

# Recent Findings of HEQCO-Sponsored Research

HEQCO Research Conference on Enhancing Student Success  
in Ontario Higher Education

Tuesday, June 29, 2010  
Ryerson University, Toronto

**Richard Dominic Wiggers**  
**Research Director**

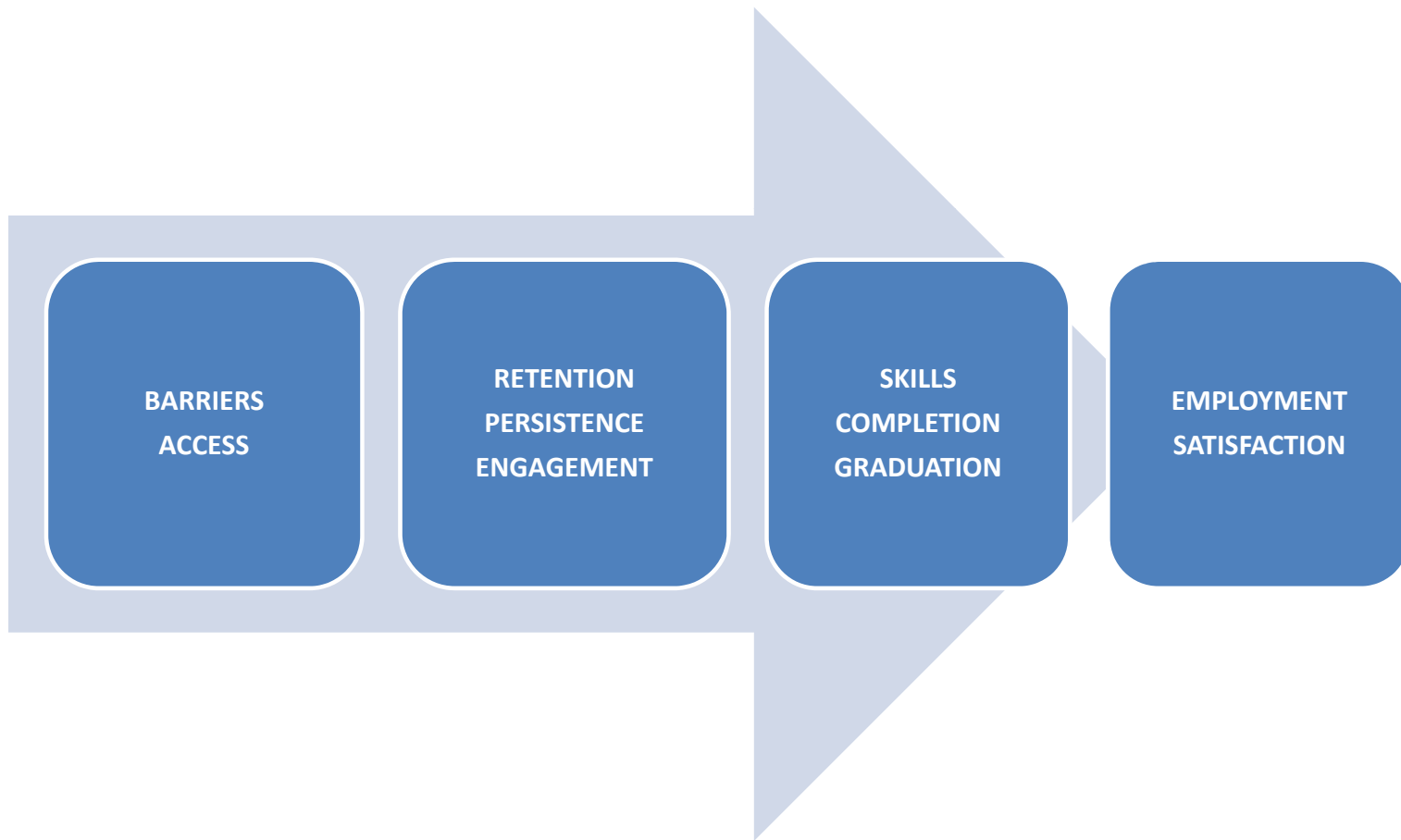
Higher Education  
Quality Council  
of Ontario



Conseil ontarien  
de la qualité de  
l'enseignement supérieur

*An agency of the Government of Ontario*

# Why “Student Success”?



# Why Worry About Student Success?

## **Personal/Student (and Family/Parent)**

- Perceived need/desire for PSE credential
- Investment of time, funds and effort

## **Institutional**

- Investment in recruiting & orienting new students
- Institutional reputation/key performance indicators (KPIs)

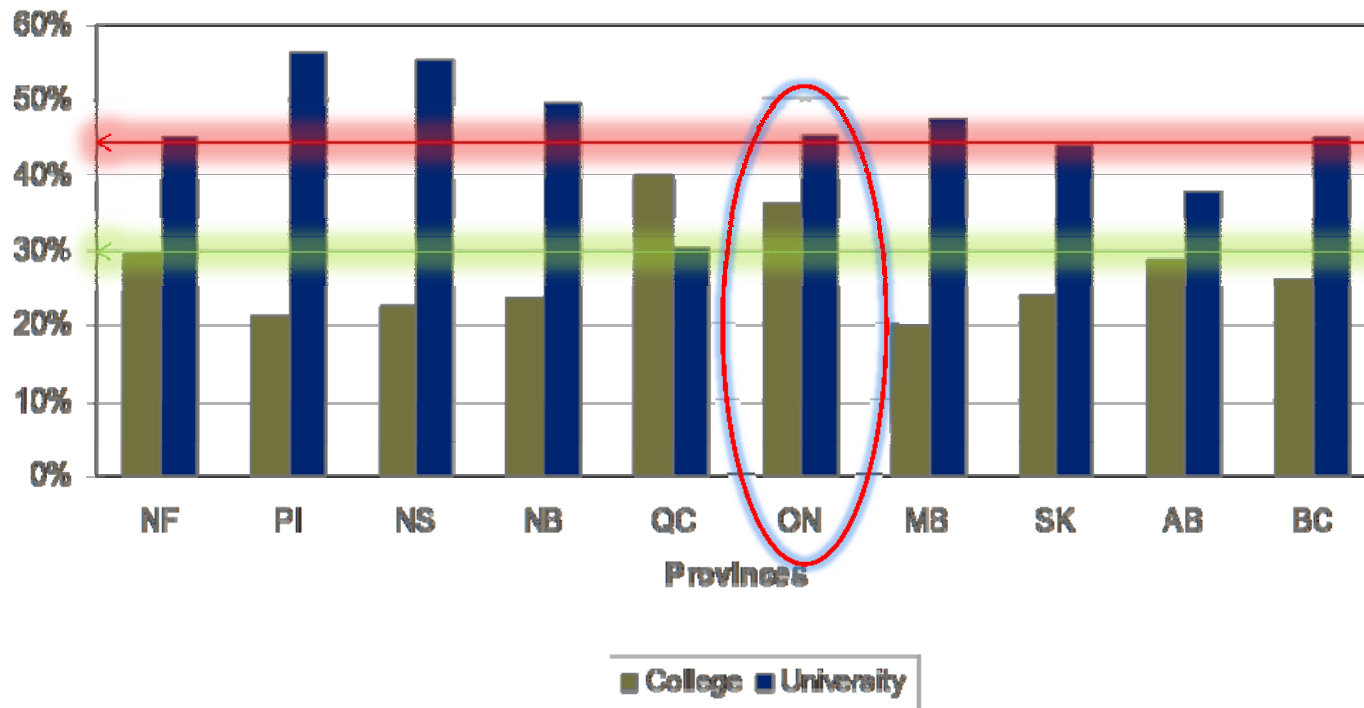
## **Government/Social**

- Concern about satisfaction with PSE investments
- Need for citizens/employees with “relevant” skills/credentials



