Final Report
Research Related to Postsecondary Student Mobility

Assessing the Effectiveness of Ontario College Preparatory Programs Offered at Durham College

Submitted to the Ontario Council on Articulation and Transfer
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ABSTRACT

According to the Ministry of Training, Colleges and Universities, preparatory or pre-programs of instruction are defined as programs that provide students with foundational and/or specific skills required for admission to other college programs of instruction from which they will graduate. Preparatory programs have become a popular choice for students who are uncertain of their specific career goals and provide an opportunity to sample various skills areas. All Ontario colleges offer a variety of preparatory programs, with over twenty different preparatory programs available. Durham College began offering preparatory programs in 1999 and currently offers eight of these programs, with an enrolment of over 2,600 students over the last five years from 2008-09 to 2012-13.

This study seeks to understand the outcomes of students who have enrolled in preparatory programs. Historically, the graduation rates for the preparatory programs have been low. However, graduation rates alone do not present a complete picture of the successful outcomes for preparatory programs since students may transfer to another postsecondary program without graduating from the preparatory program. Student pathways are an especially important option for the preparatory program students and need to be examined from the point of entry into the preparatory programs.

This study included students who enrolled in a one-year preparatory program at Durham College from 2008-09 until 2012-13, and examines the various pathways followed by these students. Students were invited to participate in an online survey and offered the opportunity to volunteer for focus group discussions. Findings from the survey were analyzed and further explored in-depth during the focus group discussions. The analysis was further enhanced with administrative data on academic outcomes.

This study demonstrates that well-articulated academic goals (or educational plans), social integration achieved during the preparatory program, career clarity, perceived usefulness of
the courses, and supportive faculty and administrative staff play important roles in students’ experiences and decisions to continue with subsequent postsecondary education.

The key findings from this study were:

1. Durham College preparatory programs are effectively supporting students with academic preparedness and social integration. 82.1% of the respondents indicated that the preparatory program met their expectations.

2. In addition to academic preparedness and social integration, students expect preparatory programs to help them with developing academic goal clarity and career clarity.

3. 73.1% of the respondents sought subsequent postsecondary education. Based on the administrative data, 63.5% of the study population returned for subsequent postsecondary education at Durham College itself. Most of the students who re-enrolled at Durham College sought two-year diploma or three-year advanced diploma program. Respondents who enrolled at other postsecondary institutions primarily enrolled in undergraduate degree programs.

4. Students who had completed preparatory programs at Durham College had higher retention rates but took longer to graduate from the subsequent diploma or advanced diploma programs than the students who did not have prior preparatory program experience at Durham College.

5. Students indicated the need for greater academic rigour in some of the preparatory programs. In addition, preparatory programs at Durham College seem to prepare students more adequately for two-year diploma programs than three-year advanced diploma programs.

6. Students were generally satisfied with the admission process and the transition to subsequent postsecondary program but had specific suggestions for improvements enumerated in the conclusion of the study.

7. Findings of the study lend credence to the value of using graduation rate as an assessment metric for the preparatory programs.
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SECTION I: BACKGROUND

Purpose of the Study

This study focuses on the experiences and outcomes of students who have enrolled in Ontario college preparatory programs at Durham College. Durham College, specifically, began offering preparatory programs in 1999 and currently offers eight of these programs – two of which became available to students as recently as September 2012.

With an enrolment of over 2,600 students over the last five years, preparatory programs at Durham College have become a popular choice for students who are uncertain of their specific career goals and provide an opportunity to sample various skills areas; however, data about the experiences of students in these programs is limited. The preparatory programs examined in this study in an effort to understand student experiences include the following:

- Business Fundamentals
- Community Services and Child Studies Foundations
- Emergency Services Fundamentals
- Foundations in Art and Design
- General Arts and Science
- General Arts and Science – Health
- Pre-media
- Trade Fundamentals

*Please note that Community Integration Through Co-operative Education was not included in the study because the supports offered to the students in this program are distinct from other preparatory programs and would not have been reflective of the overall student population enrolled in preparatory programs at Durham College.*
Research Questions

To understand the experiences and outcomes of Durham College preparatory students, there are seven research questions under investigation. The study evaluates preparatory program students’ motivations, experiences and outcomes while they are enrolled in the preparatory program, and then again, when they are enrolled in subsequent postsecondary program. Finally the study provides an alternative validation on the outcomes of preparatory students who undertake further education.

Stage I: Enrolled in a Preparatory Program

1. What are the career/educational objectives of students in the preparatory programs?
2. What were the experiences of the students in the preparatory programs?
3. Did the preparatory program meet the expectations?

Stage II: Transition to Subsequent Postsecondary Program

4. Did the preparatory program students subsequently enrol in a postsecondary program?
5. What factors, if any, can predict the likelihood of preparatory program students continuing postsecondary education?

6a. What are the motivations and transfer experiences of students who transfer to a subsequent postsecondary program of study?

6b. What strategies assist the preparatory program students in their transfer to a subsequent program of study?

Stage III: Validation of Outcomes in Subsequent Postsecondary Programs

7. Are the outcomes of academic performance, retention rates, and graduation rates of students with a prior postsecondary program comparable to students without a prior preparatory or postsecondary program experience?

Where possible, a comparison of students enrolled in the different preparatory programs will be presented.
Definitions of Key Terms

The following is a list of key terms used throughout this report:

- **Banner**: Durham College’s student record information system
- **KPI**: Key Performance Indicator
- **KPI Graduate Satisfaction Survey**: annual telephone survey conducted by MTCU among a sample of graduates who attended colleges in Ontario
- **MTCU**: Ministry of Training, Colleges and Universities
- **OCAS**: Ontario College Application Service
- **ONCAT**: Ontario Council on Articulation and Transfer
- **Ontario College Preparatory Program**: programs that are rooted in preparing students to begin pursuing post-secondary studies and to assist them in obtaining a targeted set of vocationally specific skills

Limitations of the Study

The study includes the entire preparatory program student population across five academic years. However, 7% of the study population responded to the survey questionnaire, and the respondent demographic was positively skewed towards females. Wherever possible, survey findings have been additionally validated through administrative data available for the entire study population.

Additionally, there was wide variability between preparatory programs on some of the dimensions assessed; hence, the findings should be carefully interpreted in the context identified. Overall, the findings of the study are fairly generalizable across the preparatory programs offered at Durham College. However, further investigation would be required to assess whether the findings are also applicable to preparatory programs at other Ontario postsecondary institutions.
SECTION II: LITERATURE REVIEW

There is little opposition to the notion that postsecondary education is becoming an increasingly important aspect of the social, economic and cultural development within societies. Postsecondary education is often tied to both individual economic and social achievement, as well as provincial and national economic growth (Berger, Motte & Parkin, 2009; Deloitte, 2011; Wilson, McCaughan & Han, 2011). At the individual level, it is widely held that possession of a postsecondary credential is directly related to an individual’s employment outcomes as well as earnings potential. Literature suggests that unemployment rates are generally lower amongst those with postsecondary credentials, while incomes tend to be higher, when compared to those individuals who do not attend a postsecondary institution (Berger et al., 2009; Deloitte, 2011; Wilson et al., 2011). Similarly, research indicates that the vast majority of parents now expect that their children will attend some form of postsecondary institution following their completion of high school (Educational Policy Institute, 2008).

The widespread belief in the importance of postsecondary education, and the benefits that often accompany earning a postsecondary credential, have led to substantial research into the potential barriers to student success in a postsecondary environment. Much of the literature emphasizes two key stages where a student may face barriers to participation in postsecondary education. First, literature explores the factors that influence student decisions on whether to enrol in postsecondary education. Various studies explore the reasons students choose not to enrol in further study following high school, and what methods should be employed to influence more students to continue on to postsecondary education (Wilson et al., 2011; Berger et al., 2009; Deloitte, 2011).

The second stage is once a student is enrolled in a postsecondary environment. The focus of research then tends to shift to exploring the factors that influence student persistence in postsecondary education. Persistence generally refers to the commitment that individuals have to completing their postsecondary education once they have initially been enrolled. Research on persistence tends to explore the reasons why students drop out of their postsecondary institution, and what institutions can do to improve student experiences and improve retention rates.

Whether discussing barriers to student enrolment or persistence in postsecondary education, there is an almost unanimous belief in the fact that postsecondary education is becoming increasingly important, and it is essential that individuals have the opportunity to both enrol in, and complete postsecondary programs. One of the methods that institutions often employ to both improve access to postsecondary education for individuals while also improving persistence and retention rates is the use of preparatory programs that are designed to provide students with certain knowledge and skills that will help them to be better prepared for further education. Preparatory programs in Ontario provide students with a complexity of knowledge that focuses on preparing students to begin their postsecondary education, or may provide students with vocationally specific skills (Ministry of Training, Colleges and Universities [MTCU], 2009). Preparatory programs are important in this context because the benefits that
accompany enrolment in a preparatory program often mitigate the effect of factors that can prevent students from enrolling, or staying enrolled, in postsecondary education.

**Academic Preparedness**

Academic preparedness is one of the largest barriers to postsecondary education, and is one of the most important predictors of whether an individual will attend a postsecondary institution, or complete a postsecondary program (Gorman, Tieu & Cook, 2013; Wilson et al., 2011; Berger et al., 2009; Deloitte, 2011; Looker, 2002; Educational Policy Institute, 2008; Tinto, 1975; Bailey and Karp, 2003; Grosset, 1991). A positive sense of one’s readiness for the academic demands of higher education is often cited as being one of the most important factors influencing student success in postsecondary education (Grosset, 1991; Mueller, 2007; Tinto, 1975).

There are a number of specific facets of academic preparedness that play a large role in influencing whether or not individuals actually attend a postsecondary institution or complete a postsecondary program. Not surprisingly, one of the most common topics surrounding academic preparedness and its impact on postsecondary education is a student’s academic experiences prior to enrolling in their current postsecondary educational institution. Student grades, as well as the level of academic rigour students face while in high school, is believed to play a large role in predicting whether individuals will succeed in postsecondary education (Tinto, 1975; Grosset, 1991; Baker and Velez, 1996; Harackiewicz, Barron, Tauer & Elliot, 2002). Much of the literature on student persistence in postsecondary education suggests that an individual’s educational experiences prior to college entry, including their measured academic ability as demonstrated through grade performance in high school, is very much related to that individual’s success in college (Tinto, 1975).

Academic preparedness has a significant impact on students’ self-efficacy beliefs. It plays such a large role in student success in postsecondary education because often students do not (or do not believe) that they have either the grades, or the skills that are required to succeed in a postsecondary environment. Students often cite having marks that were too low, or simply not being accepted to their program of choice as important factors in their decisions not to attend postsecondary education (Looker, 2002; Grosset, 1991). Similarly, failure to meet the academic demands of a postsecondary institution can sometimes be traced back to a student’s poor academic performance in high school or their lower academic ability (Tinto, 1975; Grosset, 1991; Baker and Velez, 1996; Harackiewicz et al., 2002).

