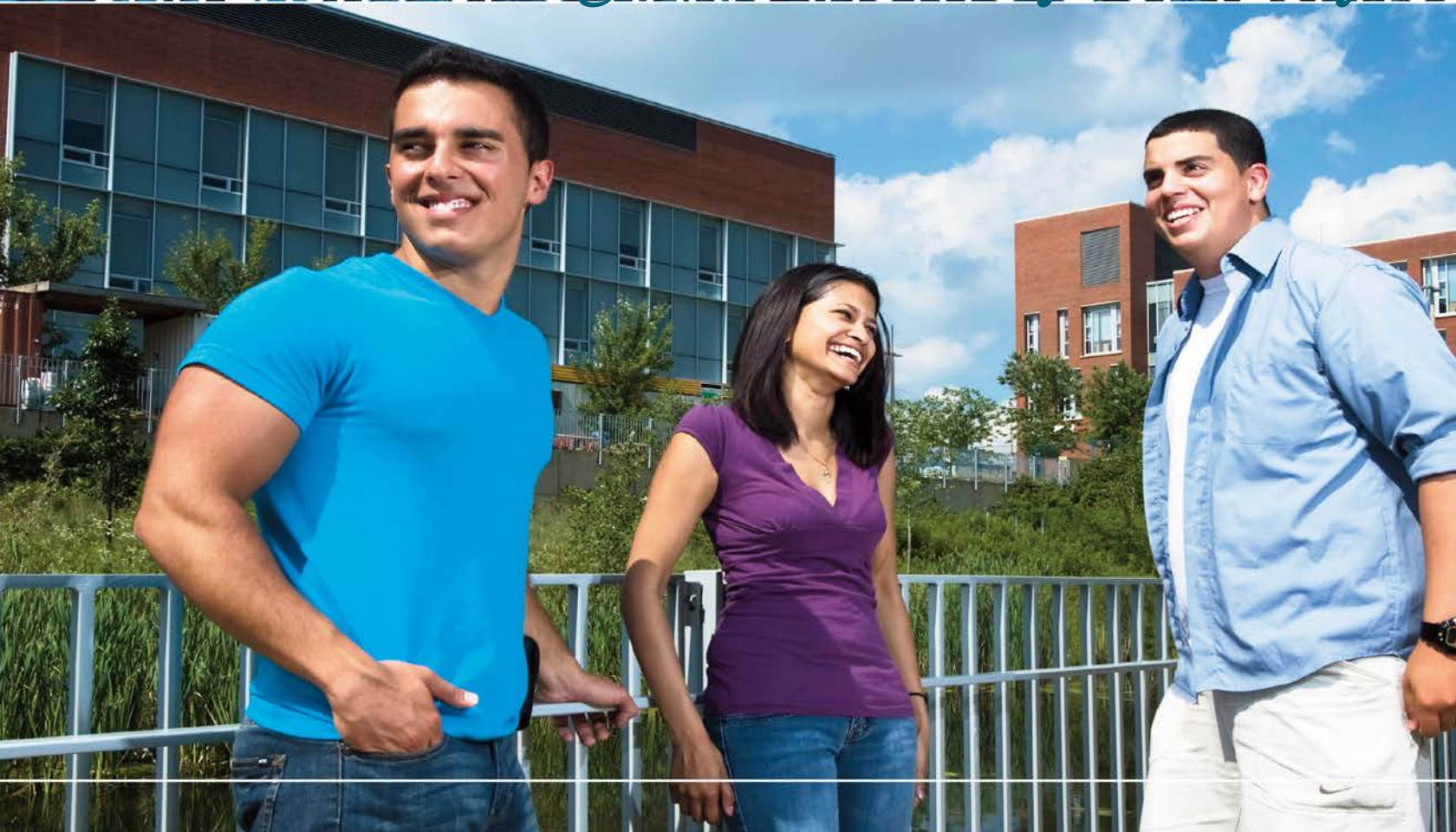


# Exploring Student and Advisor Experiences in a College – University Pathway



# Agenda

- Introduction to Durham College & UOIT
- Introduction to the Study
- Background for the Study
- Methodology
- Bachelor's of Commerce Pathway Case Study
- Conclusions
- Recommendations

# Durham College

- Mission: The student experience comes first at Durham College.
- Vision: Durham College is the premier college in Canada for career-focused students who are motivated to succeed in a challenging, supportive and inclusive learning environment. Our programs are continually shaped by market need and delivered by exceptional teachers with real-world experience. Our vibrant campus community enriches the student life experience. All of this combines to ensure our graduates have the skills to succeed in their careers and make a difference in the world.

# Part of DC Strategic Plan (2010-2013)

Develop high affinity academic pathways for students wishing to enhance their post-secondary education.

-Durham College and UOIT today offer 25 diploma to Degree opportunities approved by both institutions

# UOIT: Vision and Mandate

- Innovative, 21<sup>st</sup>- century university featuring:
  - Technology enriched learning environment (first in Ontario);
  - Every classroom wired;
  - Campus-wide wireless access; and
  - Flexible program delivery.
- Opened doors to students in September 2003.
- Offer programs that are responsive to industry and community needs and address skills and labour gaps.
- Focused on developing academic pathways between colleges and universities.
- Graduates to emerge with real-world skills and prepared for success.





# UOIT Today



- Comprehensive university, offering over 40 programs overall including undergraduate, post-graduate (23 master's level degrees) and doctoral degrees (seven PhD programs).
- Seven Faculties
- Undergraduate and graduate enrolment has grown to more than 9200.
- **22 Unique Pathway Programs**
- Over \$10.5 million in annual external research funding (2011-2012).
- More than 6700 alumni.

# UOIT: Focus on Experiential Learning

Integration of hands-on learning into curriculum:

- Undergraduate student research opportunities;
- Most STEM programs have capstone projects (4<sup>th</sup> year projects with industry or community partners);
- Programs without capstone projects incorporate 1-2 placements in 4<sup>th</sup> year of study;
- Development of co-operative education streams; and
- Flexibility in programs for internship opportunities.