# PSE Participation Rates

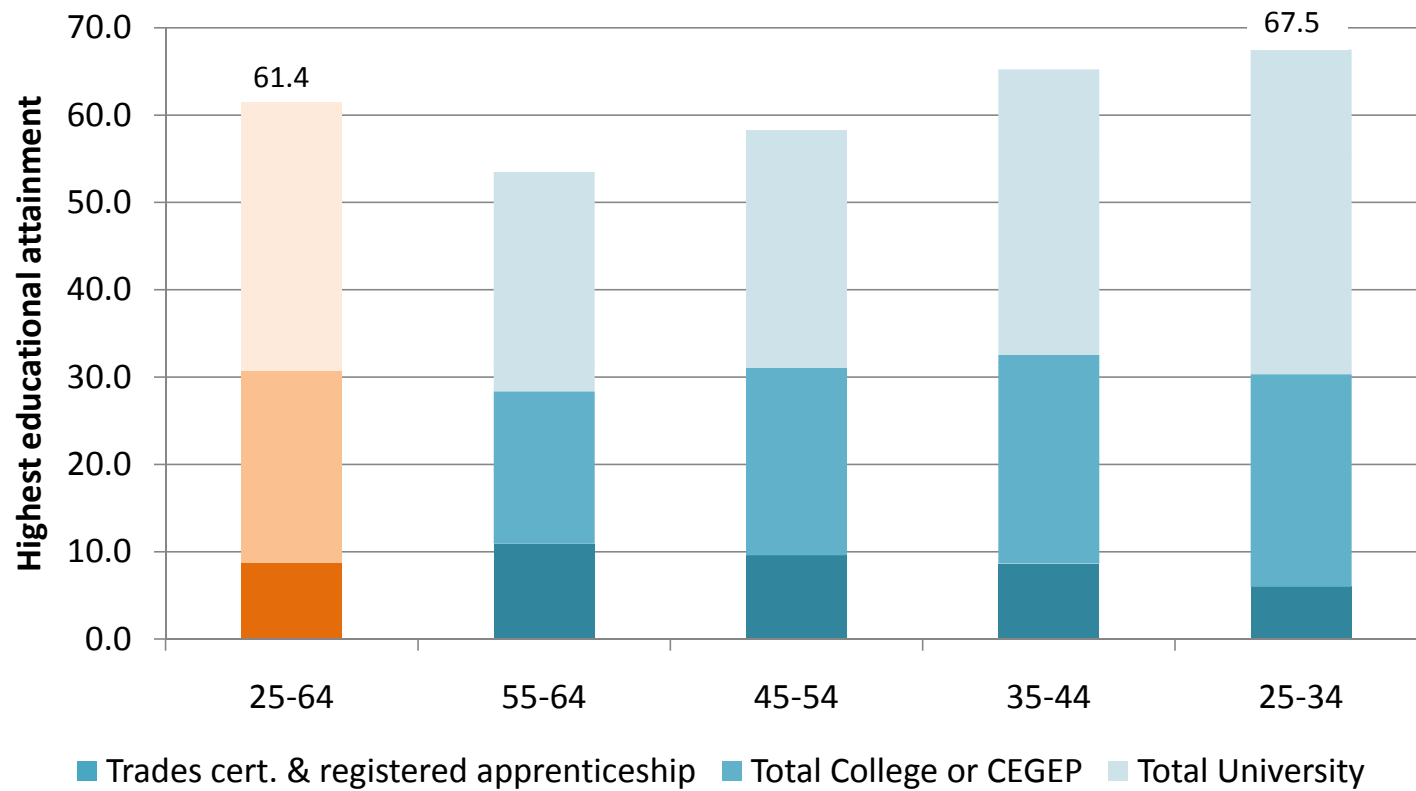
College and university access rates by the age of 21 in each province



Source: Finnie (forthcoming)



