some resources, however, were widely available but little used. Working individually with a guidance counsellor, reportedly available to three quarters of students was used by two in five. Similarly, community agencies such as the YMCA and Canada Employment Centres were available to two thirds of students but utilized by only one quarter. Co-op courses were said to be available by over four fifths of respondents but had only been used by slightly more than one in ten students. This is due to the fact that registration is normally limited to those in Grade 11 or 12 (Ontario Ministry of Education, 2000). Other resources such as speaking with college or university guidance staff, groups of students working with a high school guidance counsellor and workplace tours had low rates of use.

Table 4 also presents the perceived helpfulness of career planning resources based on the responses of students who had used them. Computer programs such as Career Cruising and working one-on-one with a guidance counsellor were reported to be the most helpful career planning resources since one half of respondents rated them as very helpful. High school co-op courses were also reported to be very helpful by one half of the small percentage (13%) of students in the survey sample who had enrolled in such a course.

Table 4

Availability, Use and Helpfulness of Career Planning Resources

Resource	Available (%)	Used (%)	Very Helpful (%)
Mandatory Career Studies course in high school	100	100	41
40 hour high school volunteer requirement	100	81	38
High school co-op courses	85	13	53
Computer programs (e.g. Career Cruising etc.)	85	85	50
Written materials (magazines, brochures etc)	80	71	25
Working one-on-one with a guidance counsellor to explore future careers	78	41	49
Paid work experience (full/part-time work, etc.)	76	48	43
School career information centre / library	72	60	27
Short videos that show actual on-the-job duties for specific careers	69	51	34
Community agencies (e.g. YMCA, CEC, etc.)	64	28	27
Career Interest questionnaire (e.g. Strong Interest Inventory, etc.)	64	70	33
Career information sessions with guest speakers	64	70	23
Career Fairs/Career Days	59	49	27
Job Shadowing (time with someone at their job)	58	45	45
Career related internet sites (e.g. MyBlueprint)	56	48	32
Ontario Youth Apprenticeship Program (OYAP)	51	11	34
Speaking with college / university guidance staff	46	33	47
Groups of students working with a guidance counsellor to explore future careers	40	22	31
Workplace/Industry Tours	39	38	33

Approximately two fifths reported they found speaking with college or university guidance staff, job shadowing, paid work experience, the mandatory Career Studies course and the mandatory community service requirement very helpful.

A third tier of resources were rated as very helpful by approximately one third of respondents. These included the Ontario Youth Apprenticeship Program, career-specific videos, workplace tours, career interest inventories and internet sites, and groups of students working with high school guidance staff. Other resources such as information sessions with guest speakers, career fairs/days, school career libraries and print materials were rated as very helpful by roughly one quarter of respondents.

The ranking of planning resources presented in Table 5 shows that, generally, those perceived to be most helpful by the Grade 10 students in this study were experiential activities such as co-op courses, job shadowing, work experience and volunteering. Interacting with individuals such as guidance counsellors or speaking with college/university guidance staff was also reported to be very helpful. One significant deviation from this pattern was the high value placed on computer software programs that help students identify potential careers such as Career Cruising.

Discussion

This study sought to describe Grade 10 student perspectives on career planning in Ontario high schools. The results document their understanding of and attitudes toward career planning, the status of current career and future educational plans, their relative comfort in seeking advice from a variety of individuals and the influence of these individuals and groups on their career planning. Their views on the types of career planning information and activities that would best support their planning and the relative utility of various formats to present this information was a second major goal. Finally, the availability, use and perceived helpfulness of diverse career guidance resources typically available to Ontario secondary school students were also examined.