Benefits:

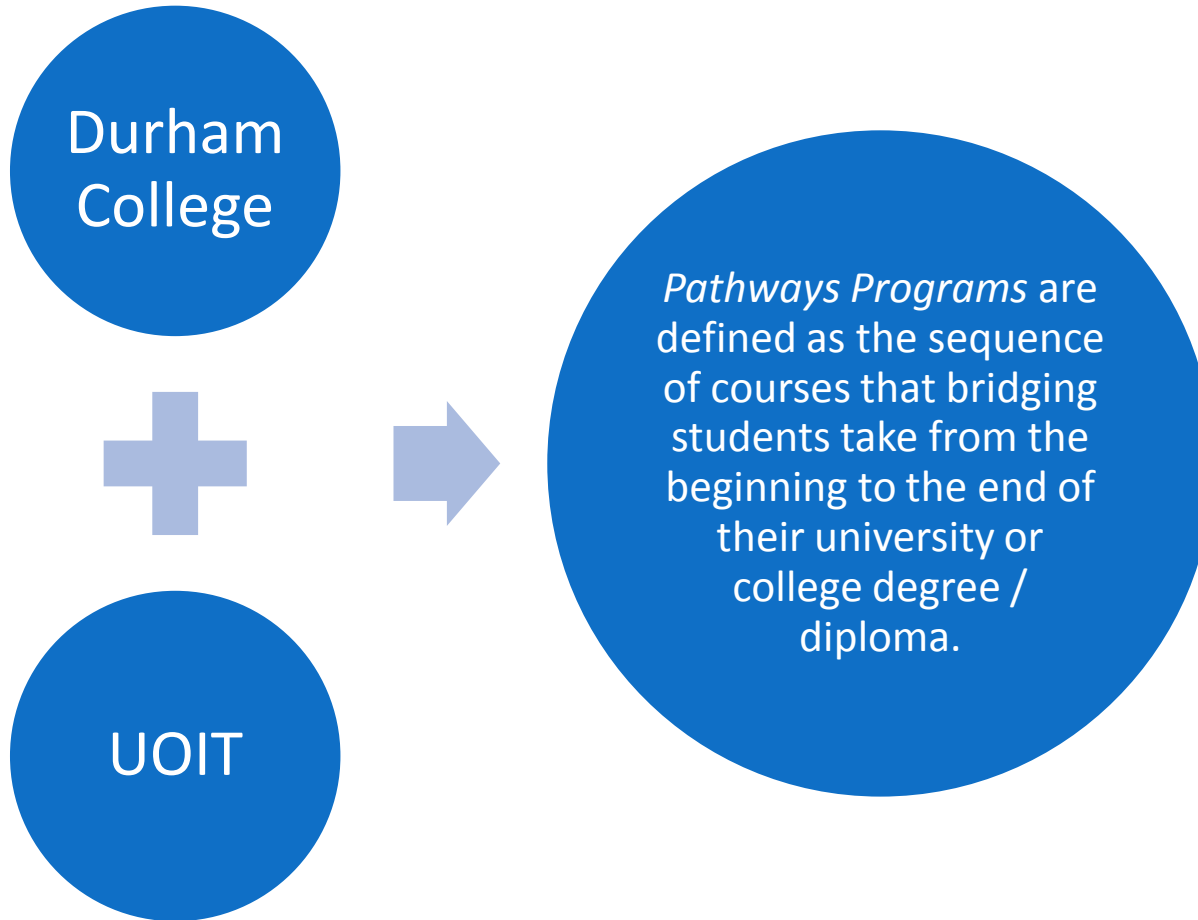
- “real world” experience;
- future job placements;
- potential foundation for future research partnerships; and
- community engagement with institution.

# Current Status of Pathways

- The number of Ontario college graduates pursuing degree programs at Ontario Universities nearly doubled from 2000 to 2006 (College Ontario, 2009)
- Number of students transferring between institutions (including University to College) has increased substantially (ACAATO, 2005)
- Few studies exist that have examined pathway student experiences



# Defining Pathways



# What we know about Pathways

- Most studies have focused on transfer rates, GPA patterns, and withdraw rates (Gawley and McGowan, 2005)
- Several studies indicate a significant academic and cultural difference between Colleges and Universities
  - Class sizes
  - Preparation needs (critical thinking, writing, reading speed)
  - Assessment methods
  - Faculty involvement
  - Social Integration

# Previous Research Findings

- Experience in both College and University environments can be beneficial (Center for Spatial Economics, 2010)
- Preparedness of students for academic standards in the university environment is an open question
- Transition barriers and preparedness has had mixed results
- Orientation can play a key role in mediating the transition

# Context

Durham College (DC) and the University of Ontario Institute of Technology (UOIT) in Oshawa, Ontario have been pioneers in the development of Pathway programs.

Pathway programs facilitate the transition of students between institutions for the completion of degrees, diplomas, and certificates.



# Understanding Pathways between Durham College and UOIT

- First DC-UOIT pathway launched in 2004.
- Now have over 20 unique pathways across 6 of the 7 Faculties at UOIT.
- No formal review process for pathway programs exists
- In search of best practices, commonalities, areas for improvement, and a better understanding of challenges faced by pathway students

# The Broader Study

- 1-Year mixed methods study (March 2012 - March 2013)
- Funded by DC and UOIT

## Purpose

- To examine opportunities and barriers to Pathway Program completion with a focus on exploring the lived experiences of program participants.

## Research Objectives

- Quantitative: To provide a quantitative description of the Pathways students have followed from 2005 until 2011.
- Qualitative: To explore individuals' perceptions and experiences in DC/UOIT Pathway Programs.