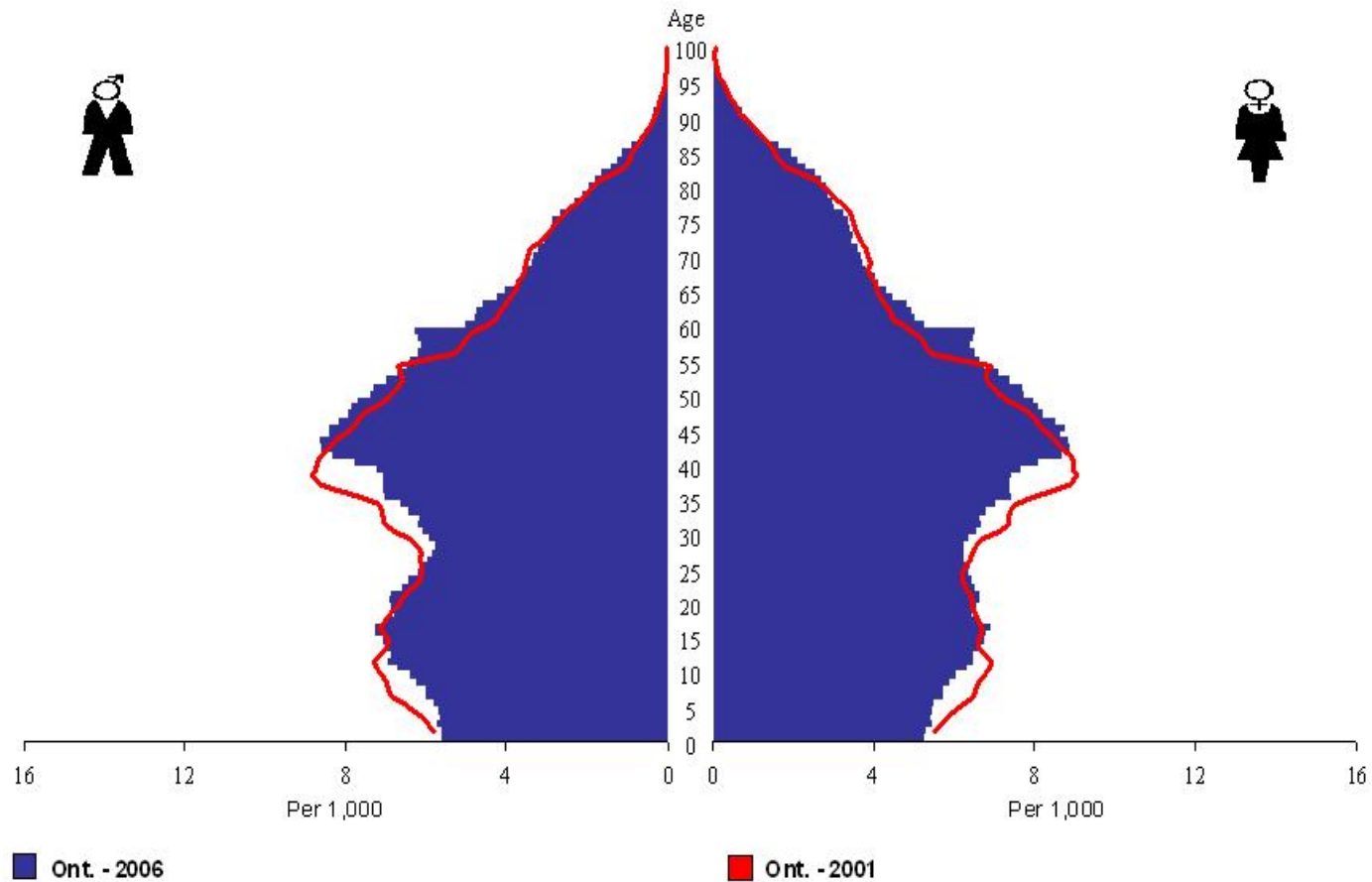
# PSE Attainment Rate



Source: 2006 Census



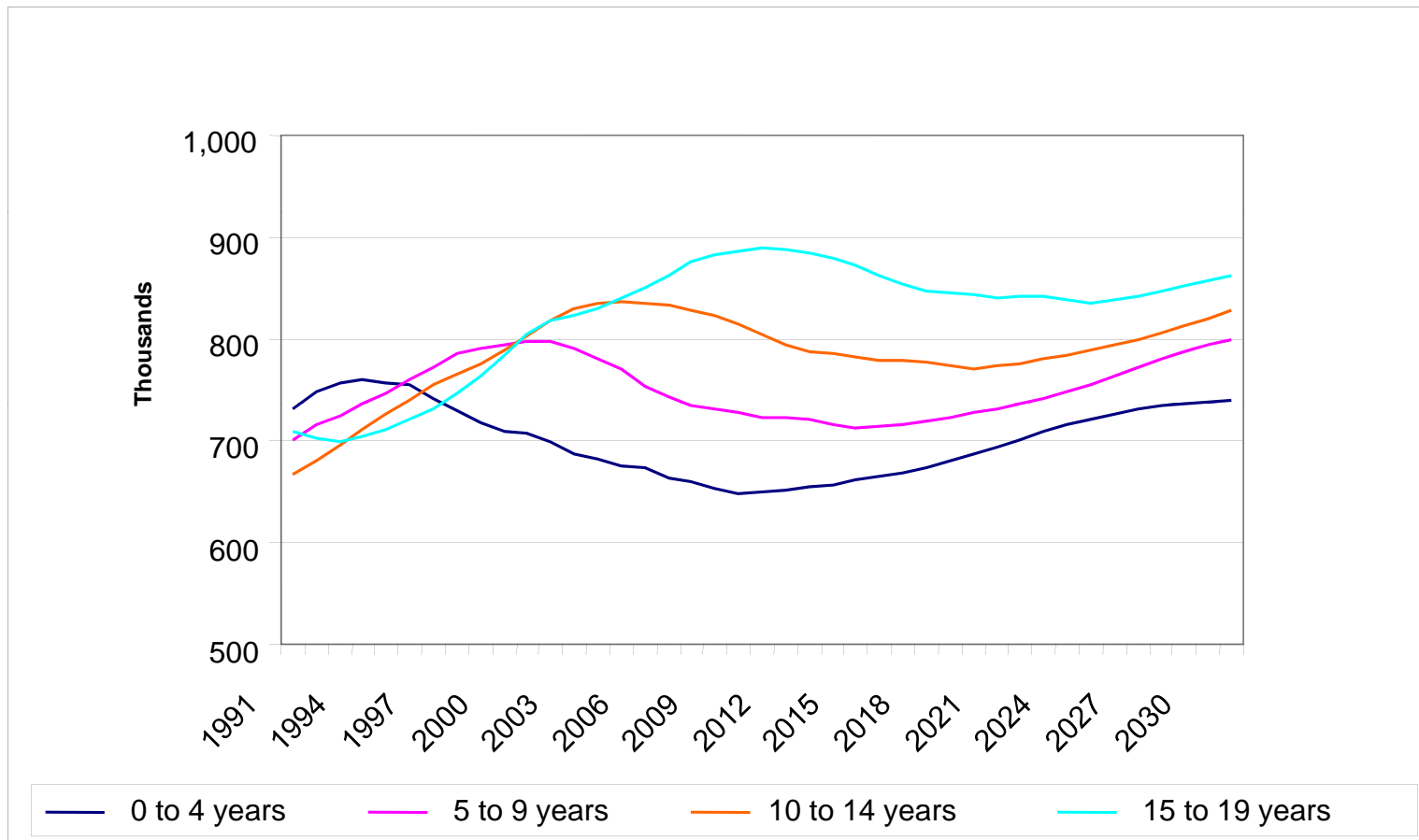
# Declining Youth Population



Source: Statistics Canada/2006 Census



# Declining Youth Population

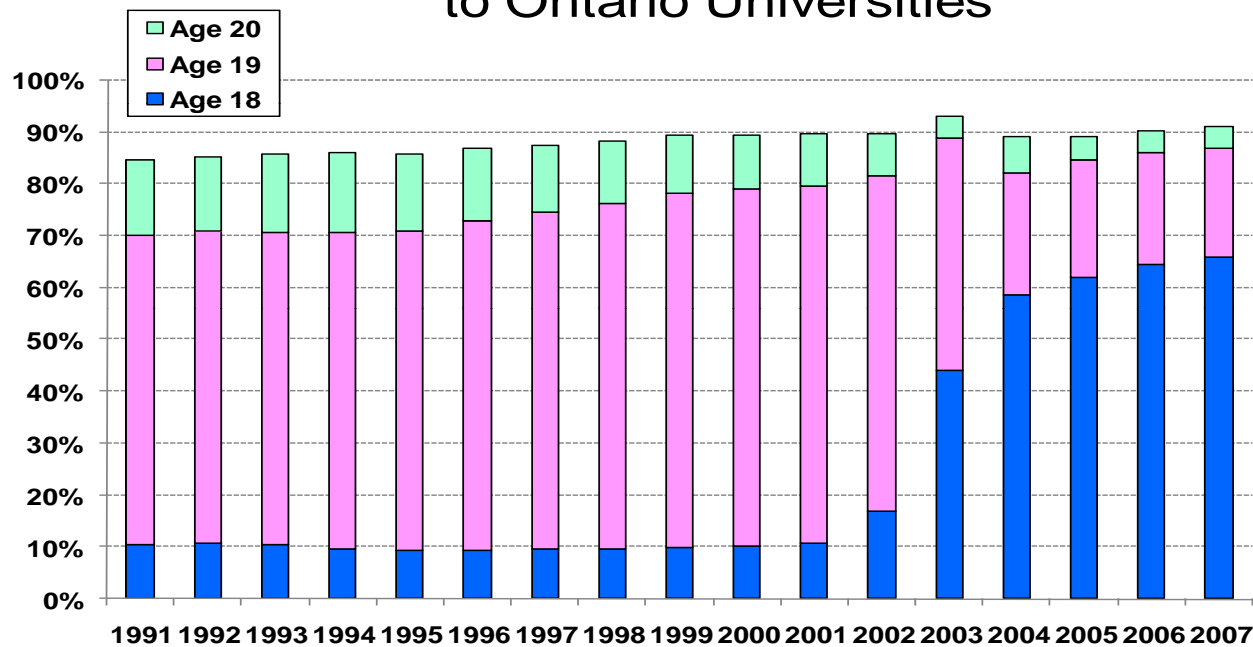


Source: Statistics Canada



