Applying the Construct of Resilience to Career Development

Lessons in Curriculum Development

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Chapter 1

Background

The Canada Millennium Scholarship Foundation supports the pursuit of post-secondary education and has placed specific priority on access to post-secondary education for students facing economic or social barriers. It endeavours to advance the post-secondary agenda and inform policy via research an public discussion.

Each year, the Canada Millennium Scholarship Foundation awards $350 million in the form of scholarships and bursaries across Canada. In 2001, it launched the Millennium Research Program to assist the Foundation in carrying out its mandate to improve access to post-secondary education and provide students with the educational opportunities they need to prepare themselves for the future. The research program advances the study of barriers to post-secondary education and the impact of policies and programs designed to alleviate them. It ensures that policy-making and public discussion about opportunities in higher education in Canada can be informed by rigorous analysis and empirical evidence.

The Millennium Research Program is focused on two key themes:

- Access to Post-Secondary Education in Canada, with a focus on who participates in post-secondary education, who does not, and why. Studies address such topics as the current make-up of the student body, the costs and means of paying for post-secondary education, the availability of student financial assistance, the extent of student debt, the impact of tuition policy, and the effectiveness of other policies and interventions designed to enhance access. Special attention is paid to the issue of the equality of educational opportunity and the experiences of different groups of the population, such as Aboriginal youth or students from disadvantaged economic backgrounds. Studies also address the issue of access from a wider perspective that looks at how the overall economic, social and cultural context in which children and families develop affects the desire and the ability of students to pursue college or university studies.

- Preparing for Post-Secondary Education, with a focus on whether students, families and schools have the information, academic support and financial means necessary to adequately plan and prepare for successful entry into post-secondary education. Studies—including most notably the Foundation's pilot projects—examine how decision-making about post-secondary education, especially within families whose children are less likely to attend college or university, is influenced by different factors including the availability of academic support, financial support and of information about the costs, benefits and means of financing post-secondary education.

Under this latter theme, the Foundation supports pilot projects to examine the key influences on decision-making related to post-secondary education.

Future to Discover is a demonstration research project made possible through an innovative partnership between the Canada Millennium Scholarship Foundation and the governments of New Brunswick and Manitoba. It is a six-year project aimed at understanding whether better information, career education interventions and financial incentives can encourage students who would not normally pursue post-secondary education to do so successfully.

Across the two provinces, a total of approximately 5,500 students are participating in the pilot project. Students are randomly selected and assigned to one of four groups:

- Explore your Horizons is a career education intervention offering workshops after school hours to students (and, in Grade 11, their parents/guardians) as they move from Grade 10 through 12.

Participants also receive biannual visits from post-secondary ambassadors who share their experiences. Participants have access to concise information about post-secondary education costs and benefits through a members-only website and also receive a Future to Discover magazine twice a year at their home.

- Learning Accounts (in New Brunswick only) is a financial incentive intervention that offers a guarantee of $8,000 to students in Grade 9 who come from households with income below the provincial median. They receive a bursary if they graduate from high school and enrol and persist in their studies in a recognized post-secondary education program.

- A third group receives the services outlined above for both the Explore Your Horizons group and the Learning Accounts group.

- The fourth group is a comparison group.

The label "Future to Discover" is used in Manitoba to describe the intervention identical to Explore Your Horizons in New Brunswick. Manitoba is not participating in the Learning Account intervention.

The career development interventions are seen as a vital component of the Information Strategy. In Grade 10, students participate in *Career Focusing*, a series of after-school workshops that assist students to articulate a career plan based on their key interests and strengths. In Grade 11, the *Lasting Gifts* workshop series offers students and their parents, guardians or significant adults opportunities to better understand today's labour market; examine more deeply their own attitudes, strengths and dreams; and develop skills and strategies for successful career and educational planning.

In January 2006, the Canadian Career Development Foundation (CCDF) was engaged by the Canada Millennium Scholarship Foundation to develop the Grade 12 curriculum for the Future to Discover pilot project. This curriculum was to be an original contribution, complementing and supplementing the Grade 10 and 11 career development interventions as well as existing secondary guidance and career education programs in New Brunswick and Manitoba.

Grade 12 students are on the precipice of a significant milestone as they prepare to leave the relatively predictable world of secondary school and embark on the next phase of their career journey. They will no doubt encounter unforeseen opportunities, unexpected challenges and often unpredicted disappointments. With this in mind, CCDF looked to the research on resilience to explore whether a unifying theme for the curriculum could be "career resilience."

Colloquially, we refer to a "resilient" person as someone who has the capacity to deal with, or bounce back from, unexpected challenges and disappointments. In fact, a very extensive body of research and literature underpins the construct of resilience, suggesting specific "protective" factors that promote resilience as well as risk factors that hinder it.

In career development, the term "career resilience" has begun to emerge as a way of illustrating the competencies required for managing turbulent labour market conditions. Very little solid research exists, however, regarding the potential applications of resilience to career development.

Intuitively, it would appear that the findings from health and social work regarding the construct of resilience would be applicable to career development. CCDF pursued this intuitive lead in developing the Grade 12 Future to Discover curriculum.

The purpose of this paper is to summarize the results of background research conducted by CCDF, consolidating and extrapolating key themes from this research to the development of the Future to Discover Grade 12 curriculum. A secondary purpose of this paper is to open the door to further exploration of the potential application of the construct of resilience to career theory and practice.

Chapter 2

Existing Research on Resilience

2.1 Literature Review

An extensive body of literature on resilience exists in the health and social work domains, dating back to the 1940s. While our review of the literature resulted in over 30 distinct definitions, most of them emphasize the capacity to overcome obstacles, adapt to change, recover from trauma or to survive and thrive despite adversity. Common characteristics of resilience include:

- It is a dynamic, developmental process.

- It depends on life context and is transactional, involving a complex interplay between the individual and their environment.

- It is a two-dimensional construct defined by a continuum of risk and protective factors.

- It is most critical at life transition points/milestones.

- It is potentially within everyone.

Boris Cyrulnik (1999) described resilience as the "art of navigating in the torrent" (free translation). He postulated that each of us has the capacity to become resilient if we have timely access to *tuteurs* of resilience. These *tuteurs* are people, personal awareness and inner strengths that can be found primarily within family and school structures and that enable us to overcome difficulty.

Similarly, Michel Lemay (Poilpot, 1999a) emphasized that an encounter with a person (parent, friend, relative or stranger) can reactivate the potential resilience that lies within each of us.

In the physical sciences, resilience is used to describe the capacity of matter to return to its original form following manipulation or aggressive contact.

Many definitions refer to this capacity to "bounce back" and "pick up where one left off."

It is interesting to return to the Latin root "*resiliens*," which refers to the pliant or elastic quality of a substance. This does not imply a return to an original state, but rather the capacity to absorb negative conditions, integrate them in meaningful ways and move forward. This latter interpretation is consistent with Stefan Vanistendael's view that resilience is the capacity to accept trauma as a step in life, integrating the consequences, learning from the negative experience and continuing to move forward (Poilpot, 1999a).

Most resilience research has taken the form of epidemiological studies (cohort/case control) using quantitative methods. Greene (2002) delineates two significant generations of risk and resilience studies:

1. Studies focused on disadvantaged, "at-risk" children

    a. Studies of infant attachment
    b. Longitudinal and case study methods exploring the impact of single risk factors
    c. Exploration of the interaction of multiple risk factors on child and adult adjustment

This first generation of studies found that between one-third and two-thirds of "at risk" children are able to "turn a life trajectory of risk into one that manifests resilience" (Benard, 1997). This led researchers to a second generation of studies:

2. Studies exploring the factors that enable children and adults to overcome risk and adversity.

These studies led to the identification of "protective factors"—factors that buffer, interrupt or prevent risk.

Paul Bouvier (Poilpot, 1999) classified factors that promote resilience in three categories:

- External resources and supports (I have)
- Personal strengths, feelings, beliefs and attitudes (I am)
- Social and interpersonal competencies (I can).

Similarly, Mangham et al (1995) referred to individual, familial and support factors that promote resilience.

A meta-analysis across the literature would suggest that protective factors can be boiled down to three core elements:

- Caring and supportive adult relationships
- Opportunities for meaningful participation in school and community
- High parent and teacher expectations regarding student performance and future success

Scratching the surface of existing research, however, reveals a plethora of internal and external protective factors linked to resilience. These can be summarized into four broad categories:

- Internal — Intrapersonal Factors
- Internal — Social/Coping Skills
- External — Interpersonal Supports
- External — Institutional Supports.

Schoon, Parsons & Sacker (2004) delineate four distinct types of protective factors:

- General protective factors: conferring direct ameliorative effects on both high- and low-risk conditions
- Protective-stabilizing factors: providing stability in competence despite increasing risk
- Protective-enhancing factors: providing increased competence with increasing risk
- Protective but reactive factors: conferring advantages, but less so when risk is high.

This study found that parental aspirations for their child are a protective-enhancing factor, suggesting the particular importance of this factor for youth from disadvantaged backgrounds.

The scope of resilience research has expanded to encompass the full lifespan, including family, career and community resilience. While these extrapolations have logical appeal, they are not yet supported by solid research.

Charles-Henri Amherdt (2005) suggests that career resilience is linked to *le savoir devenir*, or the capacity to look into the future and see a clear career direction which reflects both who we are (*savoir être*) and what we are capable of doing (*savoir faire*).

Many references to career resilience can be found in the literature. It is cited as a desired outcome of career interventions (Borgen & Amundson, 2001) and we find tools to assess our levels of career resilience online (Lodestar, 2001).

Our review of the literature revealed nothing beyond anecdotal research to support the construct of career resilience in a career development context, however. This void is surprising given the extent to which the research has intuitive application to career themes. Students are facing a multitude of choices, unprecedented competition and an increasingly complex and demanding labour market. As one considers the three core protective factors as well as the more detailed analysis of protective factors extrapolated from the research, their relevance to helping students navigate these choices and successfully manage their transitions between secondary school, PSE and work is apparent.

Table 1 summarizes intrapersonal, social/coping skills, interpersonal supports and institutional supports associated with resilience across the literature.