Academic advising plays an important role in helping prepare students for the rigour of postsecondary education, and is recurrently emphasized as an important tool that should be used to mitigate the effect of student perceptions of being underprepared for postsecondary studies. Often it is stressed that work needs to be done in order to bridge the gap between high school and college by helping students in areas such as time management and preparing for tests, as well as helping students with core competencies such as math and literacy (Grosset, 1991; Deloitte, 2011). Students who struggle with these core competencies are more
likely to face challenges in postsecondary education (Grosset, 1991; Deloitte, 2011). Similarly, academic advisors are important to student success because it is necessary for students to have access both in class and out of class support when they are dealing with both personal and academic difficulties (Grosset, 1991).

**Social Integration**

While much of the literature on success in postsecondary education focuses on the importance of academic preparedness for a rigorous educational environment, another major factor that is argued to influence student success is the social integration into a postsecondary environment (Tinto, 1975; Kuh, 1995; Grosset, 1991; Christie & Dinham, 1991; Pascarella, 1980; Pascarella, 1984; Stage, 1989). An individual may be able to integrate well into the academic domain of a postsecondary institution; however, a lack of integration into the social system of the college can often lead to low levels of commitment and feelings of disengagement. The lack of social integration increases the probability that a student will leave the college to pursue other opportunities (Tinto, 1975; Kuh, 1995; Pascarella, 1980; Christie & Dinham, 1991; Stage, 1989; Grosset, 1991). The factors that contribute to student success in postsecondary education are said to be undergoing continuous modification based on a student’s interaction with the college environment (Pascarella, 1980; Christie & Dinham, 1991; Tinto, 1975; Stage, 1989; Grosset, 1991). This is emphasized by Pascarella (1980) who mentions the important influence of a student’s “interpersonal environment.” A student’s interpersonal environment is “the climate of attitudes and behaviours of those that a student is in direct and constant contact” (Pascarella, 1980: 546). Students’ social integration is impacted by involvement in social activities and also their interaction with members of the postsecondary environment including peers, faculty members and administrative and support personnel (Tinto, 1975; Pascarella, 1980; Grosset, 1991; Kuh, 1996).

Tinto’s (1975) model of persistence in postsecondary education suggests that college dropouts generally perceive themselves as having less social interaction than those students who succeed in a postsecondary environment. One of the key aspects of social integration into a postsecondary education is the relationship that is developed between students and their peers (Tinto, 1975; Grosset, 1991; Kuh, 1996; Pascarella, 1980; Christie & Dinham, 1991). Emphasis is often placed on the idea that a student’s postsecondary experiences are positively impacted by more frequent interaction with peers, often through involvement in extra-curricular activities, friendship associations, or living on campus in residence, for example (Tinto, 1975; Grosset, 1991; Pascarella, 1980; Christie & Dinham, 1991). Similarly, other students and peers are also an important aspect of cognitive development and the learning experience while enrolled in postsecondary education, and relationships between students should be encouraged through group classroom activities, or even peer tutoring activities (Kuh, 1996; Grosset, 1991).

Much of the literature on student success in postsecondary education stresses that social integration into a postsecondary institution is heavily reliant on a student’s ability to develop meaningful relationships with faculty members (Tinto, 1975; Pascarella, 1980; Kuh, 1996;
Wilson et al., 2011; Pascarella, 1980; Christie & Dinham, 1991; Grosset, 1991). In order to promote and enhance social integration into a postsecondary environment, it is important that faculty members not only develop relationships with students while in the classroom, but they should also develop relationships with students outside of the classroom (Tinto, 1975; Pascarella, 1980; Grosset, 1991). Evidence suggests that often, non-formal relationships developed between students and faculty members outside of the classroom can impact an individual’s personal development while enrolled in postsecondary education (Pascarella, 1980). Relationships between students and faculty members outside of the classroom is said to have a measurable impact on a number of educational outcomes including educational aspirations, intellectual and personal development, academic achievement, career aspirations and potential career mobility, student satisfaction with a particular postsecondary institution, and a student’s persistence in postsecondary education (Tinto, 1975; Pascarella, 1980; Grosset, 1991). Essentially, an opportunity for increased interaction with faculty members, both academically and non-academically, helps to foster a formal sense of purpose for students in a postsecondary setting (Pascarella, 1980).

The importance of out-of-classroom experiences for students in postsecondary education also reinforces the important roles played by not only faculty and peers, but also by administrative personnel and others that are associated with the support services available at an institution (Tinto, 1975; Grosset, 1991; Pascarella, 1980; Wilson et al., 2011; Gorman et al., 2013; Wilson et al., 2011). Faculty members are often the most common point of contact for students and it is important for them to also act as a bridge between the classroom and the out of class support that is available for students who experience both personal and academic difficulties (Grosset, 1991; Pascarella, 1980). Relationships between students and advisors, be it academic advisors or personal support counsellors, emphasise the importance of the postsecondary environment beyond the transmission of facts and knowledge (Pascarella, 1980).

Clarity of Academic Goals and Expectations

When discussing his seminal predictive model of student persistence in college, Tinto (1975) stresses the importance of understanding student expectations, goals, and motivations. He suggests that it is important to understand a student’s academic and educational goal commitment, because it is sometimes educational goals that influence how an individual will interact with the college and its environment. Often it is the interaction between a student’s academic performance, social integration, and goal commitment that impacts their postsecondary experiences (Pascarella, 1980; Stage, 1989; Tinto, 1975; Harackiewicz et al., 2002). For example, Pascarella, Smart and Ethington (1986) suggest that the stronger a student’s social and academic integration into a college environment, the greater the student’s commitment to the goal of college graduation. Similarly, when referring to the interaction between goal commitment and other predictors of student persistence in postsecondary education, others suggest that it is goal commitment itself that acts as a significant predictor of both academic and social integration (Stage, 1989; Harackiewicz et al., 2002).
Students who enter postsecondary education with a particular set of academic goals in mind or those who develop strong commitments to academic goals while enrolled in postsecondary education, are often cited as being more likely to persist than those who do not have any goals. The idea is that the more committed a student is to a clear academic goal or educational plan, the more likely that student is to remain committed to their institution and therefore persist in their program of study (Tinto, 1975; Grosset, 1991; Stage, 1989; Harackiewicz et al., 2002; Sewell and Shah, 1967). For example, Grosset (1991) suggests that students who enter postsecondary education with higher degree aspirations and the intention of completing at least a bachelor’s degree, are more likely to persist than those with lower, or no degree aspirations. Similarly, in a study that examines educational goals from a more micro perspective, Harackiewicz et al. (2002) suggest that even goals as simple as academic performance goals can influence a student’s experiences in their postsecondary program. Harackiewicz et al. suggest that students with set performance goals generally attain higher grades than those without performance goals in mind, and this can often have long term influences on a student’s experiences in postsecondary education.

Access to information such as the availability of various types of postsecondary programs, the costs and benefits associated with postsecondary education, and potential programs for future study is an integral aspect of student success in postsecondary education. If students have the resources necessary to make informed decisions about their academic aspirations and educational goals, they are more likely to succeed in a postsecondary environment (Educational Policy Institute, 2008; Grosset, 2001; Deloitte, 2011; Berger et al., 2009). Providing students with access to enhanced academic planning early on in their postsecondary academic career is argued to be an important aspect of helping students to craft their educational goals and aspirations (Grosset, 1991; Wilson et al., 2011; Educational Policy Institute, 2008). Grosset (1991) suggests that providing orientation programs early in the enrolment process that make students aware of program possibilities, course selections, and other administrative information would help to enhance student persistence in postsecondary education.

Clarity of Career Goals and Expectations

When Tinto (1975) refers to student goals and commitments as being major predictors of student success in postsecondary education, the reference is not only to educational goals, but also to the importance of occupational and career related goals. Student commitment to a particular career path is widely believed to be one of the most significant factors contributing to student success in postsecondary education (Deloitte, 2011; Wilson et al., 2011; Educational Policy Institute, 2008; Looker, 2009). Individuals with clear and coherent occupational goals are often cited as being significantly more likely to enrol in postsecondary education, than those who remain undecided on their intentions following high school (Tinto, 1975; Parkin & Baldwin, 2009; Gorman et al., 2013; Grosset, 1991; Berger et al., 2009). Similarly, indecision surrounding where an individual intends to go following the completion of a postsecondary program is also cited as an important influence on whether an individual will find value in the program that
they are enrolled in, and consequently, whether they will remain enrolled in that program (Tinto, 1975; Wilson et al., 2011; Gorman et al., 2013; Berger et al., 2009).

An example that emphasizes the important role that colleges play in helping students to develop occupational and career goals is the changing nature of university and college transfer patterns amongst students. Literature suggests that students in postsecondary education are increasingly attending multiple institutions over the duration of their studies (Boswell, 2004; Wilson, 2009). In the past, credit transfer discussions, particularly in the United States, focussed on the role that community colleges have played in preparing students for transfer for further study in a degree program at a university (Boswell, 2004; Wilson, 2009). However more recently, the paths of student transfer in the postsecondary educational environment have not been so clear. Increasingly, researchers are making note of the process of “reverse transfer” in postsecondary education. “Reverse transfer” refers to students who have completed at least some level of university education who enrol in college programs following their university experiences. This process is important in the context of students setting clear occupational goals, because one of the main factors that contributes to the process of “reverse transfer” is the fact that students often view the community college setting as a way to improve their occupational skills, gain training to get a job and discover career interests (Wilson, 2009).

Much of the literature on student persistence in postsecondary education looks to Tinto’s model of student persistence as its framework. However, it should also be noted that there are some who suggest that Tinto’s model alone does not reflect the unique characteristics of all students in the postsecondary system. Some argue that Tinto’s model is too macro, and that variables such as student ethnicity, age, and the type of institution (i.e. university or college), for example, should be studied in more detail to account for the different experiences that particular groups of students may face while enrolled in postsecondary education (Metz, 2002).

The literature that specifically reviews educational effects of postsecondary preparatory programs is relatively sparse, and research that investigates aspects related to some of the intended outcomes of preparatory programs is fragmented. Preparatory programs, such as the ones that are explored in this project, are intended as a means to prepare students for the rigours of postsecondary education and to help them to be successful in their paths of future studies. Preparatory programs are an important tool that can be used as a means to improve the postsecondary experience of students. Preparatory programs help students to prepare academically for the rigours of postsecondary education, they introduce students to the social aspects of postsecondary environment, and they help students to develop clear academic goals as well as clear career goals. By providing students with support in the academic and social realms of postsecondary education, and by helping them to develop clear goals for the future, preparatory programs are believed to improve student participation in postsecondary education, as well as student persistence and retention in postsecondary education.
SECTION III: METHODOLOGY

Population and Sample

The study population (n=2,885) is comprised of students who were enrolled in the eight preparatory programs at Durham College from 2008-09 through 2012-13. The study population was invited to participate in an online survey and subsequent focus group.

An additional population sample was included for students enrolled in preparatory programs at Durham College during Winter 2014.

Data Collection Methods

The methodology for this research is a non-experimental mixed methods design. The study population (n=2,885) was invited to participate in an online survey. The online survey questionnaire explored the motivations, experiences, and outcomes of the respondents (n=202; please refer to Appendix A for the survey questionnaire). The survey respondents were further invited to volunteer for focus group discussions (N=23; please refer to Appendix B for the discussion guide). To validate the information provided by survey respondents during focus group discussions, an additional focus group was conducted with preparatory program students who were enrolled in the Winter 2014 session.