# Younger First Year Population

## Full-time, Grant-Eligible, First-Year Entrants to Ontario Universities



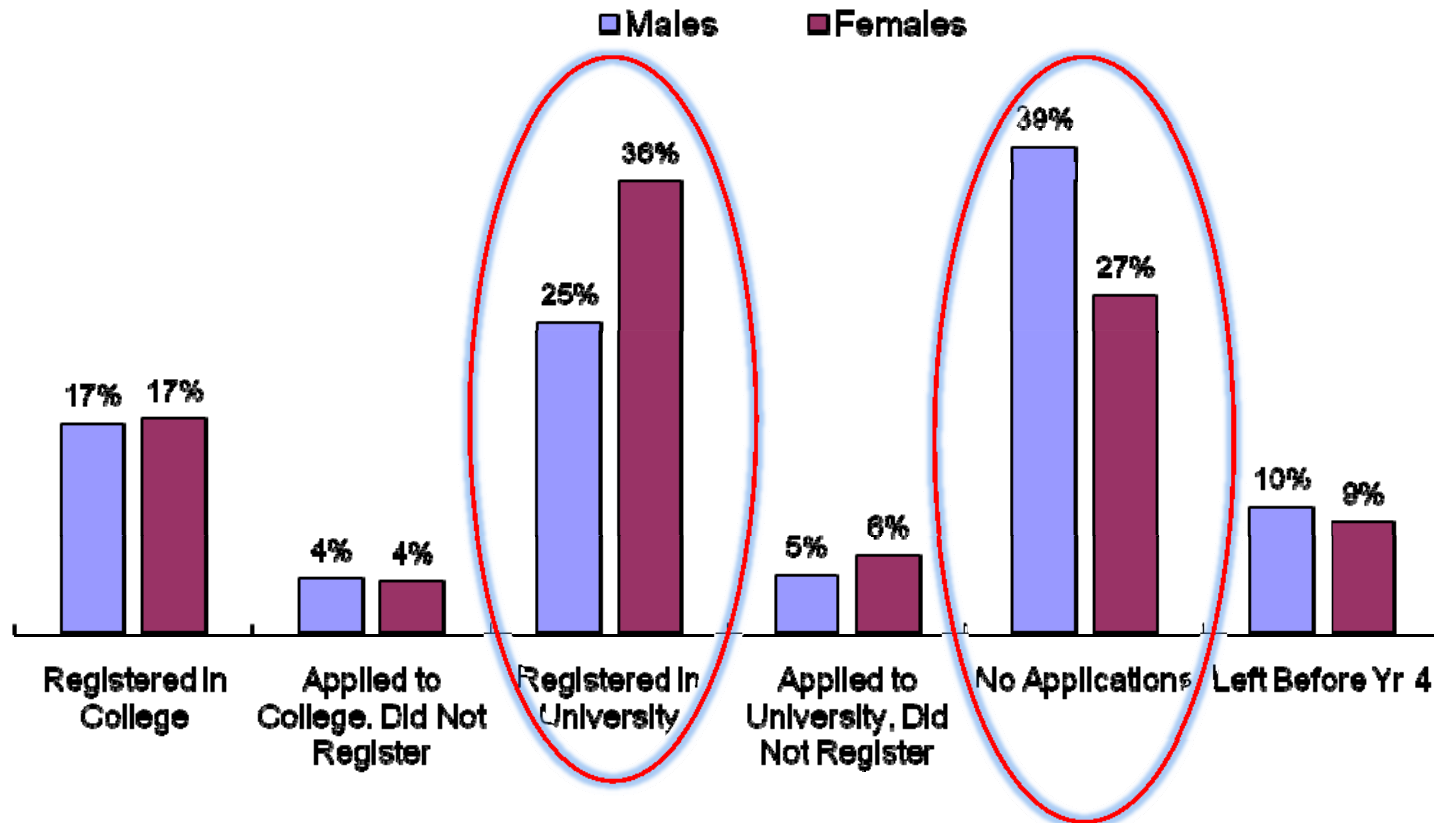
Source: MTCU User reports (November 1st count). Note: age is calculated as age at end of calendar year of enrolment.  
 COU-CUPA (CESPA) 2009-06-14





