

Informing Youth Education to Labour Market Transition Decisions

A Federal Perspective

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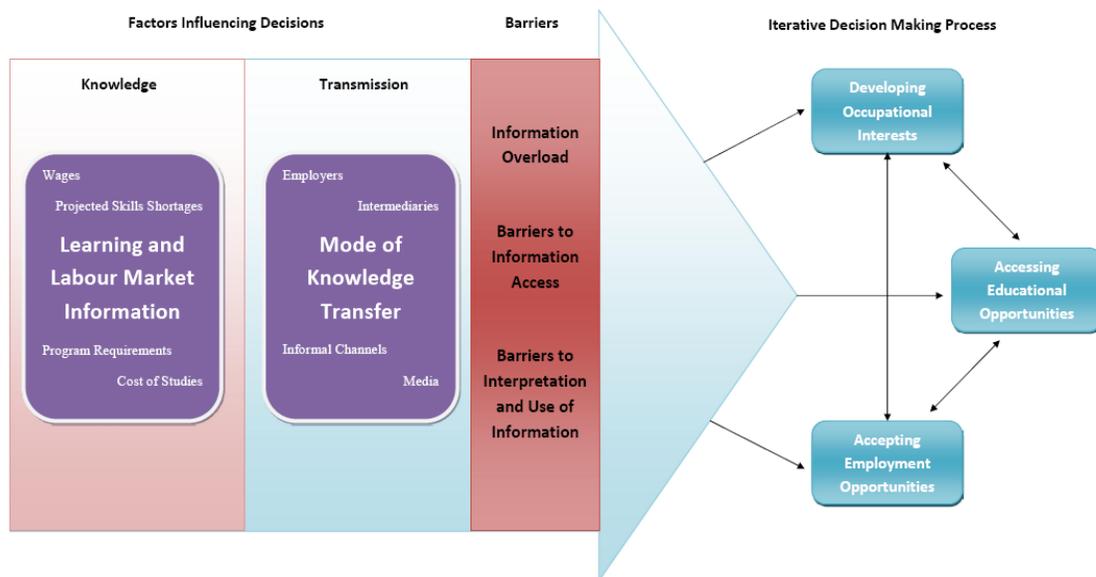
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EXECUTIVE SUMMARY

An important role for the Canadian federal government is supporting the ability of citizens to make informed choices about their participation in the Canadian society and economy. The 2010 Federal Speech from the Throne commits to “make timely information on labour market opportunities available for all Canadians.” Further, the 2010 Federal Budget indicates that supporting the successful integration of youth into the Canadian labour market is an area of importance for the current government. Informing youth education to labour market (ETLM) transition decisions is an important part of this information provision and labour force integration. If youth are better equipped to explore and gain insight into educational and labour market opportunities, their transition decisions and labour market outcomes can be improved. Improved labour market outcomes are positive for youth themselves and society as a whole through their potential to increase productivity and innovation. With these considerations in mind, the purpose of the following policy paper is to identify federal policy directions and potential areas for action to better support youth in making informed ETLM transition decisions.

Conceptual Framework and Findings:



ETLM transitions describe a process whereby youth, influenced by various sources of information, navigate often nonlinear paths through education, employment and interest

development. ETLM transitions can therefore be understood as an iterative decision making process where decisions are influenced both by the type of knowledge accessed and the transmission of this knowledge. From a policy perspective there are two broad areas of this process that lend themselves well to policy intervention:

- Supporting the collection and analysis of learning and labour market information and;
- Encouraging improvements to mode of knowledge transfer including transmission sources and methods of transmission.

While each can be seen as independent areas for policy intervention, they must also be understood as interconnected pieces influencing the decision making process. As with any interconnected process, success depends on the ability of the component pieces to flow seamlessly together. In the case of ETLM transition decisions, three major barriers to informing youth ETLM transition decisions exist. The first is information overload. Individuals become overwhelmed by and have difficulty processing the sheer volume of knowledge that has the potential to inform ETLM decisions. The second is challenges to information access including being unaware of information needed and the nonexistence of information being sought.

A third major barrier to informing youth ETLM transition decisions is that even when knowledge is transmitted, its interpretation and use are influenced by belief in the ability to perform a given action (self-efficacy) as well as a belief concerning the results of one's actions (outcome expectations). Self-efficacy and outcome expectations create barriers because they are not necessarily the products of objective reality but rather are influenced by an individual's direct and vicarious experiences, social influences and physiological and emotional reactions (Lent, Hackett and Brown, 1999). Influences that lead to incorrect assumptions about educational opportunities and the labour market act as barriers because they have the potential to prevent an individual from accessing or truly internalizing knowledge that may challenge their unsubstantiated beliefs.

The research methodologies employed in this policy paper provide support for the above conceptual framework and highlight areas of particular salience. The literature review reveals a number of significant gaps in the understanding of information and modes of knowledge transfer desired by youth. The literature also suggests that the direct and interactive provision of learning and labour market information (LLMI) has particular potential to improve the labour market outcomes of some at risk groups of youth (youth belonging to families with low income and/or low educational attainment) and youth with initially low levels of LLMI.

Focus groups with college and university students strongly supported the importance of self-efficacy in the ETLM transition process. In making ETLM transition decisions,

youth expressed that they spent very little time looking for general information to inform possible paths but rather based their decisions on self-efficacy beliefs resulting from direct or vicarious experience. Moreover, focus groups also revealed that youth's feelings of self-efficacy were not necessarily rooted in objective reality and that their knowledge of career and educational options was quite narrow. Interviews also revealed that the gaps in knowledge identified by the literature review were perceived by many federal government officials as barriers to their ability to better inform the youth ETLM decision making process.

Finally, the smart practice review reveals that increased coordination between varying levels of government in areas responsible for education and the labour market as well as harnessing the often latent potential of employers and youth themselves have strong potential to improve current practices of informing youth ETLM transition decisions in Canada.

Discussion:

Underlying much work on informing youth ETLM transitions is the assumption that individuals are sophisticated users of information who make rational decisions. Following this logic, simply increasing the amount of sound LLMI evidence available to youth should lead to more positive labour market outcomes. This paper has found there is little empirical evidence to support this assumption. Much of the literature – as well as interviews with youth – indicates that youth often do not actively seek out LLMI to make rational decisions. Rather, youth appear to frequently make decisions based on personal experiences, intuition, outcome expectations and feelings of self-efficacy. An additional consideration is that relying too heavily on increased LLMI to inform youth ETLM transition decisions may disadvantage precisely those youth who most need greater ETLM transition support (e.g. at risk youth) because they are least likely to have been taught to be sophisticated decision makers.

This is not to say that gaps in ETLM related LLMI do not remain or do not merit being addressed. Self reported needs of youth indicate there is a desire for more investment in LLMI including greater information on careers and educational options as well as more detailed and up to date occupational projections. Rather, the findings suggest that increasing available LLMI may not be the most pressing avenue for government investment. If the goal is to overcome barriers to informing youth ETLM transition decisions, evidence collected in this paper suggests investment in improving modes of knowledge transfer, as opposed to supporting further collection and analysis of LLMI, is most deserving of immediate policy focus. For instance, improving the ability of local employers to directly transfer information about diverse occupational opportunities to youth, as well as seeking input from youth on the design of web-based LLMI transmission resources, show great promise in ensuring youth are better informed about youth ETLM transition decisions. In addition, the paper's research has shown that

investment in achieving a greater understanding of the informational preferences of youth (e.g. the types of LLMI and modes of knowledge transfer that positively impact youth) has the potential to fill important gaps in knowledge and improve future policies and programs.

American national security expert Gregory Treverton calls attention to what he calls *puzzles* and *mysteries* in the information age. For Treverton, a puzzle is a problem that can be solved by acquiring key pieces of missing information, while a mystery is a problem that, at least in part, is created by too much information. Mysteries do not have simple, factual answers but rather require judgment in the face of uncertainty and a means of selecting and making sense of key pieces of information from a multitude of sources (Gladwell, 2009).

Research undertaken for this paper shows ETLM transitions are mysteries. No one can know with any certainty what the labour market of the future will look like and there is a bewildering array of informational sources to inform the transition process. This finding is not trivial. If ETLM transitions were seen to be predominantly a puzzle, then policy directions would primarily focus on efficient ways of obtaining more information. By recognizing ETLM transitions as mysteries, this report has found that informing youth ETLM transition decisions must be more than the provision of information. Policy directions must recognize the informational preferences, barriers and labour market/educational perceptions of youth.

Policy Directions:

Given these considerations, and recognizing that provinces and territories play a critical role in supporting youth ETLM transition decisions by virtue of their responsibilities for education and skills training, this policy paper recommends four broad policy directions for the federal government:

- Develop a better understanding of client needs
- Improve access to direct and vicarious career experience
- Facilitate more active engagement of youth in the design and delivery of policies and programs
- Exercise more strategic leadership

These directions, along with proposed actions to support the recommendations, are summarized in the table to follow.

Policy Direction	Actions		
	Short-Term	Medium-Term	Long-term
Invest in developing a better understanding of client needs	<p>Execute Community Based Research Projects with youth from across the country</p> <p>Begin tracking websites accessed by youth at Service Canada Centres for Youth (SCCY)</p> <p>Begin surveying youth at SCCY periodically</p> <p>Develop a research agenda focused on youth preferences respecting modes of knowledge transfer and youth ETLM decision making</p>	<p>Extend current funding for FLMM/HRSD research project measuring the impacts of LMI</p> <p>Provide funds for the design and execution of performance measurement of existing initiatives to inform youth ETLM transitions</p> <p>Use improved research on youth ETLM decision making to inform improvements to federal online LLMI resources</p> <p>Share findings on youth ETLM decision making with Service Canada</p>	<p>Conduct more in-depth analysis on the specific needs of various at risk groups of youth</p>
Improve access to direct and vicarious career experience	<p>Test pilot projects that require some Career Focus and Summer Work Experience program providers to develop methods of exposing youth to career/education related information and experiences</p> <p>Test pilot projects that expand work with Sector Councils to encourage more active employer involvement with schools</p>	<p>Work with Sector Councils to liaise with professional organizations to institute professional development hours that could be put towards informing youth ETLM transition decisions</p>	
Facilitate more active engagement of youth	<p>Develop mechanisms that allow youth employed with SCCY to engage in more outreach</p> <p>Involve youth in design and evaluation of improvements to federal government online LLMI dissemination</p>	<p>Engage youth in the design and evaluation of advertising relating to information on ETLM transitions</p>	<p>Maintain regular communication with youth representatives</p>
Exercise more strategic leadership	<p>Better link Job Bank to other F/P/T ETLM transition information/ programs</p> <p>Investigate methods for better integrating privately provided ETLM transition information with governmental initiatives</p>	<p>Expand the current FLMM Career Development Working Group</p>	<p>Use the expanded Career Development Working Group as well as improved research on client needs to work with stakeholders to identify gaps and methods of obtaining additional LLMI</p>

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1. INTRODUCTION

1.1. OVERVIEW

A key objective of the Strategic Policy and Research Branch (SPR) at Human Resources and Skills Development (HRSD) is to enable Canadians to make informed choices about their participation in the Canadian society and economy. Moreover, the 2010 Federal Budget and Speech from the Throne indicate that the government is committed to supporting the successful integration of youth into the Canadian labour market and to providing Canadians with timely information on labour market opportunities. Given this context, the following policy paper identifies priority areas for federal policy focus in supporting the objective of ensuring youth are able to make informed decisions about their education to labour market transition decisions.

There are a number of considerations that make informing youth pathways through education to the labour market a policy issue of interest. Studies of youth labour market participation show that youth are more vulnerable to labour market churn and exhibit disproportionately high unemployment rates in the wake of recession (e.g. Martin, 2007). The percentage of Canadians expressing feelings of over qualification is also among the highest – at all age levels – of the OECD countries (Brisbois, 2003). Yet many Canadian employers express concerns about finding adequate numbers of workers to fill skills needs (e.g. Bank of Canada, 2008; Canadian Federation of Independent Business, 2009). Part of this disconnect may result from a difficulty in communicating labour market demands to those capable of providing supply. This difficulty in communication has both immediate and long-range implications. In the short-term, impacts of the most recent recession mean youth are transitioning into an economy where there are fewer positions available. Thus understanding where and what types of skills are in demand is very valuable. In the medium-term, the labour market is expected to experience a period of prolonged tightening due to demographic pressures and it is therefore important that youth are able to access information that will facilitate the matching of the skills and knowledge supplied to the labour market with the skills and knowledge required by employers.

Canadian youth themselves have also expressed a desire for greater access to information that could help guide their transition from school to the labour market. For example, the Canadian Policy Research Networks' (CPRN) Youth Dialogue held in November 2005, attended by 144 randomly selected Canadian youth (aged 18-25), revealed that many youth were searching for more accessible information on careers and educational options (Saunders, 2008).

Despite the importance and demand for increased information, informing youth education to labour market (ETLM) transition decisions is a complex issue that faces a number of barriers that need to be further explored and addressed.

Using the above context as a guide, the following policy report is designed to further the federal government's objective to improve youth labour market outcomes through supporting informed ETLM transition decisions. The report develops a conceptual framework for understanding the process of informing youth ETLM transition decisions, discusses findings from key informant interviews to develop a better sense of multiple views on the issues at hand, reviews a number of smart practices in informing youth ETLM transition decisions and provides policy directions for the federal government.

1.2. BACKGROUND

1.2.1. Defining Transitions

When defining transitions for the purpose of this paper many factors must be considered. In his study on the transition to adulthood, Galland (1996, cited in Doray, Picard, Trottier and Groleau, 2009) describes the transition as a journey played out between two principle axes: (a) the public axis, extending from formal education to the labour market (from the end of studies to a stable career) and (b) the private axis of family to matrimony (leaving the family home and forming a union with another). While this model is perhaps too simplistic and pejorative in equating adulthood with coupling and labour market attainment, it serves to highlight an important point. The following paper is concerned with youth ETLM transitions which are only one "axis" within a much more complex transition journey.

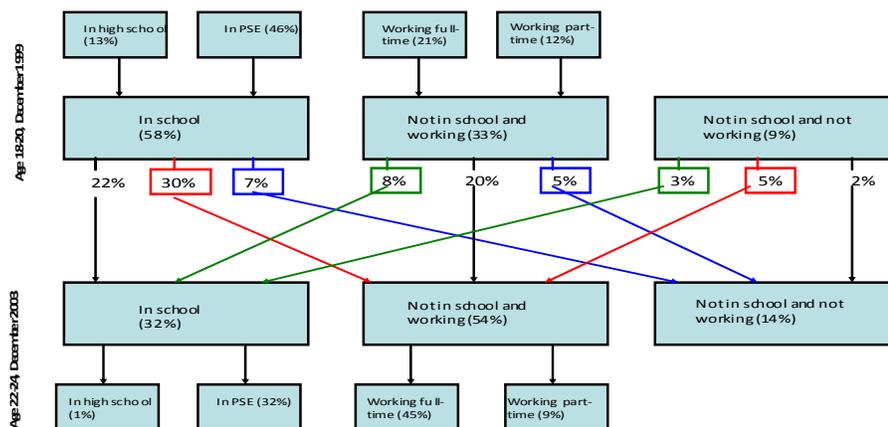
Further, the study of ETLM transitions themselves can be seen through many lenses including supporting youths' level of competency to become significant contributors to the labour market, their ability to translate classroom learning into real world situations and their ability to continue to foster a country's economic growth and prosperity. This study looks at youth ETLM transitions with the lens of *informing* these transition decisions and more specifically with the aim of developing federal policy directions to support this process. While a complex and multifaceted process in and of itself, it must not be forgotten that the work of this project is part of a still larger and more intricate whole.