Primary sources of quantitative information were administrative data in the Banner Student Information System, OCAS applications data, data collected through the online survey (n=202), and KPI Graduate Survey data. Primary qualitative data was collected from five focus groups of survey volunteers, and an additional group of the Winter 2014 preparatory program students.

A. Online Survey

<table>
<thead>
<tr>
<th>Target Respondent:</th>
<th>All Durham College preparatory students enrolled between 2008-09 and 2012-13 were invited to participate in the survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Source:</td>
<td>Durham College’s Banner System</td>
</tr>
<tr>
<td>Sample Size:</td>
<td>Total of 202 completed surveys (15 students from 2008; 30 from 2009; 41 from 2010; 40 from 2011; and 76 from 2012)</td>
</tr>
<tr>
<td>Field Dates:</td>
<td>November 15, 2013 to January 10, 2014</td>
</tr>
<tr>
<td>Completion Length:</td>
<td>Approximately 15 minutes, on average</td>
</tr>
<tr>
<td>Screening Criteria:</td>
<td>Provision of informed consent prior to completing survey</td>
</tr>
<tr>
<td>Incentive:</td>
<td>Entry into a draw for a chance to win 1 of 3 Best Buy gift cards valued at $100</td>
</tr>
<tr>
<td>Weighting:</td>
<td>None required</td>
</tr>
</tbody>
</table>
Assessing Effectiveness of Durham College Preparatory Programs

<table>
<thead>
<tr>
<th>Summary</th>
<th>Respondents were asked a set of questions to understand their background, reasons for choosing their program, support services accessed, and anticipated/actual outcomes. The survey data was quantified and reported, and used to inform the identification of some of the common themes that were explored in the student focus groups. Where possible, results from students from different programs are compared.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B. Focus Group</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Target Respondent:</strong></td>
<td>After completing the online survey, all respondents were invited to participate in the focus group to explore key themes in greater detail</td>
</tr>
<tr>
<td><strong>Sample Source:</strong></td>
<td>Durham College’s Banner System/Online Survey</td>
</tr>
<tr>
<td><strong>Sample Size:</strong></td>
<td>Total of 23 focus group participants</td>
</tr>
<tr>
<td><strong>Session Dates:</strong></td>
<td>February 19, 2014 (12-1pm); February 20, 2014 (12-1pm); February 22, 2014 (11:30am-12:30pm); February 25, 2014 (6-7pm); March 3, 2014 (12-1pm); February 11, 2014 (12-1pm).</td>
</tr>
<tr>
<td><strong>Group Length:</strong></td>
<td>60 minutes (6 sessions)</td>
</tr>
<tr>
<td><strong>Screening Criteria:</strong></td>
<td>Provision of informed consent prior to participating in focus group</td>
</tr>
<tr>
<td><strong>Incentive:</strong></td>
<td>Pizza lunch provided to participants</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>A set of open-ended questions was designed to elicit information at a deeper level, particularly to understand their reasons for attending the preparatory program, their experiences in the preparatory program, support services accessed, and goals upon graduation. Common themes from the focus group are identified and described in further detail throughout the report</td>
</tr>
</tbody>
</table>

**C. Supplemental Data**

Additional validation analysis was conducted based on the administrative data derived from the Durham College Banner system for students who were enrolled in Diploma and Advanced Diploma programs at Durham College during 2012-13. Specifically, data from Banner was extracted to identify and compare student retention and graduation rates, and to determine whether there is any difference between students:
(i) with prior preparatory experience at Durham College and students who do not have preparatory program experience at Durham College;
(ii) with preparatory program experience at Durham College who enrolled in Diploma programs compared to those who enrolled in Advanced Diploma programs, and
(iii) the extent to which enrolling in a preparatory program contributed to their overall success.
### SECTION IV: DATA ANALYSIS

The following table provides a summary of the overall preparatory student universe (2008-09 to 2012-13), online survey respondents, and focus group participants in this study:

<table>
<thead>
<tr>
<th></th>
<th>Universe</th>
<th>Online Survey</th>
<th>Focus Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sample Sizes</strong></td>
<td>n=2,885</td>
<td>n=202</td>
<td>n=23</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>41%</td>
<td>29%</td>
<td>11%</td>
</tr>
<tr>
<td>Female</td>
<td>59%</td>
<td>71%</td>
<td>89%</td>
</tr>
<tr>
<td><strong>First Generation Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23%</td>
<td>27%</td>
<td>28%</td>
</tr>
<tr>
<td>No</td>
<td>77%</td>
<td>73%</td>
<td>72%</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 21</td>
<td>11%</td>
<td>23%</td>
<td>28%</td>
</tr>
<tr>
<td>21-25</td>
<td>67%</td>
<td>51%</td>
<td>44%</td>
</tr>
<tr>
<td>26-30</td>
<td>16%</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>31-35</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>More than 35</td>
<td>4%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Year of Entry into Preparatory</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td>14%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>2009-10</td>
<td>16%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>2010-11</td>
<td>19%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>2011-12</td>
<td>23%</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>2012-13</td>
<td>28%</td>
<td>38%</td>
<td>67%</td>
</tr>
<tr>
<td><strong>Preparatory Program</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Fundamentals</td>
<td>5%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Community Services and Child Studies Foundations</td>
<td>1%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Emergency Services Fundamentals</td>
<td>3%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>Foundations in Art and Design</td>
<td>9%</td>
<td>9%</td>
<td>17%</td>
</tr>
<tr>
<td>General Arts and Science</td>
<td>39%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>General Arts and Science – Health Stream</td>
<td>35%</td>
<td>48%</td>
<td>28%</td>
</tr>
<tr>
<td>Pre-Media</td>
<td>4%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Trade Fundamentals</td>
<td>2%</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Agreed to Participate in Focus Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>n/a</td>
<td>33%</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>n/a</td>
<td>67%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Please note that percentages may not add up to 100 due to rounding.*
Various analysis was conducted to assess the differences between the student cohorts from each of the five academic years, as well as to assess any differences between First Generation and non-First Generation students. No significant differences were found between these groups; hence, subsequent analysis included all of the student population across five academic years included in the study. It is noted, however, that there is a significantly larger female participation in the surveys and focus groups.
Stage I: Enrolled in a Preparatory Program

Subsection 1: What are the career/educational objectives of students in the preparatory programs?

This study explored the primary purpose(s) for which students at Durham College enrolled in the preparatory programs. The online survey respondents were offered choices that corresponded with Academic Preparation, Career Clarity, Social Integration, Other, or No Specific goals, and asked to identify their primary goal. The majority of the Durham College preparatory program students indicated Academic Preparation, either specifically for a particular postsecondary program or general academic skills (see Figure 1.1) as their primary motivation for enrolling in the preparatory program. This finding is consistent with the purpose of the preparatory programs as defined by the Ministry of Training, Colleges and Universities.

It is interesting to note, however, that almost one-quarter of the respondents indicated their primary goal as Career Clarity, either directly identifying it as a goal or through exploration of postsecondary programs available. This indicates that the preparatory programs, in addition to preparing students for other postsecondary programs, may need to play an active role in providing career exploration and guidance. Further analysis indicates that students in preparatory programs such as Trade Fundamentals and General Arts and Science-Health, which had greater occupational focus and hence fewer but better articulated pathways to postsecondary diploma programs, placed less emphasis on Career Clarity as a goal. In comparison, students in the preparatory programs such as, Business Fundamentals or Pre-media, which were field-specific but not occupation-specific and hence connected to greater number of pathways to postsecondary programs, placed a greater emphasis on Career Clarity.

Figure 1.1: Goals of Preparatory Program Students (n=202)
Social Integration, as identified through familiarizing with college culture and environment, was a less prominent reason among students who previously completed a university degree. Improving grades and acquiring the prerequisites required for the intended postsecondary program were some of the other goals identified for undertaking the preparatory program.

Subsection 2: What were the experiences of the students in the preparatory programs?

Students were invited to identify the various skill-sets that they were able to develop because of their experiences in the preparatory programs (see Figure 1.2). The extent to which respondents agreed with various skills development ranged from 75% to 92%. Academic Preparation (development of academic skills, gain knowledge about area of interest) skills were rated highest while Career Clarity (clarify career goals expectations, better understanding of postsecondary programs) were rated relatively lower. Social Integration related skill-set (develop sense of belonging with the college, explore student services available on campus) were in the mid-range except “understanding of social opportunities available” to students, which were rated relatively lower.

![Figure 1.2: Experiences with Skills Development in Preparatory Programs (% Strongly Agree/Agree)](image)

The motivations and experiences of students were explored in-depth in the focus groups. Focus group discussions indicated that the students who enrolled in the preparatory programs to improve academic skills or gain specific knowledge had the most successful experience. Students whose primary motivation was to gain career clarity had limited success in their experiences in the preparatory program while students who did not have any articulated goal
had the least successful experience in the program. Focus group participants emphasized the value of experiential learning, importance of faculty support, and the elective courses that can help inform career decisions.

**Student Support Services – Usage by Preparatory Program students:**

Durham College offers support to students through a number of services. This study explored the usage of seven particular student support services: Academic Learning Services, Career Services, Continuing Education, Diversity Office, Financial Aid, International Office, and Office of the Registrar.

Table 1.1 presents the usage of support services by the survey respondents. The majority of survey respondents indicated sporadic use of applicable services. Of all the services used, Student Academic Learning Services was used more frequently than other services.

Table 1.1

<table>
<thead>
<tr>
<th>Student Support Service - Preparatory Program</th>
<th>Never</th>
<th>Once a week</th>
<th>Once a month</th>
<th>Once a term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registrar (n=198)</td>
<td>28%</td>
<td>3%</td>
<td>13%</td>
<td>57%</td>
</tr>
<tr>
<td>Academic Learning Services (SALS) (n=201)</td>
<td>41%</td>
<td>17%</td>
<td>15%</td>
<td>26%</td>
</tr>
<tr>
<td>Financial Aid (n=198)</td>
<td>44%</td>
<td>5%</td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>Career Services (n=198)</td>
<td>68%</td>
<td>4%</td>
<td>5%</td>
<td>24%</td>
</tr>
<tr>
<td>Continuing Education (n=198)</td>
<td>79%</td>
<td>2%</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>Other; please Specify (n=115)</td>
<td>89%</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Diversity Office (n=198)</td>
<td>96%</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>International Office (n=196)</td>
<td>97%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

It is interesting to note that the Office of the Registrar services were not used most frequently but were used by the greatest number of respondents (57%). Further analysis indicates that the Office of the Registrar service usage was higher (84.1%) for the respondents who enrolled in a subsequent postsecondary program as compared to the respondents who did not (63.4%). In addition, Continuing Education usage was higher for respondents who did not enrol in subsequent postsecondary programs (31.7%) as compared to respondents who did enrol in subsequent postsecondary programs (19.7%). This may imply that either the preparatory program students seek flexibility through Continuing Education, or may be seeking alternative further education opportunities through Continuing Education.

Logistic regression analysis was conducted to further assess the impact of service usage on students’ decision to continue with postsecondary education after the preparatory program.
The results indicated that students who use the Office of the Registrar during their preparatory year are significantly more likely to re-enrol while the students who use the Continuing Education Office during their preparatory year are significantly less likely to re-enrol in subsequent postsecondary education.