# Gender Trends

PSE Destinations by Gender

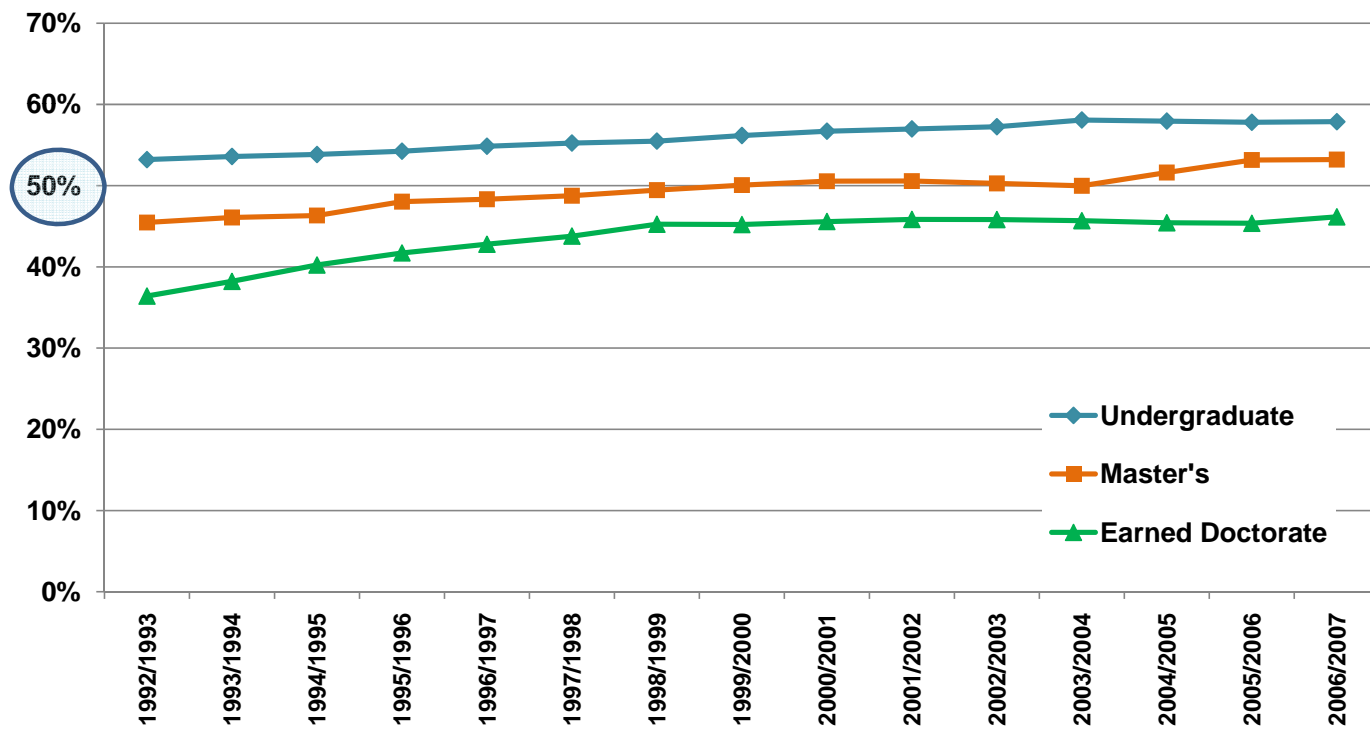


Source: King et al., *Who Doesn't Go to PSE* (2009).



# More Female Students

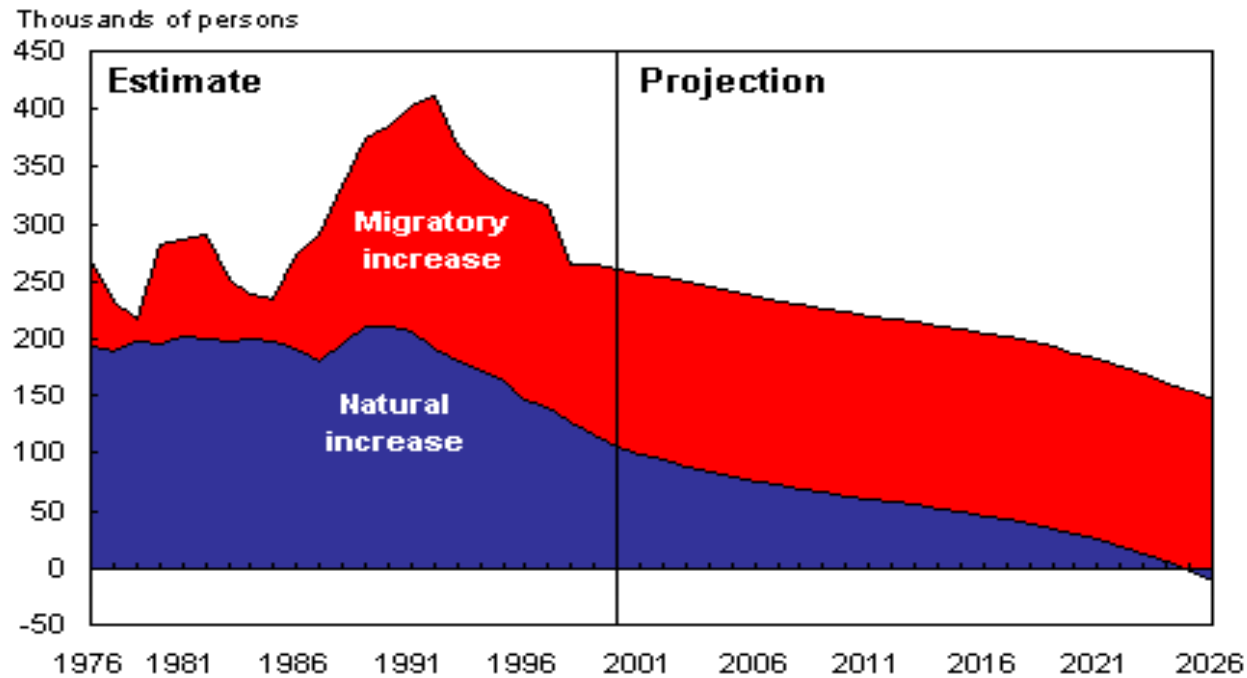
Female Percentage of University Enrolment by Credential, Ontario, Age 15+



Source: PSIS (data) & Angelika Kerr, HEQCO Research Note, *Where Are the Boys?* (2010)



# Increasing Diversity



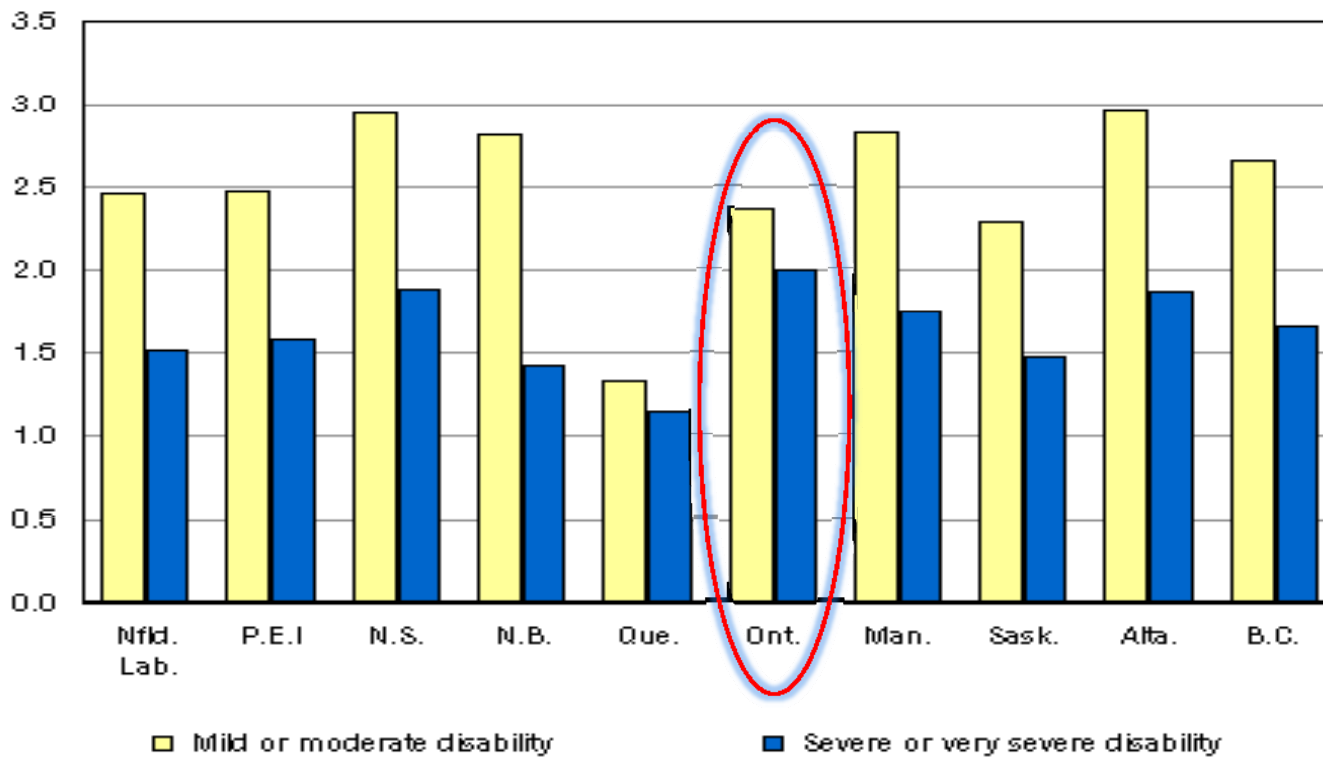
**Note:** The projection is based on medium assumptions: fertility rates at 1.5; immigration at 225,000 new immigrants per year; a gradual increase in life expectancy from 77–80 years for men and 83–85 for women.

