

CareersNet: Exploring the Options for Improving the Development, Evaluation and Communication of Employability Skills

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Executive Summary

- ◆ The purpose of this paper is to provide a review of the concept of *CareersNet* and the initial reaction of various stakeholders to this concept;
- ◆ Today's youth are much more likely to go on to post-secondary education, about equally likely to have left secondary school and less likely to have any work experience;
- ◆ Employers are faced with a youth labour force that is more likely to have some post-secondary education but less likely to have developed employability skills in a work setting;
- ◆ Canada's youth labour market exhibits high rates of "churn" or firing and hiring as employers and youth seek the best fit for entry level jobs;
- ◆ This "churn" may reduce employers incentives to develop "stepping stone" jobs and lead to them overspecifying jobs;
- ◆ *CareersNet* objectives are to:
 - ◆ provide young people with a framework for understanding how employability skills relate to the world of work;
 - ◆ provide a mechanism for young people to assess the strength of their employability, enterprise and ICT skills;
 - ◆ communicate these strengths to employers;
 - ◆ provide employers with an improved basis for distinguishing between the employability skills of various job applicants;
 - ◆ provide employers a more effective recruiting system and incentives for investing in "stepping stones" jobs for youth.
- ◆ Canada's school to work transition system is strong on the development of employability skills, weak on assessing these skills and weak on communicating these skills;
- ◆ As with much of the application of ICT's, the first and main impact has been simply to increase the volume of potential matches as opposed to the quality of the matches;
- ◆ From the employers' perspective, the challenge remains how to screen applicants and find good matches between their jobs and the skills and aptitudes of potential employees;
- ◆ A meeting of stakeholders was held in Toronto on February 18th, 2000 to discuss *CareersNet*. This meeting included youth employers, government, educational institutions and not-for-profits that are concerned about the school-to-work transition system;
- ◆ The main themes emerging from the meeting were:
- ◆ the reliability and validity of assessing "soft skills" like employability skills is the main challenge facing *CareersNet*;

- ◆ creating connections to existing recruitment tools, including employers own recruitment systems and other Internet-based recruitment systems is key;
- ◆ there are challenges related to creating a living credential that captures employability skill developed in the workplace;
- ◆ there are issues pertaining to the employer's and employee's efforts to use and maintain the database;
- ◆ confidentiality and employer liability are also of concern;
- ◆ while stakeholders are enthusiastic about the concept, youth employers in particular need a concrete tool to which they can react;
- ◆ the final recommendations of the report are:
 - ◆ CareersNet is sufficiently sound conceptually to warrant the development of a prototype;
 - ◆ The main challenges in developing the prototype are to design a valid and reliable self assessment tool and to develop a system for having this initial assessment updated through initial employment experience;
 - ◆ A decision on proceeding with a pilot should be postponed until a prototype can be developed that addresses concerns about reliability and validity and that receives favourable reaction from youth employers.

Background

Grant Insights has undertaken work over the past three years on Canada's school-to-work transition system.¹ This work has identified the need for innovations that would improve the development of employability skills among youth, the assessment of those skills and their communication to youth employers. Although many groups may benefit from improvements in this system, the plight of secondary school graduates is of particular concern because they account for the greatest absolute numbers of unemployed youth and they have already achieved a good level of numeracy and literacy skills.

The Concept of CareersNet and Its Initial Development

This led to the conceptual development of *CareersNet*, an Internet-based system for assessing, developing and communicating employability skills to youth employers.² Employability skills go beyond academic skills to include personal management skills and teamwork skills. An oft-heard complaint is that employers hire on the basis of technical skills and fire on the basis employability skills. Yet Canada's school-to-work transition system tends to put a disproportionate emphasis on academic credentials as opposed to employability skills credentials.³ Employability skills tend to be credentialized in informal ways, if at all.

The idea of *CareersNet* is to take preliminary steps toward improving the assessment, development and communication of employability skills. The vision is of system where secondary school graduates undertake a self-assessment of their employability skills upon graduation. Armed with their high school diploma (the credential of academic achievement), the self-assessment (a credential of employability skills) and references from previous work experience, the individual would have an expanded portfolio from which to apply for work with youth employers. Youth employers would have a better system for recruiting and therefore reduce the fire/hire cycle that is typical of the Canadian school-to-work transition system.

As the young person gained work experience, the employer would undertake an additional assessment of the employee's employability skills in the workplace. The assessment could be undertaken in concert with the normal performance review process. This assessment could be added to the employee's "skills account" on the Internet. Over time, the employee would build up an employability portfolio that would include academic

achievement, employability skills, and work experience. In the parlance of education research, *CareersNet* would be a major contribution to Canada's stock of "matching technology" that plays an important role in the incidence and duration of unemployment.⁴ The point is to improve young people's options after high school to include work for those that prefer this option.

This concept was reviewed with some 15 major youth employers in the Toronto area during the summer of 1999. All the employers were enthusiastic about the proposed program. They did, however, express concerns about their own time investment as well as security and privacy issues. Moreover, the funding of such a system was identified as a challenge.

Subsequently, Industry Canada asked Grant Insights to develop a strategic plan for *CareersNet* that might serve as a basis for engaging stakeholders in its development. Industry Canada was interested in seeing the concept expanded somewhat to include Information and Communication Technology (ICT) skills and enterprise skills such as the ability to take initiative. Consequently, this paper considers this enhanced set of employability skills.