Additionally, Student Academic Learning Services (SALS) has a relatively high usage frequency. The impact of this service on students’ experience and success was particularly evident in survey comments as well as during focus group discussions.

Student Academic Learning Services (SALS) was consistently acknowledged as an excellent resource by focus group participants in multiple discussion groups. There were a number of students who acknowledged that SALS played an important and “amazing” part in their experiences while enrolled in the preparatory program; they particularly appreciated the help they received from the members of the Academic Learning Services. Specific mention was made of the fact that representatives from SALS visited classes to discuss advising services for skills such as Biology and Mathematics.

Subsection 3: Did the preparatory program meet the expectations?

Students were offered a dichotomous response to indicate whether the preparatory program met their expectations. The majority (82.1%) of survey respondents indicated that the preparatory program met their expectations. Knowledge and support of the faculty were cited as primary reasons for the program meeting the expectations.

The professors were not only knowledgeable, but incredibly helpful and involved in the success of their students.

Respondents who indicated that their expectations were not met, were invited to share the reason(s). The primary reasons cited for failing to meet the respondents’ expectations were that the courses were not sufficiently challenging, and the programs did not help in further academic/career decision-making. Some of the comments shared by respondents were “It just felt like a high school program very dumbed down”; “It seemed more like a waste of time because I didn't learn anything I needed to for my career choice.” Focus group discussions yielded an interesting insight into these survey comments. A few of the focus group participants had prior postsecondary experience at university, and had enrolled in the Durham College preparatory programs to prepare for a career choice transition. This observation indicates that
there may be some students in the preparatory program whose skill-sets are already beyond the preparatory programs’ *academic preparedness* mandate, and that these students in particular may need more challenging courses or alternative pathways.

There was wide variability across the programs (see Table 1.2); however, caution is urged with interpretation due to small sample sizes of some of the programs.

Table 1.2

<table>
<thead>
<tr>
<th>Program</th>
<th>Expectations Met (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Fundamentals (n=7)</td>
<td>71.4%</td>
</tr>
<tr>
<td>Community Services and Child Studies Foundations (n=13)</td>
<td>84.6%</td>
</tr>
<tr>
<td>Emergency Services Fundamentals (n=10)</td>
<td>60.0%</td>
</tr>
<tr>
<td>Foundations in Art and Design (n=19)</td>
<td>94.7%</td>
</tr>
<tr>
<td>General Arts and Science – Health (n=95)</td>
<td>90.5%</td>
</tr>
<tr>
<td>General Arts and Science (n=49)</td>
<td>71.4%</td>
</tr>
<tr>
<td>Pre-Media (n=5)</td>
<td>60.0%</td>
</tr>
<tr>
<td>Trade Fundamentals (n=3)</td>
<td>33.3%</td>
</tr>
<tr>
<td>Overall (n=201)</td>
<td>82.1%</td>
</tr>
</tbody>
</table>

Some of the variability in the perception of programs’ usefulness is better explained through the primary motivation of the students enrolling in the preparatory programs rather than the specific program itself. A greater percentage of students whose primary goal was *Academic Preparation* (see Table 1.3) had their expectations met as compared to students whose primary goal was *Career Clarity*. However, two-tailed z test was not significant for differences between *Academic Preparation* and *Career Clarity* groups, z=1.36, p<.05.

Table 1.3

<table>
<thead>
<tr>
<th>Primary Goal</th>
<th>Expectations Met (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Preparation&lt;br&gt;Prepare for specific diploma/undergraduate post-secondary program(s) (n=94)</td>
<td>86.3%</td>
</tr>
<tr>
<td>Improve general academic skills (n=28)</td>
<td>82.1%</td>
</tr>
<tr>
<td>Explore different post-secondary programs available (n=27)</td>
<td>77.8%</td>
</tr>
<tr>
<td>Clarify career expectations (n=22)</td>
<td>73.9%</td>
</tr>
<tr>
<td>Social Integr. &lt;br&gt;Familiarize yourself with college culture and environment (n=9)</td>
<td>88.9%</td>
</tr>
<tr>
<td>Other (n=12)</td>
<td>66.7%</td>
</tr>
<tr>
<td>Did not have specific goal(s) (n=9)</td>
<td>66.7%</td>
</tr>
</tbody>
</table>
The analysis of student motivations, experiences, and satisfaction in the preparatory programs affirms that the preparatory programs at Durham College are successfully delivering their primary mandate of Academic Preparedness, especially where there is significant Academic Goal Clarity already present among students. However, there is an expectation among a significant percentage of students on gaining Career Clarity, and clarity of Academic Goals, through preparatory programs. This indicates that preparatory programs could better meet student expectations if their purviews were expanded to include more curriculum and advising on Academic Goals and Career Clarity as additional learning outcomes.

To further explore the aspects of Academic Goals and Career Clarity as outcome expectations from the preparatory programs, a comparative analysis was conducted between programs(s) with general learning outcomes and program(s) where learning outcomes are connected with specific field(s) of study. The majority of respondents in both General Arts and Science (n=49), and field-specific preparatory program(s) (n=152) indicated that the programs met their expectations. However, a higher percentage (29%) of those enrolled in General Arts and Science programs indicated that the program did not meet their expectations as compared to those enrolled (14%) in field-specific preparatory programs. This difference is statistically significant, $z=2.23$, $p<.05$. These results suggest that students enrol in the preparatory programs with the expectation that they will be provided exposure to specific field(s) of study, and programs of study, regardless of the type of preparatory program in which they have chosen to enrol.

Preparatory program graduates’ satisfaction was further explored through KPI Graduate Survey data available. KPI graduate information corresponding to the 2008 to 2012 students was extracted as a sample and analyzed. The KPI Graduate Survey invites the graduates to indicate whether they would recommend the program to others. 87.0% of the graduates (n=740) from the preparatory programs who graduated over the 2009 to 2013 period indicated that they would recommend their respective preparatory program to others. There was a minor difference between the graduates of General Arts and Science program and the graduates of field-specific preparatory programs. 86.7% of the General Arts and Science (excluding the Health stream) graduates (n=391) indicated that they would recommend the program to others as compared to 87.4% graduates (n=349) in other preparatory programs.
Stage II: Application to a Subsequent Postsecondary Program

Subsection 4: Did preparatory program students subsequently enrol in a postsecondary program?

There were 202 participants in the online survey. Of these, 90 graduated from the program and 67.8% (n=61) of the graduates subsequently returned for a postsecondary program at Durham College. Of the remaining 112 respondents who did not graduate from the preparatory program, 73.2% (n=82) returned for a subsequent postsecondary program at Durham College.

In comparison, amongst the entire preparatory program population for this study (n=2885), 893 students graduated, and of these graduates, 66.3% (n=592) subsequently returned for a postsecondary program at Durham College while 1992 students did not graduate, and of these students, 62.2% (n=1240) re-enrolled in a subsequent postsecondary program. This analysis does not take into account any students who may have continued postsecondary education at other institutions; hence, these estimates of further education are likely to be under-estimates.

The above finding has conflicting implications for the role of graduation rate in assessing the preparatory programs. Survey results indicate that a greater proportion of students who did not graduate returned for subsequent enrolment in postsecondary programming, 73.2% as compared to 67.8%. In comparison, the results for the overall study population indicate that a greater proportion of students returned for subsequent postsecondary if they graduated, 66.3% in comparison to 62.2%. This study examines the role of graduation from the preparatory program in further detail in subsections 5 and 7.

Overall, survey results indicate that 73.1% of the students enrolled in a subsequent postsecondary program (Table 2.1). Respondents indicating “not applicable” included personal reasons such as moving, family, disability, or non-acceptance in the subsequent program of choice.

Table 2.1

<table>
<thead>
<tr>
<th>Enrol in subsequent postsecondary program (n=201)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (n=147)</td>
<td>73.1%</td>
</tr>
<tr>
<td>No (n=38)</td>
<td>18.9%</td>
</tr>
<tr>
<td>Prefer not to answer (n=10)</td>
<td>5.0%</td>
</tr>
<tr>
<td>Not applicable (n=6)</td>
<td>3.0%</td>
</tr>
</tbody>
</table>
The above observation in conjunction with the discussion on Clarity of Academic Goals and Career Clarity in Stage I implies that students in the preparatory programs who are able to achieve academic and career clarity are more likely to utilize pathways to pursue subsequent postsecondary programs.

Of the 147 survey respondents who pursued subsequent postsecondary programs, 71.9% (n=106) re-enrolled at Durham College. Of these (n=106) students who re-enrolled at Durham College, 80.2% (n=85) were enrolled in a postsecondary program that was related to the preparatory program they had undertaken. Additionally, Figure 2.1 presents the distribution of subsequent postsecondary credentials undertaken by students who re-enrolled at Durham College.

**Figure 2.1: Credential Distribution - Durham College (n=106)**

- Two year diploma (n=55), 51.9%
- Three year diploma (n=26), 24.5%
- Bridge (Undergraduate) program (n=8), 7.5%
- One year certificate (n=9), 8.5%
- Continuing Education (n=8), 7.5%

Of the students (n=147) who enrolled in a subsequent postsecondary program, 88.4% students indicated the preparatory program helped inform their choice of subsequent postsecondary program.
Of the 41 preparatory program students who re-enrolled at an institution other than Durham College, 19.5% considered application to only one college/university indicating a dedicated interest in that institution. Of the students who re-enrolled at an alternate college or university (n=41), 61.0% (n=25) reported being enrolled in a postsecondary program that was related to the preparatory program they had undertaken. Additionally, Figure 2.2 presents distribution of the subsequent postsecondary credentials at those institutions. The majority of students (41.5%) who did not re-enrol at Durham College for a subsequent postsecondary program actually enrolled in an undergraduate degree program.

**Figure 2.2: Credential Distribution - Other Institutions (n=41)**

- Undergraduate degree (n=17), 41.5%
- One year certificate (n=4), 9.8%
- Two year diploma (n=17), 41.5%
- Three year diploma (n=2), 4.9%
- Graduate certificate (n=1), 2.4%

*Subsection 5: What factors, if any, can predict the likelihood of preparatory program students continuing postsecondary education?*

Logistic regression was conducted to investigate the factors that may contribute to preparatory program students’ decision to pursue further postsecondary education. The type of preparatory program (i.e., general versus field-focused), skills learned during preparatory programs, preparatory program outcome status, and demographic variables were examined as possible factors that may predict preparatory students’ decision to enrol in a subsequent postsecondary program. Table 2.2 presents the results of the logistic regression analysis.
Results indicate that preparatory program students who believed that the program helped them develop a sense of belonging with the college (i.e., Social Integration) were significantly more likely to enrol in further education. Additionally, students who were enrolled in the field-specific preparatory programs, and the students who graduated from the preparatory program were significantly more likely to pursue further postsecondary education. The strongest predictor of student decisions to pursue further education is whether they graduated from their preparatory program.

Also, females and relatively older students were more likely to continue on to further education following enrolment in a preparatory program.

These results indicate that the program completion and hence graduation rate is an important indicator of the preparatory programs’ successful performance.
Subsection 6:

What are the motivations and transfer experiences of students who transfer to a subsequent postsecondary program of study?