**Source:** Statistics Canada



# More Eligible Students with Disabilities

Percentage of children with a disability



Source: Statistics Canada



# Finances

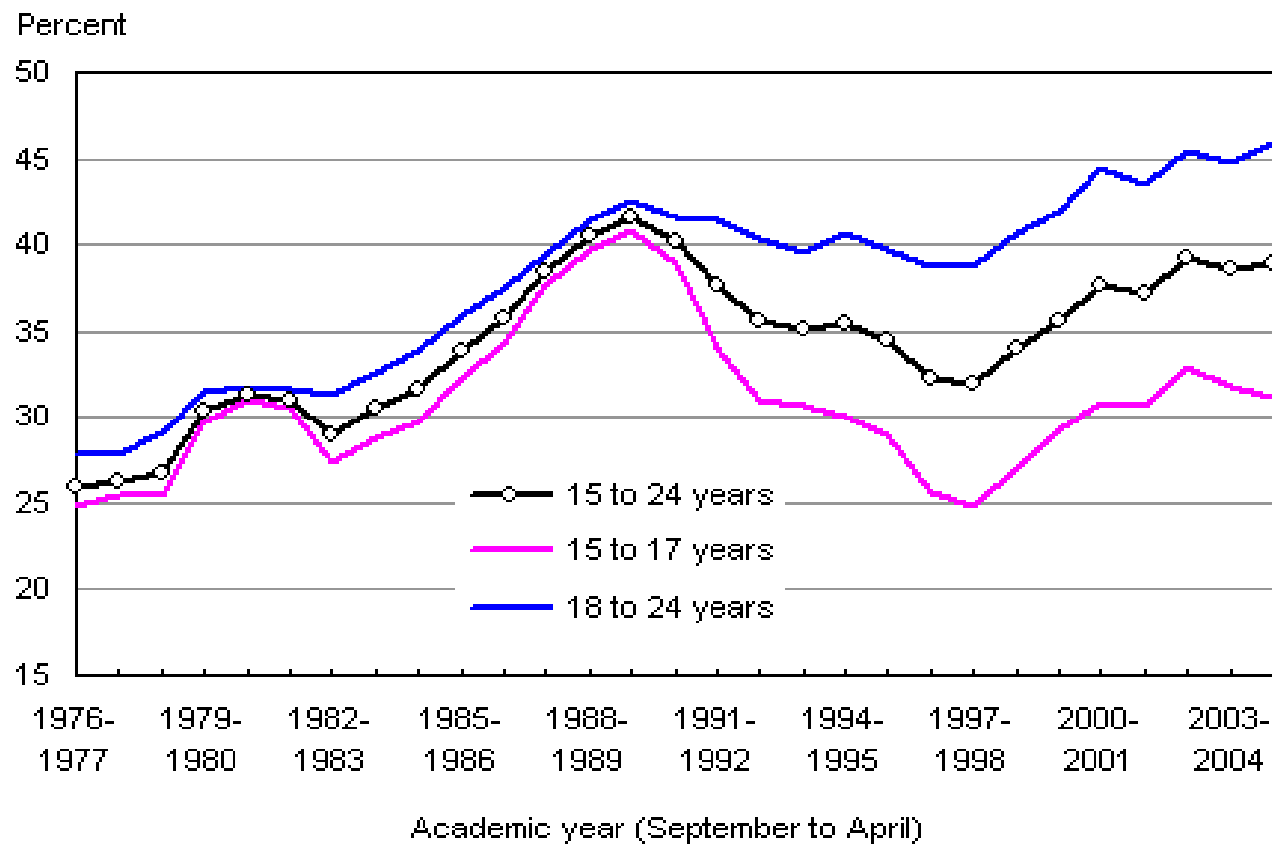
Sources of Funding for PSE Studies by % who reported using that source

	Private Schools	College	Bachelor's	Graduate Program
Non-repayable funds (parents/partner)	31.9%	28.3%	43.4%	38.8%
Non-repayable funds from others	3.7	6.9	7.1	8.4
Employment Earnings	45.2	67.6	79.5	70
Personal Savings	15.2	25	21.4	18.2
Scholarships	4.3	6.8	16	44.4
Grants	3.9	3.9	18.8	26.2
Loans	32.3	32.3	44.3	40.9
(% of Gov't. Sponsored Loans)	<b>44.3%</b>	<b>73.8%</b>	<b>75.3%</b>	<b>73.4%</b>
Trust funds, RESP's, RRSP's	0.1	0.5	2.8	2.1
Other Sources	13.9	13.9	4.3	4.9

Source: *How Do Youth Finance their Postsecondary Education?*  
(forthcoming, YITS A & B data)