Internal Factors	External Factors
Intrapersonal Factors	**Interpersonal Supports**
• Self-efficacy (self-worth, self-esteem, belief in self, sense of mastery, internal locus of control, self-confidence, sense of identity) • Autonomy • Sense of purpose • Achievement/goal orientation • High expectations for success, optimism, hope • Personal responsibility, ideology of activism • Faith, morality • Humour • Positive temperament • Trust • Altruism • Creativity • Persistence, determination, inner will, motivation • Flexibility • Critical consciousness • Adaptive distancing	• Parents/Family (parental monitoring of out-of-school time, parenting style, parental involvement in school, high expectations for success, warmth/cohesion/stability in the family, spending time together as a family, positive communication and affirmation within the family, proactive posture and confrontation of problems at home, respectful structure and consistent rules and consequences at home, parental encouragement of autonomy) • Teachers/Other Adults (high expectations for success, trusting relationships, emotional support, positive role models, network who believes in student) • Peers (network of achieving peers) • Network of informal relationships
Social/Coping Skills	**Institutional Supports**
• Active coping styles (problem solving, ability to plan, teamwork, effective communication, active emotional expression, positive self-talk, impulse control) • Strong capacity to form relationships, interpersonal awareness, empathy and social responsiveness • Cognitive competence, consequential thinking • Appreciation of cultural diversity, sensitivity • Realistic appraisal of environment, capacity to construct productive meanings for events, healthy perspective with respect to adversity • Critical/reflective thinking • Willingness to seek help • Ability to disengage from home, engage with outside world and then re-engage with home • Absence of non-productive coping (worrying, wishful thinking, tension reduction, ignoring the problem, self-blame and isolation)	• Opportunities for youth to constructively participate in the community • Strong connection between school, family and community • Access to alternative programs and extracurricular activities (after school and summer) • Challenging in-school curriculum • Stable, supportive and respectful school environment • Wide range of resources in the community (cultural, spiritual, health, educational, welfare and security) • Community/School views youth as resources and rewards competence • Consistent expression of community values and norms regarding "proper" behaviour • Formal social support through school/religious affiliations

Chapter 3

The Career Development Context

3.1 Career Development Practice

The Organization for Economic Co-operation and Development (OECD) defines career development as "services intended to assist individuals, of any age and at any point throughout their lives, to make education, training and occupational choices and to manage their careers" (2004).

Current career development practice is holistic in its approach. Career practitioners do not separate work from the rest of an individual's life, recognizing that issues such as family commitments, community involvement, social activities, preferences with respect to location and lifestyle and self-care need to be considered in comprehensive career decision-making. It is also commonly accepted that making one good career decision at the transition from school to work is no longer adequate. Rather, most people will make a number of career transitions throughout their lives and, consequently, career development is seen as a continuous, daily process.

According to Hughes (2004), career practitioners help individuals with a range of issues related to work and/or learning. They help individuals to:

- Know *where* — understand labour markets, skill requirements and locations of these markets

- Know *when* — understand "timing" issues, surpluses and shortages, current and future career opportunities and how to take advantage of them

- Know *why* — understand their own interests, values and motivations to help set a meaningful career direction

- Know *how* — acquire the knowledge, skills and experiences required to manage work and learning decisions and transitions

- Know *whom* — make the most of contacts and networks to help improve chances of success.

The process underlying career service delivery varies considerably. In some cases, service is provided on a supply basis, offered to individuals regardless of their presenting issues and needs. For example, a job-finding club assists all individuals in identifying prospective work (knowing where) and provides coaching with respect to specific work search techniques (a piece of knowing how). In other cases, individual demand (need) guides the choice of inter-vention. In this case, interventions or combinations of interventions are tailored to meet specific and unique individual needs.

The seven elements below provide a composite picture of the full career development process based on several of the most widely accepted theories of career development. The steps are described in a developmental sequence. However, in reality, individuals may deal with any one issue or any combination of issues at any given time. So, although it may be considered ideal to achieve a certain level of self-awareness before one strives to become aware of *opportunities*, *awareness of opportunities* can also enhance *self-awareness*. Any one of the seven steps in the process can precede the other, and all can enhance each other.

1. Believing in Self: A fundamental precursor to employability is a basic belief in oneself, one's capacity to contribute and to be connected to community. With this in mind, career practitioners often work with individuals to build self-esteem, self-efficacy, internal locus of control and motivation.

2. Knowing Self: Many traditional approaches (interest inventories, personality profiles) focus exclusively on this element. Career practitioners often work with individuals to help them develop a realistic appreciation of their own interests, values, personality traits, preferences, personal styles, strengths and challenges. Ideally, this information is then used as a critical anchor for career exploration and decision making.

3. Making Sense of Opportunities for Work & Learning: Career practitioners assist individuals to access and make sense of both formal and informal labour market information and to understand the changing nature of work and the workplace.

4. Building Work Skills: Work skills include a wide range of skills and attitudes to support success in work and/or learning. Increasing emphasis has been placed on generic employability skills (such as problem solving, planning, teamwork and effective communication), which are transferable across many jobs and/or learning situations.

5. Making Decisions and Plans: The ability to make meaningful decisions and realistic, motivating plans is grounded in a wide range of attitudes, skills and strategies. Examples of areas of focus might include working with individuals on their sense of purpose, goal orientation, consequential thinking, capacity to realistically appraise their environment and strategies to sustain motivation.

6. Finding/Creating Opportunities for Work & Learning: Again, this element reflects a composite of attitudes, skills and strategies. Core components include the capacity to realistically appraise one's environment, the demonstration of key employability skills, the development and maintenance of support and strategic networks, sense of purpose, goal orientation and the capacity to sustain motivation.

7. Managing Transitions and Personal Development: Recognizing that people will face many transitions across their careers, career practitioners work with individuals on issues such as goal orientation, optimism, flexibility, problem solving, active emotional expression, impulse control, the capacity to construct positive meanings for events and critical/reflective thinking.

The nature of work in the 21st century has undergone radical and systemic change in Canada and internationally. Seeking employment was once primarily a local activity. Now, it is a national or even international activity (Herr, 1999). Occupations used to be relatively stable over time. Now, old occupations are disappearing, new ones are being invented at a rapid rate, and the work that is done within an occupational title may be considerably different than it was a few years ago (Savickas, 2005). Where "career" was once thought of as a single commitment to a life-long occupational pursuit (Collin & Young, 2000), it is now thought of as the life-long participation in and interaction among numerous life-roles. Organizations, and to a lesser extent educational institutions, once were encouraged to "guide" individuals along their career paths. Now, individuals are being expected to assume greater responsibility for their own career development (Krumboltz, 1998).

At the same time, the composition of the Canadian workforce is increasingly diverse, including workers from a variety of cultural backgrounds (McMullin & Cooke, 2004).

The combined effect of these changes has placed significant pressure on prospective workers. Against this labour market context, the seven-step career development process becomes increasingly complex. Today's labour market demands a commitment to lifelong acquisition of knowledge, competencies and "career literacy" skills and attitudes in order to become informed, confident and adaptable within a context of rapid change and increasing diversity (Bezanson, 2004; Borgen 1997; Government of Canada, 2002; Gunderson, 2003; Kadkhoda, 2002).

Students contemplating their transition to post-secondary education must not only navigate access routes to a massive and daunting post-secondary system, but must also make their decisions against

the backdrop of today's complex and challenging labour market. This already challenging transition can be all the more so for students who may have additional barriers (such as no role models who pursued post-secondary education, limited financial means). In this context, a construct of "career resilience" can be seen as a potentially important element.

"The major goal of career life planning is to help individuals cope with changing events and to accomplish tasks and transitions of developmental stages successfully" (Zunker, V. Career Counseling 1990, pg. 81). Career practitioners do not state that their goal in practice is to develop "career resilience", yet their interventions are largely directed toward enhancing those factors linked to increased resilience in the literature.

Referring back to the key protective factors identified in the resilience research (Table 1, Appendix A), it is possible to see potential linkages between each of the seven steps in the career development process and factors that promote resilience. These linkages suggest that resilience may be an important thread that runs through career development practice.

Table 1 (Appendix A) delineates in detail the protective factors that are associated with each of the seven steps in the career development process. It is interesting to note that all seven steps can be linked to multiple resilience factors. Key resilience factors that are repeatedly seen across the career development process include:

- sense of purpose

- personal responsibility; ideology of activism

- goal/achievement orientation

- high expectations for success, optimism, hope

- realistic appraisal of environment

- active coping styles (problem solving, ability to plan, teamwork, effective communication, active emotional expression, positive self-talk and impulse control)

- flexibility.

A second guiding structure commonly used in career development practice is the Blueprint for Life/Work Designs. The Blueprint articulates the key learning outcomes that should result from effective career practice across all developmental stages. In Canada and internationally, curriculum/intervention development is often guided by the Blueprint and many resources are coded against the Blueprint as a way of clearly defining their purpose and scope.

Once again, an analysis of Blueprint outcomes against resilience factors from the literature points to significant alignment. Table 2 (Appendix A) provides a summary of apparent linkages between competencies at the secondary and adult level from the Blueprint for Life/Work Designs and protective factors identified in the resilience research.

While many of the same factors identified in our analysis of protective factors against the seven-step career development process were likewise identified in this analysis against Blueprint competencies, it is interesting to note that some additional factors emerged, including:

- family cohesion, involvement, stability and communication

- trusting relationships with teachers and other significant adults

- interpersonal supports, including peer, family and significant adults

- strong formal and informal networks

- participation in diverse curricular, extra-curricular, community and work experiences

- ability to disengage from home, engage with the outside world and then re-engage with home.

The seven-step career development process and Blueprint outcomes described above provide considerable guidance and direction to career practitioners. They do not, however, offer an overarching frame-work to explain why these steps and outcomes are important.

In the Grade 12 Future to Discover curriculum, the development of protective factors is made intentional, with interventions specifically designed to foster these resilience factors and debriefing discussions that make the intent of the interventions transparent. This conscious focus on building protective factors may represent an initial step toward giving the construct of "career resilience" shape and substance and to exploring how resilience can similarly provide a supporting structure for intentional career practice.

3.2 Career Development Theory

The first widely recognized theory of career development was the trait-factor theory of vocational theorists Frank Parsons and E.G. Williamson, dating to the early 1900s. This theory assumed that each person has a unique pattern of traits (interests, values, abilities and personality characteristics) which can be objectively profiled. Similarly, each occupation has requirements that can be objectively profiled. The job of the career practitioner is to facilitate good matches between a client's profile and an occupational profile. Trait-factor theory continues to influence modern practice (e.g., True Colors, General Aptitude Test Battery, Data-People-Things Interest Test, occupational profiles and most computer-based career guidance programs).

Since this first foray into career development theory, others have followed with adaptations as well as new and original approaches. Key theories include the following:

- **John Holland's Career Typology:** This offshoot of the trait-factor theory suggested that our degree of work satisfaction, stability and achievement will depend on the congruence between our personality and our work environment. Holland's hexagonal model delineated six types of personality and six types of work environments. He asserted that, in most cases, one type will predominate and two others will be secondary, thereby giving each person and each work environment a three-tiered typology profile. The goal, then, was to find a work environment which matched your own personal profile as closely as possible. While Holland's cognitive, problem-solving approach to career planning was extensively researched and considered to be robust, it was criticized for ignoring the impact of culture and life experience on personality. Nonetheless, it has been extremely influential in career development and can be seen in popular assessment tools (Self-Directed Search, Vocational Preference Inventory, Strong Interest Inventory) as well as the Dictionary of Holland Occupational Codes.

It is interesting to note that Holland's approach hangs on an overarching goal of helping work seekers find work where they are least likely to encounter the stress, challenge and adversity associated with poor worker-to-work fit. Of course, many people, despite the best intentions and efforts of career practitioners, do not find a "good fit." Complex issues, such as the structure of opportunity, demographics and chance often intervene. In such cases, resilience may provide the resources workers need to overcome disappointment and unexpected challenge and to persist through changes in work life.