# Methodology

- Mixed Method approach
- Research members from both Durham College and UOIT
- Research members from across schools and faculties
- Focus on DC-UOIT and UOIT – DC pathway programs

# Quantitative Research Team

- Jennifer Percival (Associate Professor, Faculty of Business and Information Technology )
- Bill Goodman (Associate Professor, Faculty of Business and Information Technology),
- John Samis (Assistant Professor, Faculty of Health Sciences)
- Otto Sanchez (Associate Professor, Faculty of Health Sciences)
- Darryl Hand (Undergraduate - RA)

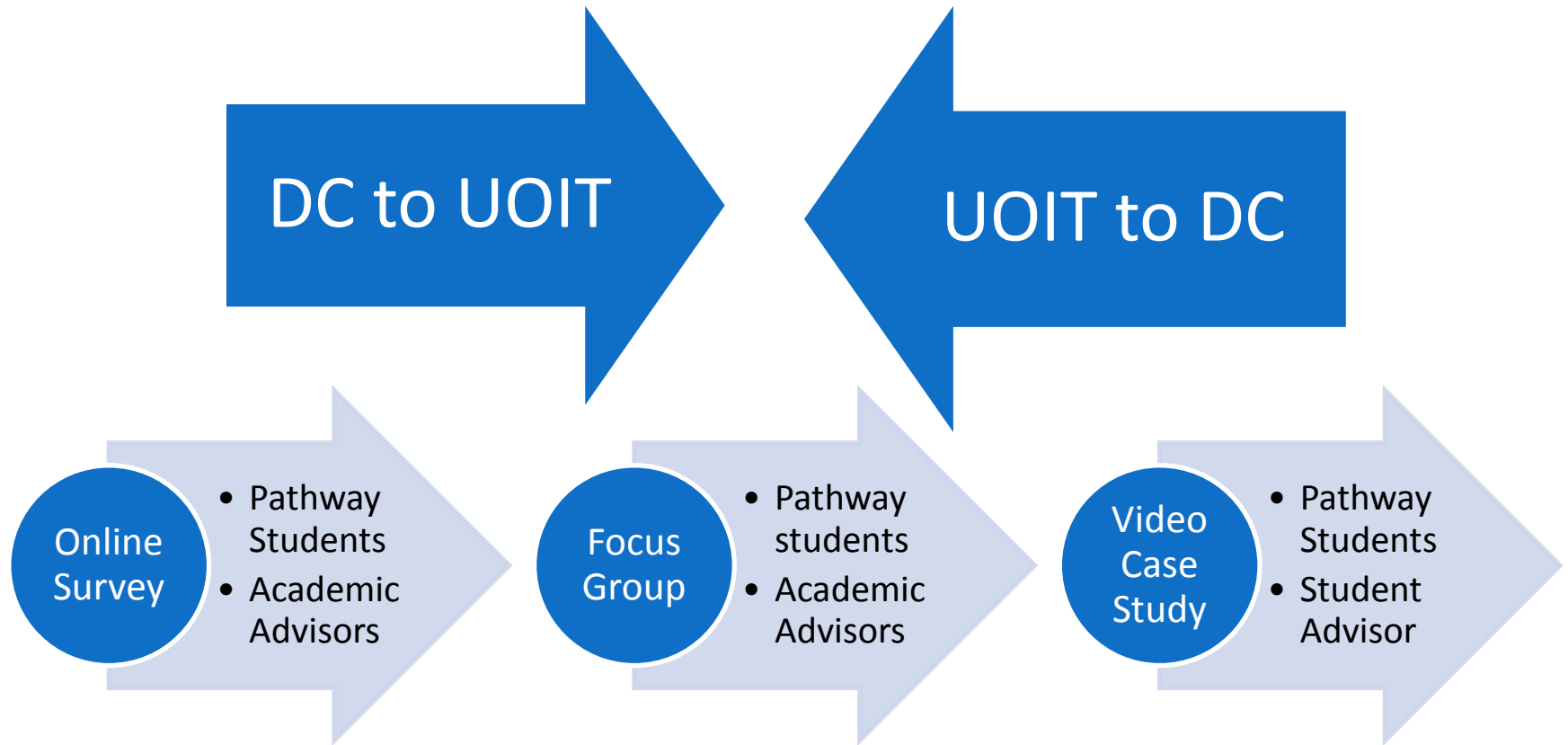
# Quantitative Study Components

- Analysis on the size and growth rate of existing pathway programs
- Comparative Analysis of student performance
  - Program – level
  - Course - level

