

ONCAT 2015 Student Pathways in Higher Education Conference

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





Rationale

Background:

- Durham College, started offering preparatory programs in 1999 and currently offers eight preparatory programs;
 - 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
- Popularity of preparatory programs:
 - > Academic Preparation
 - Address uncertainty in career goals



Rationale – Historical Data

Year	Number of Preparatory Students	Number of Preparatory Programs
2008-09	598	5
2009-10	611	6
2010-11	626	6
2011-12	688	6
2012-13	837	8



Definitions of Key Terms

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



Gaps in the Literature

- The literature that specifically reviews educational effects of postsecondary preparatory programs is:
 - relatively sparse: limited research on longitudinal outcomes limited research on a comprehensive set of outcomes; and
 - fragmented: not used a cohesive set of criteria for assessment

Effectiveness of Preparatory Programs: Assessment

Student Experience & Outcomes (3 Stages)

- Stage I: While Enrolled in a Preparatory Program
- Stage II: Transition to Subsequent Postsecondary Program
- Stage III: Subsequent Postsecondary Program: Validation of Outcomes



Research Questions

Stage I: While Enrolled in a Preparatory Program

- What are the career/educational objectives of students in the preparatory programs?
- What were the experiences of the students in the preparatory programs?
- Did the preparatory program meet the expectations?



Research Questions

Stage II: Transition to Subsequent Postsecondary Program

- Did the preparatory program students subsequently enrol in a postsecondary program?
- What factors, if any, can predict the likelihood of preparatory program students continuing postsecondary education?
- ❖ 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 program of study?



Research Questions

Stage III: Subsequent Postsecondary Program: Validation of Outcomes

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?



Framework: Assessing Effectiveness of Preparatory Programs

- 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.
- * Four criteria for assessment of effectiveness of Preparatory programs:
 - 1. Academic Preparedness
 - 2. Social Integration
 - 3. Clarity of Academic Goals and Expectations
 - 4. Clarity of Career Goals and Expectations



Defining the Criteria

Academic preparedness:

❖ A positive sense of one's readiness for the academic demands

Social Integration:

Student's interaction with the college environment

Clarity of Academic Goals:

- ❖ Academic performance goals/ Commitment to an educational plan
- Higher degree aspirations

Clarity of Career Goals

Commitment to a particular career path



Population

- ❖ 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.



Methodology

- ❖ The methodology for this research is a non-experimental mixed methods design.
- Stage I & II (Online survey, Focus groups, Administrative data)
 Stage III (Administrative data)
- ❖ 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).
- ❖ The survey respondents were further invited to volunteer for focus group discussions (N=23).
- ❖ 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.



Study Population

	Universe	Online Survey	Focus Groups	
Total Sample Sizes	n=2,885	n=202	n=23	
<u>Gender</u>				
Male	41%	29%	11%	
Female	59%	71%	89%	
<u>First Generation Status</u>				
Yes	23%	27%	28%	
No	77%	73%	72%	
Age Group				
Less than 21	11%	23%	28%	
21-25	67%	51%	44%	
26-30	16%	18%	22%	
31-35	2%	2%	0%	
More than 35	4%	7%	6%	
Year of Entry into Preparatory				
2008-09	14%	7%	0%	
2009-10	16%	15%	0%	
2010-11	19%	20%	22%	
2011-12	23%	20%	11%	
2012-13	28%	38%	67%	



Methodology- Online Survey, Focus Group

<u>Survey</u>

Section A: Experiences in the Preparatory Program

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

Section B: Decision to Enrol/Transfer to Subsequent Post-secondary Program

✓ Trigger: Was this post-secondary program at Durham College?

Section C: Subsequent Post-secondary Program (Part 1)

✓ Experience not at Durham College

Section C: Subsequent Post-secondary Program (Part 2)

✓ Experience at Durham College

Section D: Experience After Durham College Preparatory Program

✓ Reflection Questions

Focus Group

- ✓ Reasons for enrolment
- ✓ Reflection of experiences
- ✓ Student service usage
- ✓ Recommendations



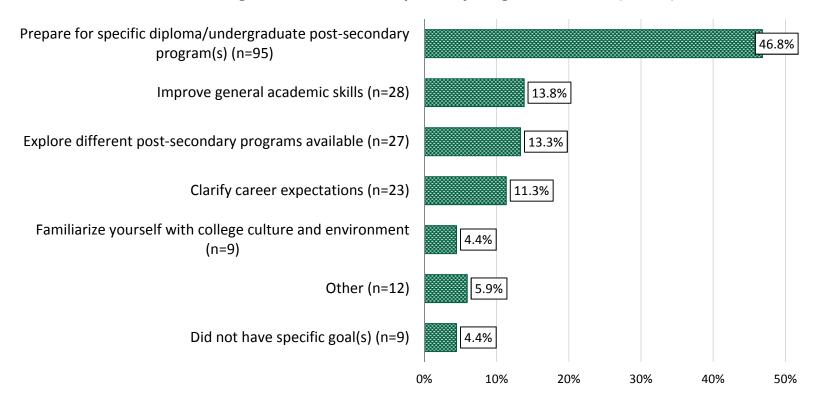
Results

Stage I: While Enrolled in a Preparatory Program

- What are the career/educational objectives of students in the preparatory programs?
- What were the experiences of the students in the preparatory programs?
- Did the preparatory program meet the expectations?

