

Introduction:

Today's Post-Secondary Students – Adding Faces to Numbers

Lesley Andres

Expansion of the post-secondary system, increasing evidence of the market and nonmarket effects of education, an emphasis on credentialism as the new rite of passage, and national attention on issues of equality of opportunity have served to promote post-secondary participation in Canada.¹ As a result, provincial systems of post-secondary education have continued to expand and diversify. Between 1984-85 and 1998-99, full-time university undergraduate enrolment increased by 20 percent and full-time enrolment in programs at community colleges increased by 25 percent (Statistics Canada 1984-2001). Much of the growth has been attributed to increased access for nontraditional students, evidenced mainly by higher numbers of women taking part in post-secondary education and, to a lesser extent, students from different ethnic and socioeconomic backgrounds, disabled individuals, and older students. Because these data are disaggregated by gender, comparisons of enrolment and completion rates by women and men in various programs can be determined (Andres 2002; Finnie 2001). However, national databases do not allow for the examination of participation of different age, ethnic/racial, or socioeconomically disadvantaged groups; nor do they permit examination of the experiences and outcomes of these groups. The purpose of this book is to extend current understandings of participation, experiences, and outcomes of today's post-secondary students.

Multiple forces impacting on post-secondary education, including threats to funding, rising tuition fees, labour market restructuring, privatization, and calls for increasing relevance of education to the workplace, have led to growing pressures on post-secondary institutions to pay increasing attention to the quality and relevance of their students' experiences and related educational outcomes. Increased interest is evidenced by activities ranging from national efforts to establish educational outcomes (Canadian Education Statistics Council 2000) to academic (Doherty-Delorme and Shaker 2003) and popular media ratings and rankings of universities (e.g., *MacLean's*, *U.S. News World Report*).

However, in most of the scholarly work to date, theoretical models and empirical studies have focused on student retention and attrition. The most dominant body of research has been grounded on a theoretical model of persistence/dropout developed by Tinto (1975, 1987). Based on this model, persistence and withdrawal behaviour by students has been described as the degree of “fit” between students and their institutional environments. That is, students arrive at a given institution with a range of personal characteristics (e.g., sex, ethnicity), family and community of origin characteristics (e.g., family socioeconomic status, size of community), skills (e.g., intellectual and social), value orientations, achievements, and experiences from prior schooling (e.g., academic ability, secondary school achievement). Each of these characteristics affects the individual’s initial formulation of intentions and commitments about future educational activities, which, in turn, influences subsequent experiences within the institution. Ultimately, these experiences determine the individual’s integration into the institution. The extent to which academic integration occurs is determined by academic performance and level of intellectual development. Social integration is a result of the quality of peer group interactions and the quality of student interactions with faculty. Levels of social and academic integration lead to second-order commitments toward the institution and graduation. The higher one’s level of institutional and goal commitment, the more likely one is to persist at the institution.

Researchers adopting variations of Tinto’s model have examined community college students’ predisposition to transfer, retention of ethnic groups, and specific constructs of the model such as faculty-student contacts, and predictors of social and academic integration (Chapman and Pascarella 1983; Nora and Rendon 1990). These findings have been used by institutional researchers and planners to assess the fit (or mismatch) between students’ initial expectations and actual experiences. By focusing on its various dimensions, interventions have been designed to encourage student persistence, thereby preventing potentially wasted resources associated with post-secondary attrition.

Such approaches, however, are limiting. Originally designed to assess persistence patterns of a young (e.g., the 18- to 24-year-old) residential student population, theoretical developments and empirical studies usually focus on four-year university students and assume full-time attendance. As such, they disregard the demographic heterogeneity of today’s student population. Historically, the “traditional” university student meant male and white (Andres and Guppy 1991; Axelrod 2002). Demographic profiles of post-secondary students in the 1990s reveal that students once defined as “non-traditional” are now an integral part of the mainstream student population (Puccio 1995).² Although variations of Tinto’s model have been devised to

assess persistence/withdrawal behaviour of “nontraditional students,” these models remain peripheral and continue to deal with the “other.”