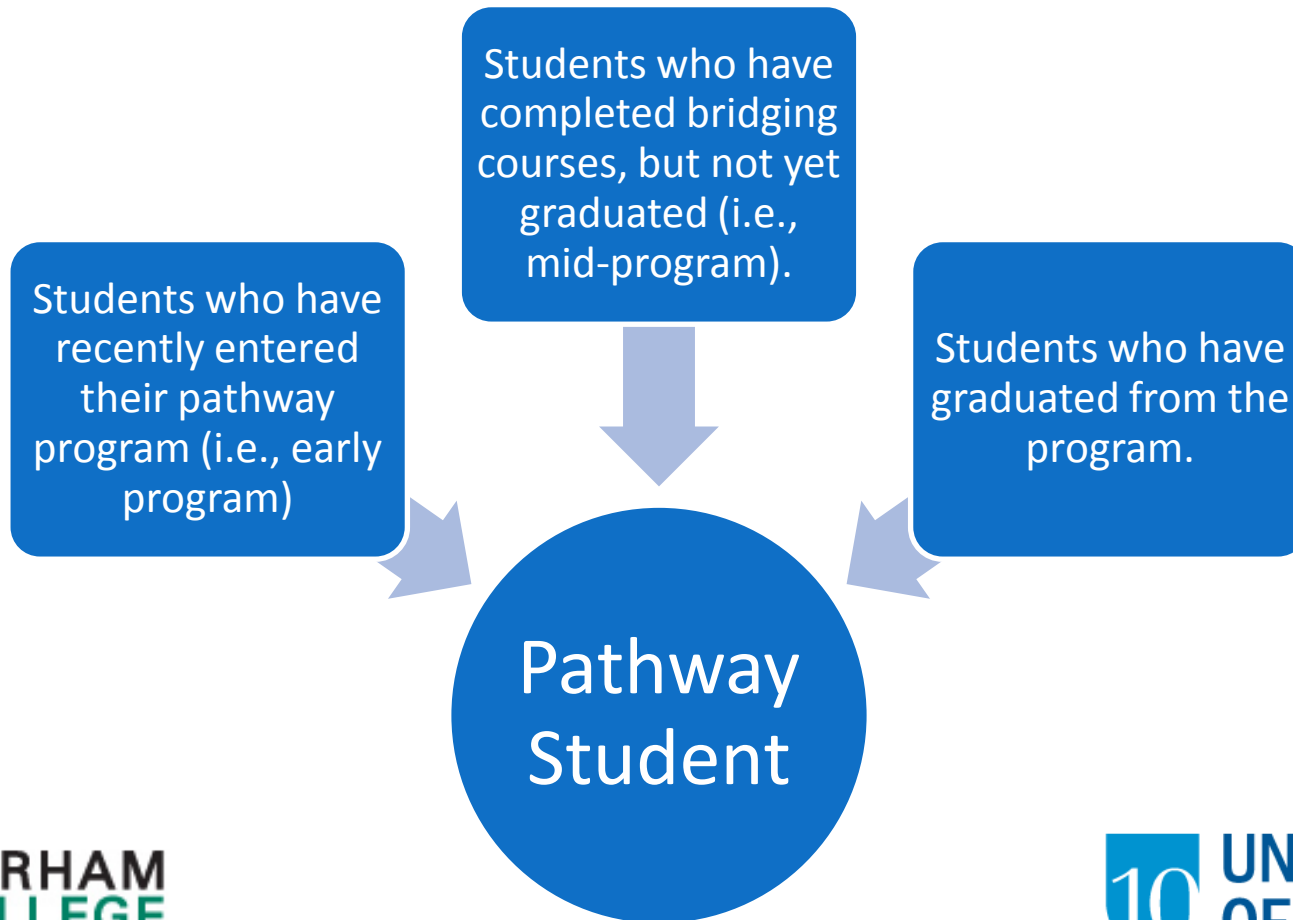
# Qualitative Research Team

- Ron Hinch (Professor, Faculty of Social Science and Humanities),
- Fabiola Longo (Nursing Professor, School of Health and Community Services)
- Arlene De La Rocha (Nursing Professor, School of Health and Community Services)
- Ann LeSage (Assistant Professor, Faculty of Education)
- Maurice DiGiuseppe (Assistant Professor, Faculty of Education)
- Anna Rodrigues (Professors, Print and Broadcast Journalism Program)
- Phil Raby (Professors, Print and Broadcast Journalism Program)
- Marc Hall (Graduate - RA)

# Qualitative Data



# Qualitative Data DC to UOIT



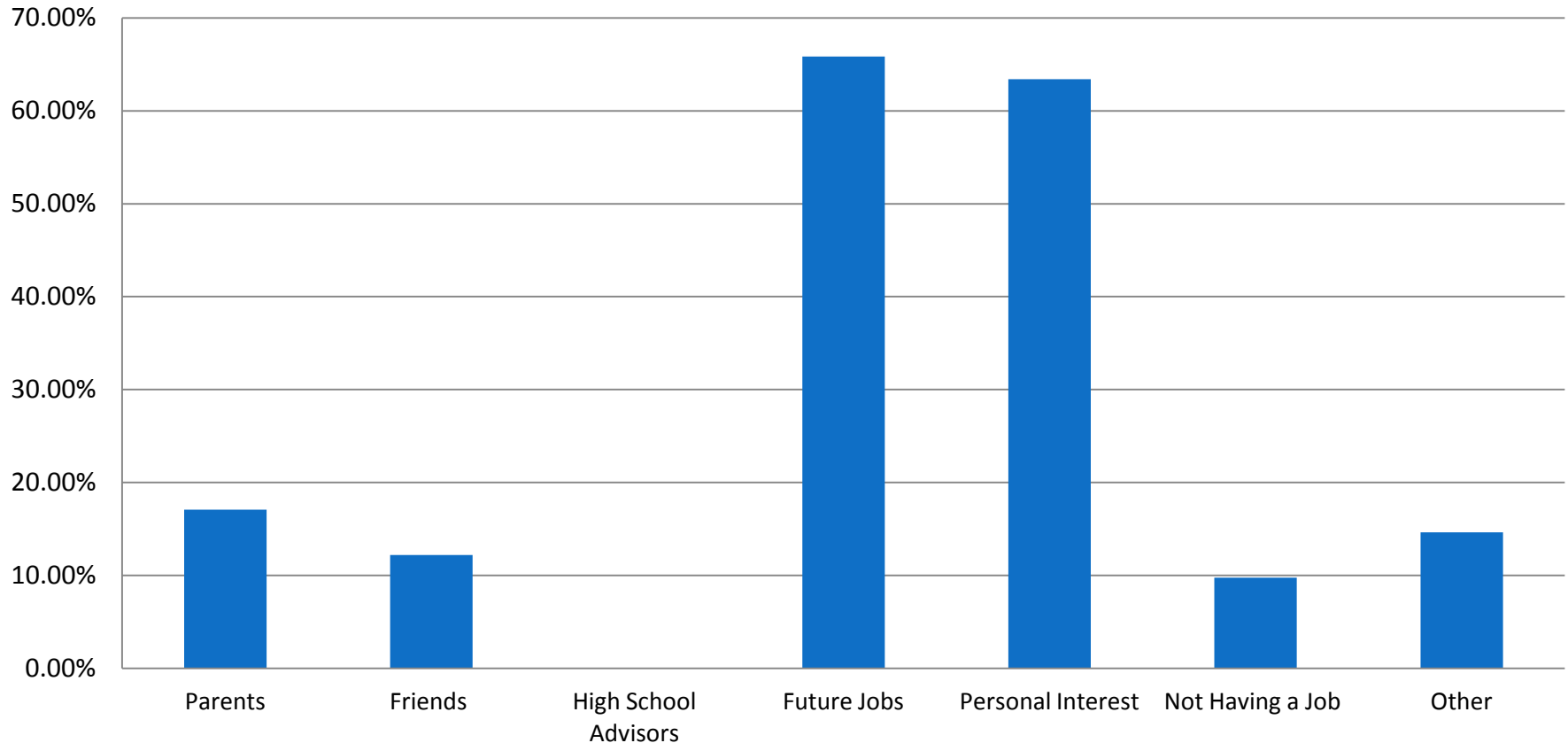


# Survey Results

- Invitations to participate were sent to 272 current DC -UOIT pathway students
- 17% responded
- Invitations to participate were sent to 127 graduates of pathway programs.
- 7% responded
- Invitations were sent to advisors for the programs with 8 advisors participating.

