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Some Key Concepts

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Introduction

Education systems are structured by whether they are primary, secondary or post-secondary, and the last of these more specifically between undergraduate and graduate levels. They are also structured by subject areas and programs. All of these structures determine the possibilities and limitations faced by students.[1] To a larger degree, this structure steers students' educational pathways—i.e., the series of educational processes they undergo in their formal training. It defines the range of possibilities (through the array of programs offered), sets forth the rules for access to each program and specifies the junctures that mark transitions—the passages from one type of education to another, one level to another or (within the same level) one program to another. Stages are determined for each type of training offered (e.g., general, vocational, technical) and/or based on the learning objectives set forth in the curriculum (e.g., compulsory and optional courses). The optimal duration and the conditions for admission to each program are also established. Education systems thus provide a standard, regulated orientation framework[2]. However, while some students follow a linear educational pathway, adhering to a standard route, many others embark on atypical pathways characterized by frequent withdrawals, re-entry or even reversals within the education system (for example, enrolling in a college program after university). In this sense, the depiction of education systems as a sequence of progressive academic levels does not necessarily reflect the pathways of many students. Education systems are characterized on the one hand by the constraints and rigidities integral to the standard route and, on the other, by the permissiveness and flexibility that mark atypical pathways.

Authors of early studies on the discrepancies between standard and atypical educational pathways used the notion of *carrière déviante* ["divergent career"] (Crossan et al., 2003) to designate the non-traditional trajectories of adult learners and "disorder" or "inconsistent sequence" (Rindfuss, Swicegood and Rosenfeld, 1987) to describe the transition to adulthood in all areas of life (scholarly, professional, familial). These concepts were inspired by studies on deviance in other areas, including delinquency (Becker, 1963) and psychopathology (Goffman, 1968). Such theoretical perspectives imply that students stray when they diverge from the standard route.[3] We feel there is cause to deconstruct this negative representation of so-called atypical or non-traditional pathways. In this paper, we will show that such pathways do not run counter to the system's logic, but in fact are intrinsic to its very mechanisms. We will also suggest that atypical pathways can be partly explained by the selective function of the education system, as well as by students' strategic choices, which attest to a certain rationality. In other words, atypical pathways arise from transactions between the educational institution and the individual.

To what extent do students embark on pathways that diverge from the route promoted by the system? Why is this so for such a considerable proportion of students? What are the profiles of students who take

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1. TRANSLATOR'S NOTE: While *élève* and *étudiant* are used in the French to differentiate elementary and secondary school learners from their post-secondary peers, this translation, in the interests of concision, generally uses "student" to refer to all individuals in the education system, regardless of level.

2. For instance, elementary school is generally preceded by preschool and kindergarten, and the duration of both varies according to the system. Elementary school is divided into levels of varying numbers and lengths. Based on the degree to which they meet the established educational goals, students are streamed into various secondary educational experiences: they can choose between general or vocational training, unless they are simply assigned to the latter by the school. Students' previous academic performance serves as the basis on which their access to optional courses is either enabled or barred. These decisions in turn determine their access to various post-secondary study programs. At the mandatory school-leaving age, all students, whether in the general or vocational stream, must decide if they are going to continue their studies or leave the system to enter the job market. The same applies to high school graduation. Students who pursue post-secondary studies must choose between the various types of establishments (colleges, institutes and universities), as well as between training programs leading to certification or other types of programs, particularly technical training. They can also be refused admission to a program of their choice if they fail to meet the admission criteria or if quotas are set.

3. Some students do not engage fully with their studies, unduly prolonging the process without necessarily defining more precise goals. In such cases, program duration becomes cause for concern, particularly with regard to master's and Ph.D. students. Moreover, the costs of these prolonged paths—both for the students concerned and to the system's efficiency—must be taken into account. A further consideration is the impact of late professional integration in a demographic context marked by labour shortages in certain economic sectors. For an analysis of this context, refer to Létourneau and Thibault (2005).

such paths or who exceed the prescribed timeframe for completing their programs? Do their profiles differ from those of students who comply with the paths privileged by the system? Is the academic market polarized between students who take the standard route and those who deviate, much like the polarization observed between the primary job market (full-time, permanent, well-paid employment with benefits) and the secondary one (part-time, minimum-wage employment of limited duration and with few benefits)?

Addressing the full extent of these questions is beyond the scope of this paper. Rather, we will propose a theoretical and conceptual framework to serve as a reference for studying educational pathways under the *Transitions Project*. Accordingly, we develop our theoretical perspectives in the first part of the paper, based on previous work and on the conclusions of various empirical studies that have focused on the question. These perspectives yield a number of key concepts that may then be used to guide educational pathway analysis as it pertains to post-secondary schooling in Quebec and Canada. In the second part of the paper, we present various approaches associated with the concepts of *academic tracks, trajectories, learning careers, educational and learning pathways*, as well as transitions, in our attempt to specify the most suitable approach for the *Transitions Project* and lay the groundwork for empirical research.

I. Conceptual Framework

Our work hinges on three key theoretical paradigms whose concepts have been applied to data analyzed in other research areas of the *Transitions Project*. These paradigms refer to:

1) the selective function of the education system,

2) variability, flexibility and reversibility in educational pathways,

3) the entry into adulthood[4].

I.I Educational Pathways and the Selective Function of the Education System

The standard pathway privileged by the education system, while not inflexible, serves a selective function that must be taken into consideration. Its mission is not limited to instruction, to the transmission of knowledge or to the socialization of the younger generation. Rather, it extends from evaluating students' aptitudes to ranking them based on how they meet curriculum- or program-defined learning objectives and, ultimately, to selecting them, based on academic performance, knowledge acquisition and the skills and competencies they develop. According to the Conseil supérieur de l'éducation (1989, p. 71), aptitude-based ranking, the range of possibilities available to students depending on certain conditions, program admission criteria and the practice of fixing quotas are all indicators of this selective function.

Durkheim (1922) laid the groundwork for analysis of the selective function of the education system. Although he stresses the functions of "methodical socialization" and standardization of the collective representation of young generations, he states that

"l'éducation, à partir d'un certain âge, ne peut plus rester la même pour tous les sujets auxquels elle s'applique" ["education, beyond a certain age, can no longer remain the same for all those to whom it applies"] (p. 48). Education must differentiate, must make room for "special educations" based on the occupations available to young people within the social division of labour. Clark (1960, 1962) defines this selective function more explicitly by reviewing the various aspects of its dynamic, particularly as regards higher education. He describes educational establishment practices and dissuasive strategies aimed at "cooling" the aspirations of students who do not satisfy the admission criteria to certain programs or who fail to demonstrate the capacity to complete them.