Moreover, these models locate individuals within a given post-secondary institution and emphasize the effectiveness of the individual to integrate socially and academically into the institution. Concepts within these models are defined and measured in limited ways. For example, the most frequent measures of the concept of academic integration include grade point average or the number of contacts with faculty outside of the classroom setting. As Benjamin (1994) points out, this disregards the complexity of students’ lived lives. To extend our understandings of access to post-secondary education and participation and retention once in the system, other individual, institutional, and extra-institutional dimensions are needed. These dimensions include family, society, preparation, situation, institution/program, psychosocial/emotional and socioeconomic considerations, and outside community support (Johnson 1991). Students cannot be examined in isolation from the multiple contexts within which they operate; in other words, it is critical that individuals, environments, and situations remain conceptually and analytically intact. Also, it is important to embrace the complexity of post-secondary institutions and the multiple societal institutions in relation to the quality of students’ experiences within post-secondary institutions.

To date, however, existing theoretical models and empirical analyses have not addressed the dynamic relationship between students as agents within societal institutions and institutions as living structures that impact on the lives of students. The relationship between structure and agency has long been acknowledged in the sociological literature (Archer 1982; Coleman 1986; Giddens 1984). Agents (i.e., students) enter post-secondary institutions enabled or constrained by varying levels of competencies, resources, and strategies. As such, they are not without “engines of action,” completely constrained and shaped by their environment. However, students also encounter people, policies, and practices within societal institutions, including post-secondary institutions, family, and work, that enable or constrain their ability to integrate socially and academically and to achieve their educational goals. As Bourdieu (1991) indicates, educational institutions can be conceptualized as a “field” within the multidimensional space of the social world. A given institution and the people within it create a *field of forces* and a *field of struggles*, which tend to transform or conserve the field of forces. Students are defined by their *relative positions* in this space, that is, relative to faculty, staff, resources, policies, and practices of a given post-secondary institution. Students’ relative positions are also defined by other relevant “fields,” such as family and work. Hence, occupants of various positions in each field are oriented, through the network of relations among

the positions, to the strategies that may be implemented in their struggles to ameliorate their positions.

Considerable research efforts have focused on access to post-secondary institutions by Canadian women and men. For example, statistics indicate that between 1960 and 1985 enrolment by women in university undergraduate programs increased steadily, and by 1988 women's enrolment had surpassed men's. In 1998-99, the proportion of women in the 18-21 age group enrolled full time in university undergraduate programs in Canada was 35 percent; the comparable figure for men was 26 percent. Since 1976, women's full-time enrolment at community colleges in Canada has exceeded men's and more women students have always participated part-time at community colleges (Statistics Canada 2001). However, women remain underrepresented in mathematics, science, engineering, and technology at both the community college and university levels (Adamuti-Trache and Andres 2002; Andres 2002). Existing national data do not permit an examination of experiences within the post-secondary system by women and men, different age groups, women with multiple responsibilities, students with disabilities, international students who are often visible minorities, or students in alternative programs such as cooperative education. In this volume, we extend the analyses to include the study of access and participation within given institutions and programs. Our chapters focus on participation and experiences of women and men within various post-secondary settings.

This requires an approach to research that permits exploration of the agency-structure nexus. Such an approach allows us to seek answers to the following questions: Who has access to post-secondary education today? At what financial and personal cost? Based on what conditions and criteria? What institutional structures facilitate and constrain successful participation and completion by certain groups? In light of these constraining and facilitating factors, what levels of agency are required for experiences within the post-secondary system? How do various groups of nontraditional and traditional students describe their experiences within universities and the non-university sectors? Now that women are the majority in community colleges and undergraduate education, is gender still an issue?