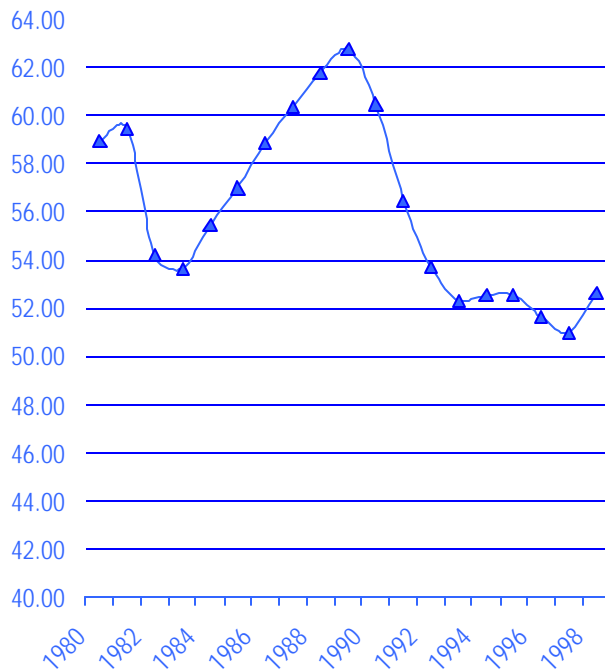
In the first stage of this project, interviews were conducted with various experts on Canada's school-to-work transition system. Approximately 20 experts (Appendix 1) in Canada's existing school-to-work transition system were consulted during December 1999 and January 2000. The information from these consultations, as well as the previous discussion with youth employers, is incorporated into this discussion paper.

The purpose of this paper is to provide a review of the concept of *CareersNet* and the initial reaction of various stakeholders to this concept. The paper provides a brief overview of the rationale for improving Canada's school to work transitions system. It then undertakes a review of existing mechanisms for developing, assessing and communicating skills to employers. This is followed by an analysis of strengths and weaknesses in the current Canadian system and a strategy for improving on the strengths and addressing weaknesses. Finally, there is a listing of the various outstanding issues that need to be addressed prior to any further development of the *CareersNet* project.

Overview of the Issue: Why *CareersNet* May Be Needed

The current interest in school-to-work transition systems is driven by Canada's ongoing youth employment problems. Most noteworthy is that the number of 15 to 24 year olds Canadians who are employed in relationship to their population (Chart 1). A familiar pattern over the last few decades has been for youth employment to fall steeply during recessions and rise quickly during recoveries. Yet Canada has been in the recovery phase for over 5 years and youth employment continues to languish.

Chart 1
Total Youth Employment As a Share of Youth Population 1980- 1998
(Canada, 15-24 year olds)



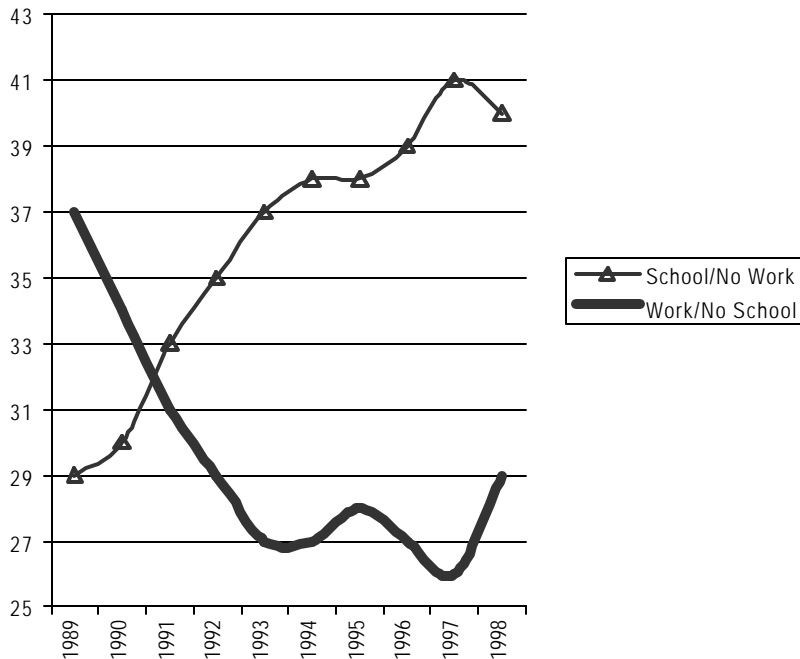
Source: Statistics Canada, Labour Force Survey

There are several characteristics that distinguish the current youth cohort from their predecessors. First, there are more full-time students. This general trend is primarily due to rapid increases in post-secondary enrollment as opposed to higher rates of secondary school completion. Canada's rate of secondary school completion is below the average of those for the Organization of Economic Co-operation and Development

(OECD).⁵ Meanwhile, post-secondary enrollment has increased substantially as the percentage of 22 to 24 year olds in full-time attendance has doubled since 1981.

Second, today's youth are much less likely to have work experience than previous cohorts. Since 1990, the percentage of youth with no work experience has increased from 10 per cent to 20 per cent.⁶ This is partly due to the overall weakness of the youth labour market as well as the fact that youth are less likely to combine school with work. Before the last recession, over 40 per cent of youth were combining school and work compared to 35 per cent today.⁷ Today's youth are much more likely to go on to post-secondary education, about equally likely to have left secondary school and less likely to have any work experience. Interestingly, today's youth are also much more likely to gain work experience by volunteering as between 1987 and 1997 the rate doubled from 18 per cent to 33 per cent.⁸

Chart 2
Percentage of Young Canadians Only At Work or At School, 1989-98 (Age 15-24)



Source: Statistics Canada, Labour Force Survey
Eight month average excluding summer months

It's not at all clear that this amounts to an excellent school-to-work transition system. Although Canada would be well-served to achieve high rates of secondary school completion, its high rate of post-secondary enrollment and low rate of work experience may be partly indicative of a weak school-to-work transition system.

One piece of evidence supporting this proposition, is the fact that the wage premium for a university degree relative to a high school certificate has not risen in Canada, whereas it has increased in the United States.⁹ The research suggests that Canada's rate of post-secondary school enrollment is outpacing the capacity of the economy to employ these post-secondary graduates productively.

There is also signs that many youth feel obligated to pursue post-secondary credentials even if this is not right for them. Canada's rate of post-secondary graduation in no way conforms to its rate of initial enrollment. According to the most recent school-leavers survey, only about half of those who enrol in post-secondary studies complete their degrees in the standard period of time.¹⁰ Overall, about a million Canadians have uncompleted post-secondary studies.¹¹ Many who do have post-secondary degrees and diplomas feel underemployed in their jobs. These trends may be the result of young Canadians seeing post-secondary school as their only choice. Some may well be better off in entry-level employment. Increasingly high school graduates are stuck in a "Catch 22" of no experience/no job.