Career Understanding, Attitudes and Plans

Adolescents' understanding of the term "career" has important implications not only for their own career planning but also for the design and delivery of career development courses and programs. Indeed, students in this study who reported confusion about what is meant by "career" also placed less importance on career planning activities. The

Table 5

Ranking of Career Planning Resource Helpfulness

Resource	Mean	S.D.
1. Computer programs (e.g. Career Cruising etc.)	2.41	.648
2. High school co-op courses	2.39	.719
3. Working one-on-one with a guidance counsellor to explore future careers	2.38	.679
4. Speaking with college / university guidance staff	2.35	.675
5. Mandatory Career Studies course in high school	2.33	.625
6. Job Shadowing (time with someone at their job)	2.33	.680
7. Paid work experience (full/part-time work, summer jobs etc.)	2.31	.672
8. 40 hour high school volunteer requirement	2.23	.680
9. Short videos that show actual on-the-job duties for specific careers	2.19	.670
10. Career Interest questionnaire (e.g. Strong Interest Inventory, etc.)	2.18	.665
11. Workplace/Industry Tours	2.17	.683
12. School career information centre / library	2.14	.625
13. Career related internet sites (e.g. MyBlueprint, The Real Game etc.)	2.12	.705
14. Written materials (magazines, brochures etc)	2.12	.613
15. Career information sessions with guest speakers	2.12	.583
16. Career library outside of your school	2.11	.681
17. Career Fairs/Career Days	2.10	.658
18. Groups of students working with a guidance counsellor to explore future careers	2.10	.722
19. Ontario Youth Apprenticeship Program (OYAP)	2.07	.777
20. Career planning workshops	2.05	.691
21. Community agencies (e.g. YMCA, Canada employment centre, etc.)	2.02	.715

fact that the majority of students said they "kind of knew what it meant, but not really" is especially intriguing given they were at the end of a nine week Career Studies course. However, as others (Noeth, Engen & Prediger, 1984; Pyne, Bernes, Magnusson & Poulson, 2002) have found, senior as compared to junior high school students are more likely to understand a "career" as being more of a longer term commitment. The implication is that as students progress from the junior to senior high school they develop a less concrete and more complex understanding of what a career is. Courses designed to explore future career paths with students in Grade 10, therefore, might begin with a more concrete approach that focuses on the types of occupations that are related to their passions, interests and abilities.

Despite their uncertainty about what "career" means, Ontario Grade 10 students ascribed a great deal of significance to career planning. The majority said it was important to them and of those who said it was not, most said it would be in the following year. This is consistent with what others (Collins & Hiebert, 1995; Hiebert & Huston, 1992; Hiebert, Kemeny, & Kurchak, 1998) have found; students in the seventh to twelfth years of school rank career-related concerns among the top ten of their self-expressed needs. Similar levels of importance were found for junior (Bardick, Bernes, Magnusson and Witko, 2004) and senior (Bloxom, Bernes, Magnusson, Gunn, Bardick, Orr and McKnight, 2008) high school students

in Alberta. To further highlight the significance of career planning for students in this study, the majority also indicated that having a future career goal was an important component of their identity. As has been noted elsewhere (Pyne, Bernes, Magnusson & Poulson, 2002), "career is not only a job, it is part of their identity. Career provides personal meaning and a sense of importance for the individual" (p. 71).

In keeping with the importance and personal meaning associated with career plans, most Ontario Grade 10 students reported they either had a specific career in mind or were trying to decide between alternatives. This is quite similar to the results reported for Grade 12 students in Alberta (Bloxom, Bernes, Magnusson, Gunn, Bardick, Orr and McKnight, 2008). While fewer of the Ontario students compared to those in Alberta reported they had reached a stage of career commitment (26% vs 39%), in both cases two in five said they were trying to decide between a couple of plans. In addition, a somewhat larger percentage of Ontario Grade 10 students were unsure about their future career or did not yet have a clear plan. The lower level of career certainty found in Ontario students is likely due to their younger age and earlier stage of career planning.