What strategies assist the preparatory program students in their transfer to a subsequent postsecondary program of study?

Motivations of survey respondents enrolled in subsequent postsecondary program:

It is helpful to understand students’ motivation(s) for continuing with subsequent postsecondary education before a discussion on development and deployment of effective strategies to promote this transfer. Figure 2.3 presents some of the reason(s), as indicated by the survey respondents, for continuing with subsequent postsecondary education. Please note that the respondents were allowed to indicate multiple reasons, if applicable.

Figure 2.3: Reasons for undertaking a subsequent Postsecondary Program

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>This was the logical next step in my educational path (n=86)</td>
<td>58.5%</td>
</tr>
<tr>
<td>I wanted to increase my educational qualifications (n=76)</td>
<td>51.7%</td>
</tr>
<tr>
<td>The institution was close to home/family (n=61)</td>
<td>41.5%</td>
</tr>
<tr>
<td>I wanted to further enhance my present skills (n=47)</td>
<td>32.0%</td>
</tr>
<tr>
<td>I changed my career path (n=46)</td>
<td>31.3%</td>
</tr>
<tr>
<td>I wanted to get hands-on experience (n=44)</td>
<td>29.9%</td>
</tr>
<tr>
<td>I was unemployed (n=14)</td>
<td>9.5%</td>
</tr>
<tr>
<td>Other (n=8)</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

It is interesting to note that “logical next step in my educational path” was deemed to be the primary reason. This indicates that these students had an “educational path” that was mapped out *apriori*, and that the reasoning for the future path had led them to pursuing a subsequent postsecondary program as a “logical” step. This finding has important implications for
institutions wanting to develop and deploy strategies to promote pathways for their preparatory programs. It indicates that while Academic Preparedness is an important goal for the preparatory programs, it is equally important that students be offered advising and opportunities to develop a well-articulated “educational plan” while they are still enrolled in the preparatory program(s). This is especially important, given that 88.4% of the survey respondents who pursued subsequent postsecondary programs indicated that the preparatory program helped inform their choice.

Motivations of survey respondents not enrolled in subsequent postsecondary program:

To help identify the strategies that support student transfer, it is also important to understand the experiences of the preparatory program students who decided not to pursue subsequent postsecondary education. 27.0% (n=54) of the survey respondents who did not continue postsecondary education (n=28), or preferred not to answer the question (n=10), or did not deem the question of pursuing further postsecondary “as applicable”, were invited to indicate the specific reason why they did not continue. Figure 2.4 presents results for these 54 respondents who indicated a reason for not continuing with postsecondary program.

Some of the reasons offered as “Other” were inability to decide on a program or career, non-acceptance in the subsequent program of choice, or that a few were still enrolled in the preparatory program.

18.2% (n=10) of these respondents indicated that they did not have a good experience in the preparatory program. To assess the quality of students’ experiences with the preparatory
programs, satisfaction levels of the respondents who did not continue with postsecondary program were explored. Table 2.3 presents results for satisfaction with the preparatory program for the three groups of students not pursuing postsecondary education: (i) students who categorically identified as not pursuing postsecondary education, (ii) students who indicated that they would not prefer to answer the question, and (iii) students who indicated that pursuing subsequent postsecondary education was not applicable to them. Overall, 75.5% of these students were satisfied with the preparatory program at Durham College.

Table 2.3

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Transfer to subsequent postsecondary program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No (n=38)</td>
</tr>
<tr>
<td>Very Satisfied/Satisfied</td>
<td>76.9%</td>
</tr>
<tr>
<td>Very Unsatisfied/Unsatisfied</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

Respondents who indicated that they were not satisfied with the preparatory program were offered an additional opportunity to comment. Comments indicated that students were disengaged because either the courses were not “useful” or the faculty and/or administrative staff were perceived as non-supportive. One of the respondents commented, “The program should be put together in a different way. I found it hard to take the program seriously.” Lack of academic goal and career clarity was an issue as well: “I went to figure out what I wanted to do, and after the two semesters I still didn’t really know. I guess that’s more on me than the program.”

Another important aspect that should be explored for the preparatory programs is the concept of student-program fit. Student-program fit is often discussed in the context of other postsecondary programs but rarely for preparatory programs. One of the respondents commented, “The program would have been helpful to me if I wanted to raise my marks higher if I wanted to go into a certain career from the program. I didn’t end up completing the program because the classes were the exact same classes I took in high school that I was not interested in. I am now in another preparatory program I enjoy more due to a different career choice.”

These 54 survey respondents were asked to indicate whether Durham College could have influenced their decision to not pursue postsecondary education. Five of the respondents indicated that the college could have influenced their decision positively by either providing timely administrative support, engaging and challenging curriculum, or supportive faculty. Students intending to enrol in preparatory programs should be encouraged to articulate their academic goals and investigate earlier during the enrolment process whether the program is a good fit.
The above discussion indicates that while some student interests may be served through generic preparatory programs such as General Arts and Science, other student interests may be better served through occupational cluster-specific preparatory programs. Students may need advising and support to determine the best preparatory program fit for them the very first time. Student advising and support have a significant impact on student experiences.

Well-articulated academic goals (or educational plans), career clarity, perceived usefulness of the courses, support from faculty, and administrative staff play an important role in students’ experiences and decision to continue with subsequent postsecondary education.

The Transfer Experience of students who enrolled in a subsequent postsecondary program:

The survey respondents who transferred to a Durham College postsecondary program were invited to share their transfer experience and indicate whether they had any difficulty with the transition to their subsequent postsecondary program. Table 2.4 presents the results of all the survey respondents who attended a subsequent postsecondary program, either at Durham College or a different postsecondary institution. The majority (73.2%) of respondents indicated that they did not have difficulties in transitioning to the subsequent postsecondary program. However, about 30% of the respondents indicated difficulty with specific aspects of the transition experience as indicated in Table 2.4.

Table 2.4

<table>
<thead>
<tr>
<th>Difficulty in transitioning to subsequent postsecondary</th>
<th>All Postsecondary Institutions</th>
<th>Durham College</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had no difficulties in the transition</td>
<td>73.2% (n=127)</td>
<td>76.1% (n=92)</td>
</tr>
<tr>
<td>Connecting with someone from financial aid (i.e. for OSAP, scholarships)</td>
<td>28.9% (n=121)</td>
<td>28.2% (n=85)</td>
</tr>
<tr>
<td>Determining whether the program was right for me</td>
<td>28.4% (n=134)</td>
<td>27.6% (n=98)</td>
</tr>
<tr>
<td>Understanding the admission requirements</td>
<td>27% (n=141)</td>
<td>24.3% (n=103)</td>
</tr>
<tr>
<td>Connecting with someone from admissions</td>
<td>25.5% (n=137)</td>
<td>20.4% (n=98)</td>
</tr>
<tr>
<td>Connecting with someone from the program</td>
<td>23.8% (n=130)</td>
<td>22.1% (n=95)</td>
</tr>
</tbody>
</table>

A greater percentage (76.1%) of students who continued their subsequent postsecondary education at Durham College had a better transitioning experience than students (73.2%) who enrolled at other postsecondary institutions. Students continuing at Durham College identified “understanding admission requirements” as a key hurdle, particularly the admission grade requirement for the intended subsequent postsecondary program. In addition, OSAP services were identified as a barrier to transition. Transitioning students at other postsecondary
institutions identified administrative services such as access to transcripts and financial aid as some of the key hurdles.

The transfer experience of students was further explored in-depth during the focus group sessions. Focus group participants identified lack of information about paths of further study or potential career paths as a key barrier to further education. Researchers prompted further discussion on the optimal timing of the availability of such information. Participants recommended discussions on potential programs of future study to be held in the preparatory program orientation week itself to help them choose an educational path and elective courses. Other participants suggested that such information sessions should be held twice: once during orientation week as an introduction to the potential fields of study and again in November when students have become familiar with the various programs and have a better idea of what educational paths are possible. Regardless of when students would prefer to receive information surrounding future programs of study and educational paths, nearly all focus group participants indicated that they would have appreciated more information from sources such as school offices, other students, faculty members, and external industry representatives.

There was also discussion on the lack of readily available information about the credit transfer process. While many of the participants were satisfied with the information that they received about transferring credit and indicated that the process was easy, a few others indicated that the onus of finding information about the transfer credit process was placed on the students themselves. Participants suggested that the college provide links to future programs of study directly on the preparatory programs’ web pages.

A number of focus group participants also discussed the importance of the relationship between Durham College and the University of Ontario Institute of Technology (UOIT), given that the institutions share a campus. Participants indicated their appreciation for the process when a representative from UOIT visited the classroom to provide information about related programs at UOIT and discussed potential programs of study. However, there was significant variability between the participants of various preparatory programs. Focus group participants from some of the programs were particularly frustrated with the perceived lack of communication between Durham College and UOIT, especially with exchange of information via administrative processes.

Survey respondents were further invited to reflect on their satisfaction with the transitioning experience, and if not satisfactory then to reflect the reason(s). Table 2.5 presents the summary of responses. Overall, 94.6% of the respondents were satisfied with their transitioning experience.
The survey further explored *Academic Preparedness* perceptions of the respondents who continued further education. 85.7% of the respondents who continued with postsecondary (n=147) indicated that their preparatory program helped them to prepare academically for the subsequent postsecondary program. Respondents identified the following as some of the particular ways in which preparatory program particularly helped them to successfully transition to subsequent postsecondary program:

- Gain knowledge in specific subjects, such as, Biology, Math, Chemistry and others;
- Understand workload and assignment expectations;
- Identify helpful academic resources;
- Develop study and time-management skills;
- Learn how to get around in the campus and settle into lifestyle;
- Gain transferable credits; and
- Improve grades.

**Though the program I am in right now is 3x harder than the preparatory, I would say it still helped me because I gained a lot of self-confidence and self-discipline from the preparatory.**

**I had a taste for what it takes to succeed.**

Of the remaining 14.3% survey respondents who did not believe that their preparatory programs helped them prepare academically for subsequent postsecondary, a majority identified *insufficiently challenging courses* and *light workloads* as the primary reasons.

Focus group discussions further delineated the role of preparatory programs in preparing for further postsecondary education. The majority of focus group participants provided positive feedback on their preparatory programs and agreed that they would recommend the program to others. However, a few of the focus group participants had prior learning experiences at
universities, and suggested a need for individually customized learning and greater experiential learning.

Focus group participants also mentioned the importance of the social integration into the college environment that they received by enrolling in their preparatory program. They acknowledged that preparatory programs allowed them to take a more gradual step into postsecondary education to help them feel more comfortable. Relationships with other classmates were another important aspect that was acknowledged, and participants indicated that classmates often acted as sources of information and created a social environment that made them feel more comfortable in a college setting.

The most significant challenge identified by focus group participants was that the preparatory programs were too easy, and that the workload itself was not challenging. This was expressed as a concern across a range of participants, but particularly by participants who had a prior postsecondary experience at university. However, there was significant variability across programs and respondents from at least one program (General Arts and Science-Health) indicated that their workload was adequately challenging.