- **Super's Life-Span/Life-Space Theory:** Donald Super offered a holistic, developmental approach to career development. He postulated that while people have multi-potentiality, their career choice and subsequent satisfaction is inextricably linked to their self-awareness and self-concept. According to Super, our self-concept evolves developmentally over the lifespan in response to external factors (others, society), life experiences, acquired skills and preferences. Super contributed the notion of age-appropriate career interventions and situated career development within the broader context of our multiple life roles.

Integral to Super's theory is the notion that important learning needs to take place in childhood and continue throughout life to facilitate career development. This implies the active development of skills, attitudes and strategies. Likewise in the resilience research, we see skills, attitudes, strategies and an ideology of activism as inextricable underpinnings of success. Super suggested that the implementation of one's self-concept is a life-long task. His notion of iterative exploration aligns with findings of Borgen and Butterfield (2006) that resilience evolves and strengthens with experience. The centrality of self-concept is also mirrored in the resilience research, with self-concept and related factors (self-efficacy, self-worth, self-esteem, internal locus of control, and sense of identity) being central to the construct of resilience.

- **Krumboltz's Social Learning Theory of Career Choice:** According to John D. Krumboltz, career decisions are the product of genetic influences, environmental conditions, task-approach skills and the unique and innumerable learning experiences resulting from each person's encounters with people, institutions and events. Krumboltz emphasized the key influence of role models (parents, mentors, peers) in career decision-making. The sum of a person's learning affects their world view and how they approach career choice. The role of career practitioners is to identify problematic learned views and identify career-relevant learning experiences, modeling or skill building to reframe that view.

  The dynamic relationship between person and environment seen in Social Learning Theory is consistent with resilience theory. Borgen and Butterfield (2006) suggest that resiliency is strengthened through experience, learning and personal evolution. The key role of significant others (parents, mentors, peers) is also prominent in both Social Learning Theory and resilience research.

- **Constructivist Theory/Models of Career Development:** This approach, most notably associated with Mark Savickas and Vance Peavy, draws on existential philosophy to provide a framework within which career counselling can be done. Essentially, this approach suggests that there are no fixed meanings or realities in the world. Rather, we each "construct" ourselves and our own meaning based on our unique experiences. Career practitioners work with individuals to construct meaningful careers using techniques such as narrative, metaphor, mapping and critical reflection.

  It is possible to see clear linkages between the goals of constructivist approaches and the protective factors found in the research on resilience. For example, meaning-making is intended to result in a stronger sense of identity, autonomy, ideology of activism, creativity, critical consciousness, and the capacity to construct productive meanings for events. Resiliency also encompasses key meaning-making activities, such as taking action to mobilize supports, reaching out to others and taking action for self (Borgen and Butterfield, 2006).

Each theory provides guiding goals for career development and a rationale for the delivery of specific career interventions. In practice, determining and meeting the particular needs of the individual often requires calling on goals and interventions from more than one theory. No single overarching theme is sufficient to define the scope of practice or fundamental purpose of career development.

Resilience offers a new and interesting beacon for career practitioners. Resilience appears to be a common thread that runs through all processes that derive from their most dominant theories, but it has not been explicitly integrated into theory or intentionally integrated into practice. While the evidence base in career development is still relatively small compared to the extensive body of research on resilience, parallels are apparent:

- Self-efficacy, achievement orientation, high expectations for success and social supports were associated with the ability to find and successfully maintain work (Ward, 2000).
- Parents have a significant and lasting impact on the career choices of youth (Magnusson and Bernes, 2001; Looker and Lowe, 2001). Resilience research suggests that, particularly for youth facing barriers, parental aspirations for their son/daughter and their belief in their capacity to succeed are vital.
- Important elements in career decision-making and work satisfaction include self-efficacy, the capacity to form interpersonal relationships, family relationships, cognitive competence, achievement orientation, empathy, personal responsibility, social responsiveness, social interconnectedness and faith/morality (Hughes, Lowe, Schellenberg, 2003; Crozier and Dorval, 2002; Strategic Directions Inc., 2004).
- Self-efficacy, relationships with others, achievement orientation and cognitive competence are strongly associated with worker satisfaction (Industry-Education Council of Hamilton, 2003).

Many analysts are suggesting that today's labour market and associated work environments are changing at an escalating rate and many people are not coping effectively with these changes.

Indicators include rising absenteeism rates and worker compensation claims. There are indications that absences for mental health and psychosocial reasons are increasing and productivity is decreasing (Borgen and Butterfield, 2006). Absenteeism rates associated with mental health issues are rising dramatically among younger workers. Depression and anxiety rates among younger employees are redefining this generation's workplace needs (WarrenShepell, 2005).

Ties to resiliency can be found in all the theories of career development and, therefore, resiliency seems to be a relevant construct for both theory and practice. Career resilience offers potential as a unifying theme with particular relevance in today's labour market.

Chapter 4

Objectives and Assumptions

4.1 Overall Aim

An important theme driving the Future to Discover Pilot Project is the exploration of how to best prepare students to make successful transitions from secondary to post-secondary education. While a substantive body of research exists to support the construct of resilience, these results and consequent learning have been applied neither broadly to the field of career development, nor specifically to a better understanding of factors that might support or hinder the transition to post-secondary studies.

There is considerable intuitive appeal to the notion of career resilience as an overarching construct to guide career development interventions. With its solid research basis, resilience offers a potential rationale for why career practitioners seek to achieve specific outcomes and a framework within which to develop and implement targeted interventions. No empirical evidence exists, however, to support these applications.

CCDF decided to further explore the application of resilience to career development by using the existing resilience research and preliminary primary research to inform and guide the development of the Grade 12 Future to Discover career development intervention. In this way, the Grade 12 intervention could serve as a "test" intervention aimed at increasing career resilience.

The aim of this paper is to report learnings from the review of existing resilience research and preliminary primary research. This paper will explore the potential viability of "career resilience" as an overarching construct to further illuminate the practice of career development and, specifically, to guide the development of new career interventions and curricula.

4.2 Specific Objectives

This research was undertaken in order to learn more about:

- The extensive body of quantitative and qualitative research that exists to support the construct of resilience

- Whether it is possible to extrapolate from this research anything of relevance to the career development field and, specifically, to the development of career curriculum

- What has helped/hindered students who have made the transition to post-secondary education

- What factors contributed to drop-out and failure among students who were not successful in this transition

- Whether the factors identified by these two groups of students mirrored factors identified in the resilience research

- The key preoccupations and hopes of senior secondary students as they prepare for their transition to post-secondary education

- The key preoccupations and hopes of significant adults—teachers, guidance counsellors and parents/guardians or significant adults[1]—as they seek to support this transition

- Whether these preoccupations and hopes align with risk and protective factors from the resilience research.

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1. N.B.: Parents/guardians and significant adults in the lives of students participating in the Future to Discover program were engaged in this research and became a target audience for the Grade 12 curriculum. When referring to this group throughout this paper, we will use the term "parent" to refer to this broader group, including guardians and other significant adults.

4.3 Outcomes

While an extensive review of existing resilience literature was conducted, the primary research undertaken for this report is preliminary in nature and limited in scope. The research was primarily intended to inform and guide the development of the Grade 12 Future to Discover career development intervention, providing an organizing framework and specific outcome goals.

It is hoped that a secondary outcome of the research will be the possibility of applying the construct of resilience more broadly to the career development field and further career education curriculum development. This report represents an initial step toward better understanding this potential application.

Chapter 5

Research Methodology

5.1 Overview of the Methodology

Environmental scanning is the acquisition and use of information about trends, events and relationships, the knowledge of which can assist in strategic planning and action (Adapted from Choo, 2001). CCDF carried out the following activities for the environmental scan:

- **Literature Review**

  CCDF's primary focus was national and international academic research, supported by web-based review of articles and sites. CCDF:

  - identified relevant studies, journal articles and books published in the last 10 years across Canada and internationally
  - reviewed the literature for key theoretical foundations, trends in the definition of resilience and the evidence base supporting the construct
  - identified protective factors that were empirically linked to increased resilience
  - extrapolated educational strategies and interventions to support the development and/or enhancement of these protective factors.

- **Focus Groups**

  Focus groups are designed to gather information on the perceptions and views of representatives from a defined target group. Focus groups are particularly useful in exploratory research or in adding depth and clarity to trends gleaned from literature reviews. CCDF:

  - identified groups of students in first-year PSE programs (including university, college, private vocational and apprenticeship)

  - conducted focus groups or one-on-one interviews with students from diverse streams of PSE
  - interviewed young adults who had dropped out or failed at their first attempt at PSE.

- **Input from Key Stakeholders**

  Recognizing their expertise and direct access to the target audience over the last two years, CCDF sought the input of Future to Discover facilitators in Manitoba and New Brunswick. CCDF conducted a structured group interview with all Future to Discover facilitators in New Brunswick. In addition, these facilitators initiated a process to gather input directly from Grade 11 students and parents.

5.2 Steps in the Research

The basic steps in the research were as follows:

- Consult with network of Canadian and international researchers and practitioners regarding literature and/or innovative developments related to resilience and career development

- Review the literature on resilience and any existing applications to curriculum development and career development

- Determine research questions

- Develop focus group protocols for first-year students in post-secondary education and those who have dropped out of or failed their first year

- Conduct focus groups with groups of first-year students across three streams of post-secondary education (college, university and private vocational)

- Conduct telephone interviews with first-year apprenticeship students

- Conduct telephone interviews with students who dropped out of or failed their first year of post-secondary education

- Develop protocol for group interview with Future to Discover facilitators

- Conduct group interview with Future to Discover facilitators

- Develop self-complete surveys for Grade 11 students and their parents

- Disseminate surveys to parents and students (via Future to Discover facilitators)

- Analyze completed surveys

- Draft preliminary report, outlining key findings and mapping development for Grade 12 Future to Discover career development intervention

- Develop Future in Focus (Grade 12 intervention)

- Elicit feedback on Future in Focus activities from Grade 12 students in Ontario and New Brunswick

- Train Future to Discover facilitators to deliver Future in Focus

- Prepare and submit final research report.

5.3 The Sample

Targets for sampling were set for the following:

- focus groups with students in first-year college, university or private vocational schools

- interviews with first-year apprenticeship students and those who had dropped out or failed in first year

- interviews with Future to Discover facilitators

- surveys of Grade 11 students and their parents.

Keeping in mind that the purpose of this primary research was to inform the development of the Grade 12 Future to Discover career development intervention, sampling goals were not set with statistical analysis in mind. Rather, the intent was to take a "snapshot" of relevant groups for descriptive purposes.

Within this framework, however, there were conditions established for the data collection from focus groups/interviews in order to promote representation (not necessarily equal) across the following criteria:

- all four streams of post-secondary education (college, university, private vocational and apprenticeship)

- urban/rural

- anglophone/francophone

- male/female.

Table 2 shows the distribution of participants across these four criteria:

	College	University	Private Vocational	Apprenticeship	Dropped Out/Failed
Urban	41		10	3	5
Rural		10		1	
Male	17	3	3	3	2
Female	24	7	7	1	3
Francophone		10	10		
Anglophone	41			4	5
Total	**41**	**10**	**10**	**4**	**5**

All Future to Discover facilitators participated in the group interview (6 francophone, 6 anglophone; 8 female, 4 male; urban and rural representation). Facilitators disseminated surveys to students completing Grade 11 and their parents at Lasting Gifts sessions. Surveys were returned by 139 students and 131 parents. Session participants included representation across urban/rural, male/female and francophone/anglophone. It is important to note that this group does not capture the perspectives of students and/or parents who have not engaged in the Future to Discover project. The characteristics and motivations of this group are not reflected in this research.