ETLM transitions are best understood as occurring on two levels: micro (individual) and macro (society) (Muller and Gangl, 2004). It should also be acknowledged that for many youth these transitions cannot be simply understood using the traditional linear paradigm (e.g. a straight path from education to stable placement in employment). Using data from the Canadian Youth in Transition Survey (YITS), Figure 1 shows how within a matter of seven years much movement can exist between being in school, working and neither working nor being in school. What the figure does not show is how much movement and

shifting of trajectories existed within that time. According to the Canada Student Loan Program, over 36% of post-secondary education (PSE) students had either switched programs or dropped out of PSE by 24 years of age (Canadian Student Loan Program, 2009).

Moreover, many youth are increasingly mixing education and work. Some taking time off between periods of study, others combining education with a full or part time job (Bourdon, 2001, as cited by Franke, 2010). These forays into the labour market however do not qualify as transitions. Rather than representing stable integration in the labour market, they can be better understood as temporary work used to finance activities such as leisure or education or as interim states while decisions about more permanent labour market trajectories are made. Although the distinction between *interim employment* and stable integration into the labour market may be difficult to make in some cases, being aware that ETLM transitions can involve numerous experiences with the world of work is helpful to guide thinking.

Figure 1. Youth Transition Trajectories



From *Current realities and emerging issues facing youth in Canada: An analytical framework for public policy research, development and evaluation*, by S. Franke, 2010. Policy Research Investing in Youth and Social Management of Risk Project, p. 31.

Operationally therefore ETLM transitions will be defined as a process whereby youth use various sources of information to help navigate often nonlinear paths through education and employment as they move toward a stable labour market position and identity.

1.2.2. Defining Youth

Youth is a term often used in policy discourse. Despite its popularity, no consensus exists on its definition. The most common practice – defining youth according to age – is becoming increasingly problematic for the purposes of understanding ETLM transitions.

Today more than ever, youth face multiple life trajectories and make transitions at widely different ages. Some youth leave school and enter the labour market immediately following the completion of compulsory education while others extend their education and thus delay full entry into the labour market until well into their 20s or early 30s.

While some work discussing youth ETLM transitions use age ranges such as 15-29 (e.g. Human Resources and Skills Development Canada [HRSD], 2010a) or 15-24 (e.g. Bell and Bezanson, 2006) for the purposes of discussing ETLM transitions, the following paper uses the life-course perspective to frame its definition of youth. According to Elder, Kirkpatrick and Crosnoe (2004) understandings of youth must focus on “social pathways, trajectories, transitions and key life moments” (Franke, 2010, p. 8). Therefore for the purpose of this paper, youth is operationally defined as the period of life between the end of one’s compulsory schooling and settlement in a stable work position.

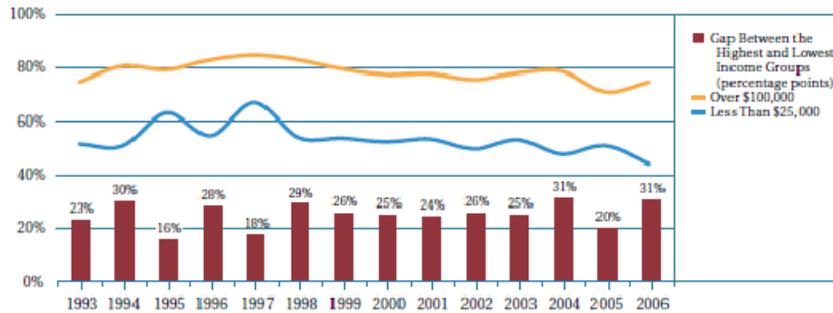
Youth at risk

When it comes to informing youth ETLM transition decisions, many youth face similar barriers (e.g. lack of understanding or access to information they find useful) and thus this paper has chosen to look at supporting youth as a whole rather than focusing on specific groups of youth. This is not to say further work might not be done respecting techniques for informing specific youth sub-populations in which to invest.

A key policy goal for informing youth ETLM transition is to improve labour market integration and outcomes for Canadian youth. There is no question that certain factors affect youth decisions to participate in PSE and subsequently their labour market outcomes. For example, the area where youth are raised (rural versus urban) appears to affect PSE decisions with the proportion of urban youth achieving a university bachelor or graduate degree being 50% higher than those coming from rural communities. Off-reserve Aboriginal youth were much more likely to have only obtained a high school diploma or less (60%) by age 26-28 and fewer than 10% had a university degree (Shaienks and Gluszynski, 2009, p.13). When compared to students whose parents completed PSE, youth whose parents did not complete high school were five times more likely not to complete it themselves (Shaienks and Gluszynski, 2009, p.14). Further Zeaman (2008) found a strong relationship between family income and university attendance. While not an exhaustive list, these numbers do indicate certain groups are “at risk” of facing greater barriers to accessing PSE and therefore making smooth ETLM transitions. What’s more, the trends in these barriers to access do not appear to have changed significantly in the past two decades. Data collected by Berger, Motte and Parkin (2009) from Statistics Canada’s Survey of Income Dynamics show that gap in post-secondary participation by family income levels remained at approximately 25% between 1993-2006 (Figure 2). Berger et al. also found that when looking at age groups,

the gap between the proportion of Aboriginal and non-Aboriginal people earning a post-secondary credential has increased over time (Figure 3).

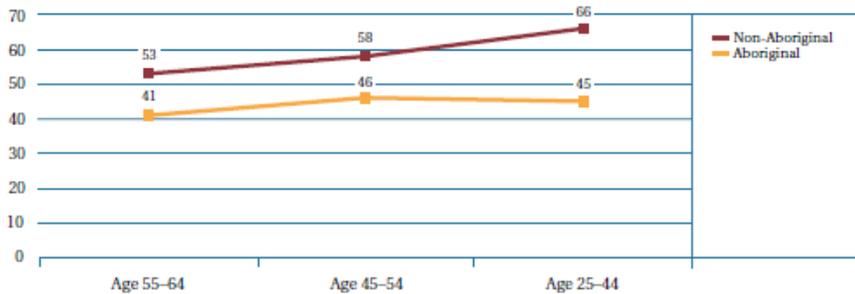
Figure 2. Post-secondary participation rates by select family income levels



Note: Sample is restricted to individuals residing with at least one parent when surveyed; Statistics Canada used an augmented sample, exploiting the longitudinal nature of the dataset, to verify the reliability of the data. The method used replicates Drolet's approach, described in Drolet (2005, 14-15).

From "Participation in post-secondary education: recent trends" by J. Berger, 2009. In J. Berger, A. Motte, & A. Parkin (Eds.), *The Price of Knowledge: Access and Student Finance in Canada, Fourth Edition* (pp. 27-62), p. 47.

Figure 3. Proportion of the population with a post-secondary credential, by age group



From "Participation in post-secondary education: recent trends" by J. Berger, 2009. In J. Berger, A. Motte, & A. Parkin (Eds.), *The Price of Knowledge: Access and Student Finance in Canada, Fourth Edition* (pp. 27-62), p. 53.

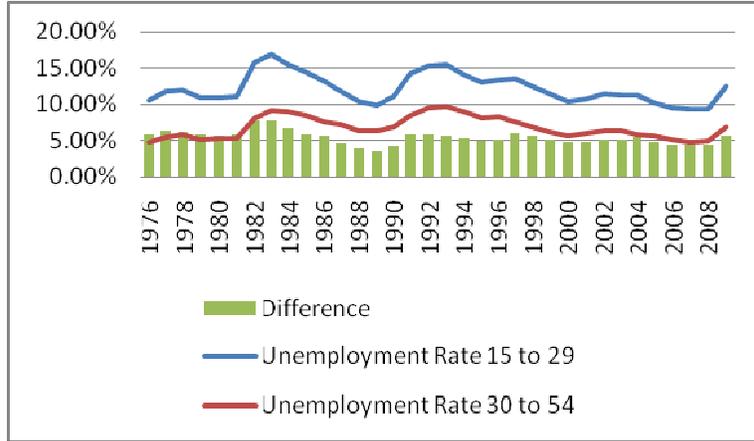
Given these considerations, further work to explore specific avenues for informing at-risk youth about ETLM transition decisions has strong merit. The current paper focuses on broader issues as a starting point. By identifying key areas for policy focus in general this paper can serve as a useful guide for those wishing to tailor knowledge transfer methods to specific groups.

1.2.3. The Context

Between 1978 and 2008 youth performance in the labour market has improved substantially. Youth between the ages of 15-29 saw their employment and participation rates raise markedly (see Figures 5 and 6). Despite this improvement, youth continue to experience much higher rates of unemployment than adults. Comparing unemployment rates of youth 15-29 and the core age (30-54) population in 1976 to 2009 (Figure 4), shows that that this trend has remained fairly static over time. Although it should be

noted that the difference grows larger during times of recession indicating youth tend to be more severely hit during times of economic downturn.

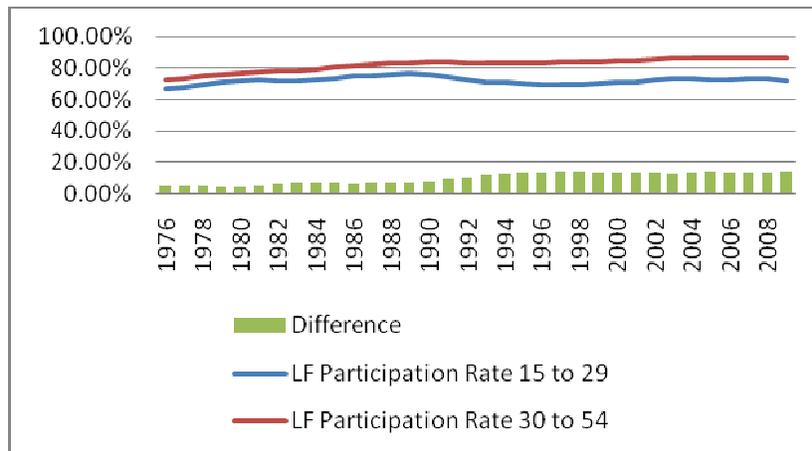
Figure 4. Unemployment rate 1976-2009, ages 15-29 & 30-54



Data from "Labour Force Survey PUMF," by Statistics Canada, 1976-2009 [Data File].

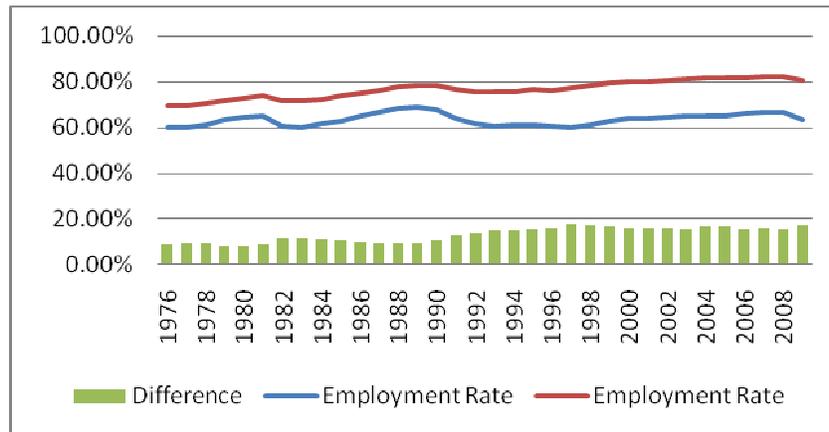
Comparing gains in participation and employment rates of youth age 15-29 to that of the core age (30-54) between 1976 and 2009 shows that in addition to having lower unemployment rates, the core age population has made more significant gains in the other two primary indicators of labour market performance (Figures 5 and 6). This is however not necessarily a cause for concern because the trend in both age categories remains positive and lower gains in participation and employment rates for youth age 15-29 may be reflecting increased time spent in formal education.

Figure 5. Participation Rate 1976-2009, ages 15-29 & 30-54



Data from "Labour Force Survey PUMF," by Statistics Canada, 1976-2009 [Data File].

Figure 6. Employment Rate 1976-2009, ages 15-29 & 30-54



Data from "Labour Force Survey PUMF," by Statistics Canada, 1976-2009 [Data File].

These numbers must be interpreted with some caution. First, as youth is not defined by age but rather life-course in this paper, some youth who have transitioned into adulthood, at least as it pertains to labour market outcomes, may be represented in the 15 to 29 age group and some youth may still be captured in the 30 to 54 group. It is however reasonable to assume that these age categories can provide a practical approximation with which to compare youth and adult labour market outcomes. A second caveat is that, particularly for the lower end of the age spectrum, many jobs being sought could be categorized as intermediate work used more to support leisure than basics of survival and thus these youth will take employment search less seriously and be more likely to pass on pursuing job opportunities (Martin, 2009). Difficulty finding jobs may also arise from the fact that youth are still in the process of developing their skills (i.e. in some form of schooling) and once their education is complete will have a much easier time finding a job. That said, there are a number of factors that contribute to higher youth unemployment which are more structural in nature and deserve attention when considering informing youth ETLM transition decisions.

As noted by Martin (2009), youth are more vulnerable to labour market churn. They experience higher job losses during recessions (i.e. first out and last in) and because they are more likely to be temporary or contract workers they are more vulnerable to layoffs. This sensitivity is strongly illustrated by looking at job losses occurring as a result of the most recent recession. Between October 2008 and July 2009 youth aged 15-24 experienced 49% of job losses while representing only 15% of total employment in October 2008 (Statistics Canada, 2009b). Despite their disproportionate representation in job losses youth do tend to have greater flexibility to return to education in the wake of job loss (e.g. less likely to have dependents and more likely to have parental support) and thus increase their potential to obtain more positive labour market outcomes. Grenier (2009) presents evidence indicating that the recessions of the 1980s and 1990s positively

influenced both youth enrolment and graduation rates – particularly at the college level. In addition there is emerging evidence that suggests a similar pattern took place for the 2008-2009 recession (Human Resources and Skills Development Canada [HRSD]a, 2010).

A second difficulty youth face in making ETLM transitions identified by Martin (2009) is that youth have less experience looking for work and thus may have more difficulty securing a stable labour market position. A corollary issue is that because they have significantly less experience with the labour market, youth also tend to have less access to networks to help them navigate the job search process. These challenges in particular can be mitigated through better information provision.

Many studies have emphasized that initial job outcomes have great influences on the future development of career paths (Muller and Gangl, 2004). Given the challenges faced by youth, particularly in this economic climate, and the long-term influence of early labour market transitions, supporting successful youth ETLM transition decisions has strong potential to yield positive policy outcomes. Aside from this general context there are two important areas for consideration when discussing informing youth ETLM transition decisions.

The Knowledge Based Economy

There is a general consensus that Canada is moving towards an increasingly knowledge based economy. It is presently estimated that by 2015, 35% of new jobs created in Canada will require a university degree (Franke, 2010, p.11). Amalgamating a variety of different estimates from Canada and the United States, Miner (2010) concludes that 66% of our workforces will need to have PSE credentials by 2031 (p.1).

While the increasingly knowledge based economy presents many opportunities, it also presents a number of risks. First and foremost are risks to those students who do not complete advanced levels of schooling (te Riele, 2005). The increasingly knowledge based economy also means that even when a more stable state of employment is achieved, continuous learning will likely be required throughout the work life. Thus, while a state of moving through education to stable employment is the main focus of this paper, beyond successful transitions, successful labour market policies must also focus on continued learning including employer provided training.