In this volume, we focus on the experiences of students attending public post-secondary institutions in British Columbia. As such, the British Columbia context provides the specific example of the general case of participation and experiences of students attending Canadian post-secondary institutions. Nowhere has post-secondary expansion and diversification occurred to the extent that it has in British Columbia. In 1963, only one university and a handful of vocational schools constituted the BC post-secondary system. By 1988, the system had expanded to include five public universities, one private university, fourteen community colleges, four

public institutes, an Open University and an Open College, and a smattering of small private colleges and trade schools. In 2003, the BC system was composed of fourteen degree-granting institutions (including seven universities, five university colleges, the British Columbia Institute of Technology, and the Emily Carr Institute of Art and Design), twelve community colleges, three public institutes (including two Aboriginal institutes), and a sophisticated network of private post-secondary institutions. In addition, in 1989 the British Columbia Council on Admissions and Transfer (BCCAT) was established as a major initiative to improve access to post-secondary education. The broad mandate of the Council is to provide leadership and direction in ensuring that students can move throughout the network of post-secondary institutions in BC (Andres and Dawson 1998). In other words, in terms of availability and transferability of course credits among institutions, the British Columbia system of higher education provides a vast array of offerings and avenues for successful completion of post-secondary studies.

Because of this great variety of post-secondary offerings, the BC post-secondary system provides an ideal setting in which to study student access, experiences, and outcomes. However, although this volume showcases recent research conducted with students attending BC post-secondary institutions, the studies presented in each chapter will be relevant to post-secondary and secondary educators, educational policy makers, students of higher education, current secondary and undergraduate students, and their parents – within and outside BC – who are interested in the experiences of post-secondary students. Although the BC system has many distinctive characteristics, it shares more similarities than differences with other Canadian provincial post-secondary systems. All Canadian provinces have extensive public post-secondary systems that are controlled at the provincial level. Each provincial system makes provision for open access and highly competitive access to university and non-university programs. The former is fostered through a combined federal/provincial student assistance program in each province. Most provincial university systems include a variety of undergraduate, comprehensive, and medical/doctoral institutions. Although there is variation among provincial community college systems in terms of transfer and terminal programs, all systems offer a mix of developmental, academic, vocational, career, technical, and continuing education programs. In addition, although each province has developed a distinct system rooted in a uniquely Canadian model that is a hybrid of the British and American systems, many aspects of the Canadian system are indistinguishable from state higher education systems in the United States. The transfer systems in BC and Alberta are one example.

As summarized in detail below, the chapters address issues of access and participation by nontraditional and traditional students in programs ranging from community college developmental studies to graduate studies. In

the concluding chapter, we will highlight how results, implications, and recommendations offered in each chapter can be transferable to provinces and states within North America and beyond that have post-secondary systems that are similar and dissimilar to that of BC. This volume will provide valuable insights for well- or underdeveloped community college systems, educators and policy makers working in systems with disabled students, a few or many co-op programs, small or large numbers of international, Aboriginal, and nontraditional students, and those interested in improving the transition from high school to post-secondary study and enhancing participation by girls and women in mathematics and sciences. In addition, those interested in the study of systems of higher education – both nationally and internationally – will find the chapters enlightening.

The topics of access and participation are complex and multidimensional. Hence, various approaches to this investigation have been undertaken. In most chapters, the data presented are students' accounts of their experiences. In two chapters, the authors (Adamuti-Trache and Pillay) employ a large longitudinal study of BC young adults to portray patterns over time. In several other chapters, the authors (McGee Thompson, Liversidge, Warick, Lyakhovetska) conducted in-depth interviews with small groups of students to describe, in detail, their experiences in the post-secondary system. Two authors (Hawkey and Grosjean) combined larger-scale survey research and interviews with smaller groups of students. By examining students' participation and experiences at multiple sites and by employing several analytical methods, this collection of research studies is significant in the following ways: From the perspectives of policy and practice, we have been able to document how current admission, tuition, curricular, and institutional policies and practices have an impact on the participation experiences of students. In terms of theory and research, we have extended current thinking on these issues through rigorous conceptual and empirical debate and analysis.