While many students indicated that the workload in their preparatory program was not particularly challenging, the majority of focus group participants agreed that their experiences in the program did help to prepare them for further education. A number of participants suggested that the skills that were taught in their preparatory program prepared them for further study by providing them some interaction with a variety of useful skills. For example, students in the Foundations of Art and Design and Emergency Services Fundamentals programs, indicated that their preparatory program introduced them to a number of different fields and requisite skills. Thus, the programs not only helped them to choose the field in which they wanted to continue their education, but also provided them with a basic understanding of the foundational skills in the specific field to further build in their subsequent academic program.

**Student Support Services – Usage by students in Subsequent Postsecondary Programs:**

Survey respondents also indicated their usage of the student support services during their subsequent postsecondary program. Table 2.6 presents the usage of support services by these students. The aggregate pattern of service usage by respondents during the subsequent postsecondary program was quite similar to that during the preparatory program, except for Student Academic Learning Services. The Office of the Registrar and Student Academic Learning Services were used more frequently than other services.
Table 2.6

<table>
<thead>
<tr>
<th>Student Support Service</th>
<th>Never</th>
<th>Once a week</th>
<th>Once a month</th>
<th>Once a term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registrar (n=103)</td>
<td>30%</td>
<td>2%</td>
<td>13%</td>
<td>55%</td>
</tr>
<tr>
<td>Academic Learning Services (SALS) (n=102)</td>
<td>38%</td>
<td>15%</td>
<td>16%</td>
<td>31%</td>
</tr>
<tr>
<td>Financial Aid (n=103)</td>
<td>43%</td>
<td>3%</td>
<td>15%</td>
<td>40%</td>
</tr>
<tr>
<td>Career Services (n=102)</td>
<td>71%</td>
<td>4%</td>
<td>4%</td>
<td>22%</td>
</tr>
<tr>
<td>Continuing Education (n=102)</td>
<td>84%</td>
<td>0%</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>Other; please Specify (n=55)</td>
<td>87%</td>
<td>7%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Diversity Office (n=102)</td>
<td>98%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>International Office (n=101)</td>
<td>98%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Additional Strategies Suggested for Successful Transition:

Specific Strategies to improve Preparatory Programs:
Survey respondents were invited to share their thoughts on the strategies that could be implemented in the preparatory programs to make them better, and make it easier to apply for a subsequent postsecondary program. There was significant variability in the comments across the preparatory programs but a fair level of consistency within each program. Some of the specific suggestions were:

- Communications and Computer courses with greater relevancy; greater focus on APA formatting and essay writing than grammar and punctuation;
- No General Education (GNED) courses;
- More challenging curriculum;
- More intense workload that is reflective of the subsequent postsecondary program;
- Better use of DC Connect to post all materials such as lectures, homework assignments, and grades online;
- Better understanding of electives and their applicability for credit transfer in various postsecondary programs;
- Greater experiential learning or a day of exposure to a related postsecondary program (for example, allow Foundations in Arts students to get exposure to Graphic Design, Game Development and other postsecondary classrooms);
- Visit from Admissions office;
- Job shadowing to inform awareness of prospective careers; and
• Visit from Career Services.

Specific Strategies for Admission Process – Subsequent Postsecondary Program:

Survey respondents were invited to identify specific difficulties they may have experienced with the application process and to share suggestions for strategies that could be implemented to address the difficulties. Most of the respondents indicated that the admission process was easy to understand and execute, and they did not have any difficulties. However, some respondents did indicate specific difficulties that they faced. Some of the issues identified by these respondents are as follows:

• Timely and better understanding of the admission requirements including grade average for the subsequent postsecondary program;
  “Getting students to understand what their academic goals need to be in order to be considered for admission to their program of choice at the very beginning.”
• Timely and easy access to Durham College preparatory program transcripts;
• More guidance with program selection; and
• Better availability of online information on program pathways and transfer credits applicable to the subsequent postsecondary program.

Some of the specific strategies suggested by students to make the transition to the subsequent postsecondary programs easier include:

• Centralization of information and resources that are relevant to preparatory program or transfer students;
• Online tutorial to better understand the process, deadlines and website navigation;
• Identification of related program pathways, pre-requisites, and credit transfers on the preparatory program web pages;
• Timely availability of online information especially with respect to transfer credits applicable to a subsequent postsecondary program;
• Cross training of liaisons in academic schools in applicable program pathways;
• Presentations by Admissions Office in the preparatory program classrooms;
• More support with financial aid/OSAP application; and
• Additional avenues of communication with the Office of the Registrar (other than phone or in-person visit).

Be aware of the rules and regulations of the program, which apply to credit. As well, make it easier to apply previous credits to future program.
Most of the respondents were satisfied with the preparatory programs and the subsequent admission process. In addition to the desire for a more challenging curriculum and workload, most of the strategies suggested were focused on the availability of information and support on understanding postsecondary program pathways, pre-requisites for admission to these programs, and information on the credit transfer framework.

**Subsequent Postsecondary Program Outcomes:**

Finally, survey respondents were asked to provide their current outcome status for the subsequent postsecondary program in which they were enrolled. Table 2.7 presents the outcome results.

Table 2.7

<table>
<thead>
<tr>
<th>Subsequent Postsecondary Outcome (n=147)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduated</td>
<td>42.9%</td>
</tr>
<tr>
<td>Currently Enrolled</td>
<td>43.5%</td>
</tr>
<tr>
<td>Not Completed or Enrolled</td>
<td>11.6%</td>
</tr>
<tr>
<td>Not reported</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

A significant majority of the students (86.4%) have either graduated or are making progress towards graduation from the subsequent postsecondary program. Some of the reasons cited by students (11.6%) for not completing the subsequent postsecondary program were health-related, financial, family responsibilities, or gainful employment.

The above results indicate that the preparatory program survey respondents experience successful outcomes in their subsequent postsecondary programs. To investigate whether the results from the survey are generalizable, an alternative student population was analyzed. Results of the analysis from this analysis are presented in *Subsection 7*. 
Stage III: Validation of Outcomes in Subsequent Postsecondary Programs

Subsection 7: Are outcomes such as academic performance, retention rates, and graduation rates for students with a prior postsecondary program comparable to students without a prior preparatory or postsecondary program experience?

The survey results for this study indicated that Academic Preparedness, which is an important goal for preparatory programs, is being successfully delivered at Durham College since 86.4% of the survey respondents who continued with postsecondary education had either graduated or are well-placed to graduate. However, there may be some concern that these survey findings are based on respondents’ self-reports and may suffer from positive bias. The validity and generalizability of the survey results would be further endorsed if the results could also be investigated based on factual administrative data on outcomes. In this regard, a comparison of the outcomes for the group of students in diploma programs (including advanced diploma) who have prior preparatory program experiences with the outcomes of those others do not have such experience, would be of particular interest.

For the proposed additional analysis, administrative data on students enrolled in two-year diploma and three-year advanced diploma programs at Durham College in Fall 2012 was extracted. The dataset was comprised of 3,828 first year students, of which 7.1% (n=271) had prior preparatory program experience at Durham College. Unfortunately, data limitations do not allow for identification of any students who may have had preparatory program experience or prior postsecondary experience at other institutions. An assumption was made that the remaining students did not have prior preparatory or postsecondary experience. While the researchers recognize that it is a broad assumption, it is deemed acceptable because the impact of this assumption places an even more rigorous burden on any positive findings for the preparatory program students.

The grade point average (GPA) of students who had prior preparatory program experience was compared for their performance during the preparatory program and then again in the subsequent postsecondary program. Average GPA for the group of students who had prior preparatory program experience at Durham College, after the first semester of their preparatory program, was 3.12 (n=260). For these students again, their average GPA after first semester in the subsequent diploma or advanced diploma program was 2.86 (n=258). As indicated in the previous sections, the survey respondents had expressed that their workloads in their preparatory programs had not been particularly challenging. This decline in academic performance from 3.12 to 2.86 supports their perceptions that the curriculum and workload in the preparatory programs need to be sufficiently demanding to prepare them for the rigorous academic demands of the diploma programs.

GPA comparisons were also made for the group of students who had prior preparatory program experience at Durham College to the group of students that were assumed to not have any
Assessing Effectiveness of Durham College Preparatory Programs

prior preparatory experience. Diploma program students were assessed separately from the advanced diploma students.

For the students (n=210) in the two-year diploma programs, the GPA at the end of the first semester was higher for those with a preparatory experience (M=2.93, SD=1.13) than the students (n=2,783) with no prior preparatory program experience at Durham College (M=2.89, SD=1.35). However, the difference in the mean GPA of the two groups was not statistically significant, t(255)=0.55, p=.058. Levene’s test indicated unequal variances (F = 18.57, p <.001), so degrees of freedom were adjusted from 2991 to 256.

In comparison, for the advanced diploma program, the GPA at the end of the first semester was lower for the students (n=61) with a preparatory experience (M=2.47, SD=1.23) than the students (n=770) with no prior preparatory program experience at Durham College (M=2.75, SD=1.41). However, again the difference in the mean GPA of the two groups was not statistically significant, t(829)=1.49, p=.64.

Even though the findings for first term GPA differences between the group of students in diploma and advanced diploma programs is non-conclusive, it is noted that the mean GPA of the preparatory program experience student group is higher in diploma programs than advanced diploma program. This may imply that the preparatory programs are better preparing the students for rigours of diploma programs than advanced diploma programs.

Further, Table 3.1 presents the retention rates for the two groups across various semesters. While the GPA comparison indicates that students without a preparatory experience fare better, results in Table 3.1 indicate that students with a preparatory experience are more likely to persist with their postsecondary education. At the end of the second year, the retention rate for those with a preparatory experience is approximately 10% higher. While students with a preparatory experience have slightly lower GPA, they are more persistent with their studies. This finding lends credence to the high levels of graduation and persistence rates indicated by the survey respondents.

Table 3.1

<table>
<thead>
<tr>
<th>Fall 2013 Diploma and Advanced Diploma students with:</th>
<th>Fall 2012</th>
<th>Winter 2013</th>
<th>Fall 2014</th>
<th>Winter 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior preparatory program experience at Durham College</td>
<td>100% (271)</td>
<td>90.4% (245)</td>
<td>78.6% (213)</td>
<td>79.0% (214)</td>
</tr>
<tr>
<td>No prior preparatory program experience at Durham College</td>
<td>100% (3,557)</td>
<td>87.7% (3,120)</td>
<td>73.6% (2,618)</td>
<td>70.9% (2,523)</td>
</tr>
</tbody>
</table>
Graduation rate was assessed for students who had enrolled in the diploma programs since only diploma students could have graduated in the *shortest possible time* until April 2014. Of the 210 diploma program students who had prior preparatory program experience at Durham College, and were enrolled in first year in Fall 2013, 59 had graduated by April 2014. In comparison, of the 2,783 diploma program students who had no prior preparatory program experience at Durham College and were enrolled in first year in Fall 2013, 1117 had graduated by April 2014.