Once the Future in Focus career development intervention was developed, it was delivered to mixed female/male groups of Grade 12 students in Ontario (29 urban, anglophone) and New Brunswick (16 rural, francophone). Test sessions were conducted in a large urban school, with significant racial and socio-economic diversity (Ontario) and a smaller rural school (New Brunswick). In Ontario, interventions were delivered intensively (over three consecutive days) during regular class periods. In New Brunswick, interventions were also delivered intensively, but to students who volunteered to attend after school hours. Representatives from the Future to Discover project in New Brunswick were present at both test sites to observe and provide feedback. Verbal and written feedback was also collected from pilot participants.

5.4 Instruments

Original tools were developed for all aspects of the primary research. All tools were reviewed and vetted by Future to Discover project representatives and the Canada Millennium Scholarship Foundation project authority.

The focus groups and one-on-one interviews with first-year students across the four streams of post-secondary education were 45 to 60 minutes in duration. Seven lead questions were considered core to the protocol, with nine optional questions to be used at the discretion of the facilitator and time

permitting. Questions were grouped according to the following seven themes:

- Getting Ready: factors affecting their preparation for the transition to post-secondary education

- PSE Decision-Making: factors that influenced (helped/hindered) the decision

- Expectations: the extent to which their expectations for post-secondary education proved to be realistic/unrealistic

- PSE Experience: positive and negative elements of their current post-secondary experience

- Strategies/Supports for Success: factors that have helped them to overcome challenges in their first year of post-secondary

- Contingency Planning: the likelihood of retention beyond first year and the prevalence of "back up" plans

- Wrap Up: overall conclusions/advice for Grade 12 students.

Questions for those who had dropped out of or failed their first year of post-secondary education were slightly adapted from the first-year students' protocol. Greater emphasis was placed on determining those factors which contributed to their dropping out or failing, as well as on factors they thought would have enabled them to continue with their studies.

For the Future to Discover facilitators, group interview questions were formulated and distributed to all facilitators in advance. Facilitators were in regular contact with the target population of the career development intervention under development (Grade 12 students). Accordingly, they were asked about the preoccupations, realities, strengths and needs of these students. Having facilitated the Future to Discover program since Grade 10 and as experienced educators, they were asked to point to gaps in the program and areas needing specific attention in order to better prepare students for their imminent transition from secondary school. Finally, they were asked to speak to variations across gender, geography, language and socio-economic reality.

Student and parent surveys were drafted and refined in consultation with Future to Discover facilitators. Students were asked to rate their level of concern relative to a number of variables associated with their imminent transition. Space was provided for them to add other preoccupations or concerns and to prioritize the two or three concerns which held the greatest intensity for them. Finally, they were asked to identify any specific information and support they were hoping to receive in Grade 12 to assist them with their transition.

Parents were likewise asked to rate their level of concern related to a number of variables associated with their child's transition from secondary school. They were invited to list other preoccupations or concerns and to identify the two or three concerns that were their most significant preoccupations. They too were asked if there was any specific information and/or support they hoped their child would receive in the upcoming year.

5.5 Data Collection and Sampling Procedures

The scope of this research study was primarily limited to gathering information to support the development of a career development intervention for application in two provinces (New Brunswick and Manitoba). The information gathered, however, could contribute to the understanding of broader applications of resilience to the career development field nationally and internationally.

The Canada Millennium Scholarship Foundation project authority and Future to Discover Project Managers from New Brunswick and Manitoba were consulted at every step of the research and vetted the methodology, all key protocols and sampling standards. Future to Discover facilitators were engaged formally via the group interview, but also provided informal feedback and suggestions via the New Brunswick and Manitoba Project Managers.

Our goal was to conduct in-person focus group sessions with small groups (N=5-15) of first-year students in the four streams of post-secondary education. This proved viable for students in college,

university and private vocational programs. Captive, in-class apprenticeship students were not readily accessible, however, so one-on-one telephone or face-to-face interviews were conducted instead.

Research sites were established in Ottawa, Ontario and a rural site in New Brunswick. The former site provided both francophone and anglophone students based in mixed urban and rural settings. The latter site provided francophone students based in a rural setting.

The following focus groups were held:

- private vocational institution, Hull, January 25, 2006 — nine students (6 female; 3 male) in first-year

- college, Ottawa, February 7, 2006 — 41 students (approximately 50 per cent female and 50 per cent male) in first-year General Arts and Sciences Program

- university, February 16, 2006 — 10 first-year students representing multiple faculties

- one-on-one telephone interviews were held with four first-year apprenticeship students from Ontario.

In the college and private vocational groups, students were in pre-existing classes where the teacher responded to a call from CCDF to the institution to participate in the research. The college participants were enrolled in a General Arts and Sciences Program, which could lead to multiple paths of further study or work. The private vocational participants were enrolled in a specialized program with a clear and relatively defined career focus. The university group was comprised of students across multiple faculties who responded to on-campus promotion of the focus group via in-class announcements, posters and mass e-mails to the student body. Apprenticeship students were identified via Algonquin College, Northern College and the student peer group of a first-year apprentice based in rural Ontario.

Those who had dropped out of or failed their first year of post-secondary were identified via an Ottawa-based career service providing a range of supports to persons seeking employment. Internal files were reviewed to pull clients who had self-identified as fitting these criteria and, with permission, their

contact information was forwarded to the researchers. These participants were then contacted and interviewed via telephone.

Interviews were conducted in the primary language of the participants. All focus groups were recorded (with permission) and/or had a note-taker to capture all comments. Detailed notes were taken for one-on-one interviews and summaries across groups completed.

Future to Discover facilitators were identified as a valuable source of information due to their exposure to Future to Discover participants and their extensive experience as educators and guidance professionals. It is important to note, however, that their exposure to students who had not attended Future to Discover sessions was limited or non-existent.

Questions were disseminated to facilitators in advance and through a group interview conducted via telephone with all facilitators on January 31, 2006. Francophone and anglophone researchers led the call and facilitators responded in their language of choice. A transcript of the call was recorded. A subset of Future to Discover facilitators also submitted supplementary responses in writing.

Student and parent surveys were not originally conceived as part of this research. When the Future to Discover facilitators suggested this option and volunteered to conduct the surveys, it was agreed that this could be a source of important data to inform the development of the Grade 12 Future to Discover career development intervention.

Future to Discover facilitators distributed surveys to Grade 11 students and their parents attending the Grade 11 Future to Discover career development workshops (Lasting Gifts). Survey completion was voluntary. All submitted surveys were then sent to the researchers for analysis. Results were used in the development of the Grade 12 Future to Discover career development intervention (Future in Focus).

5.6 Data Analysis

The data collected in the primary research (focus groups, telephone interviews and surveys) is qualitative, with small sample sizes that was not amenable to statistical analysis. The purpose of this research was not to confirm a hypothesis, nor to make broad generalizations. Rather, its primary purpose was to guide and inform curriculum development. Secondarily, it was hoped that the research could serve to stimulate further research, dialogue and debate regarding the potential role of resilience in career development theory and practice.

Accordingly, the researchers looked for information in the focus groups, interviews and surveys that provided evidence for and against the importance of resilience, including:

- factors identified as important in successful career development/career transitions that were consistent with protective factors identified in the resilience research

- factors that were identified as detrimental to career development/career transitions that were also identified in the resilience research as risk factors.

To determine if there were differences across response groups, data collected from first-year students across the four streams of post-secondary education and those who had dropped out/failed in their first year of post-secondary were considered separately. While minor variations were detected, common patterns emerged and were compared to the resilience research.

Data collected from Grade 11 students and their parents via surveys were analyzed separately to distinguish the preoccupations of students from those of their parents.

Chapter 6

Findings of the Primary Research

6.1 Focus Groups and Interviews

Focus groups were held with first-year students in college, private vocational and university programs. Telephone interviews were conducted with first-year apprenticeship students. In addition, researchers conducted telephone interviews with young adults who had dropped out of or failed their first attempt at post-secondary education. These individuals were referred by an Ottawa-based public career service. This latter element of the environmental scan was added to the original methodology to capture the unique perspective of those who had not made it in their first attempt.

A key finding was that up to 50% of students in first-year programs were in fact on their second or third attempt at post-secondary education. In the end, the themes extrapolated from first-year post-secondary students were echoed by those who had dropped out/failed.

By far the most consistent and significant result across all these groups was the extent to which students reported a lack of career direction. As noted above, many (close to 50 per cent in the public college and university focus groups) had failed or dropped out of a previous PSE program before coming to their current program. In most cases, they attributed this initial setback to an absence of clarity regarding their career futures. Without a sense of purpose or meaning, they felt unmotivated and disconnected from their learning. It is noteworthy that a significant number (approximately 80 per cent in the college group) still did not have any clear sense of career direction. Students reported either receiving no career guidance at the secondary level or not

finding the available guidance useful. Some seemed to feel a sense of paralysis as they experienced parents, teachers, counsellors and "society" exerting significant pressure on them to decide. A common lament was that students felt unprepared, too young and unsupported in "deciding what I was going to do for the rest of my life."

Students also felt unprepared for the realities awaiting them in post-secondary education. Students who couldn't wait to leave their small town found themselves isolated, homesick and unable to carry on studying once at their post-secondary institutions. Others pointed to a lack of preparation in dealing with the practicalities of living independently. Many struggled with making ends meet, keeping track of bills, shopping for groceries, cooking and cleaning. Still others referred to the challenge of managing their time across multiple roles (student, part-time worker, renter and friend) and within the less structured environment of post-secondary education. Most students felt they did not have enough information about what their post-secondary experience would be like. They found promotional brochures produced by post-secondary institutions and their recruiters to be misleading. Many students were shocked by the academic realities they faced, with both extremes represented among focus group participants (several students from the private vocational college said that they were unprepared for the academic rigor, while a number of college students noted that they were disappointed by the lack of challenge and stimulation.).

It is interesting to note that several students in the university focus group suggested exposure to first-year post-secondary students, on-campus programs and experimentation with less structured instructional styles in Grade 12 as mechanisms to increase preparation for post-secondary education.

Of the students we talked to, there were some across all post-secondary streams and those who had dropped out of or failed their first year of post-secondary whose statements emphasized the importance of meaningful engagement in the community and diverse experience as a way of facilitating successful transitions to post-secondary education and clarifying life direction. A number of students pointed to programs such as Youth Service Canada and Katimavik as vital ways to "give back" to their community and to gain valuable life/work experience. The value of part-time work and other ways to "taste" different work options (co-op education, work placements, internships) was also emphasized.

The role of significant relationships and their capacity to provide needed support and guidance was a key theme. Common influences upon post-secondary choice included parents, teachers, coaches, adult relatives and friends. A number of students referred to encouragement from supportive teachers as being a vital contributor to their choice.