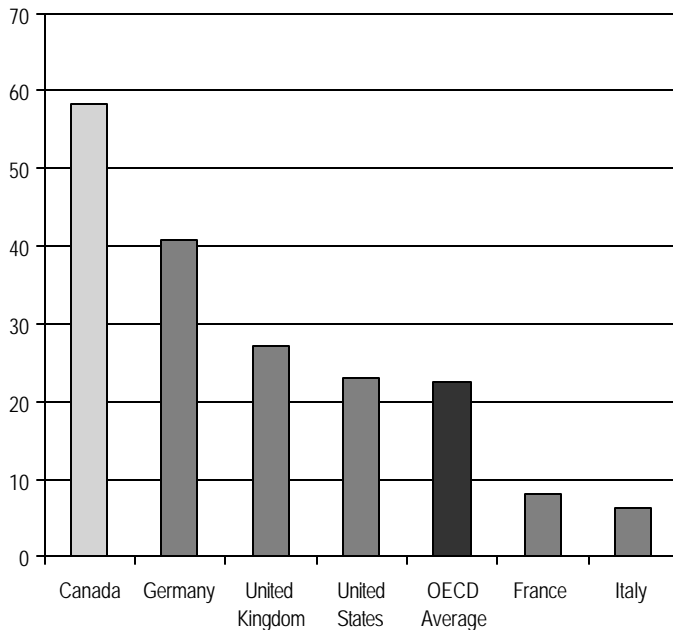
Employers face their own version of a Catch 22 in taking a chance on hiring high school graduates and in designing "stepping stone" jobs for them. They are faced with a youth labour force that is more likely to have some post-secondary education but less likely to have developed employability skills in a work setting. Moreover, employers have little way of distinguishing between various applicants based on employment experience or employability skills. As such, they may tend to use post-secondary education as a proxy for employability skills.

The risk to them is that they may make hiring errors that lead to dismissals. They often manage this risk by over-specifying jobs, hiring those with post-secondary credentials even if these are not strictly required for the job. But academic credentials are a weak mechanism for communicating the employability skills that are often the basis for dismissal or resignation.

Canada’s weak school-to-work transition system is reflected in its exceptionally high rate of “churn”. Recent OECD data shows that dismissal or redundancy is the main reason for unemployment among young Canadians who are not in school—rates that are twice those of the OECD average.¹² This churning raises employers costs to hirer young workers. It may increase a bias toward hiring older workers and those with advanced academic credentials. Moreover, employers may be less inclined to invest in training younger workers.

Many of these problems with the school-to-work transition system are very much related to poor “matching” technologies. If employers had a better system for distinguishing between the employability skills of applicants, they might make better hiring decisions, reduce their rates of dismissal and have greater incentives for investing in young people. They would have the incentive to think of young employees in a longer time frame and develop ‘stepping stone’ jobs for them.

Chart 3
Unemployed Youth Not in School: Percentage Who Have Been Dismissed, 1996
(15-24 year olds)



Source: OECD

Indeed, Human Resources Development Canada forecasts that over 40 per cent of new jobs will require less than 12 years of schooling. The vast majority of jobs in Canada are service sector jobs that require a basic level of academic skills and higher levels of interpersonal, teamwork, personal management, ICT and enterprise skills. Yet employers have an exceptionally well-developed system for determining academic skills but a weak system for determining these other skills.

CareersNet is an innovation that seeks to improve the development, assessment and communication of these other skills. Its objectives are to:

- ◆ provide young people with a framework for understanding how employability skills relate to the world of work;
- ◆ provide a mechanism for young people to assess the strength of their employability, enterprise and ICT skills;
- ◆ communicate these strengths to employers;
- ◆ provide employers with an improved basis for distinguishing between the employability skills of various job applicants;
- ◆ provide employers a more effective recruiting system and incentives for investing in “stepping stones” jobs for youth.

A Review of Existing Mechanisms

An ongoing debate in education policy has been between those who advocate education for practical skills versus knowledge. This debate has typically centred on secondary education, as this is when youth make decisions regarding either continuing education or entering the labour force.

Overtime, the strict distinctions between academic, employability and life skills have become blurred. It is less clear how a vocational stream is distinguished from an academic stream in a world where young people move freely between employment and education and where employment is often non-technical and in the service sector. There is increasing recognition that all students should be exposed to a wide range of life skills that encompass both traditional academic skills, such as numeracy and literacy, and employability skills such as teamwork and personal management skills.

Although Canada's school-to-work transition system is highly complex, it may be understood in term of a simple conceptual framework. This framework includes three interrelated components:

- ◆ ***development***
- ◆ ***assessment***
- ◆ ***communication***

Development simply refers to improvements in knowledge and skill through life experiences. The education system is merely a formalized way to intervene in the development of an individual's cognitive and social skills, but family and friends and employment also play important roles. *Assessment* attempts to measure the progress of development. *Communication* refers to the way in which an individual conveys information about their development to another individual. A credential, in its broadest meaning, is simply an "evidence of achievement or trustworthiness" (Oxford English Dictionary) and therefore speaks to the validity of mechanisms to assess development and to communicate this to other individuals.

Appendix 2 shows various programs that seek to develop, assess and communicate employability skills. This is not an exhaustive list but merely

highlights some of the more noteworthy developments in the present context.

In reviewing this list, and in discussions with experts in the field, a number of themes emerged.

Diverse Approaches to Employability Skills

The Canadian constitution assigns a primary role for the provinces in education. The Canadian school-to-work transition system leans toward academic approaches to development, assessments and credentials. These two organizing principles mean that provincial education systems and academic credentials have the greatest impact on the school-to-work transition system.