An independent two-sample t-test indicated that the graduation rate was significantly higher for students without prior preparatory program experience at Durham College (42.5%) than for students with prior preparatory program experience at Durham College (28.1%), $t(249) = 4.37$, $p < .001$, $d = .14$. Levene’s test indicated unequal variances ($F = 170.01$, $p < .001$), so degrees of freedom were adjusted from 2991 to 249. Thus, a greater proportion of students without prior preparatory program experience are likely to graduate in the shortest possible time. However, this does not imply that students with prior preparatory experience at Durham College have overall poorer graduation rate. Given the higher retention rates for students with preparatory program experience, and the high long-term graduation rates, it is logical to infer that students with prior preparatory program experience at Durham College have greater persistence, and take longer time to graduate from the diploma programs than their counterparts who do not have prior preparatory program experience at Durham College.
SECTION V: CONCLUSIONS AND RECOMMENDATIONS

The Ministry of Training, Colleges and Universities, Ontario defines preparatory or pre-
programs of instruction as programs that provide students with foundational and/or specific
skills required for admission to other college programs of instruction from which they will
graduate. Currently, Durham College offers eight preparatory programs and the purpose of this
study was to assess the effectiveness of the preparatory programs being offered.

This study demonstrates that well-articulated academic goals (or educational plan), social
integration achieved during preparatory program, career clarity, perceived usefulness of the
courses, and supportive faculty and administrative staff play an important role in students’
experiences and decision to continue with subsequent postsecondary education.

Awareness of the purpose(s) of preparatory programs and alternative pathways:

While most of the participants were quite well versed with the primary purpose of preparatory
programs, interestingly there were a few who had enrolled in the preparatory program with
gainful employment as an objective and were disappointed with the outcome of the
preparatory program. Similarly, some of the participants who had prior postsecondary
university experience had enrolled in the preparatory program to help them with career
transition; these participants were particularly disappointed with the level of challenge
experienced in the curriculum and workload. This implies that further efforts could be directed
towards clarifying the purpose of the preparatory programs, encouraging students to explore
student-program fit, and offering suggestions for alternative programs where applicable.

Expand definition of preparatory program beyond Academic Preparedness:

Student experiences and outcomes in the preparatory program were assessed through an
online survey, focus groups, and administrative data. In keeping with the intended definition of
the preparatory programs, students identified Academic Preparedness as a primary goal for
these programs, and majority were satisfied with this key aspect of the various preparatory
programs at Durham College. Thus, the preparatory programs at Durham College, as assessed
on the key dimension of Academic Preparedness, were highly effective.

Additionally, this study identified additional expectations that the preparatory program
students had from their respective programs. Of these, development of clear Academic Goals
and Career Clarity were identified as critical deliverables for an effective preparatory program.

Participants identified that the development of a subsequent educational plan, which would act
as a roadmap for pathway(s) to other postsecondary programs, was critical for their successful
transition to subsequent diploma or advanced diploma postsecondary programs. Participants
identified a multiple, specific strategies that the college could help employ to support students
with the development of Academic Goals. Participants indicated that a well-articulated
educational plan or pathway would seamlessly connect to intended careers goals. Career Clarity through exploration of the postsecondary programming available to them was an important requirement identified by the preparatory program students. Hence, one of the key recommendations of this study is that the definition of the preparatory program be expanded to include the following as deliverables in the program learning outcomes and curriculum:

- Development of clear academic goals through development of an educational plan while students are still enrolled in the preparatory program; and
- Development of career clarity through exploration of various postsecondary programs related to the preparatory program undertaken.

**Greater emphasis on field-specific preparatory programs:**

One of the interesting findings for this study was that participants who were enrolled in the field-specific preparatory programs were more engaged, had greater commitment towards postsecondary education, and had better subsequent outcomes. While improving grade average was a goal for some of the participants, a significant majority of the students in field-specific preparatory programs indicated that relevant programming better allowed them to develop academic and behavioural skills that enabled them to successfully transition to subsequent postsecondary programs. In contrast, students in general preparatory programs had a greater sense of being "academically adrift" and unable to articulate a clear career focus that would allow them to direct their effort and commitment in a progressive manner. Thus, this study recommends that greater development support and emphasis be accorded to the preparatory programs that are relevant to a given occupational cluster. Based on participant feedback, one of the recommendations was to explore the possibility of introducing a General Arts and Science-Engineering stream at Durham College. Please note that Durham College has introduced a Science and Engineering stream for General Arts and Science students as of Fall 2013.

**Review curriculum and workloads:**

Participants from a number of preparatory programs identified non-relevant courses, easy curriculum content, and light workload as aspects that needed to be addressed to make the preparatory program experiences more meaningful and rigorous. Participants particularly emphasised the need for academic rigour; they perceived it as a critical pre-requisite for a successful experience in their subsequent postsecondary education.

**Other specific strategies to improve Preparatory Programs:**

- Communications and computer courses with greater relevancy; greater focus on APA formatting and essay writing than grammar and punctuation;
- No General Education (GNED) courses;
- More challenging curriculum;
- More intense workload that is reflective of subsequent postsecondary program;
• Better use of DC Connect to post all materials such as lectures, homework assignments and grades online;
• Better understanding of electives and their applicability for credit transfer in various postsecondary programs;
• Workshops/sessions on further education/career path exploration during preparatory program orientation week and again in November;
• Greater experiential learning, or a day of exposure to related postsecondary program (for example, allow Foundations in Arts students to get exposure to Graphic Design, Game Development and other postsecondary classrooms);
• Visit from Admissions office;
• Job shadowing to inform awareness of prospective careers;
• Visit from Career Services; and
• Visit from UOIT Admissions Office.

Provide timely and readily available information to assist in transition to subsequent postsecondary program:

Preparatory program students extensively indicated the need for pro-active academic and career advising, and need for informational support in successfully transitioning to the subsequent postsecondary program. Participants were generally satisfied with the current admission process in place but offered specific suggestions for informational awareness, especially with regard to admission requirements and transfer credits, and administrative support.

Specific Strategies for Admission Process – Subsequent Postsecondary Program:
Survey respondents were invited to identify specific difficulties they may have experienced with the application process and to share suggestions for strategies that could be implemented to address the difficulties. Most of the respondents indicated that the admission process was easy to understand and execute, and that they did not have any difficulties. However, a few of the respondents did indicate specific difficulties that they faced. The following are the issues identified by the respondents:

• Timely and better understanding of the admission requirements including grade average for the subsequent postsecondary program;
• Timely and easy access to Durham College preparatory program transcripts;
• More guidance with program selection; and
• Better availability of online information on program pathways and transfer credits applicable to the subsequent postsecondary program.

Some of the other information related specific strategies suggested by students to make the transition to the subsequent postsecondary programs easier were:
• Centralization of information and resources that are relevant to preparatory program or transfer students;
• Online tutorial to better understand the process, deadlines and website navigation;
• Identify related program pathways, pre-requisites, and credit transfer opportunities on the preparatory program web pages;
• Timely availability of online information especially with respect to transfer credits applicable to subsequent postsecondary program;
• Cross training of liaisons in academic schools in applicable program pathways;
• Invite Admissions Office to visit the preparatory program classrooms;
• More support with financial aid/OSAP application; and
• Additional avenues of communication with the Office of the Registrar (other than phone or in-person visit).

Promote use of student support services:

Use of the student support services, except for Office of the Registrar and Student Academic Learning Services (SALS), was particularly low for preparatory program students both during the preparatory program tenure as well as during the subsequent postsecondary program. SALS was the only student support service that was positively and overwhelmingly acknowledged in the survey comments as well as during focus group discussions. Given preparatory program students' need for career advising, in addition to academic advising, it is recommend that the preparatory students' be made more aware of the resources available to them.

Provide multiple means of communication with the college administration:

One of the key recommendations made by participants, both through survey comments and focus group discussions, was that it would be helpful to have multiple means of communication with the Office of the Registrar. Participants indicated that live online interactions or email communications would reduce the frustration and time required for phone call assistance, and would be more helpful than the static online FAQ webpage.

Emphasize importance of graduation rate for preparatory programs:

Significance and fairness of graduation rate as an evaluative metric for the preparatory program is often debated. One of the reasons why graduation rate is not deemed as a fair metric to assess the effectiveness of the preparatory programs is that often students transfer into subsequent diploma or advanced diploma programs without completing the entire preparatory program or graduating from it. While this concern is fairly warranted, this study demonstrates that the graduation from the preparatory program is a strong predictor of the transition into subsequent postsecondary program. Given that the primary mandate of the preparatory programs is to prepare the students for subsequent postsecondary program, this study supports the use of graduation rate as a metric for assessment of the effectiveness of preparatory programs.
Implications for graduation rate in diploma programs:

Further, the study indicated that students with prior preparatory experience at Durham College have higher retention rates but take longer to graduate from the diploma programs. This finding affirms that preparatory programs have a positive impact on what otherwise may have been an academically vulnerable population. This finding also implies that the current KPI graduation rate calculation methodology which allows for an extended period of time for inclusion of graduates makes it an appropriate and robust measure.
REFERENCES


APPENDICES

Appendix A: Assessing the Effectiveness of Ontario College Preparatory Programs Offered at Durham College

(Introduction)
Durham College is conducting this survey as part of a research project to better understand the experiences of students in preparatory programs. Preparatory programs are designed for students who are uncertain of their specific career goals and would like to explore various skills areas before making a decision to pursue the specific postsecondary diploma, advanced diploma or undergraduate degree. This study will explore the preparedness and transfer experiences of the students from the preparatory program to the subsequent postsecondary program. This study will also explore anticipated and/or actual outcomes after graduation, including completion rates, and employment rates. The purpose of the research project is to develop strategies that will improve the student experience.

We’re interested in hearing about your experiences. Your participation is completely voluntary. Only the research team will have access to your responses. Responses from the individual respondents will be linked to your prior administrative data (biographical, academic, program and graduate data) for the purpose of statistical analysis but no respondents will be identifiable in any reporting.

If you decide not to participate, there will be no impact on your future dealings with Durham College. If you decide to participate in the survey, you may end the survey at any time without giving a reason; in this case, any data you have provided will not be used. If you decide to participate, all of your responses will be kept confidential. If you have any questions you do not feel comfortable answering, please skip them. The data will be stored on a secure Durham College server. All data collected from this survey will be destroyed seven years after the full completion of all reports as per Durham College policy.

The survey will take less than 15 minutes to complete. By completing the survey, you will be entered into a draw for one of three prizes of a Best Buy gift card valued at $100. If you have any questions or concerns, please contact Rashmi Gupta, Principal Investigator, at Rashmi.Gupta@durhamcollege.ca

(Informed Consent)
By checking the "yes" box below, you confirm that you have read and understand the information about this research project. You agree to voluntarily participate in this research and give your consent freely. You understand you can withdraw from the survey at any time, without penalty, and you do not have to give any reason for withdrawal.

I consent to participate in this survey.

- Yes, by responding to this survey I acknowledge that I understand and accept the terms described above, and give my full consent to participate in this study.
- No, I do not want to continue with this survey. [survey will terminate if this is selected]
### Demographics

Your current age:
- [ ] Less than 21
- [ ] 21-25
- [ ] 26-30
- [ ] 31-35
- [ ] More than 35

Your gender:
- [ ] Male
- [ ] Female
- [ ] Prefer not to answer

Are you the first member of your immediate family to attend a post-secondary institution?
- [ ] Yes
- [ ] No
Section A: Experiences in the Preparatory Program

Please identify the preparatory program that you enrolled in at Durham College:
- Business Fundamentals
- Community Services & Child Studies Foundations
- Emergency Service Fundamentals
- General Arts and Science
- General Arts and Science - Health Preparation
- Foundations in Art and Design
- Premedia
- Trades Fundamentals

In which academic year did you enrol in this preparatory program?
- 2008-2009
- 2009-2010
- 2010-2011
- 2011-2012
- 2012-2013

Please indicate the extent to which you agree with the following statements about the purpose of preparatory programs.