# Why Complete A Pathway?

*Motivating Factors for Participating in Pathway Programs*



# Preliminary General Findings

## PRIMARY MOTIVATORS FOR ENROLLING IN THE DC-TO-UOIT PATHWAY PROGRAM

### CAREER ENHANCEMENT

*“It comes down to if you have a degree ... that’s how you end up getting a better paying job. If you’re looking for a single main purpose [for pursuing a university degree], it would be for pushing my career forward.”*

### PERSONAL/SOCIAL ACHIEVEMENT

*“I just had a personal goal of getting a university degree. I’ll just be the first in my family to do so!”*

*“Most of my classmates have also done Bridging or gone to other universities or started working with the government, other pretty driven things, so it was kind of just the natural step.”*

### TUITION COST CUTTING

*“The Bridge program saved me two years of school and thousands of dollars.”*

*“You are essentially fast tracking your university degree so you don’t have to go the full four years. So saving money.”*

| UOIT GPA Distributions          |        |        |        |        |        |         |
|---------------------------------|--------|--------|--------|--------|--------|---------|
| Program                         | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Overall |
| <b>Business</b>                 |        |        |        |        |        |         |
| Business (Traditional)          | 2.32   | 2.52   | 2.58   | 2.65   | 2.58   | 2.53    |
| Business Bridge (Pathway)       |        | 2.90   | 3.39   | 3.35   | 3.25   | 3.20    |
| Business GENU (Pathway)         |        |        | 3.04   | 3.29   | 3.07   | 3.15    |
| <b>IT</b>                       |        |        |        |        |        |         |
| Information Technology (Trad.)  | 2.27   | 2.55   | 2.63   | 2.79   | 2.42   | 2.53    |
| Information Technology Bridge   |        | 2.70   | 3.06   | 3.45   |        | 2.98    |
| <b>Health Sciences</b>          |        |        |        |        |        |         |
| Health Science (Traditional)    | 2.20   | 2.47   | 2.60   | 2.73   | 2.64   | 2.51    |
| Allied Health Science (Pathway) |        |        | 3.55   | 3.58   | 3.29   | 3.53    |
| <b>Nursing</b>                  |        |        |        |        |        |         |
| Nursing (Collaborative)         | 2.84   | 2.93   | 2.91   | 3.04   | 2.90   | 2.93    |
| Nursing Post-PN (Pathway)       |        | 3.14   | 3.18   | 3.16   | 2.73   | 3.13    |
| <b>Justice</b>                  |        |        |        |        |        |         |
| Justice Studies (Traditional)   | 2.21   | 2.54   | 2.73   | 2.89   | 2.82   | 2.63    |
| Justice Bridge (Pathway)        |        | 2.64   | 2.96   | 3.04   | 2.79   | 2.86    |
| <b>Communications</b>           |        |        |        |        |        |         |
| Communications (Traditional)    | 2.37   | 2.83   | 3.01   | 3.10   | 2.92   | 2.78    |
| Communications Bridge           |        | 3.12   | 3.40   | 3.69   |        | 3.37    |
| <b>Legal Studies</b>            |        |        |        |        |        |         |
| Legal Studies (Traditional)     | 2.52   | 2.91   | 3.10   | 2.96   | 3.30   | 2.88    |
| Legal Studies Bridge (Pathway)  |        | 2.76   | 3.02   | 3.26   |        | 2.95    |
| <b>Overall</b>                  | 2.38   | 2.75   | 2.90   | 3.01   | 2.77   | 2.80    |

# General Concerns – A Preliminary Analysis

Students and Academic Advisors expressed a need for:

- Improved Access to Information on Pathways
- Improved transitional supports
- Improved registration process

“I would say the hardest thing that I had to deal with was basically my writing skills. Coming from college to university these weren’t necessarily at the same level. I would say now that ... that was probably the biggest challenge in all my courses ... trying to explain what I had in my mind and put it on paper. College was more practical, so you didn’t have to do as much theoretical, which is something that I kind of had an issue with at the start.”

## In Depth Case Study:

### Faculty of Business & Information Technology

- Bachelor of Commerce; Majors in:
  - Accounting;
  - Finance;
  - Marketing;
  - Organizational Behaviour and Human Resources Management.
- Bachelor of Information Technology; Majors in:
  - Game Development and Entrepreneurship;
  - Networking and Information Technology Security.



# Initial BCom Pathway

- Introduced Fall 2005
- Initial Entry Requirements (A average)
- Bridge Requirements (min. B average) in;
  - Finance I
  - Finance II
  - Financial Accounting
  - Managerial Accounting
  - Statistics

# Evolution of the BCom Pathway

- 2008 reduced the diploma requirement to B average
- 2010 altered bridge courses
  - Business Math
  - Critical Thinking and Ethics
  - Finance I
  - Financial Accounting
  - Organizational Behaviour
- 2010 altered bridge requirement to a C in each course
- 2010 developed business diploma specific pathways
  - 2 year diploma bridges to majors
  - 3 year advanced diploma direct entry pathways to majors

# Example Accounting Diploma Map

15 courses (45 credit hours) transfer applied (see reverse) with required 5 Bridge courses (15 credit hours). Successful completion plus further 20 courses (60 credit hours) below to complete degree requirements.

|                               |  |                                     |  |   |  |   |
|-------------------------------|--|-------------------------------------|--|---|--|---|
| <b>Bridge Semester Summer</b> | BUSI 1010U<br>Critical Thinking and Ethics   |                                     | BUSI 2311U<br>Organizational Behaviour       | BUSI 2401U<br>Finance I                             | BUSI 1101U<br>Financial Accounting                 | <b>BUSI 1916U<br/>Business Math II</b>  |
| <b>Year 3, Sem. 1 Fall</b>    | BUSI 1915U<br>Business Math I                |                                     | BUSI 3040U<br>Information Systems            | BUSI 3170U<br>Auditing Standards and Applications I | BUSI 3101U<br>Intermediate Financial Accounting I  | <b>General Elective</b>                 |
| <b>Year 3, Sem. 2</b>         | BUSI 2202U<br>Marketing II                   |                                     | BUSI 3160U<br>Advanced Managerial Accounting | BUSI 2402U<br>Finance II                            | BUSI 3102U<br>Intermediate Financial Accounting II | <b>General Elective</b>                 |
| <b>Year 4, Sem. 1</b>         | Business Elective                            | BUSI 4990U<br>Pre-Capstone workshop | BUSI 4701U<br>Strategic Management           | BUSI 3110U<br>Introduction to Taxation              | BUSI 4101U<br>Advanced Financial Accounting        | <b>BUSI 3171U<br/>Advanced Auditing</b> |
| <b>Year 4, Sem. 2</b>         | <b>BUSI 4995U<br/>Capstone Study Project</b> |                                     | <b>Accounting Elective</b>                   | <b>BUSI 3120U<br/>Advanced Taxation</b>             | <b>Accounting Elective</b>                         | <b>Elective</b>                         |