6.2   Input from Key Stakeholders

CCDF conducted a group interview with Future to Discover facilitators in New Brunswick on January 31, 2006. Questions were distributed to the facilitators in advance and both English and French groups met prior to the interview to consolidate their responses. The English facilitators submitted their responses in writing.

Students who participated in the Future to Discover project developed a career plan as part of their Grade 10 experience. Facilitators felt strongly that students in Grade 12 need to revisit and consolidate this career plan (including access to some one-on-one support from the facilitators). They felt

that the Grade 12 curriculum must make meaningful links to the Grade 10 and 11 Future to Discover curricula. Both students and parents should have workbooks, with practical information and checklists. These workbooks must stand alone, having clarity and value regardless of whether a participant attends a workshop. With deadlines for applications to post-secondary education arriving as early as November, the Grade 12 curriculum must be principally focused on facilitating a successful transition to post-secondary life as opposed to shaping post-secondary choice. While the primary focus must be on students, facilitators underscored the importance of keeping parents connected and engaged. It was suggested that a session be held for parents at the beginning of the workshop series to orient them to the approach, goals and content and to explore ways that they can support their teenager. It was further suggested that workbooks be provided at this initial session and that parents be invited back for the final hour of the last workshop, when they would join students in a closing celebration. Facilitators suggested that students should meet for four workshops immediately after school. Each of these workshops would focus on different themes, with engaging activities and information to supplement the themes in the workbook.

Students who were participating in the Grade 11 component of the Future to Discover program completed written surveys. Submitted surveys revealed that from the pre-determined list of possible preoccupations, these Grade 11 students were most concerned about:

- coping with pressure to succeed
- dealing with not getting accepted to a post-secondary program
- getting by academically in their post-secondary program.

By far the most dominant, self-identified concerns were a lack of career direction, uncertainty around career choice and/or lack of support/information to guide their career decision-making.

When asked to prioritize their concerns based on intensity, the top three concerns were:

- lack of clarity/needing help with career decisions/choices

- the need for financial assistance, information and budgeting support

- anxiety about academic pressures/not succeeding academically.

Other significant concerns included: finding/choosing the right post-secondary program and/or the right school.

Students surveyed noted that they were hoping to find the following information/support in Grade 12:

- information about occupations, field of work

- information about schools

- support with career planning

- information on possible routes from education to employment

- information on scholarships, loans and bursaries

- support with decision-making

- information about post-secondary institutions.

Parents who were participating in the Grade 11 component of the Future to Discover program were similarly surveyed. It is noteworthy that the parents who responded to our survey appeared to have moderate to high levels of concern in almost all the preoccupations listed on the survey. The three areas where they expressed the most concerns were:

- whether their child would be able to get by academically in his/her post-secondary program

- the need for financial aid/assistance to pay for post-secondary education

- their child's lack of clarity around a career direction/decision.

Many of them also expressed considerable concern regarding:

- The capacity of their child to live independently

- The pressures exerted on their child related to their transition to post-secondary life

- The prospect of their child not being accepted to post-secondary education

- The stress experienced by their child due to leaving high school.

Parents were less concerned about the prospect of their child not leaving home and their capacity to fit in socially once they left high school.

When asked to prioritize their concerns based on intensity, the top three concerns were:

- Their child's career decisions/choices

- Finances

- Their child's capacity to succeed academically.

Two other significant concerns were:

- Their child's maturity and readiness for independence; and

- The post-secondary application process.

Finally, when parents were asked what specific supports/information they hoped their daughter or son would receive in Grade 12, they said:

- Information/support with financing their education

- Support with career decision making (information about occupations, schools, programs)

- Exposure to real workers from a variety of occupations.

Chapter 7

Applications to Curriculum Development

7.1 Global Applications

The key protective factors identified in our review of the extensive body of research on resilience were consistent with outcomes identified in our preliminary primary research, as well as factors identified from career development practice and theory as being critical to career success. This congruence between sources served to further reinforce the authors' intuitive sense that resilience research had relevance not only to Future in Focus curriculum development, but to career development more broadly.

For the purposes of curriculum development, it was important to define the potential scope of the intervention. Future in Focus was originally conceived as a series of four two-hour workshops to be delivered after school to Grade 12 students. Within this limited framework, the achievement of significant intrapersonal and/or institutional change was not a realistic goal.

It is widely acknowledged by career theorists that strong positioning on intrapersonal factors (such as self-efficacy, autonomy, sense of purpose, altruism, motivation and adaptive distancing) contributes to career success. The trajectory of the development of individuals' positioning on these factors, however, is subject to considerable debate. While significant learning/growth experiences can no doubt influence intrapersonal factors, it is generally agreed that individuals' positioning on intrapersonal factors reflects a more complex combination of experiences accrued across his or her whole lifespan.

Similarly, the status of an individual's many institutional supports (such as connections between school, family and community, challenging in-school

curriculum and consistent expression of community values and norms) is a product of systemic forces such as socio-political trends and/or concerted and sustained advocacy and community development. While a curriculum such as Future in Focus could build students' awareness of existing curricular, extra-curricular, community and work opportunities and emphasize the value of diverse participation, it could not purport to fundamentally change students' external environment. Thus, although the curriculum will focus on generating awareness of opportunities and participation, the primary thrust of curriculum development is on internal factors related to social/coping skills (such as problem solving, planning, teamwork, interpersonal skills, critical/reflective thinking and the reduction of non-productive coping) and external factors linked to interpersonal support (such as the engagement of parents, teachers and other significant adults and peer and community networking).

In addition to targeted interventions (which will be delineated on a workshop-by-workshop basis herein), there are a few noteworthy thematic elements that were built into the Future in Focus curriculum:

- All workshops provide opportunities for students to "rehearse" skills and strategies they will likely need in their post-secondary life. Real-life scenarios and visualization are used to provide a "dress rehearsal" for challenges and adversity they may encounter in the future. Specific strategies are taught to assist students to replace non-productive coping styles with active coping styles in

response to challenging situations. Students have the opportunity to learn from the experiences, successes and failures of others and reflect critically on their own response to adversity.

- The use of metaphor as a means to promote reflective thinking. For example, Workshop 1 opens with the exploration of "The Transition Tree" (see Illustration 6.1). Students engage in the reflective process of personally identifying with a position on the tree and in dialogue with others explore areas of congruence and differences compared to others' choices. Working with metaphor is intended to heighten participants' sense of identity, critical consciousness, critical/reflective thinking and capacity to self appraise. Dialogue with others is intended to enhance appreciation of diversity, sensitivity and interpersonal awareness. A second significant thematic metaphor used extensively throughout Future in Focus is "The Backpack." The connections between transition and journeys are explored, including the need to plan, prepare and pack well. Throughout the four sessions, students are encouraged to reflect on their learning and add those elements they want to be sure to have in their metaphorical backpack for their journey to life beyond secondary school.

- A considerable amount of group work is integrated throughout the sessions. Groups are asked to work collaboratively to solve problems, adapt to change/challenge and find solutions. To succeed, students need to take personal responsibility for their contribution to the group, trust others, demonstrate flexibility, implement active coping styles, show interpersonal awareness, respect for diversity and demonstration of social responsiveness. Many such group activities are intentionally time sensitive and introduce challenges that require demonstrations of autonomy, the construction of productive meanings for events and willingness to seek help. In the debrief of activities, students are asked to reflect on their own behaviour in the group, identifying both positive and non-productive coping strategies and skills.

- Students are encouraged to share their experiences, learning and questions/concerns with their parent(s) and/or peers throughout the workshop series. Parents are invited to an orientation session at the beginning of the series and are given a practical reference guide to inform them about what their children will experience, provide concrete ways they can support him or her in their learning process and practical information about the transition to post-secondary (such as financing, applications and post-secondary services).

- At the end of Workshop 1, students identify where they are with respect to the clarity of their decision about post-secondary life. Whether the students identify themselves as feeling definite about their decision, strong but still in need of work or completely unclear, they connect with others in the same category and have opportunities during each workshop to work either with their group or independently on a tailored, concrete action plan. These action plans include specific steps for the student to undertake. Each plan is tailored to the specific student, with steps to reflect the amount/kind of research needed and their goal for next year (post-secondary education, work or other). Over the course of the workshop series, often students will move from one category to another (becoming more or less clear as they gather more information about themselves and their choices). The action plans are a vital component of the series, providing specific steps and strategies to help students move closer to their preferred future.

7.2 Orientation Session for Parents

Prior to the delivery of the four-workshop series to Grade 12 students, the parents of participating students are invited to an orientation session. This evening session is intended to orient key supports for the Grade 12 students to the goals, process and content of the workshop series and to provide them with practical information and tools to assist them in their important support role. In Grade 11, parents participate with the project participant in the full workshop series. In Grade 12, while the process of adaptive

distancing has begun, parents remain vital supports. This session and the support tools provided are intended to keep them engaged and active in this role.

Key interventions in this workshop include:

- Ice-breaker Activity: Parents are invited to reflect on and share their key concerns related to their teenager's transition from high school to post-secondary life. They connect with others who share similar concerns and hear the common themes that emerged from the survey of parents conducted in New Brunswick as part of the research to develop the Future in Focus series. They realize that their concerns are shared by many and are not abnormal.

- Introduction to the Concept of Resiliency: Participants are introduced to the qualities of resilience inductively (through observing the qualities of a rubber ball). They hear that these qualities (ability to bounce back, roll along smoothly, get over or around barriers and obstacles and stay afloat) are qualities that Future in Focus will be promoting and strengthening in their teenagers. Transitions are likened to journeys and the metaphor of the backpack (and its role in Future in Focus) is introduced. The key findings of the resilience research are presented and participants are guided through a reflective process regarding their key role in fostering resilience in their daughters and sons.

- Adult's Reference Guide: Parents are introduced to a practical reference guide that will be theirs to take home. It will be used in the context of this session to enable them to experience for themselves some of the activities their project participant will experience in Future in Focus and it contains concrete information (e.g., financial aid, institutional supports) and tools to support them in their role as "career allies" to the project participants.

- Helping Your Teenager Cope with the Challenges of Transition: Using their own thoughts/feelings about attending the session as the catalyst, parents are introduced to "STAC." STAC is an acronym that stands for: Situation, Thoughts/Feelings, Action and Consequences. The "S" in STAC also stands for: Stop. Project participants will be learning this practical strategy to help them develop consequential thinking skills. This strategy teaches them to take control of this process, stopping long enough to interrupt the reaction/action sequence so they can consider if their reaction will lead to a desired consequence and, if not, they can change their reaction/action. Parents explore this as a tool they can use with their teenagers to work through tough situations and for themselves as they move through their own transition.

- Being a Transitions Ally: Parents are introduced to the "Circle of Allies" that their teenagers will be developing in Future in Focus. The key role of parents in this circle is explored. Their own need for allies during their teenager's transition is discussed and they consider who they might want in their own Circle of Allies. In small groups, they explore how they can support the development of their teenager's Circle of Allies while respecting their privacy.

- Closure: The vital role parents play in fostering and strengthening their teenagers' resilience is reinforced. The "Story of Avi" is read aloud. This story speaks to the importance of having confidence in the capacity one's children to succeed, believing in them and encouraging them. Finally, parents have an opportunity to consider the "lasting gifts" they want to give their teenagers.