The provincialization of education accounts for a good portion of the diversity in school-to-work transition systems. Provincial education ministries take different approaches and indeed may allow their school boards and individual schools considerable leeway in designing their own approaches. Further, given the overall importance of education, a wide variety of players (e.g. federal government, not-for-profits) seek to influence the education system. The resulting system can appear somewhat chaotic and there is relatively little information on which parts of the system are actually effective.

A good example of an outside organization influencing the education system is the Conference Board of Canada through its Employability Skills Profile. The Conference Board of Canada's approach is simple, elegant and widely adopted by education ministries, school boards and individual schools. The Conference Board is in the process of producing an updated version of this profile, *Employability Skills 2000+*, as well as a developmental toolkit, for release in May, 2000.

Other approaches to employability skills have attempted to either improve the grounding of employability skills in specific occupations or to extend these into the areas of generic life skills. Human Resources Development Canada's Essential Skills framework is the best example of the former and has been incorporated into a rather thorough website. It is now undergoing field tests by Bow Valley College in Alberta through the Test of Workplace Essential Skills (TOWES) project. One of the key proponents of the life skills approach is the National Work and Life Centre (lifework.ca/).

Views Vary on Employability Skills and Assessment

At the risk of overgeneralization, education practitioners and civil servants tend to be interested in development, both academic and social. They are not as enthusiastic about skills in general and even less about assessing skills and communicating these to employers. The main support for employability skills in the school system comes from those responsible for career counselling and co-op education. Similarly, employers and not-for-profits with close ties to employer groups, such as the Conference Board of Canada, Career Edge and CAREERS: The Next Generation are favourably disposed toward employability skills.

Although the Conference Board of Canada has had considerable success in introducing the education system to the concept of employability skills, it is very difficult to determine to what extent this is filtering down to the classroom. Anecdotal evidence suggests that employability skills are introduced primarily through pedagogical approaches. In some instances, such as in Alberta and Ontario, employability skills have also been introduced directly into the curriculum. Moreover, co-operative work placements will have exposed more students to the employability skills required in the workplace. Ontario is at a very preliminary stage of exploring the possibility of developing a skills passport for its secondary school students.

Through the efforts of the Canadian Foundation for Economic Education (CFEE), enterprise skills have also been introduced into education system, but once again, on a hit-or-miss basis with little assessment.

Weak Assessment and Signalling Mechanisms for Employability Skills

There is very little attempt to assess the extent to which employability skills are actually developed by students. Consequently, young Canadians are often quite unaware of the employability skills that they have developed.

Generally, there is a preference for developmental assessment tools as opposed to credentializing tools. In part, this reflects the overall developmental focus of the secondary school system as well as a skepticism about the validity and reliability of self-assessment tools to be used toward credentializing. Some systems, like Québec's, issue credentials in support of employment experience that is undertaken in conjunction with school. For students on work placements, Québec will issue an attestation to this

work experience in conjunction with the standard Secondary School Diploma.

In most cases, however, employability, ICT and enterprise skills are woven into the curriculum and are not assessed or credentialized. Consequently there can be a low level of awareness of these skills and this is a basis of weak signalling of employability skills to employers. According to youth employers interviewed, young people rarely communicate their employability skills to the employer. They have little idea as to how these can be further developed in a workplace setting. Consequently employers are even more inclined to rely on educational credentials as a rough-and-ready guide to employability skills. This leads to a vicious cycle of higher and higher academic credentials and employers now seeking post-secondary credentials for jobs that would usually require no more than secondary school.

Jim Lange is now undertaking work for the Canadian Foundation for Economic Education (CFEE) to look into various types of entrepreneurial assessment systems. His preliminary findings are that there are a wide variety of assessment tools in use, several that have a relatively high degree of validity and reliability. These tools are now being used in places such as Mount Royal College in Calgary to determine the eligibility and developmental needs for enterprise education. In addition, Bow Valley College has also developed a self-assessment tool for adult learners that is linked to the Alberta Framework of Essential Competencies for Working, Learning and Living, called PEAC.

A number of initiatives do try to change the nature of the employer/applicant dialogue by encouraging users to reflect on their employability skills and to articulate these in their communication with employers. In most cases, this takes the form of simply improving communication between employers and potential employees. In others, such as the Alberta Personal Employability and Academic Competency (PEAC), the assessment is used to determine developmental strategies.

ICT's: Development and Communication

Probably the greatest advance in skills credentializing has been in the case of information and communication technology skills.

With some fanfare, the Canadian E-Business Opportunities Roundtable issued a report in January 2000 calling for the introduction of the Internet Literacy Course based on Europe's International Computer Driving

License.¹³ In Europe, about a half a million people have been registered through this system and it is now widely used as a means of organizing the development of ICT skills in the education system and as a credential for employers.

The Roundtable suggests that the attainment of this credential be a prerequisite for secondary and post-secondary graduation. It also believes that the credential does not necessarily have to be delivered exclusively through the education system. In fact, a not-for-profit organization, ICDL Canada Limited, has been established that has obtained the rights to the ICDL credentializing system. ICDL Canada Limited is in the process of accrediting test centres through training vendors, educational institutions and large companies. The ICDL model is based on several testing modules including basic concepts of information technology, using the computer and managing files, word processing, spreadsheets, database, presentation, information and communication.

An interest in assessment has also driven Industry Canada's approach to credentializing ICT skills, which is in a fairly preliminary stage of development. Industry Canada's efforts have primarily been through piloting the CanConnect Youth ICT Skills Recognition and the Junior GrassRoots programs. In the case of CanConnect, a number of certificates have been developed based on 4 levels of attainment (Discovery, Path Finder, Wizard and Mentor).

Apart from the development and credentializing of ICT skills, the technology itself is having a major impact on job search techniques. Probably the best example is SkillNet that brings together a variety of Internet-based development and recruitment tools under one umbrella. The combination of the highly successful National Graduate Register and Campus Worklink show the power of the Internet to bring together youth and employers. These Internet tool have very high usage especially in relationship to the size of the youth labour market. Skillnet reports over 260 thousand resumes requested over the last year of its operation whereas youth unemployment is around 350 thousand.