<table>
<thead>
<tr>
<th>A preparatory program should allow you to:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Enhance academic skills</td>
<td></td>
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<tr>
<td>2. Gain exposure to the college culture and environment</td>
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<tr>
<td>3. Gain knowledge about an area of interest</td>
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<tr>
<td>4. Clarify career goal expectations</td>
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</tr>
<tr>
<td>5. Become better prepared for further post-secondary education</td>
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</tr>
</tbody>
</table>

Which of the following was your primary goal in undertaking a preparatory program?
- Improve general academic skills
- Familiarize yourself with college culture and environment
- Explore different postsecondary programs available
- Prepare for specific diploma/undergraduate postsecondary program(s)
- Clarify my career expectations
- Did not have specific goal(s)
- Other (please specify): __________________________________________
Please indicate the extent to which you agree with the following statements about your experiences in the Preparatory Program:

<table>
<thead>
<tr>
<th>The Preparatory program allowed you to:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Develop academic skills</td>
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<tr>
<td>2 Develop a sense of belonging with the college</td>
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<tr>
<td>3 Gain knowledge about your area of interest</td>
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<tr>
<td>4 Understand academic workload expectations</td>
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<td></td>
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<tr>
<td>5 Explore students services available on campus</td>
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<tr>
<td>6 Clarify career goal expectations</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7 Develop a better understanding of different post-secondary programs available</td>
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</tr>
</tbody>
</table>

Please indicate the extent to which you used any of the following services during the time you attended Durham for your preparatory program

<table>
<thead>
<tr>
<th>Service.</th>
<th>Never</th>
<th>At least once per semester</th>
<th>At least once per month</th>
<th>At least once per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Career Services</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2 Diversity Office</td>
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<tr>
<td>3 Continuing Education</td>
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<tr>
<td>4 Financial Aid Office</td>
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<td>5 International Office</td>
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<tr>
<td>6 Registrar’s Office</td>
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<tr>
<td>7 Academic Learning Services (SALS)</td>
<td></td>
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</tr>
<tr>
<td>8 Other (please specify below)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

(other text box)________________________________________________

Did this Preparatory Program meet your expectation(s)?

- Yes  
  - Please describe the most helpful aspect of the preparatory program: (text box)

- No
Please describe the most challenging aspect(s) of the preparatory program: (text box)

Reflecting on your experiences, are there any additional factors that helped you succeed in your college program(s) which you would like to share with prospective students? (text box)________________________________________________

Did you subsequently re-enrol/transfer to a postsecondary program?

☐ Yes
☐ No
☐ Prefer not to answer
☐ Not applicable - please explain: ________________________

⇒ (If “Yes” above, then proceed to Section B, otherwise proceed to Section D)

(If “Yes” above) What was the name of the post-secondary program that you subsequently enrolled in or transferred to? (text box)______________________________
Section B: Decision to Enrol/Transfer to Subsequent Post-secondary Program

Overall, would you agree that the preparatory program at Durham College helped inform your choice of the subsequent post-secondary program?

☐ Strongly Agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

- (If “Disagree” or “Strongly Disagree”) Please describe how the preparatory program did not help inform your choice: (text box)

Was this post-secondary program at Durham College?

☐ Yes
☐ No
☐ Prefer not to answer

⇒ (If “Yes”, include next 2 questions then Section C – part 2; if “No” or “Prefer not to answer”, go directly to Section C - part 1)

Would you consider the subsequent post-secondary program to be related to the preparatory program?

☐ Yes
☐ No
☐ Not sure

How many comparator colleges/universities in Ontario were you considering prior to re-enrolling at Durham College?

☐ None
☐ 1
☐ 2
☐ 3
☐ More than 3
Section C: Subsequent Post-secondary Program (Part 1)

Which of the following institutions did you attend (or are still attending) immediately after completing the preparatory program at Durham College?

- (Drop down list of Ontario colleges and universities)
- Other (please specify): ____________

Which credential did you enrol in at the above college/university?

- One year certificate
- Two year diploma
- Three year diploma
- Undergraduate degree
- Graduate certificate

Was this post-secondary program related to the preparatory program at Durham College?

- Yes
- No
- Not sure

How many comparator colleges/universities in Ontario did you consider prior to re-enrolling?

- None
- 1
- 2
- 3
- More than 3

(Section C – Part 2)

Why did you decide to enrol in this post-secondary program? (Select all that apply)

- Was the logical next step in educational path
- Unemployed
- Wanted to get hands-on experience
- Wanted to enhance present skills
- Wanted to further educational qualification
- Changed career path
- Institution was close to home/family
- Other (please specify) _________________________________

Please indicate the extent to which you experienced any difficulties transitioning to the subsequent post-secondary program/institution.
Prior to enrolling, you had difficulties...

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understanding the admission requirements</td>
<td></td>
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<tr>
<td>2</td>
<td>Contacting someone from Admissions</td>
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<tr>
<td>3</td>
<td>Contacting someone from the program</td>
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<tr>
<td>4</td>
<td>Contacting someone from Financial Aid Office (i.e. for OSAP, scholarships)</td>
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<tr>
<td>5</td>
<td>Determining whether the program was the right fit</td>
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<tr>
<td>6</td>
<td>Had no difficulties in the transition</td>
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</tbody>
</table>

Please describe any other specific difficulties you may have faced during the admission process: (text box) ______________________

Overall, how would you rate your experience in transferring to your subsequent post-secondary program?

- [ ] Very satisfied
- [ ] Satisfied
- [ ] Unsatisfied
- [ ] Very Unsatisfied

  (If “unsatisfied” or “very unsatisfied”) Please describe how your transfer experience was unsatisfactory: (text box)

Overall, did the prior Preparatory Program at Durham College help you to be academically prepared for this post-secondary program?

- [ ] Yes
  - How did the prior Preparatory Program help you, specifically? (text box)
- [ ] No
  - Please describe how the prior Preparatory Program did not help: (text box)

Did you graduate from the subsequent program?

- [ ] Yes
- [ ] No, please explain: ____________________
Please indicate whether you used any of the following services during the subsequent program at Durham College.

<table>
<thead>
<tr>
<th>Service</th>
<th>Never</th>
<th>At least once per semester</th>
<th>At least once per month</th>
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<td>6 Registrar</td>
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<tr>
<td>8 Other (please specify below)</td>
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</tbody>
</table>

(Other text box)________________________________________________

**Strategies for Successful Transition**

Reflecting on your experience with the admission process, what strategies could be implemented that would make applying to subsequent post-secondary programs easier? (Text box)____________________

Reflecting on your experience with the program itself, what strategies could Durham College implement that would make the preparatory programs better? (Text box)____________________

**Additional Comments**

Please provide any additional comments/suggestions that you may want to share: (Text box)______

⇒ (Skip over Section D)
**Section D: Experience After Durham College Preparatory Program**

Please rate your experience with the preparatory program at Durham College:

- [ ] Very satisfied
- [ ] Satisfied
- [ ] Unsatisfied
- [ ] Very Unsatisfied

Based on the rating you have indicated above, please provide any additional comments or suggestions regarding your experience. Please include details regarding issues, concerns and expectations:

(text box) __________________________

Why did you choose not to pursue further education?

- [ ] Financial affordability
- [ ] Family responsibilities
- [ ] Gainfully employed
- [ ] Not interested in further post-secondary education
- [ ] Did not have a good experience in the preparatory program
- [ ] Other (please specify): __________________________

(If “Unsatisfied” or “Very unsatisfied” above) Please indicate the extent to which the following aspects had a positive impact on your experience with the preparatory program.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Not at all Impacted</th>
<th>Minimally Impacted</th>
<th>Somewhat Impacted</th>
<th>Highly Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Interactions with faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Students Service usage</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3 Availability of social opportunities</td>
<td></td>
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<tr>
<td>4 Content of program</td>
<td></td>
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</tbody>
</table>

(If “Unsatisfied” or “Very unsatisfied” above) Are there any factors that could have impacted your decision to attend further post-secondary education?

- [ ] Yes
  - Please explain if Durham College could have done anything to contribute to your decision: (text box)
- [ ] No

Overall, what aspect(s) of the preparatory program at Durham College did you find most relevant and/or useful (please be as specific as possible).

(text box) ____________________________________________

**Assessing Effectiveness of Durham College Preparatory Programs** 60
Focus Group Sign Up
We would like to further explore your experiences through 1-hour long focus groups in February 2014. These focus groups will be conducted at Durham College - Oshawa campus.

All focus group participants will receive a pizza lunch and a $25 gift card for Shoppers Drug Mart.

Would you be willing to participate in one of these focus groups?
- Yes
- No

(If “Yes” above)
Please provide your current contact information below
You will be contacted about the focus groups by Rashmi Gupta (Manager, Office of Research Services and Innovation) or Joshua Gerrow (Jr. Research Analyst).

- Name: (text box)
- Preferred Email: (text box)
- Preferred Phone#: (text box)

Optional Entry Form for Prize Draw
By completing this survey, you are eligible to include your name in a draw for one of three $100 Best Buy gift cards.
If you would like to be included, please click on the link below to sign up for the draw. A new window will open where you will be asked for your full name, your e-mail and your phone number
Please be assured that your personal information will not be connected to any survey responses and will only be used for purposes of the draw.

(LINK) Durham College Draw Entry Form
    ➜ LINKS to external draw form; asks for name, phone number and/or email.

* NOTE: The draw entry form web page is entirely separate from this survey, and data is stored in a separate database. No IP tracking is performed, which means that there will be no way to connect your survey responses to your draw entry. This is done to ensure and protect your anonymity and privacy.*

Please ensure to "Send Answers" on the NEXT PAGE, after providing your information for the draw.
Appendix B: Focus Group Questions

Assessing the Effectiveness of Ontario College Preparatory Programs Offered at Durham College

Introduction
- Review Information Letter
- Review confidentiality
- Explain nature of research project, role of note taker, PI
- Max time 1 hour
- Participants may withdraw at any time

Informed Consent
- Ensure signed consent forms received from all participants

Questions
  - Why did you choose to enrol in the postsecondary program?
    o Why Durham College?
    o Impact on personal life (especially for those with families, commuters, working)
  - Describe your transfer experience
    o Challenges getting information?
    o Hard to decide on a program/school?
    o Feel supporting by the college? By family and friends?
  - Describe your experience in the preparatory program and how you think it will/has affect(ed) your choice or academic performance in the current postsecondary program
    o Better aware of college culture?
    o Better aware of the services and facilities at the college?
    o Fit better with the classmates?
    o Better prepared academically?
    o Communications with/access to professors
    o Interaction with student liaison
    o What are your goals?
  - What student services are you using?
    o Why or why not?
• What would you recommend to prospective students thinking about enrolling in a Preparatory program?
  o Why?

• What would you recommend to Durham College administration to improve Preparatory programs?
  o Why?