Meta-analyses of the resilience research (Constantine, Benard & Diaz 1999; Benard 2005) have resulted in the identification of three core protective factors:

- caring and supportive adult relationships

- opportunities for meaningful student participation in school and community

- high parent and teacher expectations regarding student performance and future success.

Two of these three implicate parents. The research also points to many resilience-enhancing interpersonal supports which directly implicate parents. Similarly, research in the career development field, reinforces the critical role parents play in influencing career decision making and post-secondary choice (Magnusson and Bernes, 2001; Looker and Lowe, 2001). But parents

are often unaware of this influence (particularly as their teenagers begin the process of adaptive distancing) and may not feel prepared or equipped to assume this role in a proactive and positive way.

The purpose of this session, therefore, is to ensure parents are aware of the vital role they play and have a range of information, tools, strategies and supports to assist them to consciously and actively contribute to their teenagers' resilience. The facilitators are available to parents throughout the year and they are invited to join the project participants and facilitators for a final celebration at the end of the Future to Discover project.

It is noteworthy that the Future to Discover facilitators may also act as key contributors to the resilience of their students. Research (Benard 2004; Norman 2000; Crosnoe & Elder 2004; Schoon Parsons & Sacker 2004) speaks to the importance of having a teacher who believes in the student and the key role of caring and supportive relationships. The Future to Discover facilitators work intensively with students and their parents over a three-year period, providing a trusting relationship, emotional support, a positive role model and the facilitator's genuine confidence in the student.

7.3 Workshop 1

The first workshop for Grade 12 students is *Revisiting Your Focus*. In Grade 10, participants in the Future to Discover project are invited to a Career Focusing program intended to help them determine what elements are most important to them in their future work life (their focus). This focus becomes a touchstone as students explore possible work options and next steps for education. Given that two years and, no doubt, considerable growth and development have occurred since completing Career Focusing, it was important to begin this workshop series with an opportunity for students who completed a focus in Grade 10 to revisit it. Students who did not complete a focus in Grade 10 are in no way disadvantaged, as this workshop guides them through developing a current focus.

Key interventions in Workshop 1 include:

- Shapes Activity: Participants work in groups to create as many objects as possible from a series of diverse shapes. This is a time-intensive activity.

- Creating Life/Work Plans for Patrice: Students are invited to apply the same principle to build possible future plans for a fictitious character (Patrice) based on her unique constellation of values, interests, personality traits and skills. Working in groups, this creative exercise enables students to see the diverse possibilities emanating from a static "moment-in-time" list of personal elements.

- Giving Shape to Your Own Future: Participants recall the work options they considered in Grade 10 based on the Career Focus. They then assess their own interests, values, personality traits and key skills using a systematic process. A personal profile (similar to that presented for Patrice) is created by each student. Working individually, participants create two to three possible career plans based on their own unique profile.

- Giving and Receiving: Anonymous personal profiles (with no associated career plans) are placed in envelopes and randomly distributed to pairs (ensuring no pair receives their own profile). Pairs then work collaboratively to create two or three possible career plans based on each profile. Envelopes containing the profile and the plans conceived by the pairs of peers are then returned to the original owners of the profiles.

- Imagine Your Plan A …and B: Students have time to work individually to examine the perspective of their peers on their profiles and to re-examine their work options identified in Grade 10 as well as the career possibilities they identified in "Giving Shape to Your Own Future". They arrange the six to nine possibilities they now have according to preference and have an opportunity to reflect on this and share with a partner. Participants see that who they are and their career preferences may evolve and change over time. They may have their initial choices confirmed or have identified new and unexplored possibilities. They begin to understand that what is most important to them and what they do best may reflect more than one option.

Table 3 outlines the key messages/learning and protective factors being promoted via the content and process of each intervention.

Intervention	Key Messages/Learning	Dominant Protective Factors
Shapes Activity	• A multitude of objects can be constructed from the same series of shapes.	• High expectations for success • Active coping styles (problem solving, teamwork, effective communication, active emotional expression, positive self-talk, impulse control)
Creating Life/Work Plans for Patrice	• Each person is a unique constellation of interests, values, personality traits and skills. We can combine these in the same way as the shapes to create multiple future plans that reflect that unique constellation.	• Creativity • Cognitive competence, consequential thinking • Realistic appraisal of environment, capacity to construct positive meanings for events
Giving Shape to Your Own Future	• I can tap into and become aware of my own unique constellation of interests, values, personality traits and skills. • This unique constellation may evolve and change over time and with experience. • There are a number of future options that reflect and respect what is most important to me. • Who I am and what I do best can become a key touchstone to provide grounding and clarity as I consider options throughout my life.	• Internal locus of control, self confidence, sense of identity • Sense of purpose • Goal orientation • High expectations for success, optimism, hope
Giving and Receiving	• It is possible to get stuck in the rut of our own limited world view and sense of self. • Allies can help us break out of this rut and see fresh perspectives.	• Flexibility • Willingness to seek help • Relationship with teachers and peers
Imagine Your Plan A … and B	• Outside perspectives may serve to confirm my original plan or they may shake up my thinking. • Who I am and what I need/want in my career may change and evolve over time. • I am in control of my choices. • My knowledge of who I am and what I do best provides a solid grounding for me and my career development.	• Self-efficacy (self-esteem, belief in self, sense of mastery, internal locus of control, self confidence, sense of identity)
The Decision Triangle	• Wherever I am in my decision making, I am not alone and there are opportunities and challenges. • I can take concrete steps to move me closer to where I want to be.	• Sense of purpose • Achievement/goal orientation • High expectations for success, optimism, hope • Personal responsibility, ideology of activism • Persistence, determination, inner will, motivation • Realistic appraisal of environment, capacity to construct productive meanings for events, healthy perspective with respect to adversity

- The Decision Triangle: Based on this revisiting of their focus, students consider whether they now feel that their sense of direction is unclear, strong but still needing some work, or solid for now. They connect with other participants who identify themselves as in the same category and begin to work on a concrete and specific action plan to help them move closer to their preferred future.

The heart of Workshop 1 is the connection students make between their own future plans and their personal profile. Students see that their own unique constellation of interests, values, personality traits and skills can combine in a number of ways to provide them with a number of meaningful future options. This clear connection between future plan and self is intended to act a powerful driver and motivator. It should help to anchor decisions and serve as a guide in times of challenge and uncertainty.

Charles Henri Amherdt (2006) suggests that career resilience is achieved when individuals have *savoir-devenir*, or knowledge of becoming. Such knowledge provides individuals with the capacity to look into the future and see a clear direction for themselves that reflects who they are (*savoir-être*: knowledge of one's values, interests and personality traits) and what they are most capable of doing (*savoir-faire*: knowledge of ones' key skills). Accordingly, this intervention provides students with an opportunity to clearly connect their chosen future directions with these very elements.

7.4 Workshop 2

The title of Workshop 2 is "Coping Skills & Strategies" and it is focused on the development of active coping styles. The ice-breaker activity has students observing the facilitator play with a rubber ball. They are asked what qualities they saw in the rubber ball. These qualities (able to bounce back, get over/ around obstacles, able to roll smoothly, won't sink in water) are then explored as qualities that we all want in life. The concept of resilience is introduced inductively in this way.

Key interventions in Workshop 2 include:

- Bounce-Back Challenge Activity: Students write down one skill they know they have. They then form small groups and each group member reads their skill aloud. In 10 minutes, the group must put their skills together to form a company. They must name it and prepare a one minute advertisement promoting its product(s) and/or services(s). After 5 minutes, the facilitator randomly takes one of the group's skills away. The person remains, but they now need to adjust their company and advertisement accordingly. Each group presents their advertisement to the group. As in many of the interventions in Future in Focus, the most significant learning occurs in the debriefing after the activity. Students are invited to reflect on the capacity of the groups to overcome challenge and the contribution each group member made to their success. Skills, attitudes and strategies that helped are identified. Behaviours which could hinder are also explored.

- STAC: The connection between participants' thoughts or feelings in response to a situation, the actions they take and resulting consequences is explored. Students discuss the extent to which they can control their reactions to situations. A strategy is presented to help students interrupt the reaction-action sequence and choose an action to move them to their desired consequence.

- Real Life Scenarios: Students work with real life scenarios taken from first-year post-secondary students. Scenarios present challenging situations they have encountered. Working in groups, participants use STAC to develop at least three possible reactions, actions and consequences for their scenarios (one non-productive and two productive). Productive responses are shared, the question of whether people have control over their reactions/actions is revisited and STAC is reinforced as a strategy to exercise choice and create the desired consequences.

- Are You a Rubber Ball?: The qualities of the rubber ball are revisited, including the notion of being "well rounded". Sources of stress are explored with the group and they then work individually with a visual tool (The Wheel) to graph the extent to which their life is in balance. A person in full balance would end up with a perfectly round graphic. While no one is likely to achieve this, the activity brings to light areas where the student is particularly out of balance. They are encouraged to discuss their graph with their parents.

The workshop closes with an opportunity to revisit the Decision Triangle from Workshop 1. Students re-connect with their group (or join a new group) and work collaboratively, independently and/or with the support of the facilitator on their tailored action plans.

The literature (Frydenberg 2004a; Constantine, Benard & Diaz 1999; Benard 2004) is replete with references to the active coping skills that underscore resilience.

Table 4 outlines the key messages/learning and protective factors being promoted via the content and process of each intervention.

Intervention	Key Messages/Learning	Dominant Protective Factors
Bounce-Back Challenge Activity	• Groups have the capacity to come together and overcome challenge. • I (and everyone else in the group) contributes to/hinders the group's progress through the attitudes, skills and strategies we adopt.	• Sense of mastery, self confidence • Achievement/goal orientation • Humour • Creativity • Active coping styles (problem solving, ability to plan, teamwork, effective communication, active emotional expression, positive self-talk, impulse control) • Willingness to seek help • Absence of non-productive coping
STAC	• The thoughts/feelings I experience in response to a situation directly influence the action I take. This action, in turn, leads to specific consequences. • I am in control and can stop the reaction-action sequence for long enough to decide if my reaction and action will lead me to the consequence I want. If not, I can change it.	• Sense of mastery, internal locus of control • Personal responsibility, ideology of activism • Critical consciousness • Active coping styles (problem solving, ability to plan, teamwork, active emotional expression, impulse control) • Cognitive competence, consequential thinking • Absence of non-productive coping
Real Life Scenarios	• Exposure to real life challenges encountered by people in their first year of post-secondary. • Exposure to a range of ways to overcome these challenges. • Recognition that when I encounter challenges (whether they are the same or different from the ones explored here), I have options and strategies to overcome them.	• Sense of mastery, internal locus of control, self confidence • Flexibility • Active coping styles (problem solving, ability to plan, teamwork, active emotional expression, impulse control) • Consequential thinking • Critical/reflective thinking • Absence of non-productive coping
Are You a Rubber Ball?	• Stress can occur when I have too much (e.g., school work) or too little (e.g., caring relationships) of things in my life. • A "well-rounded" person won't be in perfect balance, but will have a range of activities and connections in their school, work and community lives.	• Critical consciousness • Realistic appraisal of environment • Critical/reflective thinking

7.5 Workshop 3

Workshop 3 is titled "Managing Transitions" and is focused on helping students to prepare for their transition to post-secondary life. The metaphor of journey is explored as a way to illuminate the key stages of transition: setting out, trekking and arriving. The challenges and opportunities of each stage are explored.