Educational sociologists agree on this selective function. However, they propose conflicting interpretations (Hurn, 1978). *Structural functionalists* believe that the selective function of the education system correlates to the needs of an industrial society, characterized by: (a) a surge in demand for highly skilled workers accompanied by a diminishing proportion of low-skilled jobs, and (b) the fact that social status is no longer based on family or group membership, but is acquired in the labour market on the basis of merit. In this context, one role of the education system is to find suitable candidates for high-level positions and gradually stream them into higher education so that they develop their full potential. However, *conflict theorists* reject this interpretation. All theoretical variants of social reproduction question both the notion of the industrial society as a meritocracy, and the belief that the need for skilled labour can alone explain the demand for ever-higher educational credentials. For example, Hakes (1971) and Carnoy (1975) refute the notion that the educational selection process exists to locate the most suitable candidates based on the labour needs

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4. In sketching out these conditions, we do not draw on research about the inequalities observed in the course of schooling or on theoretical explanatory models (and their limitations) of inequalities, since these topics will be addressed in other *Transitions Project* research papers that focus specifically on this aspect of pathways.

of an industrialized economy. Rather, they believe it fulfills a cultural function: that of transmitting the values of the various subcultures responsible for dictating whether or not students reach the highest echelons of the education system. Those who attain the top rungs are indoctrinated with the cultural values of the dominant elites; those who cannot do so, or choose not to pursue a lengthy academic career, are inculcated with respect for the values and lifestyles of these elites. Whatever the case, proponents of both approaches acknowledge that, as an agent of selection, the education system is part of the distribution of individuals throughout the occupational structure and, accordingly, in the social hierarchy.

It may be useful to begin the analysis of student pathways by situating it in relation to this selective function of the education system. Such an analytical perspective would imply that the choice of educational pathway, like the choice of school or vocation, does not hinge on an individual decision-making process—a process based on self-image, aptitudes, values and aspirations (the student's and/or those of his or her parents). Rather, students must deal with requirements that pertain to their ranking in the system, based on their academic output and behaviour, as well as with the specific admission requirements of the program or course of study. From this standpoint, individual orientation overlaps with an institutional decision-making process. While a high proportion of students have their individual pathway choices confirmed, others fail to gain admission to their chosen program or course of study, particularly limited-access programs. Accordingly, they are oriented by default (Prost, 1985). Nor does this take into account students who are expelled from a program after having been admitted. As Dubet (1996, p. 501) notes, *"L'élève ne choisit que ce qui lui reste à choisir en fonction de ses performances"* ["The student chooses only what remains open to him based on his performance"]. This reality engenders pathways that diverge from the standard route through necessity: students reorient themselves because the system allows or forces them to do so.

1.2 Pathway Variability, Flexibility and Reversibility

Various studies address the notions of variability, flexibility and reversibility as they relate to the educational pathways of young adults, beginning in high school. Bloomer and Hodkinson (1999), in their longitudinal, qualitative three-year study on high school students in northeast and southwest England, show the ways in which youth aged 15 to 19 follow non-linear pathways. In the United States, Hagedorn (2006) developed a conceptual approach to account for pathway diversity among university or community college students, beginning with a description of ten possible scenarios. Rindfuss, Swicegood and Rosenfeld (1987) conducted a longitudinal study based on data from the 1979 cohort in the *National Longitudinal Survey of the High School Class*. Eight years after the subjects left high school, approximately half of them, men and women alike, had diverged from the standard pathway. The authors comment on this variability: "By the end of eight years, it takes 1,100 sequences to describe the experiences of 6,700 young men and 1,800 [sequences] for 7,000 young women." Elsewhere, Calcagno et al. (2006) studied the effect of different pathway models (previous training, academic performance in first-year language and math courses, etc.) on the likelihood of obtaining a community college diploma in the United States, by comparing younger and older adults in similar training programs. Kim (2006) highlighted nine different ways of accessing training in these same post-secondary establishments.

Educational pathway variability stems, on the one hand, from the many different student situations and, on the other, from the very structure of education systems themselves. We will first consider the individual aspect of this variability.

Variability can be linked to different rates of progress among students who fail to reach their curriculum or program objectives within a pre-

determined time. For instance, by the end of grade school, a student may have fallen behind by up to two years. It follows that he will fail to master his high school subjects within the same timeframe as his peers, or even fail altogether. Not only are the elementary-school failures compounded by those in high school, the situation is further compounded by the educational choices that students face at the end of high school.

Furthermore, the vocational difficulties experienced by some students at the end of high school may persist through post-secondary studies. Such students, even if they do not have learning difficulties, may remain indecisive about their futures. Various studies have exposed the fragility of educational and career choices for a significant proportion of the student population. This is not a new phenomenon; however, according to Forner (2007), it occurs on a larger scale in North America than in other countries—for example, France. As early as the 1970s, Breton (1972), in a study on how schools and society play into the career choices of young Canadians, found 30 percent of young male subjects to be undecided and unable to show an occupational preference. A study conducted by the Conseil permanent de la jeunesse (1992) found that nearly 60 percent of high school students had "little" or "no" precise idea with regard to career choices. In a longitudinal study, Guay et al. (2006) showed that only 48 percent of a CEGEP cohort had made lasting career decisions between 2000 and 2002. In another study, this time by the Conseil supérieur de l'éducation (2002), 30 percent of students in college programs in 1990 considered themselves undecided in terms of their careers. Even at the university level, a qualitative study by Trottier et al. (1999) showed that students whose career choices were clear at the outset (*planners*) had changed their minds during their studies or during their first few years on the job market. The same study also revealed that many students whose ideas were vague or non-existent at the start (*explorers*) had come to define or clarify them. Students' strategies in this regard would appear to exist on a continuum ranging from *deliberate* to *emerging* strategies. The

former, characterized by an intentional action plan, are methodically implemented based on long-term goals. As we noted earlier, this strategy does not imply that *planners* do not change their minds, nor does it necessarily guarantee a linear pathway without divergence. Emerging strategies, on the other hand, are formed gradually, perhaps even unintentionally, as preferences become clear; they take shape through a continuous assessment of constraints and obstacles as decisions are made one by one.

In short, vocational indecision may affect motivation, academic performance and the pace at which students complete the stages of the academic track set out by the system. It can also lead to backtracking, arising from shifts in direction (for instance, to complete the admission prerequisites for a new choice of program). Orientation is also part of the process by which professional identity is constructed—a process that does not necessarily keep pace with the stages of schooling during which students must make decisions about their futures, and in which the system ranks and selects them. In other words, the construction of (professional) identity is not always in step with the educational timeframe, nor achieved in tandem with the completion of studies.