These publicly-supported efforts are further complimented by a multiplicity of private job search engines such as the MonsterBoard, CanadaJob, CareerMosaic and MegaJob. Furthermore, newspaper website incorporate job classified listings and many employers (particularly in the ICT industry) are recruiting directly online.

These initiatives have the highest usage of any of the major school-to-work transition efforts reviewed. Although the Internet has undoubtedly improved the volume of matching, Canada's high rates of churn would suggest that the quality of matching may still need improving. As such, these Internet tools may even be more powerful if they incorporated a tool for improving the quality of matching through better communication around employability skills.

Gap Analysis

Using the simple model of skill development, assessment and communication outlined previously, it is possible to identify gaps in the current system that may benefit from improvements in Canada's job matching infrastructure. The continued existence of relatively high rates of unemployment and high rates of churn among young people in the labour market, and lengthy school to work transition period (on average 7 years) are indications that improvements to Canada job matching technology for young people may still be required.

Development

There are many influences on the development of employability skills, including family and friends, school and employment experience. The main ways that they differ is in how they shape employability skills and how they allow skills to be communicated to a potential employer. Although family influences may be important in developing the capability to work in teams and take initiative, employers are unlikely to have a formal mechanism for distinguishing applicants based on their family background.

This leaves school and previous employment experience as the two main mechanisms for developing and signalling employability skills. As indicated, the overall trend has been toward more schooling and less employment experience. This means that schools either have to incorporate employability skills into the curriculum and pedagogical approaches or encourage combining school and work through, for instance, co-op programs.

Clearly schools have made significant strides in both introducing employability skills and in providing co-operative education. Canada has one of the most active co-operative education programs in the world—over 60 thousand young people are enrolled in such programs.¹⁴ None the less, the overall numbers show that fewer young people have any work experience. Employability skills are being introduced unevenly across

Canada and through a variety of different learning mechanisms. Most importantly, these skills are virtually never credentialized. Moreover, classroom education can never truly replicate the on-the-job world of customers, managers and co-workers.

To illustrate the point further, compare a typical high school graduate in 1985 with one today. Both probably have about the same level of academic skills. The 1985 graduate is more likely to have had some work experience to compliment his/her high school diploma. The graduate today is more likely to have been introduced to computers, employability skills and enterprise skills in the classroom. Yet both have the same educational credential, the 1985 graduate will have workplace references and today's graduate's educational credential will make little mention of employability skills. Finally, the 2000 graduate is much more likely to be competing with those with post-secondary credentials for a job even though these credentials are often quite unrelated to the workplace.

Clearly there are two potential gaps in the school-to-work transition system. Fewer employability skills are being developed in employment and therefore there is a need for even more job placements and stepping stone jobs to provide valuable work experience and employability skills development among youth. Second, Canada has to develop a better system for making students aware of the employability skills that they are developing outside of employment.

Assessment

Of course a major challenge here is the signalling mechanism. The balance between formal education and work experience has shifted in favour of formal education. This is usually not an issue for those with post-secondary credentials but the majority of youth in the labour market do not actually have this credential. These people account for over 80 per cent of the youth unemployment problem.

Obviously credentializing employability skills is unlikely to help someone who has yet to obtain basic literacy and numeracy skills. Assuming that a high school diploma signals this level of skill, then upwards of 40 per cent of the youth unemployment problem may be addressed by improving the assessment of employability skills. A system that relies more on the classroom to deliver these skills must therefore also rely more on classroom- type assessments for determining whether these skills have been developed. Yet classroom assessments make little mention of employability skills and employer assessments are less likely.

The current prospects for improving the assessment of employability and enterprise skills are not bright. This is primarily because of skepticism in the educational community about the efficacy of such assessments. Some of this skepticism is based on legitimate concerns about the ability to develop rigorous and reliable tools for assessing so-called “soft” skills such as teamwork, personal management and enterprise skills.

Similar skepticism does not seem to apply to the assessment of ICT skills, perhaps because these are considered to be “hard” skills. Although there is relatively little credentializing of these skills at the secondary school level today, the efforts of Industry Canada, ITAC and ICDL Canada Ltd. are very likely to change this. Over time, therefore, ICT skills assessments are likely to be less of an issue.

Communicating

Clearly the revolution in information and communication is having a major impact on the nature of the communication between young job-seekers and potential employers. Effectively, the Internet is re-configuring the traditional modes of recruiting through ads, with young people either contacting the employers directly or submitting a resume. Indeed, these modes are much less likely to be discrete steps as most websites incorporate all these functions.

As with much of the application of ICT's, however, the first and main impact has been simply to increase the volume of potential matches as opposed to the quality of the matches. ICT's cannot increase the number of available jobs. Arguably, ICT actually may reduce the average quality of matching because it is much easier for an applicant to effectively “spam” the on-line job market without much thought regarding which employers are best suited to their particular skills.

From the employers' perspective, the challenge remains how to screen applicants and find good matches between their jobs and the skills and aptitudes of potential employees. Here the problems of employability skills development (especially a lack of workplace development) and weak assessment mechanisms materialize in an ongoing problem with matching. Consequently, there is a need to deepen the communication at the same time as it has been broadened.

But there is no point in deepening the communication if there is nothing to deepen it about. In other words, it is necessary to develop and assess the development of skills that employers actually value. Inasmuch as many educators claim that this is being done in the classroom through

various employability skills models, the main task is in developing a valid and reliable method of assessing these skills. Then it is simply a matter of designing a template that links into employers recruiting systems.

Although the preliminary interviews for this research revealed differences in the specifics, there was surprising commonality in the type of employability skills that youth employers have incorporated into their recruitment systems. So while there may be a gap in the current system, it would not appear to be an insurmountable hurdle to overcome.