Except for one instance, we have chosen not to reveal the identity of the post-secondary institutional sites. Our intention is not to conceal the identities of the post-secondary institutions. Rather, we felt that readers would be more likely to focus on the stories the authors told instead of the idiosyncrasies of the institutions themselves. However, context remains a central focus of each chapter.

Clearly, we have not been able to address all access and participation issues experienced by BC students. For example, we have not examined experiences of students attending private post-secondary institutions, men in nontraditional programs, students studying part-time, those enrolled in apprenticeship or vocational programs, those engaged in online courses and programs, or specific groups of racial and ethnic minorities, to name a few. In the concluding chapter, we comment on the limitations of this study and suggest directions for further research.

Organization of the Book

In Chapter 1, Maria Adamuti-Trache employs the metaphor of the “leaking science pipeline” to explore the relationship between high school preparedness and eventual post-secondary attainment of a large sample of young BC women and men in (and out of) science education and careers over a ten-year time frame. In this study, she employs a structural analysis to determine whether and when women and men with ample high school scientific capital leak out of the science pipeline. After establishing four types of high school graduates – non-science, life science, physical science, and mathematics – she determines the post-secondary trajectories of these individuals over time. This study illustrates how girls, and to a lesser extent boys, are filtered away from science beginning at the subject-option level in Grade 12 and continuing throughout their post-secondary years. Results indicate that although post-secondary participation and completion are strongly related to students’ high school profiles and only somewhat related to gender, specific fields of study by those graduates from university are strongly related to gender and high school profile. She concludes that young women are more likely to complete studies in a broad range of fields, whereas young men’s choices are more narrow and more directly related to their original high school orientation. This pattern is more pronounced for the high school physical science profile, thus leading to a large underrepresentation of women in physical sciences and engineering academic fields. Recommendations reinforce the need to examine the structure of undergraduate and graduate program offerings in science and to increase the link between high school teachers and the post-secondary science departments.

Two chapters focus on the experiences of women attending community college. In Chapter 2, Sharon Liversidge uses the sociology of time literature to inform a study of the experiences of student-mothers who “re/entered” the post-secondary system by enrolling in a community college nursing program. Analyses of in-depth personal interviews and a focus group session conducted with a small group of women in their second year of nursing studies revealed five major themes: time as a scarce resource, a personal need to achieve, feelings of guilt related to not “being there” for their children, re/entering women as the family organizers, and positive perceptions of their multiple-role status. Liversidge weaves the voices of the women throughout the narrative to reveal their stories. Recommendations from this study suggest ways for post-secondary programs to steer away from being another “greedy institution” in student-mothers’ lives. She suggests policies and practices designed to facilitate a balanced approach to post-secondary studies that takes into account students’ other life responsibilities.

In a similar vein, Donna McGee Thompson reports the findings of an investigation of the experiences of mothers of young children attending a

community-college-based developmental studies (DVST) program. In Chapter 3, semi-structured interviews were carried out with a small group of women who, while enrolled in this program, simultaneously assumed primary live-in parenting responsibilities for at least one young child. Participation in the DVST program signified a major, and positive, turning point in these women's lives. However, participation required adapting to new time pressures and redefining roles and relationships with children and other family members. In addition, participation entailed vulnerability to childcare and financial crises for which support services may or may not be available. McGee Thompson identifies implications for daycare policy, career counselling, and centralized services for student-mothers receiving welfare assistance. In particular, she concludes that if the goal of government is to move "employable" women from welfare to active participation in the labour force, then policies and practices to support and facilitate this transition are necessary. The identification of barriers and supports could assist women such as those participating in this DVST program in their move from poverty, economic dependence, and social disenfranchisement toward economic and emotional independence and stability.