Entry into the labour market can represent an equally crucial point in this process. At this stage, young adults confirm the relevance of their choices (construction of self-identity) and see these choices supported by their peers or supervisors (construction of identity with respect to others) (Dubar, 1991). Lekh and Furlong (2006) highlight the disillusionment and orientation issues that can linger even after the successful completion of a master's or Ph.D. program, when some new graduates need to more widely explore the career opportunities associated with their training.

Lastly, students with no learning or guidance issues may still decide to temporarily withdraw from studies, notably between two levels of education (Hango, 2008), in order to gain life experience. Others who are refused admission to limited-access programs and forced to rethink their professional futures may choose another route or detour onto

the labour market as they wait to develop a clearer sense of their vocation.

The diversity of situations experienced by students certainly contributes to the variability of educational pathways. Paradoxically, some of this variability is generated by the education systems themselves, such as when the selective function is exercised or when a measure of flexibility with regard to the prescribed route is included in the structure of these systems and in program administration. This is demonstrated by the existence of bridge programs, licence to switch programs and admission rules for candidates with differing profiles, to cite but a few examples. Indeed, most educational reforms of the past four decades have, to varying degrees, promoted flexibility within the structure of the system in order to delay the age of specialization for high school students. This is carried out with a view to facilitating student versatility and mobility within the system, as well as removing dead-end tracks or programs that hinder the pursuit of studies, impede reorientation and hamper continuing education.

For example, Quebec has promoted:

(a) diversification, both of the existing paths in higher education and of attendance patterns (full time/part time/full-time accelerated/minimum definition of full time, etc.);

(b) the passage from so-called dead-end vocational or technical training to general or higher education (e.g., the creation of schools like the École de technologie supérieure);

(c) post-secondary attendance overlaps (e.g., the possibility of being admitted to CEGEP without having completed high school, DEC-BAC programs, and so on);

(d) the recognition of skills and experience acquired prior to admission to higher education.

Similarly, the British Columbia Council on Admissions & Transfer, an organization funded by the provincial ministry responsible for post-secondary education, has implemented a system that, through various agreements, fosters the passage from one post-secondary institution to another. Its objective is to facilitate student mobility through the development of policies and practices through which post-secondary credits are recognized by different institutions.

In their analysis of student living conditions, Sales et al. (1996) showed how academic regulations and even the system as a whole have become more flexible, as demonstrated by: the proliferation of short and long programs, as well as different academic fields; licence to change direction; the ability to study part-time, thus dividing time between studies and paid employment; and the possibility of interrupting studies between levels or within a given education cycle. According to Ashton and Lowe (1991), working while studying is more widespread in Canada than in Europe. The opening of the system and the gateways made possible between various programs serve to promote reversibility (Charbonneau, 2006), notably by allowing students to postpone their final choices instead of forcing them to lock into a given pathway (particularly one that penalizes students for changing direction). The system thus supports individualized management of the educational pathway. The multiplication of possible pathways coincides with two trends: the tendency to prolong the education process and the rising median age of the student body (Conseil supérieur de l'éducation, 1997). These changes are not solely due to amendments to the internal workings of the institutions, made in the interests of greater flexibility; they also stem from changes to students' living conditions. A high proportion of students work while studying or study while working to meet their own or their families' needs, reduce their student debt, gain work experience and/or acquire autonomy.

1.3 The Educational Pathway: A Dimension of the Passage into Adulthood

Educational pathways fall within a broader set of transitions to adulthood. These take the form of such key events as completing school, leaving home, starting a career, marriage and parenthood. Shanahan (2000) refers to these early adulthood events as

transition markers. They can be part of a relatively linear sequence (e.g., studying, entering the job market, living as a couple and having a first child) or not (e.g., having a first child, returning to school and living as a couple) (Rindfuss, Swicegood and Rosenfeld, 1987; Shanahan, 2000).

In his study on the transition to adulthood, Galland (1996, 2007) distinguishes two axes: (a) the public axis, extending from the education system to the labour market and from the end of studies to the start of professional life, and (b) the private axis of family and matrimony, from leaving the family home to conjugal relationships and parenthood. Traditionally, these four key events occurred more or less simultaneously in the lives of young people: one left school, entered the job market, left the parental home, formed a couple and started a family. Since the late 1950s, however, these events no longer coincide. People study for longer periods, postponing the ages at which they join the labour force and marry. The upshot of disconnecting these various thresholds of entry into adulthood is twofold:

[*Translation*]

"First… the thresholds of leaving adolescence no longer correspond to the threshold of entry into adulthood. Intermediate ambiguous spaces open between school and work on the one hand and between life with the parents and the formation of a new family unit on the other… . Secondly, family and professional thresholds are no longer synchronous: young people who have joined the workforce will postpone their departure from the parental home by several years; and when they leave, they still take on average over two years to form a couple." (Galland, 1996, p. 41)

The author concludes that "youth" can no longer be regarded as simply an extension of adolescence; instead, it must be seen an intermediary period of life between adolescence and adulthood. The phase of socialization that prepares young people for the exercise of adult roles is characterized by:

[*Translation*]

"…experimentation, where the definition of self and the establishment of the status to which this identity corresponds are formed by different social experiences through the course of an iterative trial-and-error process, before a satisfactory compromise is reached. The construction process is what characterizes the appearance today of a moratory phase." (Galland, 1996, p. 43)

Trends observed among young Europeans do not correspond fully to the situation of young Canadians. However, it is important to remember that educational pathways are concurrent with other life paths and relate to other transitions to adulthood in ways that can vary, depending on country, background, gender and education. These configurations may stem from the educational pathway or have an impact on access to higher education or the pursuit of studies. Indeed, the sense of experimentation that is common for young people can influence their educational strategies and their recourse to atypical pathways—an important consideration in any analysis.

We must also recognize that key events in the transition to adulthood, as well as their order of appearance in the life cycle, are subject to contingent historical, economic and cultural realities. Elder (1986, 1987) highlighted how certain historical events can affect transitions to adulthood. In his study on the aftermath of the Second World War in the United States, he showed how military service, by deferring graduation, entrance into the workforce or fatherhood, helped postpone the assumption of customary male roles at the threshold to adulthood. In another study, this time with a cultural slant, Buchman (1989) showed that by the early '60s, standardized pathways had given way to individualization, influenced by weakened links between the educational structure, the labour market and divergent family models, among other factors. In some cases, the trend dictated a return to studies following the assumption of parental responsibilities or entailed diverse forms of academic involvement in order to reconcile professional and family responsibilities (Bingham

and Giele, 1998; Goldscheider and Goldscheider, 1993; Morris et al., 1998). More recently, Bourdon et al. (2007) have highlighted the influence of a more targeted event, one that has affected the pathways of all Quebec students and the course of post-secondary education in the province: the student strike of spring 2005.