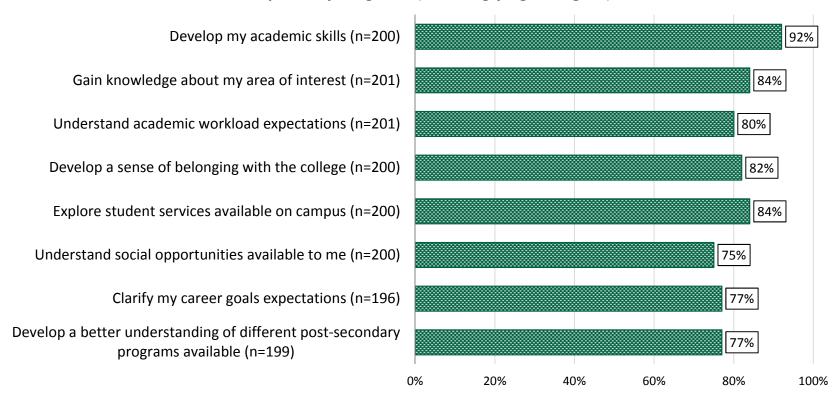
What are the career/educational objectives of students in the preparatory programs?

Figure 1.1: Goals of Preparatory Program Students (n=202)



What were the experiences of the students in the preparatory programs?

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



- What were the experiences of the students in the preparatory programs?
- ✓ Sporadic use of applicable services
- ✓ Student Academic Learning Services was used most frequently
- ✓ Office of the Registrar services used by the greatest number of respondents
 - ❖ (84.1%) enrolled in a subsequent postsecondary program
 - ❖ (63.4%) did not re-enroll



Did the preparatory program meet the expectations?

	Primary Goal	Expectations Met (%)
Academic Preparation	Prepare for specific diploma/undergraduate post-secondary program(s) (n=94)	86.3%
	Improve general academic skills (n=28)	82.1%
Career	Explore different post-secondary programs available (n=27)	77.8%
	Clarify career expectations (n=22)	73.9%
Social Integr.	Familiarize yourself with college culture and environment (n=9)	88.9%
	Other (n=12)	66.7%
	Did not have specific goal(s) (n=9)	66.7%

- ✓ Regardless of preparatory program, students expect an exposure to:
 - ✓ specific field(s) of study; and
 - ✓ programs of study



Stage II: During the Transition to Subsequent Postsecondary Program

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

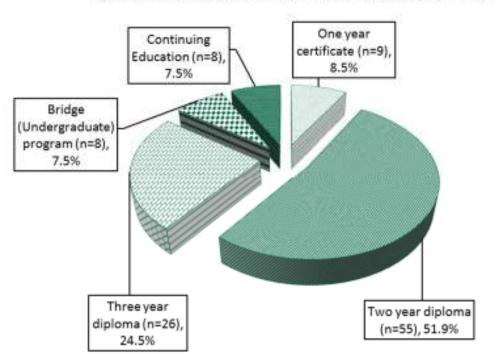
Stage II: During the Transition to Subsequent Postsecondary Program

Did the preparatory program students subsequently enrol in a postsecondary program?

Enrol in subsequent postsecondary program (n=201)		
Yes (n=147)	73.1%	
No (n=38)	18.9%	
Prefer not to answer (n=10)	5.0%	
Not applicable (n=6)	3.0%	

 ✓ Of the 147 survey respondents who pursued subsequent postsecondary programs, 71.9% (n=106) re-enrolled at Durham College.

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





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

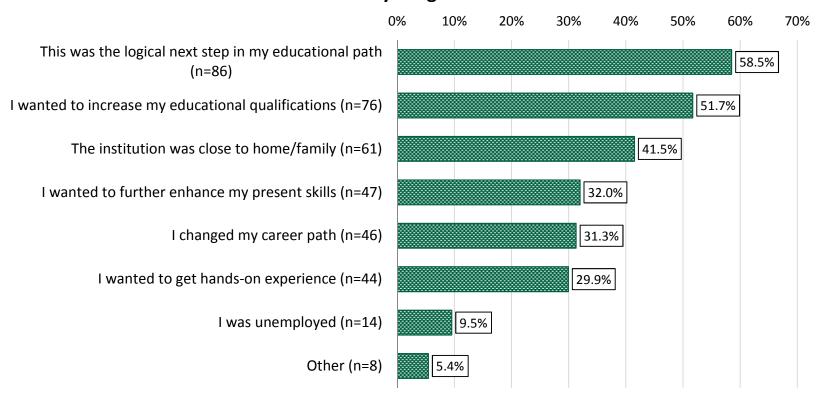
> Logistic Regression

- Develop a sense of belonging with the college (i.e., Social Integration)
- Students who were enrolled in the field-specific preparatory programs
- Graduating from their preparatory program.