Mapping a Way Forward

The initial conceptualization of *CareersNet* addressed a number of these gaps in the current system for matching young potential employees with jobs. But like many concepts, it needs a reality check with practitioners prior to making a determination as to whether to move forward with a design. As such, Grant Insights convened a Stakeholder Consultation Meeting of major youth employers and government officials, educators and experts with insights into the development, assessment and communication of employability, enterprise and ICT skills.

Stakeholder Consultation Meeting: February 18, 2000

Many issues surrounding the concept and development of *CareersNet* were discussed at the February 18 meeting (see Appendix 3 for the confirmed attendees and 4 for the agenda). Although initial reaction to the meeting was good, an impending snow storm reduced actual attendance to 12.

As input into the decision-making process about whether to proceed with a prototype development phase of *CareersNet*, the attendees were asked to address three questions during the discussion phase of the meeting:

1. What do you think of the overall concept of *CareersNet*?
2. What technical and management issues will have to be overcome if *CareersNet* is to be a success?
3. Given the concept and the technical and management issues, is it worthwhile to develop a pilot at this time?

Attendees at the Consultation Meeting were invited to hear about and discuss the concept of *CareersNet* and many of the issues associated with creating and implementing the proposed Internet-based system. Below is a summary of the major issues as presented and discussed at the meeting, and the implications for designing and marketing *CareersNet*.

Major Issues Emerging From the Meeting

Creating a Valid and Reliable Tool

One of the most contentious issues is whether a valid and reliable tool for evaluating so-called “soft” skills, such as employability skills and enterprise skills, can be created. This is less of an issue for ICT skills, where major inroads have already been made in developing internationally recognized assessment tools. Issues about validity relate to the capacity of employers to make fair and accurate judgements about their employees’ skills as demonstrated at work and the reliability of self-evaluations by prospective new youth employees while at work or when seeking a new job.

These concerns will have to be addressed up-front by engaging employers, youth and other stakeholders in the tool development process and by including in the development methodology a series of practical tests of the prototype evaluation tools. The twin challenges of reliability and validity need to be articulated candidly and openly with an explicit statement that the pilot would only proceed if and when the tools were tested and found effective in actual tests of the prototypes.

Evaluating Versus Assessing

Evaluating skills differ from assessment, testing and other forms of measurement. It can be defined as the exercise of ‘considered judgement’ to determine skills levels while judging job performance. The considered judgement is exercised by the employer when reflecting on an employee’s skill level as demonstrated specifically in the performance of their job. The context of the job as the basis for this type of skill evaluation is critically important: the job provides a clear practical focus to make this type of employer evaluation meaningful to everyone concerned. The job also provides the discipline of a judgement of skills that employers are paying an economic price for their employees to demonstrate in their work.

Employers often use a similar evaluation process in judging their employees’ job performance and deciding on transfers, promotions and firings. They use it sometimes in isolation, sometimes in conjunction with

other tools and information. Considered judgement can be a powerful and effective tool for employers who concentrate their efforts to ensure a fair, well-balanced and comprehensive evaluation of an individual's skills. By the same token, the employee or prospective employee also exercises considered judgement. They must evaluate their skills through the lens of work experiences and part-time jobs before they enter the workplace from school and, afterwards, through the lens of the work that they have been paid to perform by their employer.

The marketing of *CareersNet* will depend on successfully articulating the value of evaluation to build buy-in among employers and youth.

Evaluating Versus Measuring

Skills measurement, especially using quantitative measures, is more elaborate, time consuming and expensive than evaluation. Measurement can also be more problematic in relation to employability skills, especially the so-called 'soft' skills, than it is when the targets for measurement are fact- or information-based skills such as technical and job-specific skills. In fact, one of the major questions relating to this issue is: can you set meaningful performance targets or achievement scales for skills that may not be capable of measurement (especially quantitative measurement) but are capable of being observed and evaluated?

To illustrate the issue, take the example of Leonardo da Vinci's *Mona Lisa*. Anyone seeking to measure the painting by using measurable criteria could examine its physical dimensions of width and height, measure the size of la Giaconda's smile or even study the amount of each colour used on the canvas. None of these measurements would, however, address the value of the painting to its viewers. If questioned about its value or meaning to them, most individuals might comment on the impact of the famous smile on their emotions or on their sense of self in relation to others.

This consideration, an *evaluation*, by each individual according to their own lights, would have two likely outcomes. First, nearly everyone could and would carry out the evaluation successfully, that is to their own satisfaction. Second, the evaluations would show considerable consistency across the population of evaluators. In fact, it is our collective awareness of the cumulative evaluation of the picture by most viewers over several centuries that forms the basis for its world-wide fame and reputation for greatness. Measurement, on the other hand, plays no appreciable part on individual or collective judgement of the work.

Evaluating Versus Testing

Like measurement, skills testing is more elaborate, time consuming and expensive than evaluation. Testing can also be more problematic in relation to employability skills, especially so-called 'soft' skills, than it is when the target for testing are fact or information based skills such as technical and job-specific skills. In many circumstances, testing may not be more valid than evaluation or other types of assessment, even if a form of test can be constructed, because the test of skills, attitudes and behaviours is only a proxy for real workplace performance. Testing may not accurately enough mirror conditions in the workplace to allow employers to feel confident that the test results are a reasonable indicator of likely workplace performance in the future.

Performance Versus Psychological Traits

Assessment tools such as *CareerMax* and *Pathfinder* are based on psychological and behavioural scales as indicators or predictors of an individual's skills. One of the major concerns of some employers is how well these scales inform them about actual skills. These employers may find *CareersNet* attractive because it involves evaluation and self-evaluation tools that focus directly on skills demonstrated on the job not assessment systems that can get at skills only indirectly by using proxy indicators or predictors of skill levels.

Many employers may be attracted to support *CareersNet* because of its direct tie-in of skills to job performance because its 'real world' focus increases their confidence in its practical reliability. *CareersNet* may be marketed strongly to them on the basis of this feature.