Shanahan (2000) brought to light the incontrovertible impact of economic shifts on transitions to adulthood, educational pathways and the entrance into the workforce, as well as the decision to start a family and the forms of conjugal relationship. Periods of economic crisis or recession may also influence rates of participation in post-secondary education (Lemelin, 1998, p. 509–11).

Furthermore, changes associated with the economic costs of school attendance, largely structured by public education policies, also influence the educational pathways of certain groups of students. According to Bowlby and McMullen (2002) and Frenette (2007), constraints inherent to government financial assistance are detrimental to the post-secondary participation of students from low-income families or living in remote areas. In other words, educational pathways are liable to be affected by the prevailing political context.

1.4 Summary

This review of the conceptual underpinnings of the individual's educational pathway has demonstrated the importance of the selective function of the education system, and how the structure of that system promotes a standard, regulated progression. This analysis also posits that student orientation does not result solely from a series of individual decisions, but is part of an institutional decision-making process. While the education system is structured to promote standard and regulated progress, students may also, by virtue of that same system's flexibility, adopt different pathways that do not necessarily correspond to the prescribed route. These atypical pathways are not anomalies, but are part of the system's very logic and may even be generated by ongoing practices. Moreover, they can be influenced by factors other than academic ones that characterize the passage into adulthood (e.g., leaving the parental home, marrying, assuming parental responsibilities), as well as by economic determinants and education policies. We will now attempt to more precisely define the concept of the educational pathway as it relates to the analogous notions of educational path, trajectory, learning career and transitions.

2. Defining and Exploring the Concepts

What theoretical framework will allow us to adequately model transitions to post-secondary education and the pathways taken by young Canadian adults? Various terms evoke the notions of *pathway* and *transition*. Individual progress through the education system is designated by terms such as *trajectory*, *school career*, *path* and *pathway*. The concept of *transition* opens onto a semantic field that encompasses the notions of *transition*, *bifurcation*, *reversal* and *stage change*. In common parlance, these terms are often used interchangeably. However, on a theoretical level, distinguishing between different approaches, allows the concepts of *transition* and *pathways* to be better modelled and articulated.

2.1 The Life-Course Approach

"Life-course analysis" models a series of events through the lens of different life spheres (familial, romantic, educational, occupational, residential) on a timeline extending from birth to death. Only through integration into this timeline and into the ensemble of life spheres do events or transitions take on their full meaning. The life-course concept studies individual involvement in a standard sequence of chronological events, environments and social roles structured by social institutions (Crockett, 2002). Pioneered by demographers (Glick, 1947) and developed by Elder (1974) in his classic study of children of the Great Depression, the life-course concept has formed the basis for much research.

It is posited in life-course analysis that transitions consist of status change with far-reaching effects (George, 1993). Elder (1998) states that "transitions are always embedded in trajectories that give them distinctive form and meaning." The life-course approach considers that:

(1) individual trajectories are shaped by the historical and geographical contexts in which they operate;

(2) the impact of transitions or events is contingent on the moment they occur in the lives of individuals;

(3) "linked lives" are interdependent, and social and historical influences both manifest themselves and are seen through shared networks of relationships; and

(4) individuals construct their own life course through the choices they make and actions they take within the opportunities and constraints of history and social circumstance (Elder, 1998).

The life-course approach considers an individual's participation in the education process, extracurricular learning and vocational guidance activities as sequences, processes and specific moments in the life cycle. Research by Tinto (1993) and Hagedorn (2006) on student persistence complements this perspective. For example, dropping out of school may be viewed in a broadened timeframe in order to avoid mistakenly equating discontinuity with definitive withdrawal. Ultimately, according to Hagedorn (2006), withdrawal cannot be designated as such until the death of the individual. Life-course analysis can also flush out various obstacles to academic persistence. For instance, when a student is admitted to one program, drops out and subsequently completes another program, what is to be considered in interpreting the results? Successful completion of the second program? Relinquishment of the first? Both situations at once? Hagedorn illustrates the methodological pitfalls inherent to the concept of withdrawal.

The life-course approach would appear the most relevant in the analysis of educational pathways and transitions to post-secondary education. However,

while enlightening, this theoretical perspective surpasses the scope of the research carried out under the *Transitions Project.* Given the nature of the data available in the *Youth in Transition Survey* (or *YITS* Statistics Canada, Human Resources and Skills Development Canada, 2000), which will form the basis for the empirical analysis, pathways can only be observed over a limited period, i.e., from 2000 to 2006. Additionally, the *YITS* variables associated with various aspects of life, while numerous and representative of the various areas of personal life[5], appear unevenly based on those areas and dependent on the survey cycle.[6]

The life-course approach shows, however, that any meaning attributed to the pathway sequence observed hinges on a historical framework broader than the sequence of events selected. Thus, in interpreting the empirical data, we should consider that the events analyzed represent but a relatively short sequence in the span of an entire learning pathway, one that may extend throughout life. At the same time, these events mark important moments of decision-making in an individual's education inasmuch as they affect the pursuit of higher education, professional reorientation, discontinuity (possibly only temporary) or the decision to return to school.

2.2   Academic Tracks, Trajectories, Careers and Pathways

In the literature on educational inequality, various approaches linked to specific concepts allow us to describe the educational progression or succession of educational practices in individuals' lives. While related, they derive from different analytical perspectives. In this section, we present four approaches to the longitudinal analysis of individual education, with an eye to distinguishing and clarifying their theoretical implications.

2.2.1 Academic Tracks

The analysis of academic tracks is characterized by the notion that the individual's educational progression essentially replicates the organizational structure of the education system (Massot, 1979a and b). Paths are defined as "*étapes successives franchies tout au long de sa fréquentation du système scolaire*" ["successive steps taken during the individual's progress through the school system"] (Sylvain et al., 1985, p. 43). The analytical process entails examining how schooling unfolds and interpreting different characteristics of the education system: the transition from one level of education to another (primary, secondary, post-secondary), the passage from general education to technical training and so on. This approach both accounts for the complexity of the steps taken by the individual and highlights the differences that emerge between social groups operating within an education system. However, since the path concept is defined in terms of the education system's formal structure, this approach is less likely to account for non-linear schooling.