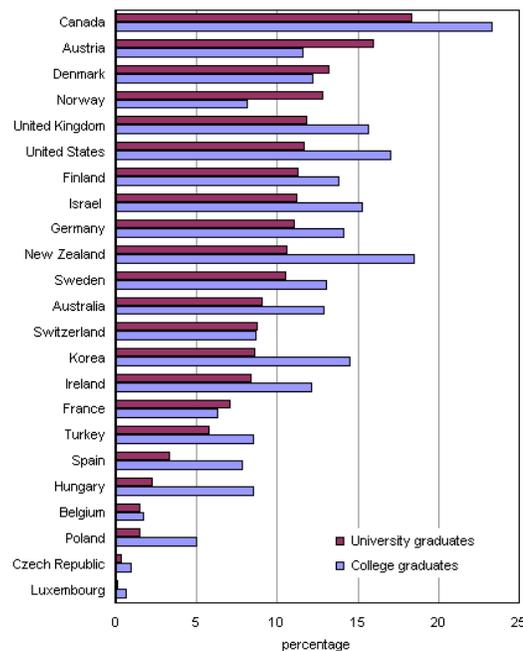
Skills Mismatch

On the supply side, data exists to indicate youth obtaining PSE do not necessarily obtain skills that are in high demand in the labour market. Study of the Follow-up of Graduates Survey indicates that one in three (35.1%) Canadian university graduates are not in a job that is closely related to his or her education (Boudarbat, Chernoff, 2009, p. 19). While

getting an education in an area that is not closely related to the eventual job, does not necessarily mean students are getting skills that are in low demand in the labour market, another Statistics Canada study shows that 20% of Canadian *university graduates* who were strongly attached to the labour market were participating in employment that required at most a *high school education* (Li, Gervais and Duval, 2006). This represents a nearly 30% increase when compared to 1993 results (Franke, 2010) and would indicate at least some students were misinformed about the education necessary to achieve their career goals.

In 2004 approximately 70% of college applicants over the age of 25 already had a university degree, indicating they may have chosen to go back to school because the original skills they obtained were not in demand in the labour market (Junor and Usher, 2004, p. 15). Finally, the OECD's *Education at a Glance 2008* found that in 2006 23% of college and 18% of university graduates earned less than half the median employment earnings in Canada. This is the highest rate of all studied OECD countries (See Figure 2).

Figure 7. Percentage of university and college aged graduates aged 25 to 64 who earned half of the median income or less, OECD countries



From "College and university graduates with low earnings in Canada – Demographic and labour market characteristics," by Statistics Canada, 2009, *Education Matters: Insights on Education, Learning and Training in Canada*, 6(2), p. 11.

On the demand side, studies indicate that businesses are having difficulty filling positions. As reported in the Bank of Canada's Business Outlook Survey conducted in the summer of 2008, 40% of businesses felt they faced significant labour shortages that restricted their ability to meet demand (Bank of Canada, 2008). In a 2008 survey of Small

and Medium Sized Enterprises (SME), it was found that 59% of SMEs felt that they have ignored business opportunities, scaled back expansion plans or lost business as a result of labour shortages. It was also found that a significant proportion of these difficult to fill positions required some form of PSE (Canadian Federation of Independent Business, 2009). To be fair, responses to these surveys were given before the full force of the economic downturn took effect. The most recent Business Outlook Survey reports that only 12% of businesses are facing labour shortages (Bank of Canada, 2010). However, despite this marked drop, the Conference Board of Canada's 2010 annual compensation survey conducted following the recession found that 54% of respondent organizations continued to have trouble attracting and retaining talent. While this share is down from numbers reported in recent years, the number is still remarkably high given the economic climate (Conference Board of Canada, 2010, p. 3). This is also evidence that even amidst rising unemployment in the wake of recession, demand for skilled workers in certain areas of the economy continues to exist. For example, many Canadian high-tech firms still find it a challenge to attract skilled IT workers (Jackson, 2009) and positions such as mechanics and nurses also continue to be hard to fill (Atlantic Institute for Market Studies, 2009).

Moreover, in the medium term as the Canadian economy recovers from the impacts of the recession many expect a return to an economy experiencing significant skill shortages. For example, in their study of the economic situation in Nova Scotia, McNiven and Foster (2009) postulate that, assuming no policy or business practice changes, by 2026 one out of every eight positions in demand will go unfilled. Although the authors note that the current recession might delay the severity of skills shortages somewhat, equally a return to economic boom may speed them up. Regardless of the exact timing, the authors see the emergence of a significant skill shortage as inevitable. Though focused on Nova Scotia, the authors contend that their research has implications with broad relevance for the rest of the country.

In reality, the labour market is likely to make corrections for shortages. Immigration may continue to increase and older workers may choose to stay in the workforce longer if incentives become stronger to keep them there. However, even with some market correction, the impact of labour shortages may be to reduce overall productivity. Haskel and Martin (1993) assert that shortages increase the cost of hiring skilled workers, leading firms to substitute by hiring less productive unskilled workers. Shortages may also put skilled workers in a stronger bargaining position allowing them to negotiate a less rigorous (and less productive) pace at work. Finally, skills shortages may inhibit investment and use of new technology that could lead to productivity growth. These productivity concerns are particularly important as Canada continues to search for ways to improve its current lacklustre productivity rates.

With youth finding it difficult to fully utilize their acquired skills in the labour market and sections of the labour market finding it difficult to find employees with their desired skills, it appears many positive results could be gained with better skills matching. As discussed below, lack of information about skills needs and the transmission of this information are not the only factors that affect the apparent mismatch between skills supplied and demanded. However, an important aim of informing youth ETLM transition decisions can be seen to be helping youth to assess what desired skills might be.

1.3. METHODOLOGY

This policy report involves using exploratory research based on a mix of data collection strategies to investigate informing youth transitions from education to the labour market. The methodologies used are as follows:

- Literature Review
- Key Informant Interviews/Focus Groups
- Smart Practice Review
- Critical Analysis and Policy Directions

The data collection strategies used to develop this policy report are qualitative in nature. While much research exists on programs and policies to support youth transitions from education to the labour market in one sphere and youth transition decision making in another, relatively little literature focuses on combining the two bodies of knowledge to provide a coherent view of policy avenues for informing youth ETLM transition decisions. The qualitative approach was therefore chosen because of its ability to explore, provide context and identify salient themes in the study of newly emerging concepts and ideas (Marshall and Rossman, 2006).

Literature Review

The literature review is designed to identify and make sense of current thinking on ETLM transitions as well as empirical studies on elements informing youth ETLM transition decisions. Literature is drawn from divergent areas of academia including economics, public administration, psychology and sociology. Sources of literature include academic journals, databases and texts as well as government documents.

Key Informant Interviews/Focus Groups

The key informant interviews/ focus groups included in this report are designed to explore the individual experiences of those involved in youth transitions from education to the labour market. Two distinct groups were identified to participate in the interviews:

- Students

- Federal government officials responsible for youth skills/career related policy and programming

The sampling strategy employed for interviews was purposive. Individuals were selected based on their stake in and/or expertise respecting youth transitions from education to the labour market. A snowball sampling technique, where those being interviewed recommended others to be interviewed, was also used to help identify individuals who may have valuable input for the research. In total 30 university/college students participated in one of six focus groups lasting approximately 40 minutes each. In addition 13 other individuals with interest in informing youth ETLM transition decisions participated in interviews lasting approximately an hour.

Smart Practice Review

In the face of the improbability of an exhaustive comparison of policies and programs to inform ETLM transitions, this paper conducts a “smart” rather than “best” practice review. The smart practice review included in this policy paper uses data gathered from academic journals and texts as well as publications available on numerous governmental and non-governmental websites. Following the methodology laid out by Eugene Bardach (2008), smart practices are defined as practices that provide insight within a policy context. In surveying smart practices it is important to do more than simply describe the program, key ideas must be isolated and appraised. These ideas can represent elements of a policy or program that works well but just as importantly they can highlight what has not worked. Therefore as part of the methodological process, these smart practices are analyzed and assessed with respect to their ability to provide insight on possible policy directions for the federal government in informing youth ETLM transitions in Canada.

Critical Analysis and Policy Directions

The final phase of research involves the analysis and synthesis of the primary and secondary data collected. The purpose of the analysis and synthesis is to integrate disparate bodies of knowledge. This work is then used to inform a set of policy directions for consideration by the Strategic Policy and Research Branch at Human Resources and Skills Development.

1.4. STUDY LIMITATIONS

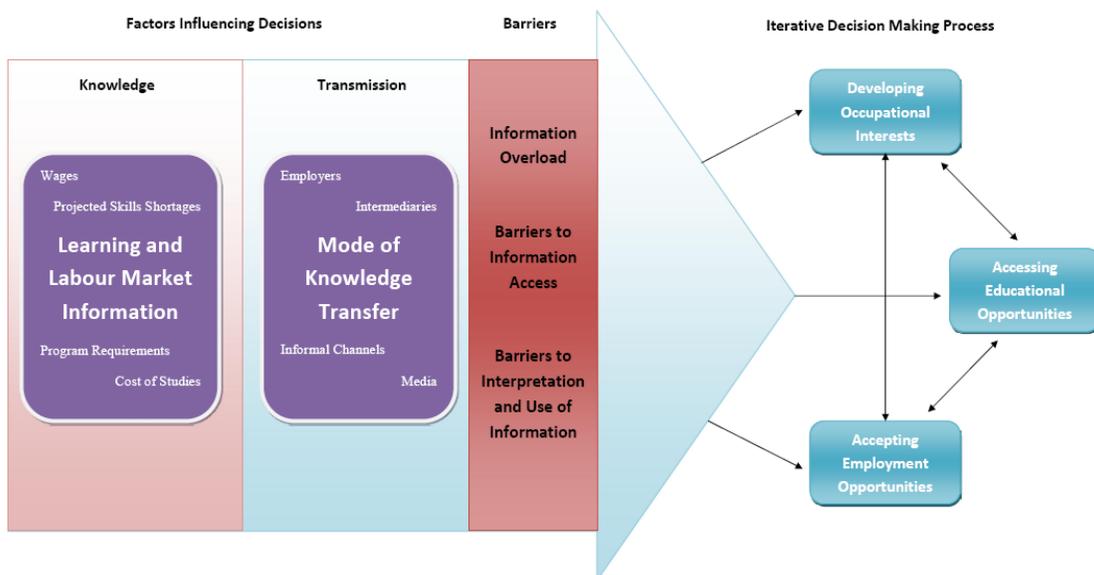
While the policy recommendations included in this report are the result of careful thought and research, the nature and breadth of issues in the study of youth transitions ETLM transitions prevent a project of this scope from fully investigating all elements of the research. Thus the findings of this policy paper must be considered in light of the following limitations:

- The Smart Practice Review does not include a survey of all available programs/policies and therefore it is possible important practices were missed.
- Students interviewed only represent youth who chose to pursue PSE and it is thus possible that the ETLM information needs of youth who chose not to attend PSE are not adequately represented in the report's findings.
- Interviews and focus groups were conducted for a relatively small sample and the purposive sampling method introduces the potential for bias in subject selection. Further, interviews were conducted primarily with those living in the Ottawa area thus preventing the exploration of regionally specific concerns. However, given time and resource restraints every effort was made to consult with a sample of the population who would provide a diverse range of views on the policy issue.

2. ETLM TRANSITION DECISIONS: A CONCEPTUAL FRAMEWORK

Information on youth ETLM transitions is abundant (see for example the School-Work Transitions Project, 2009). The topic is well studied by public policy scholars as well as by fields as diverse as sociology, psychology and economics. In addition to scholarly literature, there are hundreds, if not thousands, of programs designed to support ETLM transitions within Canada alone. To make sense of the information and to begin to understand it from the lens of informing youth, it is critical to have a solid conceptual framework with which to view the youth ETLM transition decisions (Figure 8).

Figure 8. Conceptual Framework



This paper views ETLM transitions as a process whereby youth use various sources of information to help navigate often nonlinear paths through occupational interest development, education and employment as they move towards a stable labour market position and identity. As illustrated in Figure 8, ETLM transitions are understood as an iterative decision making process where decisions are influenced both by the type of knowledge available and its transmission. The iterative nature of the process also indicates that early decisions are built upon, augmented or even reversed as knowledge acquisition occurs. Looking at informing youth ETLM transitions from a policy standpoint there are two broad areas that lend themselves well to policy intervention:

Supporting the collection and analysis of learning and labour market information; and

- Encouraging improvements to mode of knowledge transfer (transmission sources, methods of transmission).

While each can be seen as independent areas for policy intervention, they must also be understood as interconnected parts of the decision making process. As with any interconnected process, its success depends on the ability of the component pieces to flow seamlessly together. In the case of ETLM transition decisions, three major barriers to informing youth ETLM transition decisions exist. The first is information overload where individuals become overwhelmed by and have difficulty processing the sheer volume of knowledge that has the potential to inform ETLM decisions. The second is barriers to information access which include not knowing what information is needed and being unable to access information because it simply does not exist.

A third major barrier to informing youth ETLM transition decisions is that even when knowledge is transmitted, its interpretation and use are influenced by beliefs about the ability to perform a given action (self-efficacy) as well as an individual's beliefs about what will happen if an outcome is successfully achieved (outcome expectations). Self-efficacy and outcome expectations create barriers because they are not necessarily the products of objective reality but rather are influenced by an individual's direct and vicarious experiences, social influences and physiological and emotional reactions (Lent, Hackett and Brown, 1999). For example, an individual may choose not to pursue a career in economics because he believes he is unable to do math (self-efficacy) or not to go to university because friends indicated the costs outweigh the benefits (outcome expectations). Influences that lead to incorrect assumptions about education and the labour market act as barriers because they have the potential to prevent an individual from accessing or truly internalizing knowledge that may challenge their erroneous beliefs.

Using this conceptual framework as a guide, the following policy report employs a literature review, key informant interviews/focus groups and a smart practice review to identify priority areas for the federal government to best support the process of informing youth ETLM transition decisions.

3. LITERATURE REVIEW

3.1. LEARNING & LABOUR MARKET INFORMATION

In *Working Together to Build a Better Labour Market Information System for Canada* Labour Market Information (LMI) is defined as:

Knowledge, facts, data, and relevant institutional information on the *supply and demand* [italics added] of the various different types of labour services (employment), including prices such as wages and other forms of compensation as well as quantities, both at the detailed and aggregate levels, that is used for analysis and decision-making (Drummond, Beale, Kolby, Loiselle, and Miner, 2009).

In essence LMI is an incredibly broad topic that provides information on the state of the labour market (e.g. wages, employment by region, projected skill shortages) and the skills and competencies necessary to participate in it (e.g. educational and credential requirements, skills demanded for given occupations).

Learning information refers to information on educational opportunities and practices. It is closely connected to LMI and can be seen to overlap with the above definition of LMI (e.g. educational and credential requirements can be seen as both learning and LMI). However, in thinking about youth ETLM transitions there are certain considerations unique to learning information. From the perspective of learners, important learning information includes information on “the cost of studies and the availability of financial aid; degree and program requirements or flexibilities; training options; quality/reputation of providers; employment outcomes and returns on investment; and student satisfaction” (CMEC, Statistics Canada and HRSD, 2009, p.6). Put simply, while LMI is able to provide information on the skills and competencies necessary to participate in the labour market, learning information is key to informing youth about how they can best develop and hone these skills and competencies. It is clear when considering youth ETLM transitions, learning and labour market information (LLMI) are closely linked. One can hardly inform transition decisions without the other and thus the two are best understood as an integrated whole.