Despite their uncertainty about a future career, the majority of the Grade 10 students reported they had a clear educational plan for after high school. Consistent with the high postsecondary participation rates

in Ontario (Statistics Canada and Council of Ministers of Education, Canada. 2007), four in five Grade 10 students reported they would be attending a college or university following high school graduation. While this contrasts sharply with Alberta Grade 12 students (Bloxom, Bernes, Magnusson, Gunn, Bardick, Orr and McKnight, 2008) where fewer than one third had postsecondary attendance as their destination after high school, it is consistent with differences in provincial postsecondary participation rates (Statistics Canada and Council of Ministers of Education, Canada. 2007). The percentage of students identifying a college destination in the current study was almost identical to that reported for Ontario Grade 10 students more generally (King and Warren, 2006). The same study, however, found that postsecondary destination changed between grades 10 and 12. More students identifying university as a destination in Grade 10 decided on college in Grade 12 reinforcing the notion that career and educational plans are quite fluid during the final years of high school.

The absence of a clear understanding of "career" for many students could have contributed to the fact that the majority found career planning quite difficult. Gati, Krausz and Osipow (1996) described three types of career-related decision-making difficulties exhibited by Israeli students in grades 9, 10 and 11; a lack of readiness, a lack of information or inconsistent information. Findings from this study, to be discussed more fully below, suggest that some of the difficulty experi-

enced by Ontario Grade 10 students might be related not only to a lack of understanding of "career", but also to a lack of information since the majority of students reported the most useful career planning resources were not readily available, or if they were, were infrequently used.

The portrait of career planning that emerges for Ontario Grade 10 students is of a group who are somewhat confused about what a "career" is but nonetheless attach great importance to the activity and, despite experiencing considerable difficulty with the task, consider identifying a career to be an important component of their personal identity. By Grade 10, the majority has either identified a specific career or is weighing alternatives and almost all are intending to continue their education at the postsecondary level.

Career Planning Support and Influence

This study examined the level of comfort students had in seeking support from, and the influence various groups and individuals had on the career planning of Grade 10 students. The results are consistent with those of Bloxom, Bernes, Magnusson, Gunn, Bardick, Orr & McKnight (2008) who showed that parents and guidance counsellors were ranked first and second in level of comfort, respectively, by Grade 12 students. While this affirms the primacy of parents in supporting adolescent career planning (Prairie Research Associates, 2005), other findings suggest that

counsellors may be seen as more approachable as students near graduation (Bardick, Bernes, Magnusson & Witko, 2004). The latter study found counsellors were ranked much lower in level of comfort by Alberta students in grades 7 to 9. The current study suggests that comfort levels associated with seeking support from guidance counsellors may begin to change in Grade 10.

The level of comfort associated with a particular individual or group, however, does not necessarily translate into an influence on career planning. While parents were again ranked first in influence, a group associated with a low level of comfort, someone the student admired working in a field of interest, was ranked second. The independence of 'comfort' and 'influence' is further exemplified by the finding that while guidance counsellors were ranked second in approachability they were ranked last in terms of influence. And as with other research (Council of Ministers of Education, Canada & Canada Millennium Scholarship Foundation, 2009), teachers, with whom students have daily contact, were ranked low in both approachability and influence. The findings of this study highlight the almost exclusive role that parents play in supporting the career development of high school students.

Such exclusivity, however, could have negative implications as there is also some concern regarding the content of the advice and direction that parents provide. Middleton and Lougheed (1993) noted that parental encouragement, al-

though well-meaning, may focus only on a range of alternatives acceptable to the parent and thus may limit adolescents' career exploration and choice. King and Warren (2006) found that some high school students reported their parents felt so strongly about universities that they would not let them attend college. They also found evidence that parents' advice may not be adequate. A third of university and of college-bound high school students thought the career information provided by parents was 'slightly' or 'not' helpful. Focus groups with students (Council of Ministers of Education, Canada & Canada Millennium Scholarship Foundation, 2009) suggest that some parents were more inclined to nag their children about postsecondary attendance rather than provide them with practical information that could help them to decide what they might like to study. While parental influence has generally been shown to be positive (Grant, 2000), and Otto (2000) found that four-fifths of high school juniors said their career aspirations were consistent with those of their parents, the one in five cases where the career aspiration of the student does not match that of the parent could lead to enrolling in a program of study for which the student might be ill-suited. And while parents were not identified explicitly as the source, one third of students in the current study reported being encouraged to follow a career path that was not consistent with their interests.