2.2.2 Educational and Learning Trajectories

An individual's schooling may also be examined through the concept of trajectory. This approach is present in Bourdieu (1979), who broadly defines it as the sequence of positions occupied by individuals during their lifetimes, seen from within the framework of class relationships and the different social fields in which they move (e.g., the trajectories of writers, scientists or artists). Individual trajectories are largely determined by social background, which helps orient them by setting the "pitch" and possible destinations. They are themselves part of the familial trajectory, which can be ascendant or descendant due to circumstances in the social sphere. As trajectories unfold in specific fields, they are also shaped by the ground rules in effect. The educational trajectory refers to the sequence of positions within an educational field, particularly the school system. Consequently, the educational trajectory will vary

5.   These variables relate to an individual's socio-economic background, school experience, commitment to education, school performance, family history, educational and professional aspirations and the influence of peers, social behaviour, health, educational funding, experiences during the first year of training, extracurricular activities, labour market insertion and so on (Statistics Canada and Human Resources Skills Development Canada, p. 21).

6.   With regard to Cohort A, for example, the survey includes a lot of data on the school experiences of high school students (results, school and social integration, commitment, extracurricular involvement, and so on). This information is somewhat less detailed with respect to post-secondary students.

based on the social background of the individual, whose situational sequence is related to the characteristics of the school system.

Gorard (1997) and Gorard et al. (1997a, b, c, 1998, 1999) reflect this understanding by defining "learning trajectories" as lifelong models of participation in education and training that are broadly anticipated by an individual's social and educational background. Like proponents of the life-course approach, Gorard et al. include the full range of an individual's educational activities in their notion of learning trajectories. These activities extend beyond compulsory schooling or the sequence of school experiences. Like Bourdieu, the authors grant special status to social background, seen as the starting point of the trajectory in the education system, which determines both direction and destination. Bifurcation may, of course, occur; but the fact remains that social background retains strategic weight in how the trajectory unfolds.

2.2.3 School and Learning Careers

Before adopting the notion of trajectory, Bourdieu and Passeron (1970) used the concept of the *carrière scolaire* ["school career"], which they identified with an individual's schooling. Tendencies to fall behind, move to subsequent levels or choose certain fields were selected as significant indicators of the school career. This first part of the concept definition is close to the concept of the path. However, the authors distance themselves from the latter concept by seeking also to understand the mechanics of determination—i.e., the various factors that influence the positioning of individuals in the education system. In this respect, both Bourdieu and Passeron use the term *traduction* ["*translation*"] to stress that each stage of the academic track is a processed form of the class system. Consequently, despite a differentiated impact based on the stage of the pathway, social background is the "variable" that is essential to understanding the school career. In this sense, the approach bears similarities to the concept of trajectory adopted by Bourdieu in his later work.

For Bloomer and Hodkinson (1999), the notion of the "learning career" draws on three theoretical

sources. In the model used by interactionalist sociologists, a career is a series of passages from one position to another accomplished by a worker in a professional system (Becker, 1970, p. 47). The term also encompasses the notion that the situational sequence can be affected by events and circumstances.[7] Bloomer and Hodkinson above all uphold the idea that the career is composed of two parts: the "objective" situations in which individuals are involved and the "subjective" meaning individuals ascribe to their situations. The authors also adhere to the theory of "situated learning," wherein changes in individual attitudes stem from new influences and new sources of learning. Lastly, they take into account Bourdieu's contribution, integrating into their understanding of "career" the effect of social background as seen through the construction of *habitus*, including educational habitus, which they define as the dispositions that govern schooling and education.

Bloomer and Hodkinson (1999) specifically define the concept of the learning career as:

> "… a career of events, activities and meanings, and the making and remaking of meanings through those activities and events, and it is a career of relationships and the constant making and remaking of relationships, including relationships between position and disposition" (p. 590).

Based on their empirical research, they describe the learning careers of youth aged 15 to 19:

1) The careers of many young adults are "erratic" rather than linear and predictable.

2) The career path followed is never solely the product of rational individual choice.

3) The career is closely linked to other areas in the lives of young adults.

4) The learning accomplished by young adults and the pathways they take are also linked to their history of learning outside of the educational milieu.

5) Young people are capable of adapting to new educational requirements, particularly when learning is associated with or perceived as leading to significant social benefits.

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7. We should point out that the term "career" takes on a different meaning in many interactionist studies—i.e., that of a sequence of nested stages. For example, Becker (1963) conceptualizes the social career of deviance by identifying the sequences that characterize the individual's progression to the status of "deviant." The specificity of this use is precisely part of the linear sequence, the achievement of stage 3 assuming the transition via stage 2.

6) Young people aged 15 to 19 experience significant change in terms of identity, as reflected by the changes observed in their careers.

7) Transformation within the career process is complex and based on the interplay of such factors as context, values, beliefs and the meanings attributed to the experience of schooling.

8) Even if careers are based on personal learning aptitudes, variables such as social class, gender and ethno-cultural background also play significant roles (Bloomer and Hodkinson, 2000, p. 593).

Based on Bloomer and Hodkinson (2000), Crossan et al. (2003) have also employed the concept of the "learning career," which they define as a sequence of events that, through education and learning, are involved in the formation and transformation of individual identity. They use this concept to explain the non-traditional pathways of young adults:

> "For us, the concept of learning career is used to shed light on the complex interplay between the social and economic structures which shape people's lives, the educational institutions which determine the processes of engagement with learning, and the learners themselves" (p. 58).

A comparison of these approaches yields three central tenets:

1) The "path" approach differs from approaches based on the concepts of "trajectory" and "career" in the importance it places on the education structure in the construction of a sequence of events, situations or states.

2) The thrust of each approach hinges on whether it confines itself to the educational context or takes into account more global learning situations.

3) The difference between the "career" and "trajectory" approaches reflects the respective importance of social background and ongoing educational experience in understanding or accounting for the sequence of events. Proponents of the trajectory concept place more emphasis on social background from a more analytical or, as reported in Gorard et al. (1998), quasi-deterministic perspective. The "learning career" concept recognizes the importance of social background as a determinant of learning, education and school, but places greater importance on the school experience in the construction of identity and dispositions toward studying.

The works referred to here do not mention a further analytical possibility: that some sequences of events or situations result more from social background and the habitus generated by socialization, while others tend to stem from ongoing school experiences and learning. In other words, pathways are characterized by the relative importance of the factors that help shape them or articulate their various components.