# Finances: Student Employment



Source: Statistics Canada

14



# Finances: Student Debt

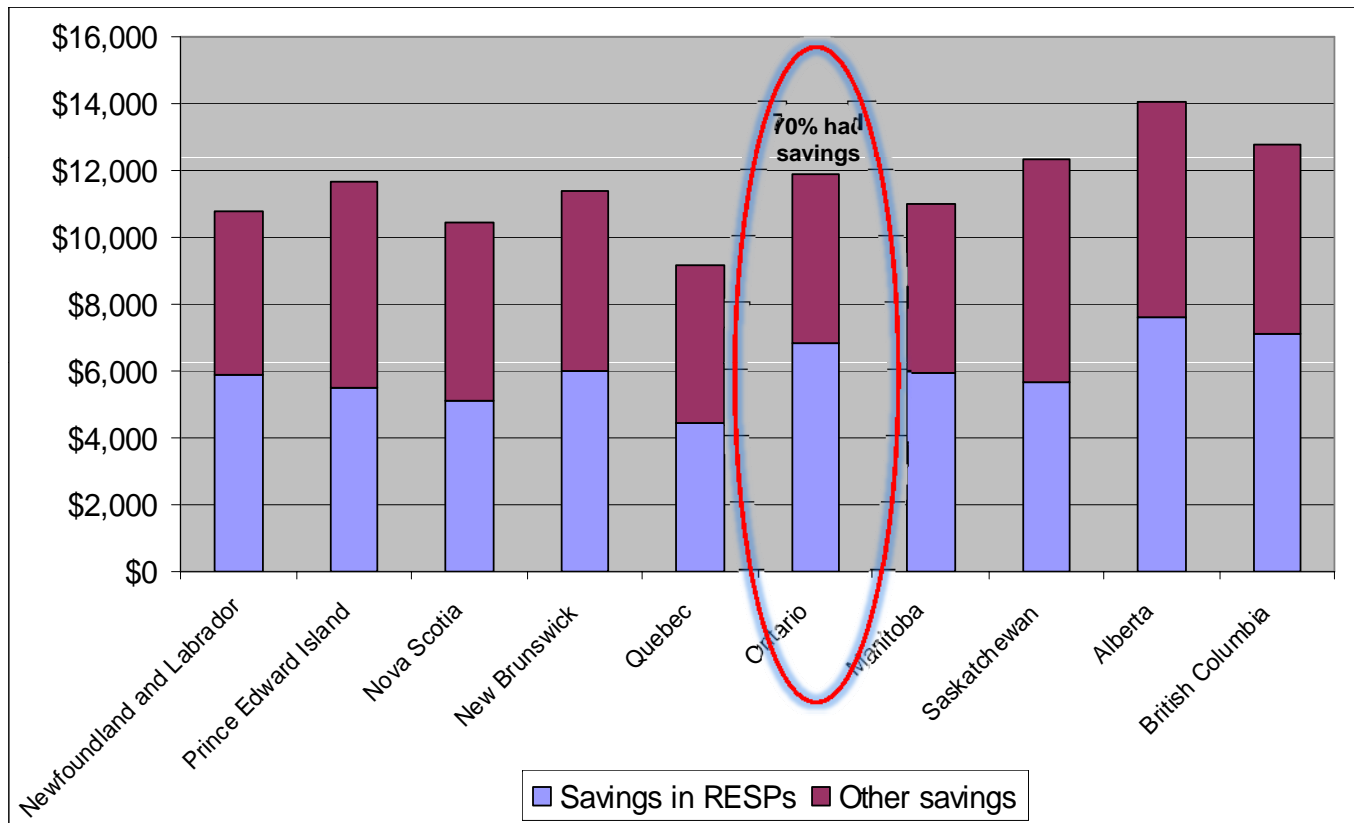
	Graduating Class	
	1995	2005
<b>Graduates with Student Debt</b>	<b>49%</b>	<b>57%</b>
<b>Government Student Loan Only</b>	<b>67%</b>	<b>52%</b>
<b>Average Student Debt (All)</b>	<b>\$15,200</b>	<b>\$18,800</b>
<b>Owing \$25,000 or more</b>	<b>17%</b>	<b>27%</b>
<b>Average Time to Repay</b>	<b>7.2 Years</b>	<b>7.4 Years</b>

SOURCE: May Luong, Statistics Canada,  
*Perspectives* (January 2010)



# Finances: PSE Savings

Average savings for the child's education among those with savings by province

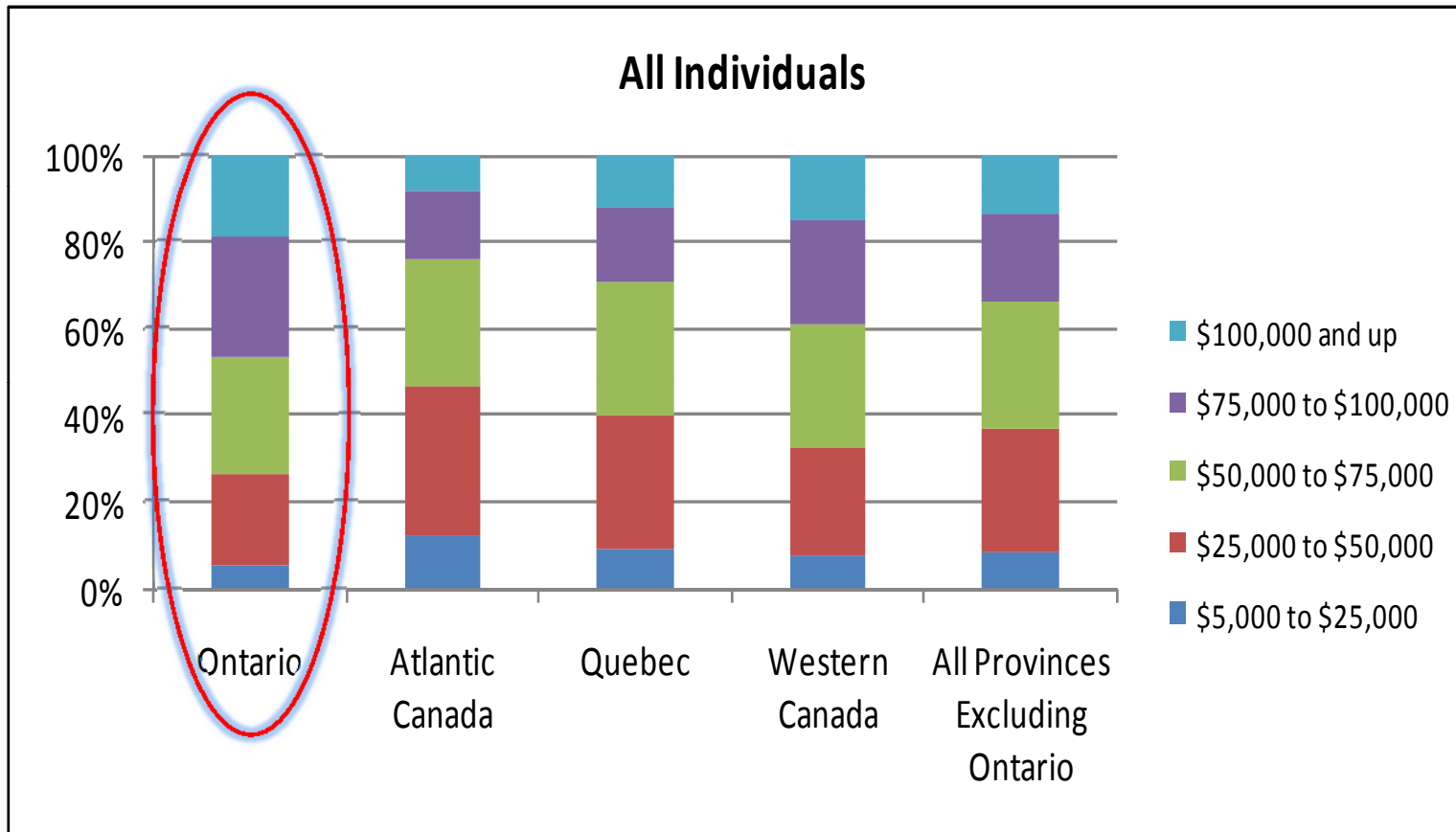


Source: ASETS 2008





# Finances: Family Income



Source: Finnie et al., Access to Postsecondary Education: How Ontario Compares (forthcoming).