LLMI has multiple sources including the federal and provincial/territorial governments as well as multiple private sector entities and individuals themselves. Aside from being used to inform youth ETLM transition decisions, LLMI is useful for business (e.g. informing training and hiring decisions), adult Canadians (e.g. job seekers) and institutions (e.g. helping to inform university course offerings). It is intuitive that LLMI is essential to promoting successful ETLM transitions. However, from a policy perspective it is important to consider the following questions:

- What is the impact of LLMI on ETLM transitions and ultimately labour market outcomes?
- Given that LLMI is provided by multiple sources, where is the federal role in its provision?
- What types of LLMI are youth looking for?

Unfortunately very little empirical evidence exists to address the impact of LLMI on ETLM transitions and labour market outcomes. The primary reason for this lack of evidence likely being that obtaining such data would require expensive longitudinal research designs. It is also very difficult to isolate the impacts of LLMI given that the impact of LLMI is strongly affected by the ability of individuals to access, comprehend and use it (Vincent and Voyer, 2007). That said, the dearth of empirical evidence on the impact of LLMI has been noted in the literature and much has been written on how this gap might be addressed. In fact HRSD, in partnership with the Forum of Labour Market Ministers (FLMM), has recently invested in a series of small scale experiments designed to specifically test the labour market impact of LMI. While an important first step, the relatively short time period allocated for the HRSD/FLMM experiments makes it unlikely the studies will provide data that is adequately longitudinal to provide comprehensive information on labour market outcomes.¹

In the absence of empirical information on the ability of LLMI to impact labour market outcomes, it is still possible to consider the above questions by considering: 1) research on the impacts of LLMI on educational decisions, 2) the federal government's responsibilities respecting LLMI and 3) the public good nature of LLMI.

In the past decade there has been particular attention focused on factors influencing the decision to attend post-secondary education. Some of these studies have focused on the role of information in influencing educational decisions. Given that participation in post-secondary education (PSE) has been correlated with improved labour market outcomes (e.g., Card, 2001; Riddell, 2002; OECD, 1998) understanding how LLMI influences education decisions can provide valuable insight into how it may impact labour market outcomes. The following studies appear to support the argument that LLMI can improve labour market outcomes, although the exact nature and strength of this impact remains largely unclear.

Among the most interesting pieces of evidence on the impact of LLMI on educational outcomes is the *Future to Discover* pilot project established by Canada Millennium

¹ Proposed experiments currently do not provide follow-up on participants adequately far enough from the initial intervention to determine the full impact of LMI. For example, we may find LMI impacts immediate training decisions but we will not know if the chosen training leads to improved labour market outcomes or if the LMI intervention may encourage training decisions at a date further out from an intervention

Scholarship Foundation in partnership with the Governments of Manitoba and New Brunswick. The project tests the impact of two interventions (*Explore your Horizons* and *Learning Accounts*) on student educational and career choices. However *Learning Accounts* is a financial incentive rather than information based intervention and thus will not be discussed further in this paper.²

Explore your Horizons' informational interventions can be broken down into three broad categories. First, the program provides interactive workshops for students and their parents and is run by specially trained educators outside of school hours. Second, the program establishes connections between high school participants and students currently enrolled in a variety of post-secondary education and training programs. Finally, the program provides LLMI through a website and a magazine mailed to participants' homes.

As very little evidence exists respecting the success of such programs, *Explore you Horizons* has also been structured with a strong experimental design to provide rigours information on program impacts. Recruitment of grade nine students for the pilot program began in the spring of 2004 with a second intake in the spring of 2005. In total over 5,000 participants, from Manitoba and the Anglophone and Francophone school systems in New Brunswick, were recruited for the study. A final report of findings including a Cost-Benefit Analysis of the program is not scheduled to be released until 2011. However an *Interim Impacts Report* discussing the current status of the project was published in late 2009 (Social Research and Demonstration Corporation [SRDC]).

The results of the interim report are an important contribution in the area of youth transitions but they do not provide convincing evidence that *Explore your Horizons'* informational interventions significantly influence youth ETLM transition decisions. The interim report tested the three different educational jurisdictions (Manitoba, Francophone New Brunswick, Anglophone New Brunswick) and further mined information on two population subgroups within these jurisdictions (students coming from low income and parents with limited PSE experience "LILE", and students whose parents have no PSE experience "FGF"). Despite this relatively high level of desegregation, when compared to a control group, no single experimental group was found to experience all the positive impacts hypothesised to result from increased information (e.g. increased planning for the future and aspirations to complete an educational credential).

There is however some evidence to suggest these interventions can create positive results for groups that are traditionally seen to be at greater risk during the ETLM transition (LILE and FGF). These diverse results indicate that more information about why and how these interventions work for given populations is necessary. Further, as many of the interventions registering positive impacts only showed modest improvement from the

² For more information on the *Learning Accounts* intervention please see http://www.srdc.org/en_publication_details.asp?id=234

baseline, a cost-benefit analysis of this type of intervention is required to see if resources might be spent more efficiently on other interventions.

A second study of interest looks at the correlation between information and educational decisions. Frenette (2009) looks at whether knowledge of educational requirements required to reach career objectives is related to educational pathway decisions. The author finds that there is a strong correlation between students who know that a university degree is necessary to reach career objectives and the decision to enrol in university. This correlation remains even when controlling for differences in academic performance, sex and socioeconomic background. Frenette finds that 17 year-olds who know that they require a university degree to achieve their career goals have a 29.1 percent higher university enrolment rate by age 21 (p. 15). While it may seem largely intuitive that those who know a university degree is required for their intended career are more likely to attend university, Frenette's next finding on timing of knowledge may be helpful in more fully understanding the youth decision making process. Frenette finds that among those who knew at age 17 that a university degree was required for their intended career, those who did not know at age 15 were 16.9 percentage points less likely to attend university than those who knew at both age 15 and 17 (p.16). These results may indicate that having information and making career decisions earlier allows students to better prepare for their chosen transition path. That said, the causal nature of this relationship remains questionable. It is also possible that students who are more committed to their career paths, or are more likely to attend university in the first place, inform themselves of educational requirements earlier. While a good start, it is clear Frenette's findings need to be supported by further research.

A final interesting set of results on the impact of LLMI were produced by Johnson, Montmarquette and Eckel (2003) and Johnson, Montmarquette and Viennot-Briot (2006). Both reports were based on the same study where participants who were shown to have a low level of labour market knowledge (as evidenced by survey responses to LLMI related questions) were divided into a treatment and control group. The treatment group was offered a 90-minute LLMI session that included information on locally available training and employment opportunities as well as the relationship between labour market outcomes and various types of education. In the month following the LLMI intervention participants in both the treatment and control group were given the same LLMI knowledge questions and asked to choose between a one time cash payment or a larger educational subsidy. While the study looked at the influence of LLMI on investing in learning activities at all ages, positive results were found only to apply to youth below the age of 25. Young people between 18 and 24 in the LLMI treatment group chose further education over the cash payment 57.1 percent of the time; 14.2 percentage points higher than the control group (42.9 percent of the control group accepted the educational subsidy). In all other age categories the difference between treatment and control group

were not statistically significant. This study indicates giving LLMI to youth under the age of 25 with initially low LLMI knowledge, can improve educational participation. The results however do not address the impact of LLMI on youth who already have a moderate amount of LLMI knowledge.

Although a greater understanding of LLMI's impact on labour market outcomes is important and deserves further attention, the current ambiguity of its effects does not mean investment in LLMI is not an important area for federal attention. As discussed above, aside from informing youth ETLM transition decisions, LLMI is used by many other actors and in the case of LLMI, understanding its public good nature is extremely important. As noted by Drummond et al. (2009), LMI is non-rival (consumption of the information by one user does not limit the ability of another to consume it) and to some degree non-excludable (once the information is made available to one user it is difficult to prevent others from accessing it). These characteristics make it likely that the market alone will under produce LLMI. To ensure a socially optimal level of information, government intervention will be required. For instance, the federal government is uniquely positioned to provide information that is integrated, consistent, pan-Canadian and bilingual in scope. Drummond et al. (2009) identified a number of LLMI related informational gaps that are not currently provided by the private sector but have the potential to provide valuable information to inform ETLM transition decisions. These gaps include a lack of job vacancy data and lack of current information on data from colleges on student enrolment, graduates, costs, and staff. In fact, current gaps in education data collection meant Canada was unable to report on 73% of the data points in the 2008 *OECD Education at a Glance* report (Drummond et al., 2009).

The ability to ensure the quality of privately produced LLMI may also provide support for the importance of publicly produced information. Much privately produced LLMI appears on the internet and is largely unregulated. Because this information will be used to make important decisions, government may have a role to play in ensuring its citizens have a source of high-quality and reliable information.

Aside from these considerations, the federal government has legislative responsibilities to provide LMI. Section 60 of the *Employment Insurance Act Part II* requires the federal government to “maintain a national employment service to provide information on employment opportunities across Canada”.

To address the question of what types of LLMI are desired by youth, a number of studies of self-reported needs of youth have been published. Many youth have expressed the desire for specific types of LLMI including more information on careers and educational options generally (Saunders, 2008) and on careers other than those accessed by university training in particular (Canadian Apprenticeship Forum, 2004; CPRN, 2006). In addition,

those informing youth have expressed a desire for improved occupational projections at more local levels (Drummond et al., 2009).

In deciding how to respond to these needs, it is important to monitor where provision of LLMI is inadequate, gain a greater understanding of LLMI's impact and - where necessary - adjust what and how information is collected. This is however only part of the story, equally important is to consider how knowledge will be transferred and interpreted. As stated earlier, LLMI's impact is not solely dependent on the information available but rather is highly influenced by the ability of individuals to access, internalize and apply it (Vincent and Voyer, 2007). The following sections provide context to understand these impacts and how they may influence policy and program thought moving forward.

3.2. MODES OF KNOWLEDGE TRANSFER

A mode of knowledge transfer refers to both the *source* and *methods* of knowledge transmission. A review of the literature reveals four main sources of knowledge transfer for ETLM transitions:

- Employers
- Labour Market Intermediaries
- Media
- Informal Channels

The following section discusses these sources; some of the ways through which they transmit their knowledge; and their potential to impact ETLM transitions. Modes of knowledge transfer do not simply convey LLMI. Knowledge such as an understanding of one's own skills and interests and methods of interpreting available LLMI are also conveyed through modes of knowledge transfer. Moreover, knowledge can be imparted *purposefully* by particular sources or it can be imparted more *passively* where the information consumer actively seeks or unconsciously receives information from his or her environment (Julien, 1999).

Employers:

Given they represent the demand-side of the labour market, employers have the potential to be an extremely important avenue to transmit ETLM transition knowledge. Employer information transmission activities include directly communicating with youth about career opportunities through career fairs and presentations, participating in international skills competitions and other community outreach activities as well as through conveying information on the labour market such as desired skills and future career-paths through work-experience programs (e.g. co-op internship and apprenticeship). Given the potentially critical role they play in informing youth transitions, it is surprising that more

formal evaluation of the role of employers in youth ETLM transitions has not been undertaken. That said, limited evidence does exist.

The Canadian Council of Learning (CCL, 2009) made an important contribution to understanding the role of employers in informing ETLM transitions through conducting a systematic rapid evidence assessment (SREA) of 35 international studies which explored the impacts of high school work-experience programs on student success. The CCL found that while the impact of work-experience programs on improving academic achievement (e.g. improved GPA or standardized test scores) was inconclusive, work-experience programs did have a positive impact on graduation rates and career preparation. In another study by Lent et al. (2002) investigating self-reported impacts on career decisions, students often expressed that direct and vicarious exposure to work experiences shaped their choices. While these results do not reflect labour market outcomes, increased graduation and career planning can be seen as important predictors of labour market success.

Research also shows that high-school students are more influenced by direct visits or exposure to actors and practices in the labour market (Bell and Bezanson, 2006). It should also be noted that a major barrier to the effectiveness of work-experience programs (co-ops and apprenticeships) is that there is an inadequate number of employers who appear to be interested in participating in these programs as they do not feel they receive adequate return on their investment (Sharpe and Gibson, 2005; Brisbois, Orton and Saunders 2008).

Labour Market Intermediaries

The term labour market intermediaries refers to entities and institutions that facilitate and help make sense of the flow of information between the supply and demand sides of the labour market (Autour, 2009). Labour market intermediaries include but are not limited to employment centres, career development counsellors, classroom-based career development, sector councils and websites providing information on the labour market and other knowledge affecting youth transitions. While the private sector provides many labour market intermediary services, this has also been an area of traditional government activity. Current federal government labour market intermediary activity for youth includes the production of numerous LLMI websites including one (youth.gc.ca) specifically targeted at youth.

The federal government is also responsible for running Service Canada Centres for Youth (SCCYs) which provide employment information as well as general career development information for youth. There are currently over 300 SCCY in operation across Canada. SCCY are typically open from May to August each year and employ high school and

post-secondary students recruited through the Federal Summer Work Experience Program (Government of Canada, 2010).

Another way through which the federal government supports labour market intermediary activity is through its support of Sector Councils. Canada currently has 34 sector councils (HRSD, 2010b). Covering sectors as varied as Agriculture and Aviation Maintenance, sector councils represent a large portion of the workforce. They provide a variety of important services for the sectors they represent including delivery of adjustment programs, facilitating training and skills development and establishing industry standards (Gunderson and Sharpe, 1998). Sector councils also provide detailed LLMI respecting their industry. For example, some sector councils provide occupational projections for their sector and many provide career information. While sector councils play a substantial role in supplying and interpreting information to their members, their ability to serve as avenues for informing youth ETLM transition decisions remain an area deserving of further attention.

As with employers, there is a lack of empirical evidence on the effectiveness of labour market intermediaries on youth labour market outcomes; however a number of studies do highlight areas important for policy consideration.

Apart from providing basic LLMI, career counselling (also referred to as career development services) is designed to provide youth with skills assessment, increased motivation and career decision making strategies. It has been shown to support high school students' desire to engage in PSE (e.g. Evans and Burck, 1992; Lapan, Gysbers and Sun, 1997) and have a positive affect on career decision-making (Université de Sherbrooke, 2005). Despite its positive affects, there remains no consistent access to career counselling across provinces and territories, and there is limited provision of career counselling to PSE students and out-of-school youth (Bell and Bezanson, 2006). A large source of this inconsistent access is the division of responsibilities between federal, provincial/territorial and municipal governments in the areas of education, training and labour (OECD, 2002).

Investment in websites to inform ETLM transitions is attractive as it requires relatively minimal expenditure and has the potential to reach a very large audience. The federal government alone has or is developing 14 LLMI related web services and systems. Provinces and territories along with the private and non-profit sectors also provide a number of websites specifically targeted at youth making ETLM transitions (see for example Talent Egg).³ Yet the success with which these websites actually transmit this information remains unclear. For example the *Future to Discover* interim report indicated that the *Future to Discover* informational website component of their intervention was

³ <http://www.talentegg.ca/>

not used by the majority of participants and that its usage declined considerably overtime (SRDC, 2009). These results may indicate that the youth involved in the study did not believe that they were securing helpful information from the website and therefore an electronic forum for LLMI following the *Future to Discover* template may not be the most effective means of informing youth ETLM transitions. Most other studies on the impact of internet provided LMI focus only on the ability of websites to serve as forms for job-seekers and employers (Sharpe and Murray, 2010b) and thus are not overly relevant to a more holistic understanding of youth ETLM transitions. Upcoming research by the Social Research and Demonstration Corporation is likely to improve understanding of the impact of internet provided information on the academic/career decisions of youth (de Raaf, Dowie, Vincent, 2009).