2.2.4 The Learning or Educational Pathway

The various concepts presented above are largely anchored in theory (e.g., the interactionist concept of "career"). However, a conceptual flux remains, since the proponents of one approach sometimes use two different concepts to analyze an individual's educational progression (this is the case with Bourdieu, who, depending on the year, also applies the concepts of "career" and "trajectory"). In this theoretical context, we prefer another phrase: the learning or educational pathway. Learning pathways are defined as the result of educational experiences or events and educational pathways as the result of educational situations that occur within the framework of formal training and the school system. What differentiates the two is the extent of the educational practices studied in the analysis. Learning pathways integrate all educational situations regardless of location or learning context; the educational pathway takes place within the school system.

Pathways are distinct from academic tracks in the flexibility that characterizes various stages of an individual's schooling. Indeed, a pathway does not necessarily result in a linear sequence of educational situations. There are, for example, permeable starts, breaks and "backtracking" (e.g., leaving university to study in college). Pathways may be non-linear, unlike academic tracks—which are a formally structured linear succession of necessarily nested steps whose parameters are set by various bodies in the education system.

Similarly, the originality of this approach (as compared to those based on the concepts of "career" or "trajectory") lies in the ability to differentiate pathways based on the respective weight of the various factors influencing how they are constructed and unfold. In other words, pathways can be distinguished by their springboards for action. For instance, some fall under the notion of social reproduction, due to the importance of social background in the individual's schooling; others bring into play the notion of educational "restructuring," i.e., what ensues when a positive educational experience supplants former negative associations with schooling.

The concept of "pathway" also helps distance the deterministic representation underlying the concept of "trajectory"—a ballistic term emphasizing the importance of the starting point in regards to how the process unfolds and anticipation in regards to the arrival point.

Among the theoretical elements presented, we have selected four axes to describe the properties of educational pathways:

1) transactions between the individual and the educational institution;

2) dynamics between the objective and subjective aspects of an individual's experience;

3) transactions between school-based and extracurricular experiences (including living conditions, intellectual/cultural heritage and social relationships); and

4) the relationship to time.

2.2.4.1. *Individual/Institutional Transactions*

Pathways are the outcome of a transaction that occurs between students and the educational institution, whose structure and organization weigh heavily in the pathway's progress, since they limit—if only by their formal and informal entrance requirements—both the access and opportunities available to individuals. Disciplinary measures (Fallis and Opotow, 2003), academic competition, the education system or lack of supervision (Rivière, 1996), guidance practices (Masson, 1994 and 1997; Conseil supérieur de l'éducation, 2002) and forms of assessment (Vallerand, Fortier and Guay, 1997) are some of the many constituent elements of the educational institutions that, one way or another, influence the pathways taken by youth.

Research on educational inequality has amply demonstrated how diverse social factors work to differentiate access to educational resources. Some of these factors issue from symbolic or cultural parameters and others from living conditions. In this sense, we must consider that the "decision" to pursue (or not to pursue) higher education, as well as the choice of field of study or program, are influenced by cultural dispositions, cultural and cognitive achievements, and living conditions. The "gaze" that individuals cast on the education system is therefore socially conditioned.

2.2.4.2. *Reconciling the Objective and Subjective*

To understand pathways, we must also examine the second axis: the dynamic between the meaning ascribed by students to their school experience, their commitment to their studies, and the objective (or objectivizable) components of their pathway. This dynamic is reflected primarily in the "*croyance dans le «jeu» éducatif que les étudiants peuvent exprimer, c'est-à-dire dans l'illusio*" ["students' expressed belief in the educational 'game,' which is to say, in the *illusio*"] (Bourdieu, 2001, p. 103). It can also be understood from the interactionalist perspective, in which the "pathway" includes both an objective dimension, consisting of identifiable social positions, status and situations, and a subjective one, essentially the meaning that individuals attribute to their experience (Crossan *et al.*, 2003). Lastly, we can also analyze this dynamic by drawing on the sociology of experience. Coulon (1992) showed that the institutional relations between students and schools do not necessarily lead to analogous educational experiences. A further example is academic failure, which can discourage some but motivate others to reinvest in their studies. We must continue to monitor the way in which individuals and groups combine the various rationales that influence action that shape the world of education (Dubet and Martucelli, 1996, p. 62).

2.2.4.3. Transactions between School and Extracurricular Experience

A third axis deals with the relationship between educational and extracurricular experiences. Educational experiences can be structured around various aspects that include the relationship to knowledge, social integration in the institutions or the acquisition of the student skillset ["le métier d'etudiant"] as a time to internalize the institutional rules or arrangements that govern learning within the school system. While extracurricular experience can facilitate the return to school and enhance the school experience, it can also act as a constraint leading to a possible bifurcation in the pathway. The literature on adult education indicates that individuals' living conditions may be detrimental to their education (Cross, 1982; Darkenwald and Valentine, 1985; Rubenson and Xu, 1997; Rubenson and Schuetze, 2001). Economic resources, the work-family-education balance and the situation regarding work (including company characteristics) and employment are factors that can facilitate or hinder access to education. In addition, extracurricular experience should not only be considered in the present: previous experience, particularly family background and geographic context, affects individuals' subjectivity (as the meanings individuals assign to situations guide their decision to continue or withdraw from studies) and educational future.

The extracurricular experience encompasses other aspects that affect educational and school choices, such as the influence of peers and social relationships. Life events, including health problems, bereavement and teen pregnancy, can also modify the course of a pathway and necessitate directional shifts or changes in momentum. We must also consider broader phenomena such as the entry into adulthood or the experience of migration or immigration.

2.2.4.4. The Relationship to Time

This axis enables the pathway to be positioned within the broader framework of the different timeframes that form part of any life story. It touches on the social, economic, cultural and cognitive dimensions that shaped the individual prior to entering post-secondary education. Social background and prior educational experience are the two main past dimensions that bear consideration; projects and expectations are the two main elements that refer to the future. The experience underway can also impact the pathway's "pitch" and cause more or less pronounced bifurcations. One example is when students experience professional disillusionment and decide to change their program of study. This experience is not only shaped by acquired dispositions or goals: it is also a time to confront previous projects and choices (Doray et al., 2005).

2.3 Transitions

Transitions are very often milestones in student pathways. The changes they bring about can have a more or less profound effect on the ensuing stages of an individual's schooling. The following section provides a brief theoretical overview to aid understanding of this concept and its usefulness in the analysis of educational and learning pathways.