Three chapters focus on the experiences of undergraduate students attending university. In Chapter 4, the nature of the university experiences of students who are hard of hearing and the impact of this type of disability on their experiences were the focus of Ruth Warick's research. Descriptive categories from Tinto's retention model (1987), along with the use of the agency-structure nexus highlighting the dynamics between an agent and the environment, provided the theoretical framework for the study. Interviews and journal entries of a small sample of hard-of-hearing students attending urban universities provided a detailed account of students' academic, social, transition, and disability service experiences in university, and revealed the impact of students' hearing losses on their university experiences. A key finding from the study is that students who are hard of hearing are similar to other students in many respects, including social patterns, discipline-related differences, and transition experiences. Nonetheless, they have different experiences because of their disability. They make academic decisions based on their hearing loss, such as choice of classes and instructors, seating position in a classroom, and courseload. They often feel like "visitors" in the classroom because of participation barriers, and they experience difficulties in social settings. Recommendations call for a greater emphasis on the classroom participation of students who are hard of hearing, increased disability training for instructors, more support for disability service offices, better classroom acoustics and mentoring programs, and modification of current models of retention.

In Chapter 5, Colleen Hawkey explores how third-year undergraduates sharing the same disciplinary affiliation at a research-intensive university

understand and experience “community.” The importance of social and academic integration into post-secondary communities has been articulated in the retention literature. Yet the meaning of community, and in particular community bounded by disciplinary affiliation, has not been explored to any great extent. In-depth interviews were conducted with a small sample of third-year students pursuing an undergraduate degree in psychology, and a survey questionnaire designed to explore key aspects of interviewees’ experiences was administered to a large sample of this cohort. In this chapter, students’ experiences, examined through the lens of a constitutive community framework, form the basis for an exploration of the structural, social, and cultural forces that contribute to community membership, integration, and involvement. The results of this study document the significant influences of disciplinary affiliation on community membership and belonging. Hawkey reveals how issues of community membership, involvement, and belonging were longitudinal processes that entailed complex patterns of participation and modes of exclusion that were influenced by students’ aspirations and obligations, as well as by structural characteristics of both the department and the university. Themes emerging from the research included a transition from a social community to integration into the academic community; competency development through enrolment in advanced-level coursework, involvement with faculty research projects, and learning the language of the discipline; research as a mechanism of integration, which included, among other things, a “space” of belonging; and membership status through improved relationships with professors and exposure to cutting-edge research. Recommendations include exploring avenues for increasing student involvement in research, providing physical space to enhance faculty-student interaction, and recognizing that community membership and involvement imply obligations and responsibilities by both the university and students.

In Chapter 6, Garnet Grosjean investigates co-op education programs from the perspective of the students enrolled in these programs. Through survey questionnaires and interview data collected from students, faculty, and staff, he details how students’ experiences in co-op programs shape their perceptions of learning and work and how, through these perceptions, they ultimately make meaning of their undergraduate experience. This study focuses on the unique set of social forces and relationships represented in co-op education and investigates them by means of a nested case study that utilizes a variety of data collection methods. Students reported that work placements provided opportunities to apply classroom learning; but more importantly, learning in the workplace had a major impact on subsequent classroom performance and self-confidence. Also, co-op allows students to earn market-rate wages while attending university and to gain employable skills. However, as demand for co-op grows, admissions are becoming

increasingly restricted to those with high GPAs, and once in co-op, those with the highest grades are placed in the most coveted work sites. Recommendations emerging from this study include further research and policy to ensure access to co-op remains equitable, the strengthening of knowledge transfer between the workplace and the academy, and the reinforcement of social networks that are fostered during the co-op experience.