Connecting to Skills Assessment Systems and Tools

Employers are interested in knowing how *CareersNet* could be connected to their existing assessment processes, systems and tools for recruiting, identifying skills gaps in employees, performance reviews, firing, transfers and promotions. Creating these connections from the beginning of planning *CareersNet* would help ensure that *CareersNet* becomes a fully integrated part of a larger system of human resource activity in workplaces. It would probably also give program developers a head start in avoiding evaluation pitfalls by borrowing from the experiences of evaluation tool designers in the workplace, and from government officials who provide tools that help youth to make school-to-work and labour market transitions.

In this regard, *CareersNet* should be seen as overlapping, and having a natural affinity for, prior learning assessment and recognition (PLAR)

systems. In the long run, it may be a powerful tool for stimulating more investment in ways to understand and recognise skills and knowledge gained and demonstrated in workplaces by people of all ages.

CareersNet would be more marketable and attractive to employers and governments if it was connected, and ideally integrated, with existing human resource assessment systems and tools, including PLAR. For this reason, *CareersNet* should be designed from the beginning to connect with employers' current human resource systems, and with federal and provincial government school-to-work and labour market transition systems.

Iterative Credentialing

One of *CareersNet's* most attractive features is that it is an iterative credentialing system. It builds an increasingly credible and useful credential with each additional evaluation performed by an employer of a youth employee and every time the youth employee performs a self-evaluation. This process is very attractive to employers who appreciate the value of multiple evaluations by their employer-peers and who recognise that the iterative nature of the credential allows them to see how and how quickly individuals are developing their skills in the workplace. It is similarly valuable for employees who want to show employers that they are growing demonstrably more skilful through the experiences of their youth working years.

The iterative nature of the credential is a powerful feature for selling *CareersNet* to employers and youth and should be featured prominently in all literature and presentations made to promote the system.

Credentialing Connections - CareersNet Certificate of Achievement

Some stakeholders feel that *CareersNet's* value will only be fully realised if it can be tied into existing credentialing systems so that it is a part of a holistic Canadian system for credentialing youth. For this reason, connections between *CareersNet* and other recognition systems of public education and private training and development, including Prior Learning Assessment and Recognition (PLAR) need to be clarified.

One idea that builds on the notion of integrating *CareersNet* into a pan-Canadian credentialing system is to create an actual credential that can be obtained by a participant on completion of the youth phase of their involvement at age 25. The concept is for the *CareersNet* system to give the individual a document as a credential of at-work skills performance

over the period of time beginning when they enter the workplace and ending when they achieve their 24th birthday.

The *CareersNet Certificate of Achievement* would be obtained by only some of the program participants. The *CareersNet Certificate of Achievement* would be granted to those youth who achieve a recognized standard of excellence in skills demonstrated in performing their jobs between ages 16-25. Like a secondary school graduation diploma, it would be a target for people to aspire to that would encourage and recognise their personal success, and a credential that employers could use to identify young people whose excellent employability skills make them attractive candidates for hire.

The *CareersNet Certificate of Achievement* would be an attractive selling feature for employers, youth and for governments that want to create a better balance in skills and knowledge credentialing systems between the academic and the practical dimensions of learning.

Relationship to Other Internet Systems

How will *CareersNet* relate to the numerous other Internet systems for matching young people with jobs? There may well be an important niche for *CareersNet* centring around improving the quality of the communication between employers and prospective employees that takes place through these other sites. Like printed ads, Internet job postings often describe jobs in terms of technical skills, but the fundamental problem for youth employees in retaining their jobs may be a lack of employability skills.

The key is for *CareersNet* to develop a common language that employers can use to describe the employability skills that are actually used in the jobs they want to fill and that employees can use to describe the generic employability skills that they possess that the employers are seeking. By improving matching based on employability skills, and using common language that everyone understands, *CareersNet* may significantly improve the quality of existing Internet job systems.

This dimension of *CareersNet* is likely to be of interest to all levels of governments with an interest in improving labour force entry and transitions for youth, as well as for employers who find the multitude of terms currently in use to be confusing at times. It should therefore be given prominence as a desirable feature in the marketing to potential sponsors and participants.

Connecting to Skills Development Systems and Tools

Employers are also interested in knowing how *CareersNet* could be connected to their existing systems and tools for developing employees' skills and knowledge. The value for them is that the evaluation can lead to the skills improvements that they need in order to improve work force productivity and improve their bottom-line. It would also add value for many youth who seek direction and guidance in addressing their personal skills shortcomings in the workplace in order to become more successful at work.

While not crucial to its viability as a system, connecting skills evaluation to skills development activities would make *CareersNet* more sellable and attractive to employers, governments and youth. For these reasons, *CareersNet* should be designed from the beginning to connect with skills development systems.

Privacy and Rights

Employers and others have identified a need for protocols to safeguard and protect the privacy and rights of youth, employers and others involved with *CareersNet*. System security and access to a voluntary system create special challenges. In addition, employers have raised questions about legal liability associated with making accessible their evaluations of youth employees to other employers, even when access to that information is controlled by the youth themselves. Their concern is that any employer role in providing information into *CareersNet* may run into issues around confidentiality and legal liability with regard to purportedly malicious or unfounded assessments

Employers (and youth employees) will only agree to participate in *CareersNet* if the issues around privacy and rights can be resolved. While important, these issues are likely resolvable, in part by borrowing from the techniques used by other Internet-based systems that involve inputs from several parties. As such, they do not pose a significant obstacle to creating and implementing *CareersNet*.

Complementarity

Some people have wondered whether *CareersNet* is conceived of as a replacement for a secondary school graduation diploma or some other form of credential. It is not: *CareersNet* will not replace any existing educational or workplace based assessment or credentialing systems. It is intended to enrich and improve the school to work transition system for youth and employers by adding a helpful additional source of information

and insight that will enhance the match between individuals' employability skills and the jobs that employers hire them to perform.

Employers are not very concerned about complementarity as an issue. They see benefits from having an additional source of information about prospective hires and, having no personal stake in other credentials, they see no costs to them from using it, even at the 'expense' of another credential. Some government organisations and educators, on the other hand, may see this as an issue of some importance because they may view it as competition for academic credentials, even though it is not.