The relatively low level of influence attributed by students to counsellors and teachers

is noteworthy and also consistent with other research (Alexitch & Page, 1997; Domene, Shapka & Keating, 2006; King & Warren, 2006). The King and Warren study showed that while teachers and counsellors were suppliers of career information, one-third of students thought the information provided by teachers was 'slightly' or 'not' helpful and one-quarter felt the same about information from counsellors. In addition, a number of studies (Bardick et al, 2004; Kotrlik & Harrison, 1989; Mau, 1995; Stratton, 2001) have shown that only a small percentage of high school students make use of guidance services and that this is particularly true in provinces like Ontario that have a mandatory high school career guidance course. Structural barriers might also account for the low levels of interaction between students and guidance staff. High school counsellors must divide their time with students to deal with personal/social issues, academic issues such as course selection, and career guidance. There are very few Ontario schools with dedicated career counsellors (Malatest, 2009) and the numbers of guidance counsellors are spread quite thinly in most Ontario secondary schools (Malatest, 2009). There is also evidence (Dietsche, forthcoming; King, Warren, King, Brook & Kocher, 2009; Malatest, 2009) that much of their time is spent on activities other than career advising such as helping senior students with course selection and prepare applications to postsecondary institutions.

Ideal Career Planning Information

Identifying the type of information that would best support Grade 10 students with their career planning was one of the core questions posed by this study. Students rated various types of information following the task sequence described by Gati and Asher (2001) where each task level brings the individual closer to identifying a specific career plan.

Only a very small proportion of the Grade 10 students said information to convince them that career planning was important would be useful. This, and the results regarding the importance they attached to the task, the perceived role of a career in their identity, and that many had already developed a career plan, indicate the majority of students is beyond Gati and Asher's 'orientation to choice' task. The largest proportion of Ontario Grade 10 students said self-exploration information to help identify careers related to their passions, talents and abilities would be most helpful to their career planning. As with other studies (Bardick, Bernes, Magnusson & Witko, 2004; Bloxom, Bernes, Magnusson, Gunn, Bardick, Orr & McKnight, 2008), this was followed in degree of usefulness by a mix of broad and in-depth information related to types of careers available, the knowledge and skills required, and relevant postsecondary programs of study. Generally, fewer students saw more in-depth types of information such as financing for postsecondary studies, salaries and

hiring potential as very useful. While over one half said that information corresponding to Gati and Asher's Task 5, deciding between two career options, would be quite or very useful, only one in five reported that information corresponding to Gati and Asher's Task 6, helping to decide on a specific career, would be useful. The implication is that many Ontario Grade 10 students are at the point of deciding between careers but few are ready to commit to a specific career. Indeed there is evidence that this task becomes more dominant in the career planning of Grade 12 students (Germeijs & Verschueren, 2005). Ontario Grade 10 students, therefore, clearly understand the importance of career planning and would like information, first and foremost, to help them discover careers that match their passions and that they "would be good at". Most are in the earlier stages of career planning dedicated to exploring potential future careers; few are ready to make a definitive choice.

Ideal Format for Career Information

Students' perceptions of the ideal format for career planning information was the second core question posed by this study. Options included print material, static and interactive web sites, and experiential activities such as speaking with those employed in an area of interest or work experience. Most students had some experience with all of these formats as indicated by their responses to the availability and use section of the survey. The top

two formats rated as the most useful for career planning by three in five students were exposure to concrete 'on the job' experiences such as work placements and opportunities to speak with others working in their field of interest. Indeed, the utility of experiential activities such as co-op and work placements has also been highlighted by others (King et. al, 2009). A comprehensive review of the impact of experiential learning opportunities for the Ontario Ministry of Education (Canadian Council on Learning, 2009) concluded, "Regardless of program type or the quality of the study, when career awareness was used as a measure of career preparation, all results were positive" (p.1). However, as borne out in this study and others (King & Warren, 2006), opportunities to obtain career information in this way, such as visits to businesses and industries, appear to be quite infrequent for Ontario high school students. Other jurisdictions, however, such as the U.K. (EBP West Berkshire, 2011) have been successful in creating organizations that facilitate such opportunities on a broader scale and might serve as models for Ontario.