In their theoretical model of transition, Goodman, Anderson and Schlossberg (1984, 2006) focus on the breaks, discontinuities and unexpected events that occur during adulthood (Guichard and Huteau, 2005, p. 50). According to Goodman, Schlossberg and Anderson (1984, 2006), transition refers to a triggering or desired (but unrealized) event that can positively or negatively affect the life course. Such an event leads to the adoption of new behaviours, role changes, the redefinition of social relations or modifications to the conduct of everyday life. These authors believe that transitions can be anticipated (e.g., the transition from high school to post-secondary education), unexpected (e.g., the interruption of studies due to illness) or unrealized though desired (e.g., admission refused to a program of study). The concept of "transition markers" developed by Shanahan (2000) to describe these transitions typical of early adulthood corresponds to the "anticipated transitions" in the model of Goodman, Schlossberg and Anderson (1984, 2006). Note that in all cases, "transition" refers to a change in an aspect of life or a

bifurcation in the route taken (Grosset, 2004), which occurs in time (t) before equilibrium is restored.

Goodman, Schlossberg and Anderson (1984, 2006) posit transition as a multi-faceted phenomenon whose configuration is based on the possible arrangement of four subsets of variables: situation, self, support and strategies. *Situation* includes the triggering event, the time at which it occurs, the level of control exercised by the individual faced with this event, the social roles to be modified, the transition period before a return to equilibrium, experience previous to the transition to which the individual can refer, other sources of stress and self-perception of responsibility. *Self* refers to an individual's personal and social characteristics. *Support* refers to the services, resources and key people available in the environment. Lastly, *strategies* are defined by behaviours, attitudes and decisions taken by the individual in order to adapt to the event.

The multiple permutations of these four variable subsets suggest the diversity of form that transition may take—a diversity that accounts in part for the variability observed in young adult pathways (Bloomer and Hodkinson, 1999; Bourdon et al., 2007; Charbonneau, 2004; Galland, 1984, 2007; Grossetti, 2004; Rindfuss, Swicegood and Rosenfeld, 1987). Moreover, this approach correspondingly integrates agency and the capacity to act while taking into account characteristics of society and the environment.

Nonetheless, the structural dimension in the Goodman, Schlossberg and Anderson model (1984, 2006) remains embryonic. Transitions may be structural when we consider the passage between levels of education, themselves an integral part of the education system. The transition to adulthood may also be structural, since it is socially "organized." However, *structural constraints* are not sufficiently emphasized in Goodman, Schlossberg and Anderson (1984, 2006); *compensatory mechanisms* (e.g., diversification of the means of access to post-secondary education) able to redress the constraints inherent in the education system are implied in the "support" variable, but are not explicit in these authors' model. These two concepts, structural constraints and compensatory mechanisms, are well developed in

the work of Duru-Bellat (1988) on educational and vocational guidance and are two key concepts to be included in the theoretical model of transitions as regards educational pathways.

Furthermore, educational transitions involve a dynamic of entry and integration. Following Tinto (1993) and Coulon (1992, 2005), we can distinguish a triple integration process: 1) institutional integration, which involves learning the formal and informal rules that govern schools and programs, 2) intellectual integration, which introduces the cognitive and academic components, and 3) social integration, which references social life within schools, as well as the dynamics of individual social life on a broader scale. Admission to post-secondary education consists largely of uncertainties inasmuch as students face new institutional, social and intellectual situations and must change from being a pupil to being a student. Adaptation plays (or can play) into the various components of the educational experience: the student's relationships to knowledge and instruction, to the institution, to learning, to faculty, to the task at hand and to peers. Admission is also the time to confirm goals and performance. The institution's program, courses and daily operations may serve to strengthen individual projects, but can also evoke disillusionment that challenges earlier decisions and goals. Admission is thus a test, since it can lead students to challenge their choice of program and professional aspirations when these are relatively specific.

Moreover, transitions can be modulated by the structures of economic, cultural and social capital, by dispositions and by acquired skills. Family support and social networks may become resources that can help a student navigate the transition period. But gaps between academic culture and social background may also entail a transformation of the relationship with family (London, 1989, 1996). The cultural capital held along with cognitive aptitudes and skills are resources that can be mobilized to support the passage or deal with possible doubts. With regard to economic capital, state-supplied financial support, including loan programs and scholarships, can have an impact and sometimes influence the transition to higher education.

Ultimately, the model selected must emphasize the reversibility of certain transitions in the educational pathways of young adults (Crossan et al., 2003; Dannefer, 1984; Featherman et al., 1984; Marini, 1987; Rindfuss, Swicegood and Rosenfeld, 1987; Rossi, 1980). This is not always the case with other transitions to adulthood, some of which are irreversible (e.g., mass redundancies following business closure, adult disability, divorce). Once again, education structures must be sufficiently flexible, and the selection process discussed in Part 1 must likewise demonstrate elasticity.

Conclusion

This paper aimed to present a set of theoretical and conceptual referents that would elucidate different aspects of the concepts found in longitudinal studies on student participation in the education system. We defined the boundaries of an approach that, centred on the concept of *pathways*, will provide the theoretical framework for analyses conducted under the *Transitions Project*.

After linking the question of educational pathways with the selective function of the education system, we reported on pathway variability, flexibility and reversibility. The structural constraints of the education system were emphasized as an important factor in the creation of individual pathways; however, the system's flexibility and openness were also underscored as enabling individual agency in the process. Of the ensuing multitude of possible paths, a certain percentage veers from the official or prescribed route. That said, these should not be regarded as "deviant," since their presence is central to the logic of the education system. We also situated post-secondary student pathways within a broader analytical framework (the transition to adulthood), thereby indicating the potential influence of other areas of life and situational factors on the process of schooling in higher education.

In the second part, we reviewed a number of conceptual approaches and elements that can serve to inform pathway analysis. A brief summary of the life-course approach was presented, followed by a description of other approaches and perspectives to shed light on the notion of "educational progression." Ultimately, we selected an approach based on studies of secondary and post-secondary pathways. From this emerged a broad definition of educational pathways, presented as a series of decisions, events and situations that relate to schooling and learning in an educational setting. The outcome may be "ordered" (e.g., when a pathway unfolds per the system's formal structure) or not (e.g., when the pathway is subject to interruptions or bifurcations). A review of the major theoretical contributions to the field also brought out four oppositions that mark the educational pathway, namely: between the individual and the institution; between an individual's subjective and objective situations; between school-based learning and extracurricular experience; and between past experiences/ achievements and future expectations.

Lastly, this paper has shown the integral presence of transitions in educational pathways. Some transitions—for instance, the passage from secondary to post-secondary levels—may be structural and largely marked by regulation (e.g., admission requirements to a program, quotas on the number of students admitted). Transitions can also issue from sources external to the individual or be caused by a third party. Dismissal from a program following repeated failure, for example, is often experienced by students. Finally, transitions can be provoked or voluntary, as in the case of changes in direction in response to professional disillusionment.