Stage II: During the Transition to Subsequent Postsecondary Program

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

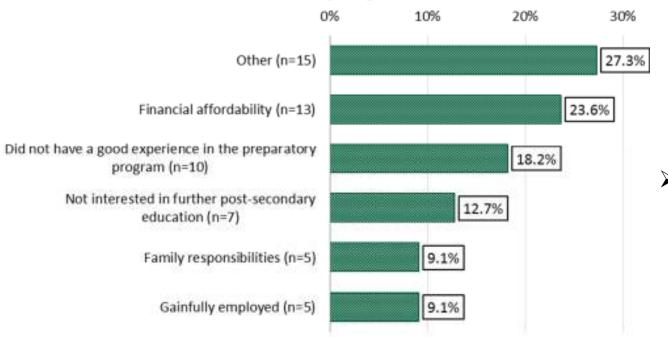
Figure 2.3: Reasons for undertaking a subsequent Postsecondary Program



Stage II: During the Transition to Subsequent Postsecondary Program

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

Figure 2.4: Reasons for <u>not</u> undertaking subsequent Postsecondary Program



The concept of student-program fit is rarely discussed with preparatory programs.



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

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



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

Significant variability, but a fair level of consistency within each program.

Challenges:

- Preparatory programs were too easy; and
- Workload itself was not challenging.
- ✓ While many students indicated that 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.

Stage II: During the Transition to Subsequent Postsecondary Program

- What strategies assist the preparatory program students in their transfer to a subsequent program of study?
 - No General Education (GNED) courses;
 - More challenging curriculum;
 - More intense workload that is reflective of the subsequent postsecondary program;
 - Better understanding of electives and their applicability for credit transfer in various postsecondary programs;
 - Job shadowing to inform awareness of prospective careers; and
 - Visit from Career Services.



Results

Stage III: Upon Completion of Subsequent Postsecondary Program

❖ 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?

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Average GPA

- ✓ Students who had prior preparatory program experience at Durham College (n=271).
- ✓ after the first semester of their **preparatory program**, was 3.12
- ✓ after first semester in the <u>subsequent diploma or advanced diploma</u> program was 2.86

Stage III: Upon Completion of Subsequent Postsecondary Program

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?

Two-year diploma programs

With a preparatory experience (n=210, M=2.93, SD=1.13) Without prior preparatory program experience (N=2,783, M=2.89, SD=1.35).

Three-year advanced diploma programs

With a preparatory experience (n=61, M=2.47, SD=1.23) Without prior preparatory program experience at Durham College (N=770, M=2.75, SD=1.41).

Stage III: Upon Completion of Subsequent Postsecondary Program

❖ 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?

✓ Retention Rates

Fall 2013 Diploma and Advanced Diploma students with:	Fall	Winter	Fall	Winter
	2012	2013	2014	2014
Prior preparatory progam experience at	100%	90.4%	78.6%	79.0%
Durham College	(271)	(245)	(213)	(214)
No prior preparatory program experience at Durham Collee	100%	87.7%	73.6%	70.9%
	(3,557)	(3,120)	(2,618)	(2,523)

While students with a preparatory experience have slightly lower GPA, they are *more persistent* with their studies



Limitations to the Study

- Only 7% of the study population responded to the survey questionnaire;
- Respondent demographic was positively skewed towards females; and
- ❖ Wide variability between preparatory programs on some of the dimensions assessed.

❖ Overall, the findings of the study are fairly generalizable across the preparatory programs offered at Durham College



- Awareness of the purpose(s) of preparatory programs and alternative pathways
 - ✓ Misconceptions about gainful employment
- ➤ Expand definition of preparatory program beyond *Academic Preparedness*
 - ✓ Increase level of career clarity
- Greater emphasis on field-specific preparatory programs
 - ✓ Increased level of academic engagement



- Review curriculum and workloads
 - ✓ need for academic rigour
- ➤ Provide timely and readily available information to assist in transition to subsequent postsecondary program
 - √ pro-active academic and career advising
- > Promote use of student support services
 - ✓ positively and overwhelmingly acknowledged



- ➤ Provide multiple means of communication with the college administration
 - ✓ reduce the frustration and time
- > Emphasize importance of graduation rate for preparatory programs
 - ✓ Graduation as a re-enrollment predictor
- Implications for graduation rate in diploma programs
 - ✓ preparatory programs have a positive impact



- > Awareness of the purpose(s) of preparatory programs and alternative pathways
- > Expand definition of preparatory program beyond Academic Preparedness
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- Emphasize importance of graduation rate for preparatory programs
- Implications for graduation rate in diploma programs



Thank You!!

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