Media

Information used to inform youth ETLM transition decisions is provided both directly and indirectly by the media. The Globe and Mail and Maclean's magazine both publish yearly rankings of universities based on various sources. All forms of news media also regularly discuss labour shortages and layoffs. While effective at reaching its audience, the quality of some of the information presented by the media has come into question. For example in 2006, 26 of 47 Canadian universities did not participate in Maclean's rankings because they questioned the magazines methodology (Ryerson University, 2006). In 2007 the president of the University of Alberta went so far as to describe the Maclean's ranking methodology as purely "marketing driven, designed to sell particular issues of a publication with repurposing of their content into even higher sales volume special editions with year-long shelf life" (Samarasekera, 2007).

A second way media informs ETLM transition decisions is through indirectly providing information through their portrayal of the labour market. Content analysis shows that primetime television provides much information on the world of work but that because many traditional occupations and workplace activities are not exciting enough to be depicted on programs whose primary purpose is to entertain, youth are often exposed to only a limited number of professions (Hoffner, Levine, Sullivan, Crowell, Pedrick and Berndt, 2006). In addition, evidence also exists to suggest that, at least in the 1990s, occupations were still generally portrayed in a gender stereotyped manner (Signoreilli and Kahlenberg, 2001). While there is little government can do to influence media as a mode of information transfer, it is important to know certain biases exist, particularly when designing informational campaigns that may run counter to these messages.

Informal Channels

Informal channels refer to ways in which youth are informed about elements of the ETLM transition through relational experiences. Informal information provision is often

unstructured and information conveyed frequently does not come from a solid evidence base. Informal channels include but are not limited to peers, teachers, family and the community (e.g. through volunteerism). Research asking youth to self-report the sources of information used to make their ETLM transition decisions consistently shows that parents and friends are primary influences on career choice (e.g. Bell and Bezanson, 2006; Bubany, Krieshok, Black and McKay, 2008). In a survey done by the Marine Careers Secretariat (2004) nearly 1,300 high-school students from Newfoundland were asked to rank the top three “influencers” on their decision to pursue a post-secondary education and/or a career. 53.1% of respondents ranked parents as their number one influencers and 80.8% ranked parents in their top three (p. 20). Friends followed closely behind with 60.4% of respondents ranking friends within their top three influencers as well. At the same time, it appears these major transmission sources may not have access to relevant information themselves.

For example, the Canadian Career Development Foundation (2003) held focus groups with 41 parents from four provinces (Newfoundland, New Brunswick, Saskatchewan and Manitoba) and found in all provinces parents felt that they did not have basic information on post-secondary options and opportunities, career pathways or financial supports through scholarships, bursaries and loans. While this sample is relatively small and thus its results cannot be applied to the general population with confidence, it does signal the need to better understand what parents’ perceptions of ETLM transitions and what can be done to ensure they have the information they need.

Volunteering allows youth to take on roles and responsibilities within their community that might traditionally be associated with labour market tasks. It stands to reason that exposing youth to these experiences can help inform ETLM transition decisions. Survey evidence on youth volunteerism indicates many youth participate in volunteer activities. In the 2007 Canada Survey of Giving, Volunteering and Participating, it was found that 58% of youth aged 15-24 were engaged in volunteer activities (Statistics Canada, 2009c p. 38). However when looking specifically at volunteerism’s ability to inform ETLM transitions, the power of volunteer experience may not be as strong as expected. In a survey of nearly 400 secondary students in Toronto who participated in volunteer activities “only 23% felt their service helped them think about the kind of job they might want and only 21% felt their service helped them learn more about a career in which they thought they might be interested” (Meinhard and Foster, 1999, p.10). Once again the relatively small sample size and limited geographical area that is covered, means these results are not generalizable. However, the results do indicate there is a need for a greater understanding of whether or how volunteerism can be used as a method to inform youth ETLM transitions.

Reviewing available literature on transmission reveals a lack of consideration about how youth would like to receive knowledge pertinent to ETLM transition decisions. The lack

of attention to youth preferences may result from the assumption that when it comes to improving ELTM transition decisions, youth simply need to be presented with key pieces of information and that the source and presentation of this information is only a secondary concern. The following discussion on barriers to informing youth ETLM transition decisions highlights that this assumption is far too simplistic.

3.3. BARRIERS TO INFORMING YOUTH ETLM TRANSITION DECISIONS

Information overload:

The term information overload was coined by Alvin Toffler in his 1970 work *Future Shock* but the concept has been around even longer. In his 1956 work *The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for processing information*, George Miller presents evidence of an inverse relationship between information received and decision making accuracy that continues to spawn empirical and theoretical work in numerous fields (Anderson and Palma, 2009). At the crux of the information overload concept is the idea that information consumers have a limited ability to receive and attend to information. In the presence of a great deal of information a sort of “information congestion” occurs and thus the information consumer must ration attention by screening out information through a variety of methods. This often leads to valuable information being screened out along with less valuable resources. It is difficult to measure at what point information begins to negatively affect a particular decision making process but there is evidence to indicate that the mode in which information is presented can help individuals direct their attention to key pieces of information and thus reduce the degree to which an individual perceives information overload (e.g. Lurie, 2004).

In the context of informing youth ETLM transition decisions, the concept of information overload can be seen to apply to youth actively seeking information that could be helpful in transition decisions. For example, if youth perceive excessive and sometimes contradictory information existing on the internet, youth may simply decide to screen the information out in favor of other informational sources like family and friends. While there is very little empirical work done on information overload on youth ETLM transition decision making, a written questionnaire surveying 399 students from three Canadian schools did find that students who felt daunted by the volume of career related information available simply chose not to access it (Julien, 1999). A survey done by the Marine Careers Secretariat found that students “are overwhelmed by the vast array of [career] choices available and tend to be navigating in the dark with no real focus or purpose for the most part” (2004, p. 20). Further, Drummond et al. (2009) find evidence of such screening in the case of adults searching for labour market information. Suggestions for mitigating the effects of information overload as it pertains to LLMI have

included creating a “one-stop”, easy to navigate, integrated dissemination tool for Canadian LLMI (Drummond et al. 2009; Gunderson, 2007; Sharpe and Qiao, 2006) and improving training of labour market intermediaries on how to use LLMI so they can better educate clients about LLMI (Drummond et al. 2009). HRSD is currently in the process of trying to operationalize these suggestions.

Barriers to Information Access:

Perhaps paradoxically, a corollary concept to information overload is barriers to information access. While information overload focuses on problems created when an individual is presented with too much information, barriers to information access focus on the inability on an individual to access the right types of information. Through implementing an interdisciplinary review of information-behavior research Harris and Dewdney (1994, as cited by Julien, 1999) created a helpful framework for understanding barriers to information access.

Figure 9. Barriers to Information Access



The first barrier identified is *not knowing what information is needed*. In the context of youth ETLM transitions, this could include not knowing that having information such as labour market prospects for professions or educational pre-requisites is useful in making informed transition decisions. The second barrier is *not knowing how to find the information desired*. Often people are unaware of the process for acquiring information in a given domain. The third barrier is closely related to the second. It focuses on *lack of awareness of the existence of information sources*. Although not specific to youth, much

research has found that lack of knowledge of informational sources is a prime reason for these sources not being accessed (Ekos, 2007; Ipsos-Reid, 2001; HRSD, 2005; Drummond et al. 2009). The fourth barrier is that desired *information simply may not exist*.

From a policy perspective, avenues for addressing the fourth barrier, information does not exist, is fairly straight forward. Continued focus on identifying gaps in LLMI and devising means to fill these gaps will mitigate the problem of lack of information. Addressing the remaining three barriers is more complex. It requires making information that is currently available engaging and easy to understand for youth. In the written questionnaire discussed above, Julien (1999) found that many students perceived available ETLM transition information to be unhelpful or difficult to read/understand and thus had no desire to search out further sources of information. However there are no clear cut methods for creating information that will be meaningful for youth. Through interviews with Australian female youth, Poston-Anderson and Edwards (1993) found that in seeking information about education and work, the girls were interested in receiving “opinions, judgments, and interpretation” as well as strategies for moving forward, rather than simply factual information (p. 27). This would suggest ensuring LLMI has a guidance component may make it more meaningful for youth. However this study is isolated and dated, and suggests more work needs to be done to gain a greater understanding of whether current students find available ETLM transition information engaging and accessible, and if not, what types of avenues could be explored to improve the provision of ETLM transition related information.

Barriers to Interpretation and Use of Knowledge

So far numerous conditions and barriers respecting youth ETLM transitions have been identified; however, methods of improving knowledge transmission can only be truly effective if the factors that influence the interpretation and use of knowledge are well understood. The following uses information from the fields of career development and social psychology to provide an additional set of considerations not typically included in policy discourse.

In much transition literature, as well as in policy making, ETLM decision making is viewed as the act of an individual rational actor. (e.g. Gati, Shenhav, and Givon, 1993; Germeijs and Verschuern, 2006). While a complete review of these models is outside the scope of this paper, it is useful to discuss the model proposed and empirically tested by Hirschi and Lage (2007) because it amalgamates a number of proposed decision making phases coming from various authors.

According to Hirschi and Lage (2007) career (and related academic) decision making can be broken down into six phases:

(a) becoming concerned about career decision making (awareness); (b) generating possible career alternatives based on one's own interests, skills and values through self- and environmental exploration; (c) reducing the career alternatives to a manageable number for more in-depth exploration; (d) deciding among few alternatives; (e) confirming one's choice and building commitment to it; and (f) being firmly decided and committed to a choice (pp. 165-166).

Figure 10. Six phase youth ETLM decision making process



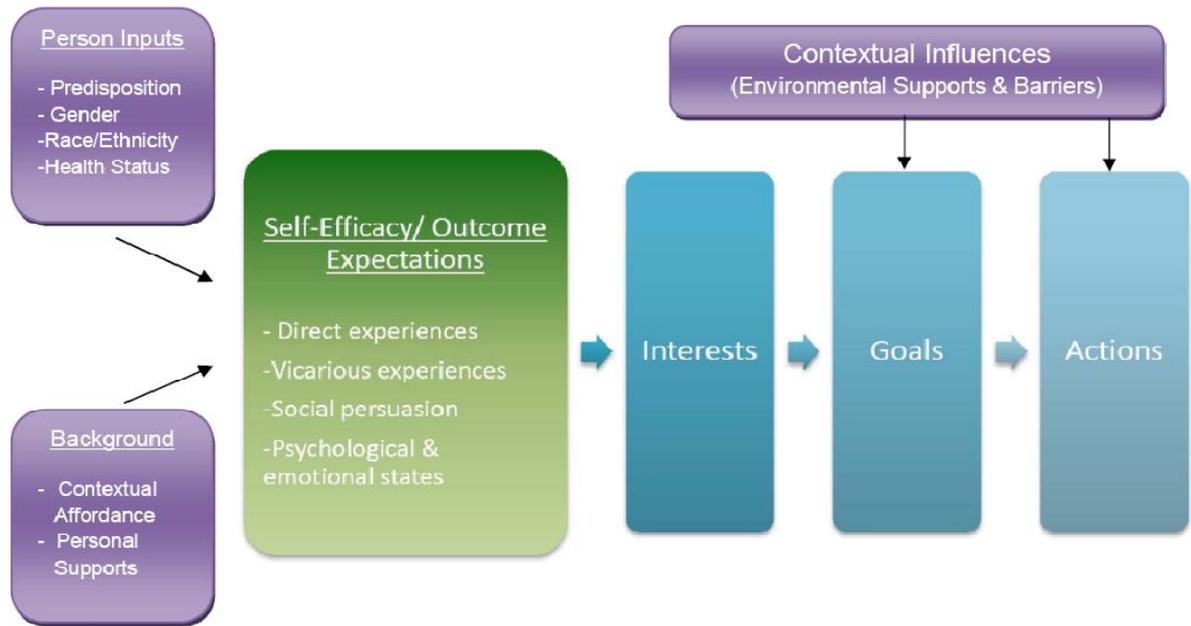
Adapted from "The relation of secondary students' career-choice readiness to a six-phase model of career decision making," by A. Hirschi and D. Lage, 2007, *Journal of Career Development*, 34, p.166.

While perhaps a useful point of departure, such models tend to make the youth ETLM decision making process appear linear as opposed to iterative and often ignore social and experiential influences. In practice, such unidimensional representations can be problematic as they may lead to inadequate policy responses that do not address important mitigating factors. By contrast, Lent, Hackett and Brown's (1994; 1999) social cognitive career theory (SCCT) provides a much more comprehensive framework for understanding, and thus helping to inform, people's educational and occupational choices. The SCCT is based on social cognitive theory that posits the way in which an individual acquires and internalizes knowledge is directly influenced by experiences with others in the context of social interactions and outside media influences.

According to Lent et al., career-relevant choices are forged and enacted through the development of a primary choice or interest (e.g. career direction, educational trajectory), once this choice or interest is established, identified goals to achieve the interest are set (e.g. intention to engage in a particular action or series of actions) and finally actions that support these educational and occupational goals are undertaken. The process is seen to be iterative as youth make numerous ETLM transition decisions.

While this model may not seem so different from that of Hirschi and Lage (2007) described above, the power of the SCCT is that it goes a step further and identifies the inputs and contextual influences behind this process. The two key inputs identified by the framework are self-efficacy and outcome expectations.

Figure 11. Social Cognitive Career Theory Model



Adapted from “A social cognitive view of school-to-work transition,” by, R.W. Lent, S.D. Brown and G. Hackett, 1999, *The Career Development Quarterly*, 47, p. 301.

Self-efficacy refers to a person’s *belief* in their ability to perform a given action or set of actions. These beliefs do not necessarily directly correlate to objectively assessed skills. In fact Lent et al. (1994) cite a number of studies that show feelings of self-efficacy often only moderately reflect objective ability indices.

Outcome expectations by contrast refer not to an individual’s beliefs in his ability to perform an activity, but rather an individual’s beliefs about *what will happen* contingent on performance. These expectations in turn also play a role in guiding a person’s interests, goals and actions. For instance, while a person may believe he has the ability to complete a degree in accounting (self-efficacy), he may not develop an interest in pursuing post-secondary education if he anticipates negative outcomes (e.g. non-support of family, unacceptably low returns on investment). Once more outcomes expectations may not reflect objective reality.

Thus rather than solely being a product of objective reality, the authors, expanding on the work of Bandura (1986), postulate self-efficacy and outcome expectations arise from four primary modes of knowledge transfer: (a) direct experience (actual experience performing an activity), (b) vicarious experience (observing others performing an activity), (c) social persuasion (e.g. social support or dissuasion) and (d) physiological and

emotional reactions (e.g. career related anxiety, feelings of risk aversion; Lent et al. 1999). These sources of self-efficacy are in turn influenced by a number of “person inputs” including gender, race and health status as well as a person’s background (e.g. prior experiences – exposure to role models, personal networks) and contextual affordances (e.g. personal perceptions of given situations).

Finally, Lent et al. (1994) note that contextual influences have the power to: a) moderate the translation of interests to choice goals and b) determine the translation of goals to actions. For instance, although an individual may be interested in engineering, he may not develop engineering as a career goal because the closest educational institution teaching those skills is a long distance away (*interests to choice goals*). Moreover, a student who may have developed the goal of becoming an engineer may not pursue this action because economic pressures (e.g. having a dependent to care for) makes continuing education extremely difficult (*goals to actions*). Thus influences that lead to incorrect assumptions about educational opportunities and the labour market may act as barriers because they have the potential to prevent an individual from accessing or truly internalizing knowledge that may challenge their unsubstantiated beliefs.