The next two chapters focus on graduate students at universities. Any edited collection of work about Canadian post-secondary students would be remiss if it did not address participation by First Nations students. Rather than presenting findings of an empirical study, Michael Marker revisits the four Rs – respect, relevance, reciprocity, and responsibility – originally presented in a classic 1990 article by Verna Kirkness and Ray Barnhardt. This article pondered whether the presence of First Nations students on university campuses led to a genuine change in the academy. Building on this theme, in Chapter 7 Marker points out that although progress has been made in terms of cultural responsiveness to an Indigenous perspective, current emphases on career education in a globalized economy, science as the hegemonic ideology, and compartmentalized, expertized disciplinary-based knowledge present constant challenges to a First Nations epistemology grounded in place and experience-based knowledge. In this chapter, he reviews dominant practices in the university, such as research, methodology, theory, and community, in relation to Indigenous ways of knowing. Marker concludes by describing the Ts`kel program at the University of British Columbia, an interdisciplinary graduate program providing culturally grounded education for First Nations students, as well as Aboriginal perspectives on and critique of mainstream educational content and goals.

In Chapter 8, Regina Lyakhovetska presents the findings of a qualitative study designed to examine the experiences of international graduate students who were studying in one department in a university faculty of education for at least one term. Individual interviews and one focus group were conducted. The major findings were as follows: students from non-English-speaking countries found it more challenging to survive and progress in their university programs than those students from English-speaking countries. Throughout the course of their studies, few reported being active in the classroom, in extracurricular academic activities, or in social activities on campus. None were active participants in social events at the department and none reported developing more than one or two meaningful contacts with Canadian classmates and faculty. Instead, their connections were with other international students. International students felt neither included nor excluded in the departmental community. Few used student services available on campus. Students who were more proactive, more outspoken about their ideas and concerns, who had more friends among other

international and Canadian students, and who were encouraged by their classmates, faculty, and staff to participate in academic and social activities claimed less or no significant challenges in their overall experiences. Students with sufficient financial support and good English skills had the least problems. Despite difficulties, the students in this study developed many connections with other international students and several volunteered to help other international students feel welcome. Although these students reported having struggled considerably, they also learned a great deal from their experiences and became more independent, more outspoken, and more proactive. Lyakhovetska concludes that although international students contribute to the university community in many ways, restrictions in terms of access to financial aid and employment opportunities, insufficient language support, and lack of sensitivity to international student issues among faculty and students present the greatest barriers to integration. Recommendations of this study address how international students can better achieve their educational goals at a host university and how a host university and its community can assist international students in achieving their goals.

Finally, in Chapter 9, Gabriel Pillay analyzes responses to open-ended questions generated from BC longitudinal data collected over a ten-year period to determine young adults' perceptions of the transition from high school to post-secondary destinations and their views about guidance and counselling. Comments provided by respondents illuminate the struggles, challenges, and unexpected realities of young adults as they navigate the transition to post-high-school life. Respondents highlighted the following themes: high school offered inadequate preparation for post-high-school life; high school counsellors and counselling programs did not provide enough accurate information and guidance to students; and success and satisfaction of these young adults with the transition experience were related to their levels of high school planning and preparation. Pillay offers recommendations for high school counselling, career education programs, and the use of the career education curriculum to explore the diversity and uniqueness of the post-secondary system and beyond.

This collection ends with a Conclusion by Finola Finlay. She reminds readers of the importance of moving from research to practice and emphasizes the public and institutional responsibility to make *real* change in order to address the issues raised in the collection. Noting that “nontraditional” students attend institutions that are still for the most part run on traditional lines, Finlay points to the remarkable commonality of concerns that unite many of the chapters. She identifies four themes that emerge from the stories told by the students and researchers: inclusion, engagement, access, and gender. Finally, she suggests areas where further research could

address gaps in our current understanding of students' experiences. She concludes by underscoring that only commitment to long-term solutions can lead to transformative change in policy and practice.

Notes

- 1 The terms "post-secondary education" and "higher education" are synonymous and are used interchangeably in this volume.
- 2 Bean and Metzner (1985) define the nontraditional student as "older than 24, does not live in a campus residence (e.g., is a commuter), or is a part-time student, or some combination of these three factors; is not greatly influenced by the social environment of the institution; and is chiefly concerned with the institution's academic offerings (especially courses, certification and degrees)" (489).

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