A comprehensive 'one-stop' web tool providing all of the information required to plan a career path was rated as the third most useful format for career-related information, consistent with research (Canadian Career Development Foundation, 2003) that highlights an increased use of tools such as the Real Game, Career Cruising, myBlueprint and other web-based career de-velopment resources. Such tools allow students to access career planning information independently and reduce the workload of guidance staff. Their effectiveness, however, is likely to depend on the student's ability to make sense of the information they obtain or else it simply becomes an 'information dump' (Grubb, 2002).

Availability, Use and Helpfulness of Current Career Planning Resources

The results of this study confirm that from the Ontario Grade 10 student perspective, a wide variety of resources are available to support their career planning. Those available to all or almost all students include the Career Studies course, volunteering for community service, co-op courses, print materials and computer programs such as Career Cruising. Of these, co-op courses and Career Cruising were considered to be the most helpful although use of co-op by Grade 10 students was minimal due to Ontario Ministry of Education (2000) policy. Indeed, while Ontario is the province with the highest enrollment in co-op programs, counsellors have reported that only between twenty and forty per cent of Ontario students enroll in such courses (Malatest, 2009). Other research confirms the value students place on co-op programs in helping them decide on a future career (King et. al, 2009). Career Cruising and the mandatory Career Studies course were both considered to be very helpful while print materials were generally not perceived to be so.

A second tier of widely available resources included working one-on-one with a guidance counsellor, paid work experience and a school career information library. While meeting individually with guidance staff was also rated as the third most helpful resource, fewer than half the students had done so. Indeed, interviews with students and parents (Canadian Career Development Foundation, 2003) have shown that both groups desire greater access to individualized support. However, while such support is available to students, this and other research (Malatest, 2009) has shown that a minority of counsellor time is actually devoted to individual career planning. The value students ascribed to paid work experiences is consistent with their desire to explore potential careers via 'on the job" or experiential learning opportunities. Results from student interviews (King et. al, 2009) suggest the experiences help them decide on a career path in that it affords students the opportunity to test jobs related to potential career aspirations. The effectiveness of such opportunities has been noted elsewhere (Canadian Career Development Foundation, 2003).

Generally, the perceptions of students regarding the most helpful of the resources available to them parallel their views on the ideal format for obtaining information about potential careers. In both cases experiential opportunities were rated first followed by conversations with knowledgeable individuals. A desire for individual support was also seen as working individually with high

school and college or university guidance staff were rated as among the most helpful resources.

Conclusions and Implications

This study gathered information from students in numerous high schools across Ontario with the goal of gaining their perspective on career planning. Those enrolled in the Grade 10 Career Studies course were surveyed since their formal curricular experience with the process positioned them as 'key informants'. A number of important conclusions can be drawn from the study findings. First, the results support Blustein's (1997) view that adolescent development involves experimenting with various work roles in planning for the future. The fifteen year olds in this study reported career planning was very important at that time of their life and that a career played a major role in their identity. While some had a career plan, most were finding the planning process difficult and were trying to decide between competing alternatives.

Second, it is clear that from the career planning perspective, the junior and senior high school years are a time of change. While the importance of attending a postsecondary institution following high school was clear to the Grade 10 students and the vast majority intended to attend a college or university, other studies (King, 2003) suggest that many change their destination between grades 10 and 12. This, and the fact that many in

this study were vacillating between alternative careers, argues that for many students both postsecondary destination and career plan can change in the final years of high school. The implication is that students in grades 11 and 12 could benefit from specific supports in negotiating this change.