The power of the SCCT is two fold. First, much empirical evidence has been amassed over the last 30 years to support the usefulness of the SCCT in understanding and subsequently isolating influences on career and academic decisions (Gainor, 2006) allowing potential work stemming from this framework to reflect evidence based policy. Second, in providing a comprehensive framework for understanding youth career/academic decision making, the SCCT makes clear numerous avenues for potential actions to inform youth ETLM transition decisions. For example, understanding that vicarious experience can inform self-efficacy would support investing in programs that expose youth to numerous career opportunities. Moreover, understanding the role of outcome expectations in decision making suggests that ensuring youth are adequately informed of the benefits of pursuing PSE could encourage greater participation.

3.4. GAPS IN EXISTING LITERATURE

While there is an abundance of literature available on youth ETLM transitions and much of this literature is helpful to developing a more complete understanding of how to better inform youth ETLM transitions, this literature review reveals three major gaps in the literature:

- The impacts of LLMI on labour market outcomes remains understudied
- Youth preferences respecting modes of knowledge transfer are not well understood
- Research on youth ETLM decision making process exists however the work is largely theoretical. More applied, policy relevant research in this area is needed.

3.5. SUMMARY

This literature review has identified notable gaps in the literature that deserve to be addressed. However these gaps are complex and many require longitudinal research. Waiting for this research before taking further action is not a practical course of action. This is particularly true as governments are increasingly faced with “wicked problems” which have no simple answers, involve multiple stakeholders and are often extremely difficult to quantify and measure. In the face of empirical ambiguity, efforts must also be made to identify promising areas for policy focus that arising from existing research.

The above literature review does provide evidence indicating that direct and vicarious occupational experience is an effective avenue for informing youth ETLM transitions. Thus action to facilitate increased interaction between youth and educators, prospective employers and other labour market intermediaries such as sector councils shows promise.

Studies of LLMI’s impact on labour market outcomes suggest that direct and interactive provision of LLMI has particular potential to improve the labour market outcomes of those in some at risk groups (youth belonging to families with low income and/or low educational attainment) and youth with initially low levels of LLMI. This suggests better understanding the specific LLMI needs of these groups as well as how to better engage these groups in accessing LLMI may yield particularly high returns.

Finally, the literature shows that despite findings of its positive impact on youth career development, there remains no consistent access to career counselling across provinces and territories, and there is limited provision of career counselling to PSE students and out-of-school youth (Bell and Bezanson, 2006). This suggests that further work on promoting comprehensive and consistent access to these resources may be merited.

The key informant focus groups/interviews as well as smart practice review that follow have been designed to further extract actionable policy directions given the existing knowledge.

4. KEY INFORMANT INTERVIEWS/FOCUS GROUPS

As discussed in the methodology section of this paper, 30 university/college students participated in one of six focus groups that were approximately 40 minutes in length. In addition, 12 other individuals with interest in informing youth ETLM transition decisions participated in interviews lasting approximately an hour. Using the conceptual framework and literature review as a guide, the interviews investigated four broad themes: knowledge, transmission, barriers and emerging ideas.

4.1. KNOWLEDGE

Knowledge was the first issue explored through the key informant interviews/focus groups. Questions investigated were: 1) the self-reported knowledge needs of youth and; 2) beliefs about knowledge sought by youth by others with an interest in informing youth ETLM transition decisions. Listed below are common themes that emerged:

- When considering educational decisions, the majority of youth indicated they were interested in information about academic requirements necessary for entry into a school or program. They also indicated the schools or programs that interested their friends had a big impact on their educational decisions. When thinking more broadly about careers, many students interviewed (particularly university students) expressed that they had not done a lot of thinking about their career paths and thus had not been actively seeking information. However students indicated that when they started to think more seriously about their careers, they would be interested in information on salaries, advancement opportunities and projected future demand for given careers. There was also interest in obtaining feedback on job satisfaction from people actually working in a field of interest. Of those that had developed a career direction, approximately half indicated that they had used informally provided information on projected employment demand and salaries as key determining factors in their decision to pursue a given career. The remaining students indicated that they chose their career path primarily based on personal interest in a given area.

“My mother told me there is going to be a lot of work for nurses when I graduate so I thought it would be a good idea to go into nursing.” –College Student

- The most common gaps in knowledge expressed by students were knowledge about “non-traditional careers” and potential career options given a chosen educational path. Many youth seemed aware that there were a multitude of diverse jobs available in the growing knowledge based economy and wanted to have access to more information about these jobs. The majority of youth (particularly youth enrolled in university) began their studies with no clear career path in mind. Those getting closer to graduation appear interested in having

“I decided to go into teaching because I see teachers everyday. I know what their job is about and what to expect I’ll be doing each day... I don’t really know if it’s the right job for me. I feel like there’s probably something out there that would let me use my talents and interests better but I just don’t know how to find it.” –University Student

easily accessible information on careers that would allow them to apply what they have learned in school to their work.

- On the part of federal government officials responsible for delivering policies and programs which touch on informing youth ETLM transition decisions, there is little consensus on the key information needs for youth. Suggestions of key information required by youth included information on available jobs and salaries at the local level, the true costs of PSE, student loan access and information about the future prospects of a given occupation. In addressing these questions, one official noted that “Labour market information is really secondary until you have a sense of direction. However when needed, it should be available, well packaged [and] organized.”

4.2. TRANSMISSION

Transmission was the second issue explored through the key informant interviews/focus groups. Questions investigated were: 1) the sources and methods of transmission accessed and desired by youth and; 2) areas where sources and methods of transmission being provided at the federal level could be improved. Listed below are common themes that emerged from interview data respecting transmission:

- The three most common sources of information accessed by youth were the internet, family and friends. When asked for detail on the type of information they were accessing on the internet, most youth expressed that they were simply “Googling” information – searching the sites of companies or educational institutions in which they might be interested. A number of youth also noted they used job-search sites such as Monster.ca, Workopolis.ca and JobBank.ca both to look for potential employment as well as to gain a greater understanding of job descriptions and the type of education and experience required to obtain employment in a particular area.
- “My sister liked what she was studying in university so I decided to do it too.” – University Student*
- Students also cited career education classes, guidance counsellors in high school and career counsellors at their PSE institutions as sources they had looked to when thinking about career and educational options. While students cited these as potential sources of information, most noted that they did not find the information transmitted in high school to be very helpful. One student noted “I went to my guidance counsellor a few times to talk about jobs I might be interested in but she was always too busy dealing with people with drug problems or getting bullied to spend any time with me.”
- “In high school we had to volunteer to get credit. I volunteered at a daycare and realized I really love kids, so now I’m going into early childhood education.” –College Student*
- A number of students also indicated that volunteer work, co-op placements or previous work experience helped to transmit information that informed their ETLM transition decisions.

- When asked specifically about their awareness of federally provided, online LLMI transmission sources such as WorkinginCanada.gc.ca and Youth.gc.ca., none of the students interviewed indicated that they were aware of the sites but did indicate interest in going to look at the sites once they were made aware of their existence. A notable exception to this lack of awareness was JobBank.gc.ca which almost all students indicated they were aware of and had visited at least once.
- When asked how students liked to receive information to help guide ETLM transition decisions, overwhelmingly students cited two factors. The first being direct exposure to career information, either through having the opportunity to actually observe a place of work (co-op, job shadowing etc.) or through having the opportunity to talk with someone who has first hand experience in a given field. Second, students expressed that they liked to be given more than just information about available career paths but also guidance on how to interpret the information.
- In discussing their desire for more direct information on career opportunities some students mentioned that they really liked the idea of Job Fairs that would allow them to speak with prospective employers but felt frustrated that they had not found a great deal of variety of professions represented at the job fairs they had attended.
- As with views on knowledge required by youth to make ETLM transition decisions, ideas of how to improve transmission at the federal level were varied. However, ensuring greater connection between the education and labour market sectors was noted by a number of those interviewed as key to improving how information was analysed.
- Work to provide information in a manner more, intuitively accessible, organized and responsive to client needs was also discussed by many federal policy and program officials. However, there was little agreement on how information could be delivered in a more client friendly manner. Some suggested that information must be tailored to target particular groups while others felt that truly useful and accessible information must be created in a manner that will address the needs of all target groups.
- A third avenue suggested to improve transmission is through promoting greater numbers of staff specializing in guidance and career development in the school system. Such qualified and trained individuals could ensure LLMI is better transmitted at the school level and help youth better understand the information they are exposed to.

“Me, I’m a hands on person. I’m never going to be able to decide whether I’m going to like a career just by reading about it. I need to experience it.” – University Student

“Historically the government has taken an ‘if we build it they will come’ approach to informing the public. We need to break from this mindset and start by gaining a greater appreciation of how people would like to receive their information as well as why they are not accessing it currently.” – Federal Government Official

- When questioned about importance of employers in acting as transmission sources, it was suggested that employers, particularly at the local level were very important to informing youth about ETLM transitions but that in terms of the federal government’s role in supporting this work, collaborating with sector councils to engage employers is a more actionable policy direction.

4.3. BARRIERS

As noted in the conceptual framework, important barriers to informing youth ETLM transition decisions include information overload, barriers to information access and barriers to the interpretation and use of knowledge. Interviews/focus groups were designed to investigate these barriers. Both barriers faced by youth as well as barriers faced by those trying to inform ELTM decisions are explored below:

- Barriers to information access were the most frequent barriers cited by youth interviewed. Students expressed that they did not have confidence in their awareness of the types of information needed to make informed ETLM decisions. They also noted they were unsure whether they were acquiring information about career and educational program options in the most effective manner. Moreover, most youth interviewed appeared unaware of informational options that currently exist. In discussing some of the federal internet sites that provided LLMI one student noted, “You need to advertise more. I want to know about these services.”

“I don’t know where to go or who to ask” –University Student

- Information overload was also a barrier discussed by youth. The presence of information overload appeared in two forms. First, a number of students noted they chose to disregard much information that was given to them by school counsellors or on the internet because they felt there was simply too much to look

“The career information the school gives us can be really scary. There are so many pages filled with information about jobs and schools. Every time I think about making a decision I feel like I’m closing doors. It’s easier just not to think about it.” – University Student

through and the process was daunting. Second, students observed that when they did find the type of LLMI they were looking for on the internet, they felt sites had too much complex or extraneous information. One college student observed that “Even if I do find

the information I’m looking for, all the sites I’ve gone to have ‘law school language’. I wish they were easier to understand.”

- Self-efficacy was shown to appear prominently in youth ETLM decisions. When asked why they chose to study in a given area or why they were thinking about pursuing a given career, many students indicated that they chose their given path because they felt it matched their skills or pre-existing experience. While this may seem like a reasonable method for making ETLM transition decisions, it was apparent youth's feelings of self-efficacy were not necessarily rooted in the reality of situations. For example, one student noted that "I knew what subjects I was good in [in high school] so now I'm just in university doing them. I'm no good with numbers so I figured I'd be no good in business." Other students seemed to take self-efficacy in one field and use it as a reason not to explore other options.

"I don't really know why I've chosen to study to be a cook. I'm not even really sure that I like it. It's just that it's the only thing I've ever done so it just makes sense to keep doing it, you know?" –College Student

- While it did not appear as prominently in discussions, there was some evidence to indicate outcome expectations also informed how youth interpreted and used information about ETLM transition decisions. Particularly interesting was how false outcome expectations could prevent students from accessing information. For example, one university student noted, "I didn't really look into going into science because I don't want to be a doctor and I don't want to spend the rest of my life stuck in a lab." Although many science degrees do not require someone to work in a laboratory on a regular basis, the student did not seem to access this type of information because of his initially incorrect outcome expectations.

- Government officials involved in informing youth ETLM transitions overwhelmingly cite a lack of understanding of the types of information and modes of knowledge transfer desired by youth as a chief barrier to informing youth ETLM transitions. Service Canada representatives also highlighted that the numerous informational sources in existence made it difficult to counsel clients as well as to keep up with available information.

"I'm not sure we really understand what types of information and transmission are most effective for youth and while asking is important, we must rely on more than just self-reported needs." –Federal Government Official

- Another barrier identified by federal government officials is the difficulty they face in connecting the learning system with the labour market. Federal and provincial governments, as well as industry and educational institutions, all produce important knowledge, as well as have the potential to serve as useful transmission sources, yet given their different structures and interests it was felt it is very difficult to create processes that allows all these sectors to work well together.

- One federal official also noted that his impression was that youth typically look for information pertaining to their existing interests and therefore a big challenge is to find what “triggers” youth’s interests in areas which are demanded by the labour market.

4.4. EMERGING IDEAS

Key informant interviews and focus groups were structured so as to provide participants with the opportunity to share any further thoughts they might have respecting informing youth ETLM transition decisions. Through this structure a number of emerging ideas were raised. These ideas are briefly summarized below. Note that some of the following are explored further in the smart practice section of the report.

- A number of university and college students noted they had felt a website named “Career Cruising” had been helpful in informing ETLM transition decisions. Career Cruising (<http://www.careercruising.com/>) is a privately produced, online source of career and educational information.
- A federal government official noted there were many “access points” that HRSD/Service Canada could better utilize to inform youth ETLM transitions (e.g. providing career related information when an individual requests a Social Insurance Number).
- The US College Navigator (<http://nces.ed.gov/collegenavigator/>) and Myfuture Australia (<http://www.myfuture.edu.au/>) were noted as interesting, user-friendly websites designed to inform youth ETLM transition decisions.
- One federal government official suggested that those working on developing Job Futures (Canadian projections for occupational demand) should work more closely with Industry Canada who creates occupational projections by sector.
- The Los Angeles County Department of Public Health’s Youth Activism Against Obesity (YAAO) social network and marketing campaign was seen as a promising practice in the use of social media in developing effective strategies for communicating with youth.

4.5. SUMMARY:

They findings of the key informant interviews and focus groups generally support the findings of the literature review. They also highlight areas of particular salience when discussing informing youth ETLM transition decisions. Focus groups with college and university students strongly supported the social cognitive career theory (SCCT) and its focus on the importance of self-efficacy. In making ETLM transition decisions, youth expressed that they spent very little time looking for general information to inform

possible paths but rather based their decisions on self-efficacy beliefs resulting from direct or vicarious experience. While this may seem like a reasonable method for making ETLM transition decisions, focus groups also revealed that youth's feelings of self-efficacy were not necessarily rooted in objective reality and that their knowledge of career and educational options was quite narrow.

Moreover, active LLMI seeking appeared to be limited and primarily focused on obtaining information to support a previously formed ETLM transition decisions (e.g. to search for job openings in a particular business, or entry requirements for a particular school). Focus groups revealed a lack of youth engagement with LLMI particularly at the critical ETLM junctures of occupational and educational interest and goal development. These findings indicate that developing means to transmit LLMI in a manner more engaging and relevant to youth may yield significant returns.

Interviews revealed both barriers and promising practices to better engaging youth with LLMI as well as informing their ETLM decisions more broadly. The two major barriers identified were: 1) a lack of understanding of what kinds of information and transmission methods were desired by youth; and 2) difficulty in coordinating the multiple stakeholders. Respecting coordinating stakeholders, ensuring greater connection between the education and labour market sectors was noted by a number of those interviewed as key to improving how information was analysed and presented to youth.