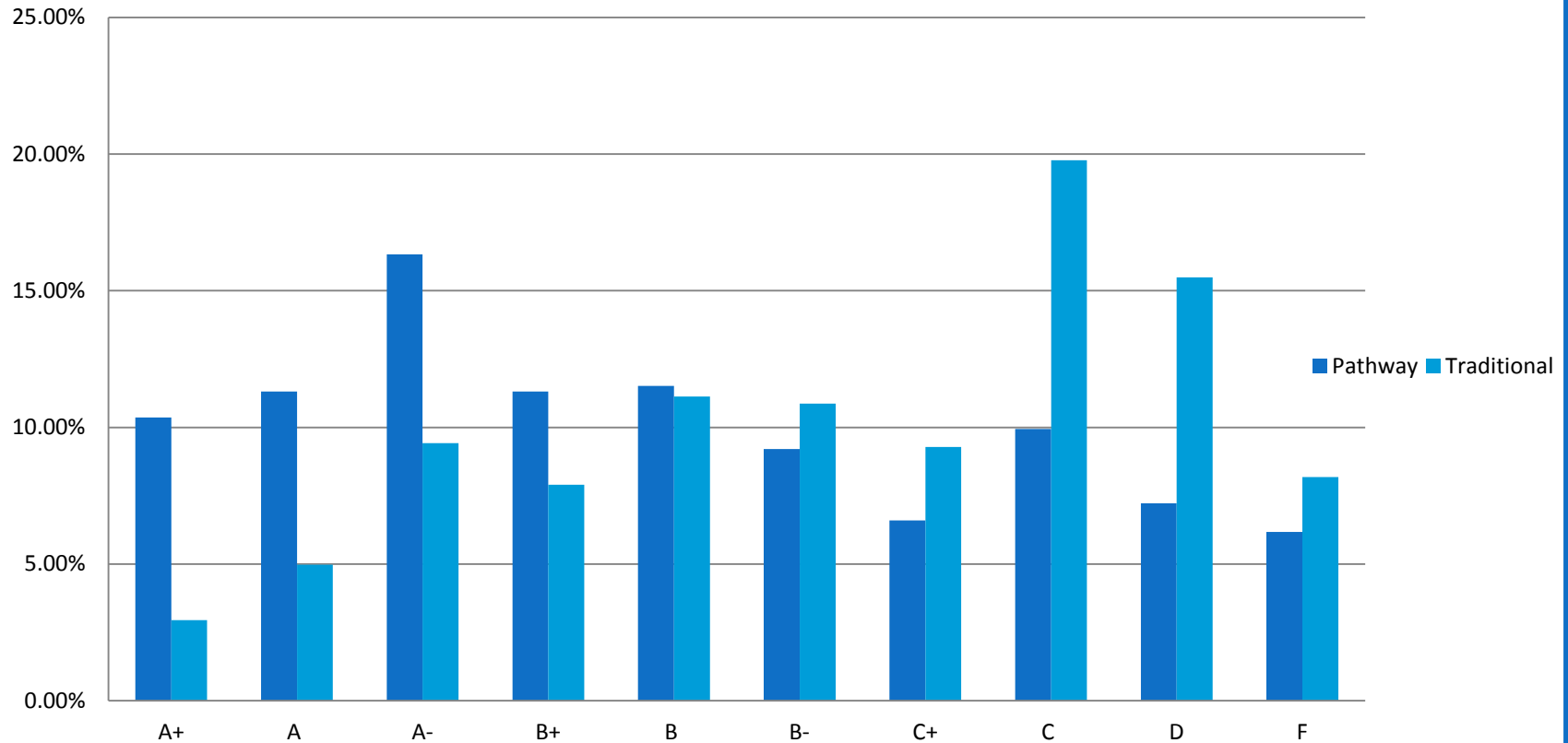
# Student Academic Performance

## Aggregate GPA Performance

| Program                                   | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Overall |
|---|--------|--------|--------|--------|--------|---------|
| <b>Traditional Four Year Students</b>     |        |        |        |        |        |         |
| Business                                  | 2.32   | 2.52   | 2.58   | 2.65   | 2.58   | 2.53    |
| <b>Pathway Students</b>                   |        |        |        |        |        |         |
| Business Bridge                           |        | 2.90   | 3.39   | 3.35   | 3.25   | 3.20    |
| Business GENU                             |        |        | 3.04   | 3.29   | 3.07   | 3.15    |
| <b>Traditional &amp; Pathway by Major</b> |        |        |        |        |        |         |
| Accounting                                |        | 2.55   | 2.56   | 3.02   | 2.94   | 2.82    |
| Finance                                   |        | 2.24   | 2.37   | 2.64   | 2.44   | 2.47    |
| Marketing                                 |        | 2.68   | 2.35   | 2.55   | 2.51   | 2.48    |
| Human Resources                           |        |        | 2.74   | 2.66   | 3.09   | 2.78    |