Key interventions in Workshop 3 include:

- The Obstacle Course: Two volunteers are blindfolded and are guided by the rest of the class through an obstacle course with specific tasks and desired outcomes. The first volunteer must go through the course with only minimal assistance to ensure safety. The second volunteer can ask for three things ("three wishes") to help complete the trek (e.g., someone to walk with and guide him or her, the opportunity to preview the obstacle course before setting out). Participants explore the differences between the two volunteers with respect to the speed, accuracy and outcomes each achieved.

- The Wheel Revisited: This activity revisits the "Are You a Rubber Ball?" activity from Workshop 2. Looking ahead now to next year (potentially their first year of post-secondary), students are invited to identify and graph the key areas where they anticipate challenges. In groups, participants work together to identify strategies and map out specific steps to overcome challenges. Participants explore the importance of being prepared and packing their backpack with vital information, attitudes, skills, strategies and supports that will help them overcome challenges as they encounter them next year. Again, students are encouraged to discuss this with their parents.

- Access Your Allies/Circle of Allies: Building on one of the key messages of the Grade 11 Future to Discover career development intervention, this activity begins with an ice-breaker that highlights how easy it is to find common ground with people, whether we know them or not. Then, recalling the image of the rubber ball again, students are introduced to a "Circle of Allies" and are given the

concrete support needed to build their own support network. Strategies to further build, sustain and adapt their Circle of Allies are explored.

- Ball of Rope: This activity provides a visual and physical reminder of the interconnectedness of groups, the contributions each person can make as an ally to others and the strength of networks to support people in times of need.

The workshop closes with an opportunity to revisit the Decision Triangle from Workshop 1. Students re-connect with their group (or join a new group) and work collaboratively, or independently with the support of the facilitator on their tailored action plans.

The research suggests strongly that resilience increases with experience and, by inference, that resilience could likewise increase due to secondary sources of experience (hearing the experiences of others and/or visualizing oneself work through experiences). The idea is that the more students are able to prepare for the realities of their first year of post-secondary, the more likely they will be able to avoid or bounce back from setbacks along the way.

The research (Frydenberg 2004; Norman 2000; Crosnoe & Elder 2004; Benard 2005) is clear that interpersonal supports are vital to resilience. Parent/family involvement is key, as is having adults (parents, guardians, teachers and/or other significant adults) who are informed, supportive and optimistic with respect to the student's future plans. Peer and informal networks are also crucial. Networks may include strangers who have been identified as having important information, expertise or experience to share.

7.6 Workshop 4

Workshop 4 is entitled "Final Check on Your Backpack" and it provides participants with an opportunity to ensure they have what they need in their metaphorical backpack to succeed next year. The session begins with the introduction of the metaphor of H_2O. Just as water is essential for any trek, there are key elements they will absolutely want to take with them in their backpack. In this case, H_2O suggests that if we Honour our Hopes and acknowledge the Hero Within, then Opportunities will open to us.

Table 5 outlines the key messages/learning and protective factors being promoted via the content and process of each intervention.

Intervention	Key Messages/Learning	Dominant Protective Factors
The Obstacle Course.	• Research and smart preparation can make a significant difference with respect to success. • There are specific attitudes, skills, strategies, tools and allies that can help me through challenging situations. • There may be signs, information and/or people right under my nose that would inform me about the realities of my post-secondary choice. • My action plan is a concrete way I can prepare for next year.	• Personal responsibility, ideology of activism • Trust • Realistic appraisal of environment, capacity to construct productive meanings for events, healthy perspective with respect to adversity • Willingness to seek help
The Wheel Revisited	• By visualizing myself in the reality of next year, I can anticipate and prepare for challenges. • Everybody is anticipating challenges next year — some we have in common and others are different. • The strategies identified by others can go into my backpack too. • Balanced activity in multiple areas of my life promotes resilience.	• Critical consciousness • Active coping styles (problem solving, ability to plan, teamwork, active emotional expression, impulse control) • Critical/reflective thinking • Consequential thinking • Active participation in community (curricular, extra-curricular, work, community)
Access Your Allies/ Circle of Allies	• I have the capacity to connect with people I don't know and find common ground. • The more I can surround myself with people who can provide me with specific support, expertise, information and/or experience, the more resilient I will be. • I have some strategies for approaching allies to ask for their help.	• Capacity to form relationships • Interpersonal supports (family, significant adults, peers) • Formal social supports
Ball of Rope	• I am an ally to others. • The Future to Discover group has become a network of support. • Support networks are incredibly strong and have the capacity to carry someone through times of difficulty.	• Trust • Interpersonal awareness, empathy, social responsiveness • Willingness to seek help • Relationship with teachers and peers

The session ends with a celebration shared with parents where students present their hopes, key strengths and the contents of their backpacks.

Key interventions in Workshop 4 include:

• Honour Your Hopes: Students have spent considerable time over the past three years thinking about and clarifying their hopes for the future. Participants give concrete form to their hopes for the future through a "Homecoming 2017" activity, working both individually and in small groups. Students voluntarily post their hopes for various elements of their lives on the wall, putting those hopes "out there" for others to see and support.

The activity reinforces that our hopes inspire us and give us vision, direction and motivation in both good times and bad.

• The Hero Within: Using the symbol of the Inukshuk and a narrative approach, students are guided through a process of thinking about someone they especially admire. They identify and record the qualities they most respect in that person and are then invited to consider the presence of these qualities in themselves. Students explore how they might be already demonstrating these qualities in their lives and/or how they may be slowly beginning to emerge. The role of

heroes in the context of today's labour market is explored. Students voluntarily post their own heroic qualities on the wall.

• Your Own Backpack: This final activity consolidates learning across the four Future in Focus workshops, as well as across Grade 10 and 11 Future to Discover programs. Using a structured and guided process, students review their learning and highlight elements they are taking with them in their backpacks for next year. They leave with a personal record of their journey and learning, as well as a concrete reminder of the skills, strategies, attitudes, messages, knowledge, information and allies they now have in their backpacks. Their achievement is celebrated and their sense of pride explored.

• Preparation and Delivery of Presentation to Parents: Students work collaboratively in small groups to prepare presentations for their parents. The first group presents their "Cloud of Hope" on the wall and talks about the importance of honouring our hopes. The second group presents the metaphor of the backpack and all the contents they are taking with them. The final group talks about the image of the rubber ball, how they have been building their resilience this past year and how they've got their H2O for their journey to post-secondary.

This final session serves as a consolidation of the resiliency factors students have been building throughout the year and reinforces the relationship between students and their key supporters, which is such a vital contributor to sustained resilience.

Table 6 outlines the key messages/learning and protective factors being promoted via the content and process of each intervention.

Intervention	Key Messages/Learning	Dominant Protective Factors
Honour Your Hopes	• My hopes are grounded in what is most important to me — who I am and what I am best at. • I can imagine my future vividly and can learn from this visualization. • Putting my hopes "out there" increases the likelihood of others offering support. • My hopes can serve as a beacon to me, inspiring me and guiding me in good times and bad.	• Sense of purpose • Goal orientation • High expectations for success
The Hero Within	• The qualities I respect in others are the same qualities I aspire to and/or develop in myself. • I can consciously foster desired qualities in myself. • I have heroic qualities.	• Self-efficacy (self-worth, self-esteem, belief in self, internal locus of control, self confidence, sense of identity) • High expectations for success, optimism, hope
Your Own Backpack	• I have specific and powerful skills, strategies, attitudes, messages, knowledge, information and allies that will help me to succeed next year and beyond.	• Self-efficacy (self-worth, self-esteem, belief in self, internal locus of control, self confidence, sense of identity) • Autonomy • High expectations for success, optimism, hope • Formal and informal networks of support • Information and support to access key institutional supports
Preparation and Delivery of Presentation to Parents	• I am proud of my accomplishments and want to share them with others. • My parents are here to better understand and support me. • Their support can make a big difference next year and beyond.	• Ability to engage/disengage/re-engage with home/outside world • Parent/family support • High expectation for success among parents, teachers and/or other significant adults. • Network who believes in student

Chapter 8

Conclusions and Additional Questions

In reflecting on the protective factors that emerge from the literature and the key themes emanating from the preliminary primary research, the following stand out as particularly relevant to the Grade 12 curriculum design:

- Some protective factors are more amenable to development within the confines of the Future in Focus curriculum than others. While some intrapersonal factors (e.g., sense of purpose, optimism) may be addressed, others (positive temperament, self-worth) lie at the core of one's unique psychology and are thus less amenable to change as a result of a relatively short-term series of interventions. The development of targeted skills and supports may contribute to these areas, but it is not reasonable to expect an eight-hour intervention to significantly enhance one's position on these complex intrapersonal factors. Similarly, changing the institutional influences on resilience would require sustained community development and advocacy. A curriculum can, however, increase students' awareness of institutional supports and opportunities and can teach strategies to access them. With this in mind, the Grade 12 Future to Discover curriculum addresses select intrapersonal and institutional factors, but focuses primarily on the development of social/coping skills and interpersonal supports.

- Given the influence of parents, teachers and significant adults (parents' aspirations in particular for disadvantaged youth) one session is devoted exclusively to engaging these supports. Parents are helped to understand the critical importance of their role in the project participants' resilience and their career journey. They are given a practical reference guide with tools and strategies to assist them in supporting their child throughout the workshop series and into their post-secondary life. The guide also provides them with concrete information about their children's imminent transitions, including tips on financial aid and the application process. Parents are encouraged to actively support project participants throughout the workshops series and are then invited to join them and the Future to Discover facilitator for a final celebration at the end of the year.

- The term "resilience" tends to be used more colloquially in the career domain. It is noteworthy that the Future to Discover facilitators used the term this way in the interview transcript. There is a general failure within the career development field to recognize the complexity of the construct. Our challenge was to break down the construct of resilience into components and creatively apply these to targeted career development interventions.

- Participants in the Future to Discover pilot have already been offered significantly more support, liberating messages and clear information to guide their career plans than was reported to us by the first-year post-secondary students and/or those who had dropped out of or failed their first year of post-secondary education. The Grade 12 curriculum needed to help students to consolidate their learning and development over Grades 10 and 11, and to provide practical information and build targeted skills to help them make a successful transition to their post-secondary option of choice.

- The Grade 12 curriculum needed to balance concrete, practical information about the realities of post-secondary life with engaging activities geared to building protective factors and the skills students will need as they face the transitions and challenges ahead.

The research conducted here to explore the viability of applying the construct of resilience to curriculum development and, more broadly, to career development practice and theory is promising.

Resilience research offers a series of protective factors that appear to be aligned with the process and desired outcomes of career development. There is particular appeal to applying the construct of resilience to career development in the context of today's turbulent and complex labour market and to working with individuals who face barriers (such as limited exposure to diverse experiences, absence of role models who have pursued post-secondary education or achieved satisfaction in work, or limited financial means).