The primacy of parents in influencing career planning and the weak influence of counsellors and teachers found in this study is well documented in the literature (Domene, Shapka & Keating, 2006). The results also suggest that for some students, parental influence on career planning might be inconsistent with the desires of the adolescent. Perhaps as others (Council of Ministers of Education, Canada & Canada Millennium Scholarship Foundation, 2009; King & Warren, 2006) have suggested, some parents might not be aware of the full range of careers and postsecondary destinations available to their child. Many parents also rely on guidance counsellors as the expert sources of support in student decision making, information on postsecondary education options and future career possibilities (Canadian Career Development Foundation, 2003). While the same research also indicates parents are willing to become more involved, if they had information and coaching, surveys of Ontario guidance counsellors (Dietsche, forthcoming; Malatest, 2009) have found that less than half of their schools offered parent workshops, and if they were, it was typically once a year. The conclusion, as others have argued, is that the benefits

of promoting increased parental involvement in career planning workshops in concert with their son or daughter are likely to be significant (Bardick, Bernes, Magnusson & Witko, 2004).

The optimization of career planning resources for junior and senior high school students must recognize the type of information they need and the most effective way to provide it. As with Grade 12 students in Alberta (Bardick, Bernes, Magnusson & Witko, 2004), the Ontario Grade 10 students desired information that would help identify careers related to their passions, interests and abilities and they wanted the opportunity to experience a job/occupation or speak to someone who was in the job before making a decision. However, the findings regarding the availability and use of career planning resources in Ontario high schools show that experiential opportunities are limited. While Grade 10 students are not generally eligible for co-op courses, increased participation on the part of Grade 11 and 12 students could be one way to help them clarify a future career.

The helpfulness attributed to Career Cruising is consistent with the ranking of a web-based "one-stop" tool third, after experiential options, as the most useful way to provide career planning information. Career Cruising has been designed to help students plan their future by packaging interest assessment tools with detailed occupation profiles and comprehensive postsecondary education information. The concept is for students to

move seamlessly through the career exploration and planning process similar to Gati and Asher's (2001) sequence to ultimately identify a career path. While access to computer resources is clearly required, it was found that some schools in this study, as well as individual students, had limited access. In addition, given the complexity of the information presented and the cognitive integration that is required to 'make sense of it', more individual support would be beneficial (Canadian Career Development Foundation, 2003; Grubb, 2002). Indeed, students in this study reported that working one-on-one with guidance staff was a great help to their career planning.

Despite this helpfulness and the degree of comfort Grade 10 students associated with guidance staff, only two in five reported having met one-on-one with a counsellor. While structural factors no doubt account for some of this (Dietsche, forthcoming; Malatest, 2009), the relatively low level of usefulness attributed to individual support for career planning suggests that Grade 10 students might underestimate the value of this resource since those who did meet with a counsellor found the experience to be very positive.

The mandatory Career Studies course could provide a venue for increasing interaction between Grade 10 students and guidance staff. Like many students in Grade 12 who meet individually with guidance counsellors to plan postsecondary studies, those in Grade 10 might do so toward the end of their Ca-

reer Studies course. Such personal support could help more students 'connect the dots' than is currently the case. Such meetings could also allow counsellors to highlight ways in which students might test their career aspirations via co-op, job shadowing or other experiential options. For example, the mandatory community service requirement, completed by all students, could be very helpful to career planning if students were encouraged to select their service activities with potential careers in mind. Overall, greater exposure to experiential forms of career information seems warranted given the findings of this study and while workplace tours for Ontario students do not appear to be widely available, other jurisdictions have been successful with such programs and might provide useful models for Ontario.

Taken together, the information provided by Ontario Grade 10 students suggests a need to rethink the access to and delivery of career planning resources in Ontario secondary schools. There is little doubt that increased exposure to experiential learning and comprehensive, computer-based career exploration tools combined with individual counsellor support could help more high school students identify a career path that is consistent with their passions and abilities. The integrated delivery of career resources in this way would not only empower students to be more involved in their planning but also increase progression to and success in postsecondary programs of study.

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