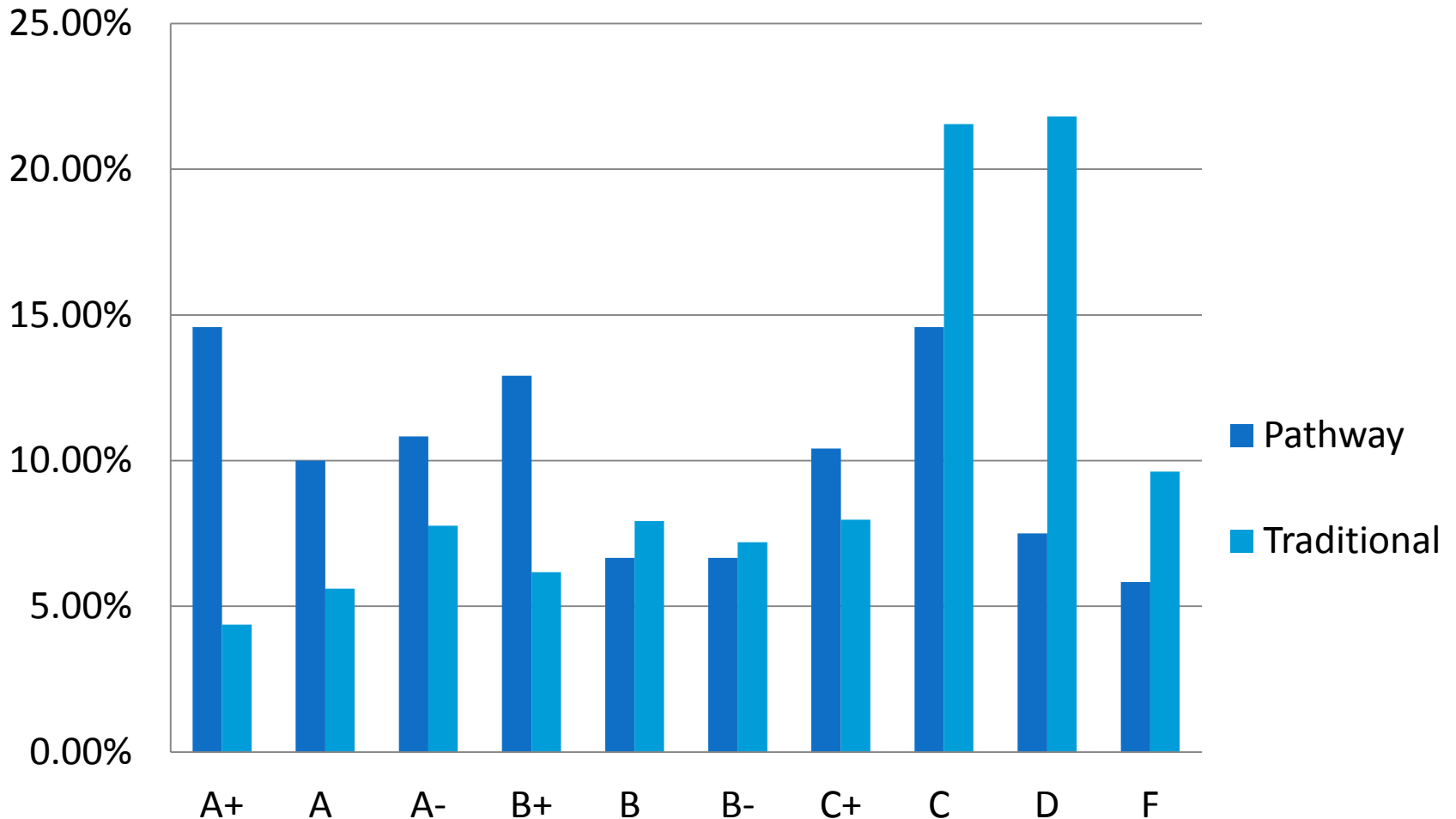
# Grade Distributions for Core Business Courses

(includes: Managerial Accounting, Marketing I, Organizational Behaviour, Finance I, Operations Management, Information Systems, Intermediate Financial Accounting I, Introduction to Taxation)