To address these barriers it was suggested that employers, particularly at the local level were very important to encouraging youth to explore diverse transition opportunities and therefore the active involvement of local employers should be encouraged. It was also suggested that investment in evaluating what works and does not work in the career development system, particularly at the school level is necessary.

5. SMART PRACTICE REVIEW

This paper's literature review and key informant interviews have provided a more complete review of the concepts introduced by the conceptual framework. The following smart practice review discusses a number of international practices that can provide insight into effectively addressing barriers to informing youth ETLM transitions. While the following smart practices are categorized under the main barrier for which they can provide insight, many of these practices have the potential to address numerous barriers to informing youth ETLM transition decisions.

This smart practice review uses data gathered from academic journals and texts as well as publications available on numerous governmental and non-governmental websites. It is designed to isolate and appraise key elements of the practices discussed in order to assess not just works, but also to highlight what has not worked.

5.1. INFORMATION OVERLOAD

As noted in the literature review, streamlined methods of presenting information can help overcome some of the negative impacts of information overload. Presentation of streamlined information requires both an understanding user needs and effective coordination of numerous players who hold unique pieces of information. The following smart practice provides insight into how the goal of streamlined information may be achieved.

5.1.1. Myfuture – Australia

In March 2000, the Australian Ministerial Council for Education, Employment, Training and Youth Affairs (MCEETYA) committed to developing a web-based National Career Information System. In 2002, myfuture.edu.au (myfuture) was launched and has received considerable positive attention in Australia (McMahon and Tatham, 2008). The site is designed to combine intelligence from various sources to provide comprehensive, one-stop information on education and labour market opportunities both for those seeking information and those wishing to help others making ETLM transitions. The site includes helpful information such as job descriptions, labour market prospects, projected salaries (based on latest census data), PSE institutions offering training in given fields (by region) and videos profiling actual workers describing their professions.

The myfuture website experience provides a number of useful lessons for Canada. First, the site was developed under the direction of MCEETYA. This council was a body comprised of both federal and state level Ministers who had responsibility for portfolios concerning education, employment, training and youth affairs (Queensland Government, 2010). By bringing together Ministers from various levels of government and with varying

portfolios and interests, the council was able to coordinate their actions to tackle issues surrounding informing ETLM transitions. Beyond encouraging the development of myfuture, the council supported numerous reports including one outlining a Career and Transition Services Framework. The council also encouraged those involved in various aspects of youth ETLM transitions to meet to discuss these issues on an annual basis. While it should be noted that in July of 2009 the Council was dissolved to reflect a realignment number of ministerial councils, Australian governments at all levels continue to ensure the formal, collaborative interaction of those responsible for education, employment and youth affairs (Ministerial Council for Education, Early Childhood Development and Youth Affairs, 2010).

The key to MCEETYA's success appears to be that its diverse members met regularly and all involved shared a sense of common purpose and a spirit of collaboration. The idea of encouraging increased collaboration among multiple jurisdictions and government departments to improve practices for informing youth ETLM transition decision is certainly one that has merit in the Canadian context.

A second lesson that can be taken from the Australian myfuture experience comes from the planning and preparation that underpinned the development of myfuture. In designing myfuture, the steering committee responsible for developing myfuture took care to gain an understanding of the career development process as a whole. Prior to launching the myfuture website, the steering committee commissioned a rationale paper discussing theory and successful practices necessary for informing the career development process. This was used to both help inform the development of the website and to help those using the website understand its value (McMahon and Tatham 2008).

Following the launch of the website, the committee has also continued to refine its product. It has consulted with various stakeholders to inform further development of the site. Feedback has come from: 1) individual users of the site; 2) formal evaluations from teachers, trainers, and students and; 3) collaboration with career experts, career development practitioners and researchers, both in Australia and internationally (Myfuture, 2010). The attention to underlying career development theory and practice as well as efforts to continually improve the product based on consultation and feedback from users are lessons from myfuture that can be easily applied to the Canadian federal government's own LLMI website development.

5.2. BARRIERS TO INFORMATION ACCESS

The first three barriers to information access identified by Harris and Dewdney (1994) are lack of awareness of information needed, not knowing what information already exists and not knowing how to find desired information. To some degree all these barriers stem from a breakdown in communication. The smart practices discussed in this section have been designed to help address the issues of communication.

5.2.1. Youth Activism Against Obesity – United States

Social media appears to be an increasingly central mode of communication for many youth. The Los Angeles County Department of Public Health's Youth Activism Against Obesity (YAAO) social network and marketing campaign provides a useful perspective on using social media and the expertise of youth themselves to develop effective strategies for communicating with youth.

The central goal of the YAAO is to build a marketing campaign developed *by youth to reach* youth. The YAAO selected forty young leaders from Los Angeles County to work with an advertising agency specializing in online media and marketing. The group was tasked with creating a marketing campaign that provided support, education and shared resources that could be used to increase health and reduce obesity among the county's youth. The young leaders drew upon focus groups, classroom/online surveys and personal experience to develop marketing suggestions as well as to support or reject marketing techniques presented by the advertising agency.

Based on feedback from youth involved with campaign, provocative posters depicting the dangers of obesity were displayed throughout Los Angeles. A website –WereFedUp.com – was also created and advertised on numerous social networking websites including Facebook and MySpace. Further, the campaign includes an evaluation component that will help gauge its effectiveness. A unique element of the evaluation design is that youth themselves have been engaged in developing evaluation criteria and will work with program leaders to evaluate the overall effectiveness of programming (Maldonado, 2009; WereFedUp.com, 2010).

While the campaign is still relatively recent (launched in late September 2009), and formal evaluations have not yet been completed, WereFedUp.com has attracted hundreds of members and almost a year after its launch appears to still generate significant discussion and action. One of the most interesting elements of the project is that it appears to have effectively harnessed the often untapped potential of youth to help inform program design and delivery. By actively engaging youth at all stages of the process, from program design to evaluation, the YAAO project has been able to create interventions that are responsive to youth desires and thus increase the likelihood that youth will actively use the programming.

Although the YAAO project is aimed at reducing youth obesity rather than providing education or career related information, its lessons are transferable to informing youth ETLM transitions. A similar practice of partnering with youth could provide greater insight into effective means of encouraging youth to actively seek LLMI and to explore the options available to them throughout their ETLM transitions.

5.2.2. School to Work Opportunity Act – United States

While improved communication about available information can help overcome three of the four main barriers to information access discussed in this paper, communication can not address the final barrier – desired information is nonexistent. To isolate important gaps in information, it is important to have a sense of the type of information youth feel they are missing as well as ascertain the usefulness of this information once it is accessed. In terms of gathering insight on key information for ETLM transitions, the experience of the United States School-to-Work Opportunities Act (STWOA) serves as a useful practice to study.

The STWOA was signed into law in 1994 and was implemented until its legislated sunset in 2001. It was jointly administered by the Federal Departments of Labor and Education. The act focused on youth in public secondary schools and provided more than \$1.5 billion to support increased career preparation activities (Neumark, 2006). Under the Act, grants were provided to States and local communities for programs designed to provide youth with opportunities to successfully transition from school into the labour market or PSE. The grants were intended to be a form of “venture capital” and thus were provided for a limited period only with Federal investment declining over time. The STWOA was very popular. During the course of programming all 50 states applied for and received funds (United States Department of Labour, 2009). In addition to grants, the STWOA provided funds for national ETLM transition efforts such as outreach and national evaluation of the STWOA (United States Department of Education, 1996).

A large and complex program, the STWOA offers insight into many elements of informing youth ETLM transitions. However the current smart practice review will focus on what lessons the Act provides in terms of collecting and evaluating performance indicators.

In identifying lessons learned respecting performance measurement, White and Medrich (2002) make three important observations. First they note that both “time and money are needed to build effective performance measurement systems” (p.290). While the presence of a performance measurement system was explicitly mandated by the STWOA, no money was specifically reserved to support state and local data collection. The lack of allocated resources often lead to unsophisticated and ad hoc data collection and has left a number of questions respecting the true validity of this data. This experience suggests that any attempts to collect performance measurement data, either administrative or otherwise in the Canadian context should be supported by proper funding.

Second, White and Medrich (2002) note that differing audiences (e.g. Federal, state, local) often have differing data needs. For example, while federal authorities may be most interested in longitudinal, economic performance related data, those at the local levels may be more interested in gathering information that will help them better manage

their programs. Thus when designing performance measurement schemas, these differing needs must be taken into consideration.

Finally, White and Medrich (2002) note that although engaging state level officials in the development of a performance management system proved helpful to secure state buy-in for the performance measurement process, the STWOA neglected to engage local level practitioners who were most knowledgeable about the feasibility of collecting certain data. This lack of inclusion led to the creation of a number of performance measures that were extremely difficult to report on in the field.

While a number of problems with the performance measurement system have been observed, it is worth noting that in addition to funding a number of ETLM transition projects, the STWOA has also shed considerable light on effective practices for ETLM transitions at the ground level and thus has done a great deal to inform policy moving forward.

In applying the lessons from the STWOA to the Canadian experience, the idea of creating a more formal mechanism to gather and evaluate data from existing ETLM programming merits consideration. Such a mechanism could provide greater insight into information that youth most desire as well as the type of interventions most likely to promote labour market success.

5.3. INTERPRETATION AND USE OF INFORMATION

Research indicates that self-efficacy and outcome expectations strongly impact how youth interpret and use available knowledge to support ETLM transition decisions. In turn, direct and vicarious experience has been shown to strongly influence feelings of self-efficacy and outcome expectations. Two practices in Austria as well as a third in Toronto provide examples of how the latent potential of both employers and youth themselves can help facilitate greater access to direct and vicarious experiences in a variety of fields.

5.3.1. Career Information Centres – Austria

The first practice involves the active engagement of employers in informing youth ETLM transition decisions. In Austria, all employers must belong and pay membership fees to an “Economic Chamber.” These chambers are responsible for providing a number of services for employers but are also meant to serve the wider community. One of the community services funded by these Economic Chambers are Career Information Centres. Career Information Centres are present all over the country. In addition to providing youth with print and media materials on various career paths, the centres provide youth with a network of employer contacts that can be used to arrange formal meetings or job shadowing opportunities. The centres also provide opportunities for youth to participate in hands-on activities that replicate work activities performed by

various occupations. Research on the popularity of these centres appears to indicate that they are very well received by the Austrian population; centres are visited by large numbers of youth and demand for services is quite high. In addition to these employment centres, local employers and trade unions have also been active in informing youth ETLM transitions through activities such as making worksites available for visits and providing speakers to participate in career education classes (OECD, 2003).

The primary smart practice that may be taken from the Austrian career information centres is that the country has managed to mobilize a large number of its employers to provide important information to youth. By providing avenues for students to talk with and job shadow employers in potential fields of interest, the program increases vicarious and direct access to career related information thus making the labour market more real and accessible to youth.

The presence of Economic Chambers in Austria has certainly facilitated the involvement of employers in informing youth and is an asset to which Canada does not have access. However, Canada does have access to some similar organizations such as sector councils and professional organizations. In applying this smart practice to the Canadian context there is potential to use these organizations to tap the latent potential of employers as has been done in the Austrian example.

5.3.2. Austrian National Union of Students – Austria

The second smart practice exhibited by Austria is the use of upper level students to provide transition related information to their peers. In Austria, the Austrian National Union of Students has been active for many years in providing advisory services to youth in their final year of non-tertiary education. The union organizes visits to secondary schools to provide information about options for university study and the student experience. Before visiting schools, student ambassadors are provided with some general training (OECD, 2003).

In Canada, many universities promote similar ambassador programs where students are asked to visit their high schools during their summer break to provide information about a given educational institution. The unique element of the Austrian program is that it is more centralized. Rather than simply representing the interests of one university, the program is designed to give a much more holistic view of options available. An important underlying idea of the program is that peers of the students targeted to be reached are the transmission source being used to impart the knowledge. The practice of using peers may help improve the ability of students to actually attend to and internalize the information being presented. One of the findings of the literature review was that students often turn to peers to help inform their ETLM transition decisions. The Austrian practice is able to take advantage of this existing preference for information transmission.

5.3.3. Toronto District School Board – Canada

Over the past decade, the Toronto District School Board has been facing a large percentage of their students choosing not to complete high school. To help combat this trend, the School Board reached out to a number of sector councils. They asked these Sector Councils to use their contacts with employers to connect the School Board with representatives from a number of fields. Once these connections were made, teachers began to work with industry representatives to tailor their curriculum to its real world application. For instance, geometry was contextualized in terms of real-world activities such as building a staircase. The School Board and local employers also teamed up to organize work-site visits that allowed students to experience different career activities. The program has been extremely well received and Sector Councils are looking to expand this type of work to other school boards.

A smart practice made evident by the Toronto District School Board experience is that Sector Councils have the potential to play a very important role in ensuring youth are able to receive direct and vicarious career experience. In many ways the Sector Councils can serve in a similar manner to the successful Economic Chambers in Austria. By serving as a point of contact for those wishing to engage employers as well as having access to federal government support and resources, the Sector Councils are well positioned to help execute programs designed to improve youth's direct and vicarious career exposure.

5.4. SUMMARY

The smart practice review has looked at a number of successful practices addressing challenges to informing youth ETLM transition decisions. The work has revealed two central elements in addressing barriers to informing youth ETLM transition decisions: 1) supporting a high degree of coordination between varying levels of government in areas responsible for education and the labour market and; 2) harnessing the latent potential of employers and youth.

In both America's STWOA and Australia's myfuture examples, programs were delivered with a high degree of cooperation between those with responsibility for education and the labour market. As the ETLM transition spans both responsibilities, coordination between interested actors allows information to be provided more seamlessly. It also allows various actors to work collaboratively to identify avenues where their collective resources and expertise can be connected to better inform ETLM transition decisions. While collaboration amongst multiple actors can be difficult, as evidenced by these examples it can lead to high degrees of success.

Further, the YAAO, the Toronto District School Board and both Austrian programs discussed in this review appear in large part to owe their success to their desire to engage youth and employers in the process of informing youth ETLM transition decisions. The

potential of these groups is often overlooked because it can often be difficult to engage and coordinate such large groups of interested stakeholders. However, these examples show that given the proper mechanisms, increasing engagement can improve communication and thus much benefit can come from engaging those most intimately involved in the youth ETLM transition process.

6. DISCUSSION

American national security expert Gregory Treverton calls attention to what he calls *puzzles* and *mysteries* in the information age. For Treverton, a puzzle is a problem that can be solved by acquiring key pieces of missing information, while a mystery is a problem that, at least in part, is created by too much information. Mysteries do not have simple, factual answers but require judgment in the face of uncertainty and means of selecting and making sense of key pieces of information from a multitude of sources (Gladwell, 2009). Findings of this paper indicate ETLM transitions are mysteries.

No one can know with any certainty what the labour market of the future will look like and there is a bewildering array of information about available careers and educational options. Therefore to better inform youth ETLM transition decisions, the two questions of greatest importance are:

- What types of information do youth require – and desire – to make informed decisions?
- Are there areas where analysis of pertinent information can be improved or existing information be sifted and transferred more effectively?

Review of evidence collected for this report provides some insight into these questions. Youth's self-reported needs indicate more information on careers and educational options, particularly careers not accessed by university education is desired. A need for more detailed occupational projections and greater dissemination of information on the true costs and benefits of PSE has also been expressed.

These findings are not overly controversial nor are they particularly new. Collecting self-reported needs about desired information is a relatively straightforward process and thus a process in which the government has often engaged. A number of studies about Canada's LMI system, as well as methods for how it can be improved have been undertaken (see for example, Ipsos-Reid, 2001; Sharpe, 2006; Gunderson, 2007; Woods and O'Leary, 2007). While less studied, work on identifying gaps in Canada's learning information system is also underway.