Using resilience as an underlying framework for the development of the Future to Discover curriculum has resulted in an intentional curriculum, with targeted interventions to teach skills, attitudes and strategies to support success in the face of transition, unexpected disappointments and adversity. Its inclusion of techniques such as behaviour rehearsal sets it apart from most traditional career development curricula. The resilience framework provides an underpinning for engaging parents and peers, underscoring the importance of their role and providing concrete mechanisms to support their active engagement. The Future in Focus program is innovative, solidly grounded in research and lends itself to integration into provincial and/or territorial curricula at senior secondary levels.

This research provides reinforcement for the intuitive appeal of resilience and calls for more investigation to further illuminate the potential applications of the construct of resilience, both to further curriculum development and to career development practice and theory more broadly.

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Annex A — Tables

Table 1: Linkages between Career Development Practice and Resilience Factors

Career Development Practice	Protective Factors for Resilience
Believing in Self	• Self-efficacy (self-worth, self-esteem, belief in self, sense of mastery, internal locus of control, self confidence, sense of identity) • Autonomy • Sense of purpose • High expectations for success, optimism, hope • Personal responsibility, ideology of activism • Persistence, determination, inner will, motivation It is commonly recognized that these intrapersonal factors are often inextricably enmeshed with interpersonal and institutional supports.
Knowing Self	• Critical/reflective thinking • Sense of purpose • Personal responsibility • Realistic appraisal of environment • Active emotional expression Self awareness is often enhanced through our interpersonal relationships. Therefore, factors such as one's capacity to form relationships, interpersonal awareness, social responsiveness, relationships with family, significant adults and peers and participation in a range of curricular, extra-curricular, community and work experiences also contribute to self-awareness.
Making Sense of Opportunities for Work & Learning	• Sense of purpose • Goal orientation (to focus search) • Realistic appraisal of environment • Ideology of activism Accessing and making sense of LMI (particularly informal/unpackaged information) requires: • Creativity • Problem solving • Effective communication • Cognitive competence • Critical thinking • Willingness to seek help • Participation is a range of curricular, extra-curricular, community and work experiences • Strong networks

Continued on the next page.

Table 1: Linkages between Career Development Practice and Resilience Factors (continued)

Career Development Practice	Protective Factors for Resilience
Building Work Skills	The following resilience factors have been associated with employability: • Autonomy • Humour • Positive temperament • Creativity • Flexibility • Active coping styles (problem solving, ability to plan, teamwork, effective communication, active emotional expression, impulse control) • Strong capacity to form relationships, interpersonal awareness, social responsiveness • Cognitive competence • Appreciation of cultural diversity, sensitivity • Willingness to seek help • Absence of non-productive coping • Strong networking abilities
Making Decisions and Plans	• Sense of purpose • Goal orientation • Optimism, hope • Personal responsibility, ideology of activism • Creativity • Persistence, determination, inner will, motivation • Flexibility • Consequential thinking • Active coping styles (problem solving, ability to plan, impulse control) • Realistic appraisal of environment • Critical/reflective thinking • Willingness to seek help
Finding/Creating Opportunities for Work & Learning	• Autonomy • Sense of purpose • Goal orientation • Optimism • Personal responsibility, ideology of activism • Creativity • Persistence, determination, inner will, motivation • Flexibility • Consequential thinking • Realistic appraisal of environment • Employability skills (see Building Work Skills above) • Development and maintenance of supportive relationships and strategic networks
Managing Transitions and Personal Development	• Sense of purpose • Goal orientation • Optimism • Personal responsibility, ideology of activism • Creativity • Persistence, motivation • Flexibility • Active coping styles (problem solving, active emotional expression, impulse control) • Capacity to construct positive meanings for events • Critical/reflective thinking.

Table 2: Linkages between the Blueprint for Life/Work Designs and Resilience Factors

Blueprint Competencies	Protective Factor
Competency 1: Build and maintain a positive self-image Level 3: Develop abilities to maintain a positive self-image Level 4: Improve on abilities to maintain a positive self-image	This competency is strongly reflected in the resilience research. Related factors include: • Self-efficacy (self-worth, self-esteem, belief in self, sense of mastery, internal locus of control, self-confidence and sense of identity) • High expectations for success • Capacity to construct positive meanings for events • Absence of non-productive coping
Competency 2: Interact positively and effectively with others Level 3: Develop abilities for building positive relationships in one's life and work Level 4: Improve abilities for building positive relationships in one's life and work	This competency is highly evident in the resilience research. Related factors include: • Teamwork • Effective communication • Strong capacity to form relationships, Interpersonal awareness, empathy and social responsiveness • Appreciation for diversity • Willingness to seek help • Family cohesion, stability, communication • Trusting relationships with teachers and other significant adults • Interpersonal supports, including peer, family, significant adults • Strong formal and informal networks • Participation in diverse curricular, extra-curricular, community and work experiences
Competency 3: Change and grow throughout one's life Level 3: Learn to respond to change and growth Level 4: Develop strategies for responding to life and work changes	Related factors include: • Flexibility • Critical consciousness • Adaptive distancing • Active coping styles • Realistic appraisal of environment • Capacity to construct positive meanings for events • Ability to disengage from home, engage with outside world and then re-engage with home • Absence of non-productive coping • Participation in a wide range of curricular, extra-curricular, community and work activities
Competency 4: Participate in life-long learning supportive of life/work goals Level 3: Link life-long learning to one's career building process Level 4: Participate in continuous learning supportive of live/work goals	Life-long learning contributes to our career development when it is intentional, or clearly linked to our sense of purpose and meaning. In the resilience research, we see the following related factors: • Sense of purpose • Achievement/goal orientation • High expectations for success • Ideology of activism • Persistence • Critical consciousness • Cognitive competence • Participation in a wide range of curricular, extra-curricular, community and work activities

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Table 2: Linkages between the Blueprint for Life/Work Designs and Resilience Factors (continued)

Blueprint Competencies	Protective Factor
Competency 5: Locate and effectively use life/work information Level 3 and Level 4: Locate, interpret, evaluate and use life/work information	Scratching the surface, this competency refers exclusively to finding and being a discerning consumer of labour market information (both packaged and informal). While the resilience research obviously doesn't refer specifically to LMI, there are key attitudes and skills that enable us to find, interpret and evaluate both formal and informal LMI. Related factors include: • Autonomy • Sense of purpose • Achievement/goal orientation • Ideology of activism • Creativity • Persistence • Active coping styles (problem solving, ability to plan, effective communication) • Strong capacity to form relationships • Cognitive competence • Appreciation of diversity • Realistic appraisal of environment • Critical/reflective thinking • Willingness to seek help
Competency 6: Understand the relationship between work and society/economy Level 3 and Level 4: Understand how societal and economic needs influence the nature and structure of work	Again, the resilience research does not speak specifically to this competency, but does highlight the underlying skills that can support it. Related factors include: • Ideology of activism • Persistence • Critical consciousness • Problem solving • Cognitive competence • Appreciation of diversity • Realistic appraisal of environment • Critical/reflective thinking • Participation in diverse curricular, extra-curricular, community and work experiences
Competency 7: Secure/create and maintain work Level 3: Develop abilities to seek, obtain/create and maintain work Level 4: Improve on abilities to seek, obtain/create and maintain work	Virtually all internal factors identified in the resilience research can be linked to sustained employability. For example, the Conference Board of Canada's Employability Skills Profile includes: • Communicate • Think and solve problems • Demonstrate positive attitudes and behaviours • Be responsible • Be adaptable • Work with others Similarly, the Essential Skills Profile includes: • Working with others • Continuous learning • Problem solving • Critical thinking • Planning and organizing These mirror many of the intra-personal and social/coping skills identified in the resilience research.

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Table 2: Linkages between the Blueprint for Life/Work Designs and Resilience Factors (continued)

Blueprint Competencies	Protective Factor
Competency 8: Make life/work-enhancing decisions Level 3: Engage in life/work decision making Level 4: Incorporate adult life reality into life/work decision making	As one examines the specific competencies underlying the capacity to make life/work enhancing decisions, the following factors from resilience research are relevant: • Autonomy • Sense of purpose • Achievement/goal orientation • Personal responsibility, ideology of activism • High expectations for success • Personal responsibility • Persistence • Motivation • Flexibility • Critical consciousness • Active coping styles (problem solving, planning, active emotional expression, positive self-talk, impulse control • Cognitive competence • Realistic appraisal of environment • Critical/reflective thinking • Strong formal and informal networks • Participation in diverse curricular, extra-curricular, community and work experiences
Competency 9: Maintain balanced life and work roles Level 3: Link life styles and life stages to life/work building Level 4: Incorporate the "balanced life/work issue in life/work building	This competency very closely reflects the work of Amherdt (2005a) on the link between *savoir-devenir* (knowledge of becoming) and career resilience. Related factors from the resilience research include: • Sense of purpose • Achievement/goal orientation • Personal responsibility, ideology of activism • Creativity • Persistence, motivation • Flexibility • Critical consciousness • Adaptive distancing • Active coping styles (problem solving, planning, active emotional expression, positive self-talk, impulse control) • Cognitive competence • Realistic appraisal of environment • Capacity to construct productive meanings for events • Healthy perspective with respect to adversity • Critical/reflective thinking • Ability to engage, disengage and re-engage with home • Absence of non-productive coping • Participation in diverse curricular, extra-curricular, community and work experiences

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Table 2: Linkages between the Blueprint for Life/Work Designs and Resilience Factors (continued)

Blueprint Competencies	Protective Factor
Competency 10: Understanding the changing nature of life/work roles Level 3: Understand and learn to overcome stereotypes in life/work building Level 4: Understand and learn to overcome	This competency refers primarily to the capacity to overcome gender bias and stereotyping in career planning. Related factors include: • Self-efficacy • Autonomy • Sense of purpose • Achievement/goal orientation • High expectations for success • Creativity • Persistence, motivation • Flexibility • Critical consciousness • Active coping styles (problem solving, planning, active emotional expression, positive self-talk) • Empathy, social responsiveness • Cognitive competence • Appreciation of cultural diversity, sensitivity • Realistic appraisal of environment, capacity to construct productive meanings for events, healthy perspective with respect to adversity • Critical/reflective thinking • Absence of non-productive coping
Competency 11: Understand, engage in and manage one's own life/work building process Level 3: Recognize and take charge of one's life/work building process Level 4: Manage one's life/work building process	This competency refers to the capacity to engage in a life/work building process that truly reflects self. Again, this is consistent with Amherdt's (2005a) *savoir-devenir* and the following factors from the resilience research: • Self-efficacy • Autonomy • Sense of purpose • Achievement/goal orientation • High expectations for success • Personal responsibility, ideology of activism • Creativity • Persistence, motivation • Flexibility • Critical consciousness • Adaptive distancing • Active coping styles (problem solving, planning, active emotional expression, positive self-talk, impulse control) • Cognitive competence • Realistic appraisal of environment, capacity to construct productive meanings fro events, healthy perspective with respect to adversity • Critical/reflective thinking • Willingness to seek help • Ability to engage, disengage and re-engage with environments (home and outside world) • Absence of non-productive coping • Strong networks (formal and informal) • Participation in diverse curricular, extra-curricular, community and work experiences