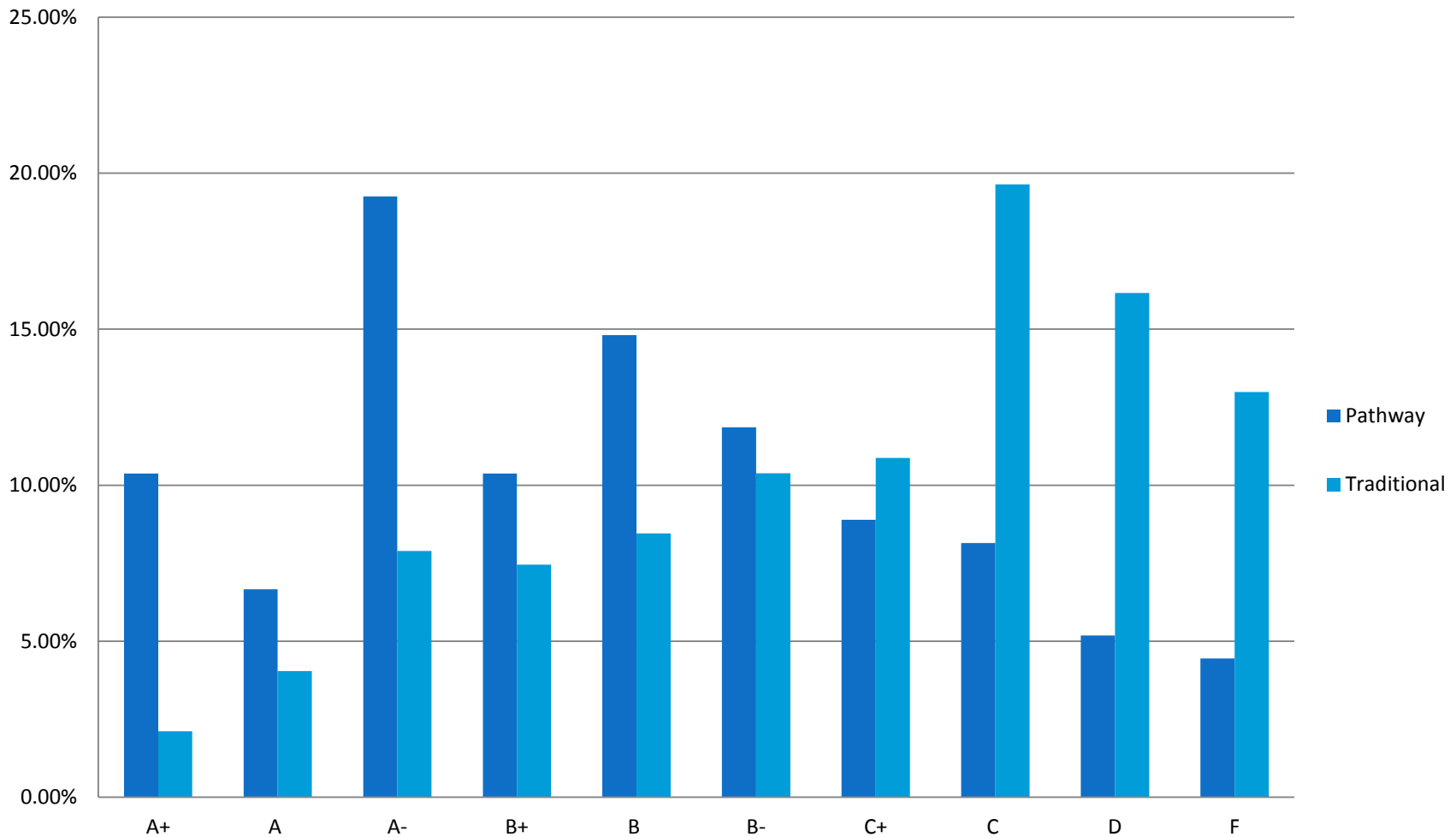
# Bridge Course Example

## Grade Distributions Finance I

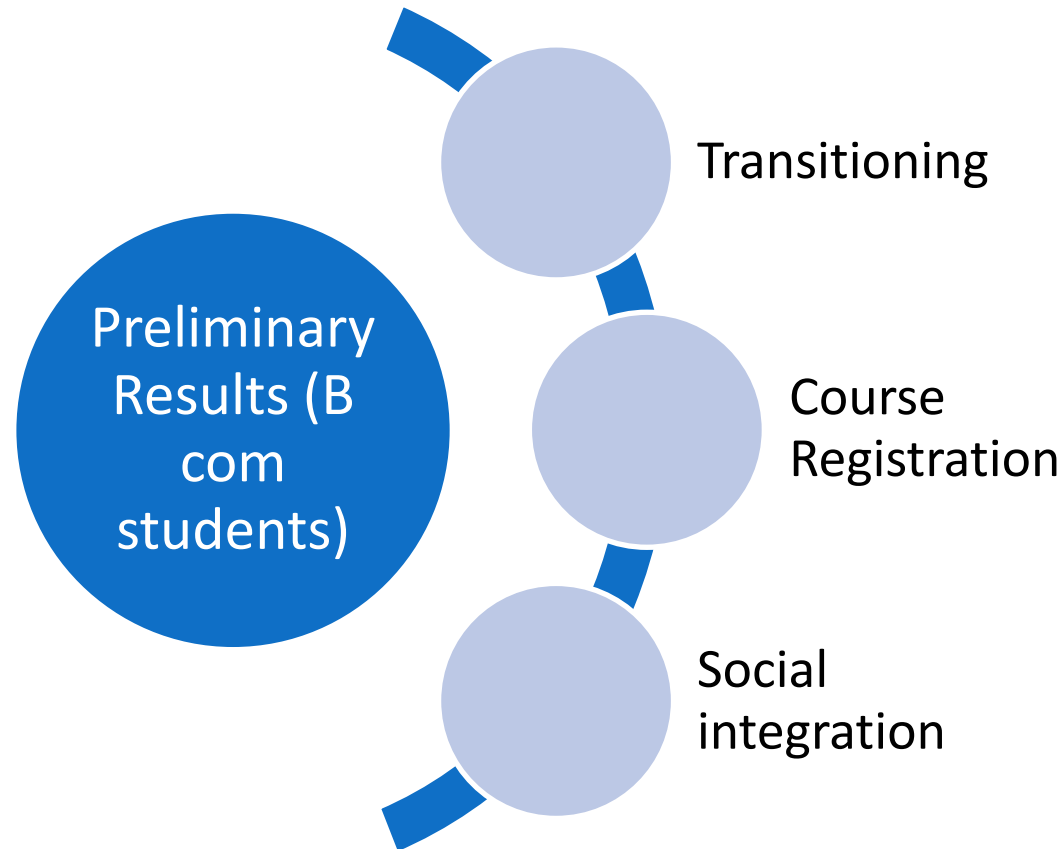


# Post Bridge Course Example

*Grade Distributions for Information Systems*



# Qualitative Preliminary Results





# Transitioning

Understanding modified program maps

## Orientation

- “They invited us to the “new student” orientation, I think, the first year. I don’t think we went because it was more geared toward first years as opposed to transfer students in the higher year.” – Pathway Student

# Registration

## Understanding Course Selection and Enrolment

- Restricted courses
- Pre-requisite waivers due to block transfers
- “this is a real problem for students” because it limits them to enrolling in courses they are not interested in. – Academic Advisor

# Social Integration

## Group work

- “at the very beginning ... these kids see us walk in and you have that stigma like ‘oh, these are college kids’ that are just walking into our program.” – Pathway Student

## Finding Clubs and Societies

## Leadership roles in clubs/societies

- “One thing I could suggest is the Accounting Association, because when you are transitioning from say a college program and put directly in the third year, you don’t really get the opportunity to join that Association. I’m not sure if it’s the same for other programs, but I know for myself, I was really interested in doing that and there wasn’t any opportunities for me to join throughout my university career, because they are geared towards the earlier year students or they are already established.” – Pathway Student

# Conclusions

- Academic Preparedness & abilities do not appear to be an issue
- Pathway students can be leaders in their programs
- More work needs to be done to better understand the social and cultural experiences of students in pathway programs

# Recommendations – DC-UOIT

- Examine the impact of block transfers on students
- Develop a specific orientation for students in pathway programs which looks to facilitate:
  - Writing needs
  - Social engagement with peers
  - Introduction to clubs, societies, and career development
- Work with student clubs to ensure opportunities for pathway students to engage in leadership roles

# Recommendations – Higher Education System

- Improve data coding for potential use in quantitative analysis and data mining
- Collect the data necessary and provide ability to link college and university data to allow more in-depth longitudinal analysis of the entire educational path of a learner

# Future Research

- Collect data and study the rationale for those who express interest in a pathway program but do not pursue it. Are there barriers preventing their access?
- Broader study on “transfer shock” to compare pathway experience to other forms of institutional transfers
- Conduct a comparative study on the academic and social experiences of students who enter via pathway programs and those that complete a single form of degree.

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