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Appendix

Transitions Project—Summary Sheet
Operationalization of the Theoretical Framework of Future Research Papers

	Title	Operationalization of the Concepts in Research Paper 3
Paper 4	**Transitions between educational levels in post-secondary education in Québec and Canada**	This paper examines the *educational pathways* of Canadian post-secondary students (PSE) based on data from Cohorts A and B of the *Youth in Transition Survey* (*YITS*). Respondents' situations as presented in the data collected each October from 2000 to 2006 will be used to plot the year-by-year development of their distribution in the education system, based on various parameters: presence or absence at school, presence in PSE and presence at various educational levels. The paper also examines the different educational pathways taken by respondents by sequencing the situations observed each year. Pathways will be categorized based on presence at school and whether they are linear or discontinuous. Once this is accomplished, we will assess the impact of interruptions to study throughout the period studied.
Paper 5	**The influence of educational aspirations on the persistence of first-generation students**	This paper examines the influence of educational aspirations on the *educational pathways* of first-generation students (FGSs) compared to other students (non-FGSs). Analysis of *YITS* Cohort A will allow us to trace the development of FGS and non-FGS aspirations from one survey round to another and to measure the influence of this variable on their *educational situation* at each cycle (persisting/graduated/dropped out). The paper will examine how aspirations influence the pathway types adopted by FGSs and non-FGSs.
Paper 6	**The effect of background characteristics and acquired competencies on student pathways**	This paper aims to determine the influence of social factors (gender, social background, ethnicity, parents' level of education) and school-based learning (high school grades, PISA scores) on access to PSE and subsequent *educational pathways*. Drawing on data from the *YITS* Cohort A, the paper will examine the factors that influence participation in PSE and whether the pathways are linear or discontinuous. The influence of variables linked to social and educational background on students' academic field selection will also be examined.
Paper 7	**Educational pathway analysis: the impact of the ongoing experience**	Numerous factors influence post-secondary *access* and student persistence. Some factors stem from social background and acquired competencies, including previous experiences; others are linked to the ongoing experience. This paper aims to better understand the effect of the latter on the pursuit of higher education. Since the range of possible factors is vast (unplanned incidents, changes to education models, changes to family situation, etc.), particular focus will be paid to the effects of education models and the intensity of paid work (i.e., jobs held during studies). Statistical risk-analysis models will be used to show the impact of different life events on the entrance and exit rates to post-secondary studies, as well as on modality (with or without a degree). This paper aims to better understand the connection between school-based and extracurricular experience in educational pathways (analytical axis 3).

	Title	Operationalization of the Concepts in Research Paper 3
Paper 8	**First-generation college students: pathways and destiny**	This paper focuses on first-generation college students. We will begin by assessing the presence in quantitative terms of FGSs and non-FGSs in Quebec and Canadian colleges. Their *educational pathways* will then be studied from a qualitative perspective to determine *transition models* and students' educational outcomes. We aim to determine whether FGSs have pathways and educational experiences that differ from those of other students. Pathways will be analyzed based on the four analytical axes enumerated in Research Paper 3, namely: 1) interaction between the individual and the institution; 2) dynamic between the pathway's subjective and objective dimensions of the pathway; 3) transactions between school-based learning and extracurricular experience; and 4) consideration of a broader timeframe (social and educational background, ongoing experiences, aspirations and goals). In the third section, we will explore the socio-geographical issues associated with FGS access to education by examining the situation in a specific geographic region: the Saguenay, Québec. It is hoped this paper will broaden reflection on the question of so-called "improbable" pathways, i.e., on the educational pathways of students whose social background would indicate a low likelihood of pursuing post-secondary education.
Paper 9	**First-generation university students: pathways and destiny**	This paper builds on the topic of the previous paper but shifts the focus to first-generation *university* students. We will describe FGS pathways and identify the factors that can account for differences in university pathways. First-generation university student *pathways* will be described from two particular standpoints: university *access* and *student persistence*. Analysis carried out using *YITS* Cohort B data will first address the factors that influence FGS educational pathways in Canadian universities. Similar analyses will then address the particularities of FGS pathways in the Université du Québec network. Through macro and micro social analyses, we hope to shed light on the possible variations and clarify the challenges faced by certain establishments due to geographic location. It is hoped this paper will broaden reflection on the question of so-called "improbable" pathways, i.e., on the educational pathways of students whose social background would indicate a low likelihood of pursuing university education. The analysis will be based on the Université du Québec network's ICOPE study and the *YITS*.

	Title	Operationalization of the Concepts in Research Paper 3
Paper 10	**Non-traditional pathways among young men and women in Canadian post-secondary education**	This paper, based on the *YITS* and the *RELÈVE* qualitative study, aims to identify the processes and factors that instigate young men and women to choose non-traditional study programs, as well as the likelihood that they persist in these programs. Analysis of non-traditional pathways will accordingly focus more specifically on program choice and persistence. To rank the programs, we established a typology of five categories (typically "masculine" programs, typically "feminine" programs, male-dominated programs, female-dominated programs and egalitarian programs), based on the proportions of male and female students in each, keeping in mind their relative proportions in the student body. This typology will make it possible to analyse the factors that influence the initial choice of a non-traditional program, as well as student persistence in that program. Analyzing the *YITS* data will yield an "objective" portrait of pathways in non-traditional programs. Secondary analysis of *RELÈVE* data will shed a more "subjective" light on students' perceptions of their choices and the motivations spurring them to take a given educational pathway (analytical axis 2).
Paper 11	**The influence of different stakeholders on students' educational choices**	This paper builds on ERTA research and data from the *RELÈVE* study. Its objective is to determine the influence of peers, parents and educational establishment stakeholders (teachers, individual tutors, academic advisors, guidance counsellors) on the pathways of college students (program choice, vocation, organisation of the school path, persistence). We aim to investigate in depth the impact of the institution and extracurricular experiences on the objective and subjective construction of the educational pathway (analytical axes 1, 2 and 3).
Paper 12	**Returning to School**	This paper builds on the research topics addressed in Paper 7. It focuses on the phenomenon of returning to school and particularly on the discontinuous or atypical pathway. The interruption of studies, an increasingly common student pathway, may be short- or long-term and may stem from different motives and situations. The paper sets out to examine the incidence of interruptions in Quebec and Canada, assess their duration and understand the underlying motives. The various factors that influence a return to school will also be discussed. This paper is intended to broaden reflection on the position of adults (or at least young adults) in post-secondary education. The analysis will be based on *YITS* Cohort B and conducted using life models, thus making it original.