Underlying much work on informing youth ETLM transitions is the assumption that individuals are sophisticated users of information who make rational decisions and so large amounts of sound LLMI evidence will result in more positive labour market outcomes. This paper has found there is little empirical evidence to support this assumption. Much of the literature – as well as interviews with youth – shows that youth often do not actively seek out LLMI to make rational decisions. Rather youth appear to frequently make decisions based on personal experiences, intuition, outcome expectations

and feelings of self-efficacy. An additional consideration is that relying too heavily increased LLMI to inform youth ETLM transition decisions may disadvantage precisely those youth who most need greater ETLM transition support but are least likely to have been taught to be sophisticated decision makers (e.g. at risk youth).

In other words, while in theory identifying gaps in the current information available will lead to improved labour market outcomes, study of the youth ETLM decision making process suggests that increasing available LLMI may not be the most pressing avenue for government investment. If the goal is to overcome barriers to informing youth ETLM transition decisions, evidence collected in this paper suggests investment in improving modes of knowledge transfer as opposed to supporting further collection of LLMI is most deserving of immediate policy focus. In addition, the paper's research has shown that investment in achieving a greater understanding of what types of LLMI and modes of knowledge transfer positively impact and are desired by youth has the potential to fill important gaps in knowledge and improve future policies and programs. In essence, this report has found that informing youth ETLM transition decisions must be more than the provision of information.

Interviews conducted for this project show that there exists a large divergence of beliefs about the types of information youth need to make ETLM transitions decisions. Interviews also revealed that a number of individuals involved in developing policies related to LLMI felt they did not have an adequate understanding of what types of information are most important to youth in making ETLM transition decisions. In addition, the vast majority of smart practices to address barriers to informing ETLM transitions discussed in this paper address mode of knowledge transfer rather than the creation of LLMI.

Further, literature on self-efficacy and outcome expectations as well as discussion with youth themselves indicates a focus on more direct and vicarious exposure to ETLM transition related information is both desired by youth and has shown great promise in encouraging more informed decision making. In interviews, youth repeatedly expressed a desire to have more "hands on" experiences. In fact, this desire was expressed more than any other in response to questioning about what type of information youth felt was needed to make more informed decisions.

This is not to say that continued investigation and improvement to Canadian LLMI is not merited. As noted in early sections of this paper, desire for increased LLMI has been expressed by youth. Moreover, LLMI has many benefits outside of supporting youth making ETLM transition decisions. It is important for job seekers of all ages; it also serves as a very useful tool for business and government policy and programming decisions. Canada's learning information system in particular has been shown to be falling behind other OECD countries. Rather, the findings suggest that at this time,

focusing on modes transmission and more completely understanding what LLMI is desired and proves useful for youth will likely yield the greatest returns on investment aimed at informing youth ETLM transition decisions. Findings also suggest that when investing in LLMI, strategies for collecting and providing LLMI must be better linked to strategies for engaging youth in its use. There appears to be a sort of miosis in federal government policies to increase LLMI. While there is importance in filling data gaps, simply filling these gaps without careful consideration of how this new information will be accessed and used by citizens can severely limit the impact of investment in information.

In essence, action to improve modes of knowledge transfer as well work to develop a greater understanding of desired and useful LLMI can be seen as the first stage of a two part process. If transmission related barriers are reduced and a greater understanding of youth information needs can be achieved, a culture of increased information seeking for ETLM decisions may be established. At that point, greater investment in closing identified gaps in Canada's LLMI system may be merited. Given the evidence collected, this report now moves to providing a set of policy directions for federal action to improve the informing youth ETLM transition decisions.

7. POLICY DIRECTIONS

Given their responsibility for education and skills training, the provinces and territories play a critical role in supporting youth ETLM transition decisions. That said, through its responsibility for supporting the efficiency of the labour market, as well as its established youth programming (e.g. the Youth Employment Strategy, the Aboriginal Skills and Employment Partnership, Labour Market Development Agreements), student financial assistance (e.g. Student Loans Program, grants to students and savings incentives for post-secondary education) and provision of labour market information (e.g. Job Futures, Job Bank, labourmarketinformation.ca) the federal government is an active player in efforts to improve the labour market outcomes of youth.

Recognizing this duality of responsibility, the following section develops a set of broad policy directions for the federal government. It also suggests some potential actions to move forward on these recommendations in the short, medium and long term.

Policy Directions:

- Develop a better understanding of client needs
- Improve access to direct and vicarious career experience
- Facilitate more active engagement of youth in the design and delivery of policies and programs meant to inform youth ETLM transitions
- Exercise more strategic leadership

7.1. DEVELOP A BETTER UNDERSTANDING OF CLIENT NEEDS

In order to properly direct future policy and programs, as well as improve the service delivery of current programs, it is essential to develop a better understanding of the needs of youth. A better understanding of how youth find and use information, greater exploration of what is preventing youth from accessing knowledge currently available and more comprehensive evaluations of existing interventions would all help to more effectively target investment in informing youth transitions.

While it is important to ask youth what they want, work to truly see the ETLM decisions making process through the eyes of youth themselves could provide invaluable insight. “Why” questions must be asked so as to explore the details of youth’s decision making needs, wants, and problems. Following this type of investigation an attempt to identify latent opportunities must be made. There is a famous quotation attributed to Henry Ford respecting market research. He said, “If I’d have asked my customers what they wanted, they would have told me ‘A faster horse.’” This sentiment equally applies to work looking at informing youth ETLM transition decisions.

One promising initiative to gain a greater understanding of the youth ETLM decision making process is through community based research. Community-based research is a relatively new research methodology that requires collaboration between a community (whether it be geographic, identity, or characteristically based), policy makers and researchers for the purpose of *creating new knowledge*. The community members participate in all aspects of the research process (including the design and analysis of the research). Although community based research is typically conducted with small groups of participants, and thus results cannot be generalized to the whole population, such a new and innovative forum could produce insight into the career decision making process that would not be made evident through traditional research methods.

While developing more formal research is important, it is not the only tool available to produce policy relevant data on client needs. Receiving regular feedback and promoting greater performance measurement of existing services may also provide an avenue to develop a greater understanding of the type of information youth desire. For example, currently Service Canada Centres for Youth (SCCY) do not collect any data on what sources of information are most frequently accessed by clients nor do they record whether there are areas where youth find the centres lacking. Further, there are many initiatives for informing youth ETLM transitions currently underway lead by provinces and territories as well as non-profit organizations. The potential for mining data from these initiatives is high if these programs could be encouraged to institute strong evaluation frameworks. Such actions have the potential to provide a wealth of new information including where problems exist, what questions are being asked and what youth find useful. This information is extremely important as it can support better delivery of current LLMI as well as encourage a greater connection between the development of new LLMI with its delivery.

Actions:

- Execute a number of Community Based Research projects with youth from across the country to obtain greater insight on the youth ETLM decision making process from a policy based perspective.
- Extend current funding for FLMM/HRSD research project measuring the impacts of LMI to allow for more long term labour market outcome findings.
- Begin tracking websites accessed by youth at SCCY to see which are most popular for youth.
- Begin surveying youth at SCCY periodically to ascertain what types of information they feel are missing.
- Provide funds for the design and execution of performance measurement systems for existing initiatives to inform youth ETLM transitions.
- Use improved research on youth ETLM decision making to inform improvements to federal online LLMI resources.

- Share findings on youth ETLM decision making with Service Canada so Service Canada representatives can be better trained to understand and thus cater to youth decision making processes.
- Develop a research agenda focused on youth preferences respecting modes of knowledge transfer and youth ETLM decision making.
- Conduct more in-depth analysis on the specific needs of various at risk groups of youth.

7.2. IMPROVE ACCESS TO DIRECT AND VICARIOUS CAREER EXPERIENCE

Although much work remains in understanding what works best to inform youth ETLM transitions, there appears to be strong evidence indicating direct and/or vicarious career exposure has strong potential for effectively supporting informing of youth ETLM transitions. Given this understanding, it is clear that employers have the potential to play a critical role in informing youth ETLM transitions. However, to date, this potential has been largely untapped in Canada. Review of smart practices as well as interviews have shown that Sector Councils provide an excellent avenue to promote employer participation as they serve as a coordinating body with employer access and communication capabilities.

In addition, the federal government itself through YES programming already does much to promote direct youth exposure to the labour market. While the YES Skills Link program stream does place some focus on informational interventions, YES's Career Focus and Summer Work Experience streams focus primarily on placing youth in temporary employment. If these programs can move from being seen simply as temporary provision of employment for students to being opportunities to inform youth transitions, these programs could be used to greater potential.

Actions:

- Test pilot projects that require some Career Focus and Summer Work Experience program providers to develop methods of exposing youth to career/education related information and experiences. Projects should be backed by strong evaluation frameworks engaging participating youth in evaluating the information provision mechanisms in an attempt to identify smart practices moving forward.
- Test pilot projects that expand work with Sector Councils to encourage more active employer involvement with schools. Projects should be backed by strong evaluation frameworks requiring feedback from participating youth.
- Work with sector councils to liaise with professional organizations to institute professional development hours that could be put towards informing youth ETLM transition decisions.

7.3. FACILITATE MORE ACTIVE ENGAGEMENT OF YOUTH IN THE DESIGN AND DELIVERY OF POLICIES AND PROGRAMS

As youth are the target audience for informing youth transition decisions, much can be gained from ensuring they are actively involved in the design of interventions as well as outreach. Currently federal programs do not appear to be fully capitalizing on the potential of youth to improve the process of informing youth ETLM transition decisions. Lessons from the Austrian National Union of Students where youth are actively involved in informing their peers about ETLM related matters and the Los Angeles County's efforts to involve youth at all stages of program design and implementation merit further consideration for their applicability to the Canadian context.

For example, SCCY are currently funded through the Summer Work Experience stream of the YES strategies. Students are hired and trained to assist youth in job search and career development activities. However, currently the SCCY youth representatives work only from physical SCCY sites. Allowing these youth to perform outreach, such as attending local festivals or offering to present at local high schools or PSE institutions could allow these representatives to better use their training as well as capture the attention of an increased youth audience.

Actions:

- Develop mechanisms for youth employed with SCCY to engage in more outreach.
- Involve youth in design and evaluation of improvements to federal governments online LLMI dissemination.
- Engage youth in the design and evaluation of advertising relating to information on ETLM transitions.
- Maintain regular communication with youth representatives about the quality of online LLMI sources and advertising to ensure the federal government is keeping up with changing trends in information technology and preferred methods of knowledge transmission.

7.4. EXERCISE MORE STRATEGIC LEADERSHIP

One of the largest challenges of informing youth ETLM transition decisions is the large number of actors involved. Given the federal government's responsibility to support the labour market and the provincial/territorial governments' responsibility for education, it is often difficult to coordinate programs because intervention requires action in both jurisdictions. Further, the disjoint between education and labour market responsibilities can create a particular gap in support for some of the most at-risk youth in Canada. Youth who are not in employment, education or training (NEET Youth) are often not well served under Canada's current system for informing youth ETLM transition decisions. This is because NEET Youth often require interventions from an education and a labour market perspective and this type of coordination can be difficult.

Within jurisdictions there are also various responsibilities for elements of informing youth ETLM transitions. For instance, within the HRSD portfolio there are those in strategic policy, program policy and Service Canada working to improve the process of informing youth ETLM transition decisions. It is critically important that these areas work together so that the creation of products to inform youth ETLM transitions are well linked to strategies for their transmission and use.

Outside government there are also many actors with important roles to play in informing youth ETLM transitions – chief among these actors being employers, media and parents. More must be done to bring these groups together and help them to realize their potential to improve outcomes for today's youth. Given these considerations, the federal government can play an important role by bringing these numerous stakeholders together and strategically facilitating opportunities for these actors to guide the development and implementation of policy and programs meant to inform youth ETLM transitions. The Australian work to bring together representatives from multiple jurisdictions and responsibilities through their Ministerial Council for Education, Employment, Training and Youth Affairs, may provide useful insight for Canada moving forward.

Actions:

- Expand the current FLMM Career Development Working Group to serve as a strategic forum to bring together employers (sector councils), media, parents, educational institutions and representatives from various levels of government with responsibilities for both education and the labour market.
- Better link Job Bank to other federally and provincially/territorially provided ETLM transition information and programs.
- Investigate methods of better integrating privately provided ETLM transition information (e.g. Career Cruising) with governmental initiatives.
- Use an expanded Career Development Working Group, as well as improved research on client needs, to work with stakeholders to identify gaps and methods of obtaining additional LLMI.

Table 1 summarizes the actions discussed thus far and categorizes them in terms of time frame.

Table 1. Policy Direction Matrix

Policy Direction	Actions		
	Short-Term	Medium-Term	Long-term
Invest in developing a better understanding of client needs	<p>Execute a number of Community Based Research Projects with youth from across the country</p> <p>Begin tracking websites accessed by youth at Service Canada Centres for Youth (SCCY)</p> <p>Begin surveying youth at SCCY periodically</p> <p>Develop a research agenda focused on youth preferences respecting modes of knowledge transfer and youth ETLM decision making</p>	<p>Extend current funding for FLMM/HRSD research project measuring the impacts of LMI</p> <p>Provide funds for the design and execution of performance measurement of existing initiatives to inform youth ETLM transitions</p> <p>Use improved research on youth ETLM decision making to inform improvements to federal online LLMI resources</p> <p>Share findings on youth ETLM decision making with Service Canada</p>	<p>Conduct more in-depth analysis on the specific needs of various at risk groups of youth</p>
Improve access to direct and vicarious career experience	<p>Test pilot projects that require some Career Focus and Summer Work Experience program providers to develop methods of exposing youth to career/education related information and experiences</p> <p>Test pilot projects that expand work with Sector Councils to encourage more active employer involvement with schools</p>	<p>Work with Sector Councils to liaise with professional organizations to institute professional development hours that could be put towards informing youth ETLM transition decisions</p>	
Facilitate more active engagement of youth	<p>Develop mechanisms that allow youth employed with SCCY to engage in more outreach</p> <p>Involve youth in design and evaluation of improvements to federal government online LLMI dissemination</p>	<p>Engage youth in the design and evaluation of advertising relating to information on ETLM transitions</p>	<p>Maintain regular communication with youth representatives</p>
Exercise more strategic leadership	<p>Better link Job Bank to other F/P/T ETLM transition information/ programs</p> <p>Investigate methods for better integrating privately provided ETLM transition information with governmental initiatives</p>	<p>Expand the current FLMM Career Development Working Group</p>	<p>Use the expanded Career Development Working Group as well as improved research on client needs to work with stakeholders to identify gaps and methods of obtaining additional LLMI</p>

8. CONCLUSION

This policy paper has explored informing youth ETLM transition decisions from a federal perspective. The work has shown that the ETLM transition process is incredibly complex. It is influenced by many actors and faces multiple barriers. In attempting to address these barriers, this report has found that while making information pertinent to the ETLM process available to youth is important, if there is a desire to truly inform youth decision making process and contribute to their successful labour market integration careful consideration of how information will be delivered, accessed and used by citizens is essential.

The four policy directions developed in this report are designed to both improve the federal government's understanding of the informational needs of youth and to better leverage the information that currently exists. In moving forward on these directions the federal government can meaningfully provide youth with the tools needed to improve their individual labour market outcomes and help better match labour demanded with labour supplied.

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