Costs to Employers of Maintaining the System

The original vision was for CareersNet to allow young employees to create a portfolio of employability skills using an initial self-evaluation and subsequent work experience that would be the basis for subsequent evaluations by them and their employers. This raises a number of issues around how the portfolio might be updated with high quality evaluations in an affordable fashion. Some employers have expressed concern, for instance, about their time commitment if the portfolio was to be updated in conjunction with their performance review system. From their perspective, time spent on these evaluations could constitute a significant labour cost. On the other hand, other employers have made the point that if cost savings from improved retention of youth hires and increased revenues and profitability from improved productivity by youth employees can be shown, employers will willingly bear the additional costs of joining *CareersNet*.

Overall, costs is a major concern of employers and is one of the essential points to address before a widely-supported *CareersNet* system can be put in place. Employers will take part if they see the benefits out-weigh the costs and the initial costs of investing in the system are not so large that they incur a major financial risk. The solution may be to design a layered system whose core evaluation instruments are simple, easy to use and do not require much time. These highly cost effective core evaluation instruments could be surrounded by and connected to more elaborate (and expensive) assessment and development systems and tools and websites.

Technical and Management Issues

There are a number of other technical issues with respect to maintaining the website and organising the database management. Many of these issues are the same as those facing large websites like Skillnet and should not be insurmountable.

These technical issues need to be addressed explicitly in developing a prototype for testing.

Conclusions from Meeting

In terms of the three questions posed at the beginning of the meeting around the concept, the managerial viability and the desire for a pilot, the meeting participants were asked for their verbal and written input. Subsequent to the meeting, a number of participants also called Grant Insights to offer their points of view.

There was a strong consensus at the meeting around the concept of *CareersNet*. However there was less consensus around the major management and technical challenges and the desirability of a pilot. The main problem here would appear to be that most of the practitioners do not deal in concepts; they are intimately involved with their recruiting systems. The positioning of *CareersNet* combines many concepts relating to youth employment, the school-to-work transition system and the relationship to recruiting systems. Although these concepts are important from a public policy point of view, they are not particularly important or relevant to youth employers who do not necessarily see the efficacy of changing the system as well as doing the best they can within the existing system.

A key insight, therefore, is that *CareersNet* must be sold to different audiences in different ways. To begin, government has to see *CareersNet* as an effective strategy for improving Canada's job-matching system for youth. If government believes this, and it fits in with their priorities, they should fund a prototype to develop the tools. There is a common market failure at this level in that employers are unlikely to fund open-access, non-proprietary recruitment tools.

These tools should be developed with employers but *only as a means to improve their recruitment systems*. Once a prototype is developed, other employers will have something concrete to which they can react. If enough employers react favourably, then a regional pilot can be undertaken. At this point, *CareersNet* will have a track record and it will be easier to sell the product to employers and indeed have them pay for it.

Final Recommendations

Based on the interviews, meeting of stakeholders and other analysis, this report makes the following recommendations:

- ◆ CareersNet is sufficiently sound conceptually to warrant the development of a prototype;
- ◆ The main challenges in developing the prototype are to design a valid and reliable self assessment tool and to develop a system for having this initial assessment updated through initial employment experience;
- ◆ A decision on proceeding with a pilot should be postponed until a prototype can be developed that addresses concerns about reliability and validity and that receives favourable reaction from youth employers.

The Conference Board of Canada has expressed an initial interest in taking a lead in developing the prototype along with stakeholders from government, the private sector, not-for-profits and educators. In this process, the project leader should engage those with practical experience in designing these tools and engaging employers. Bryn Jones of ICDL Canada Ltd. has particular expertise and insight as to how this might be done, as do Industry Canada staff who have worked with the National Graduate Register.

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Notes

¹ This work includes papers on entrepreneurship and youth employment, entry-cost barriers to youth employment, best practices in youth hiring and lifelong learning. Grant Insights has produced discussion papers on these topics over the last three years that are available upon request.

² Dr. Michael Bloom of the Conference Board of Canada played a major role in the conceptual development of *CareersNet*.

³ "Credential" is used in this sense in its broadest meaning. Although we usually associate it with formal recognition by a governing body, the Oxford English Dictionary defines it more generally as the "... evidence of achievement or trustworthiness". In this sense a credential can include statements by previous employers or any other trustworthy mechanism vouching for someone's achievement.

⁴ See for instance, Van den Berg, Gerard J., Anders Holm, and Jan C. Van Ours, "Do Stepping Stone Jobs Exist? Early Career Paths in the Medical Profession" Discussion Paper # 41, Tinbergen Institute, The Netherlands, 1999.

⁵ Conference Board of Canada, *Performance and Potential 1997* (Ottawa: Conference Board of Canada, 1997).

⁶ Statistics Canada, *Labour Force Update*, Vol. 3, No. 4.(August 1999) Cat. No. 71-005-XPB.

⁷ Statistics Canada, *Labour Force Update*.

⁸ Statistics Canada, *Labour Force Update*

⁹ Kevin M. Murphy, W. Craig Riddell and Paul Romer, "Wages, Skills and Technology in the United States and Canada" in E. Helpman (ed.) *General Purpose Technologies and Economic Growth* (Cambridge MA: MIT Press, 1998).

¹⁰ HRDC Applied Research Branch, *High School May Not Be Enough: An Analysis of Results from the School Leavers Follow-Up Survey 1995, 1998*.

¹¹ CANSIM labour force data.

¹² OECD Education, Labour, Employment and Social Affairs, *Member Country Data 1996* (<http://www.oecd.org/els/edu/EAG98/list.htm>). Table D3.1.

¹³ Boston Consulting Group (Canada), "Fast Forward: Accelerating Canada's Leadership in the Internet Economy" Report of the Canadian E-Business Roundtable, January 2000.

¹⁴ Conference Board of Canada, *Performance and Potential 1999* (Ottawa: Conference Board of Canada, 1999). p. 55.