# Finances: Family Income

Average marginal effects of parental income on the probability of going to university, by province

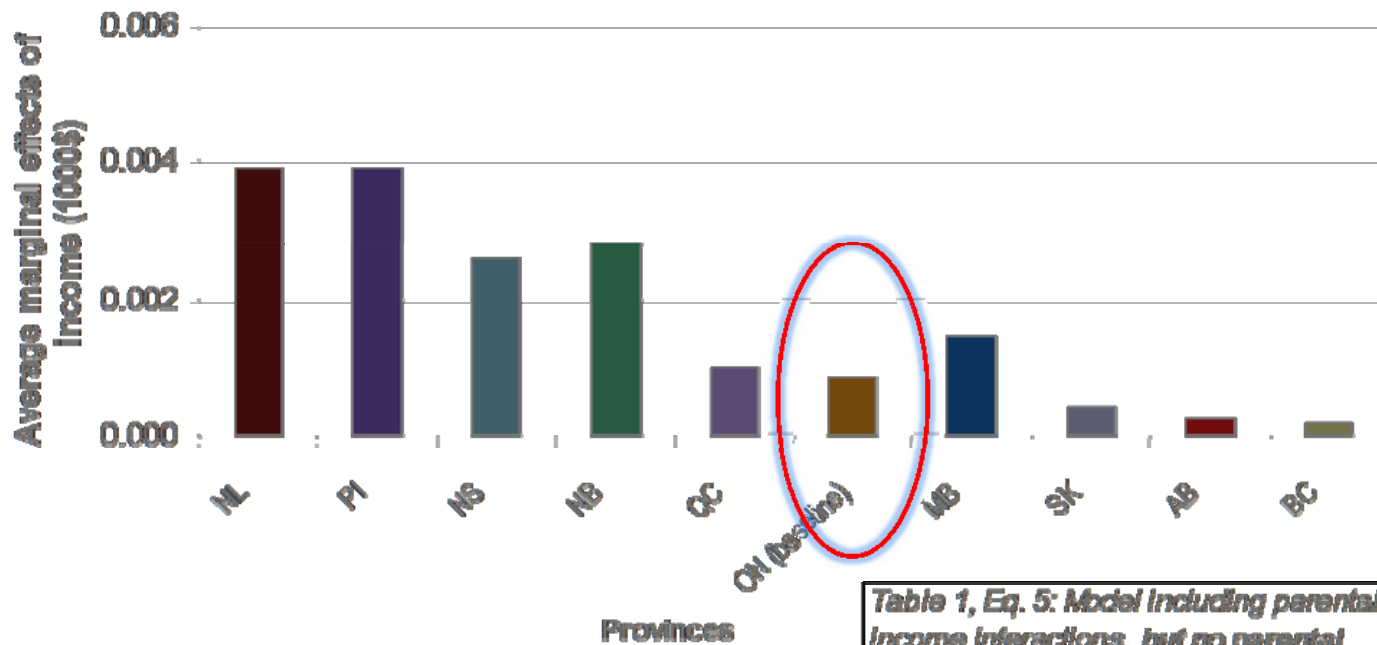


Table 1, Eq. 5: Model Including parental income interactions, but no parental education

Source: Finnie et al., Access to Postsecondary Education: How Ontario Compares (forthcoming).



# Academics: High School Grades

Average marginal effect of HS overall grade in each province on the probability of going to university

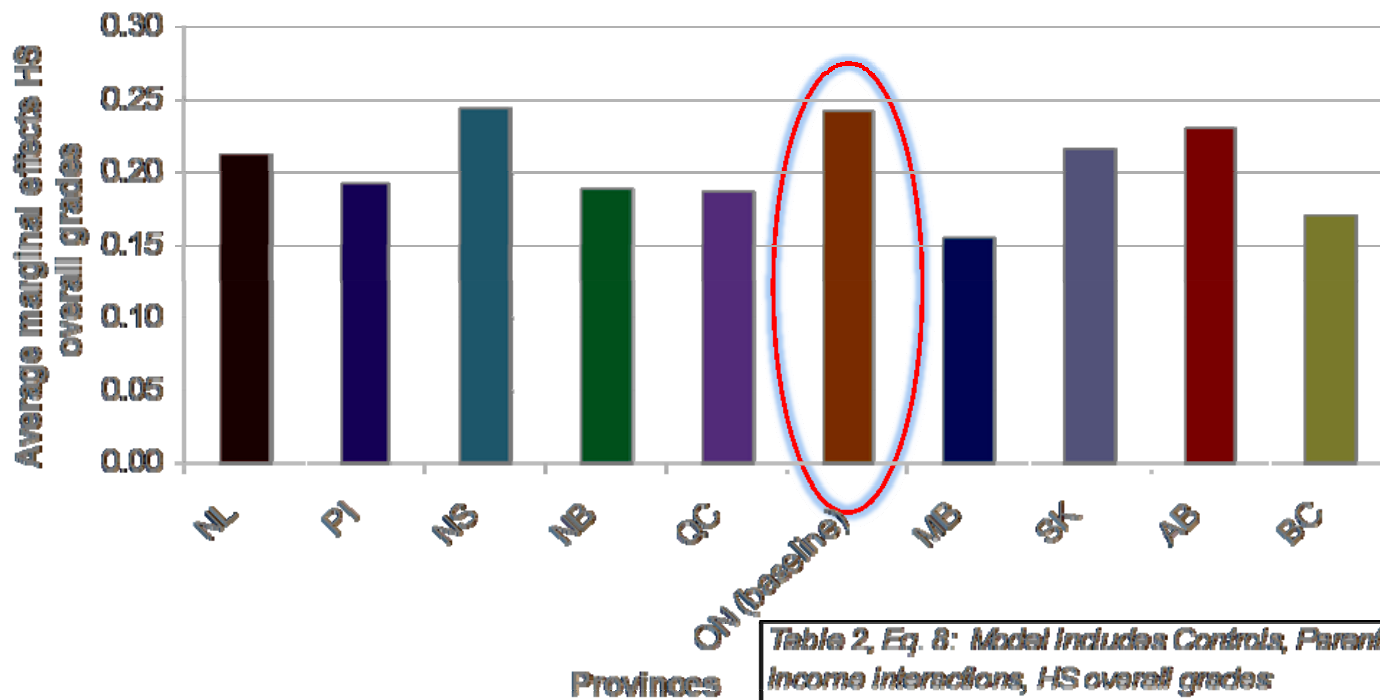
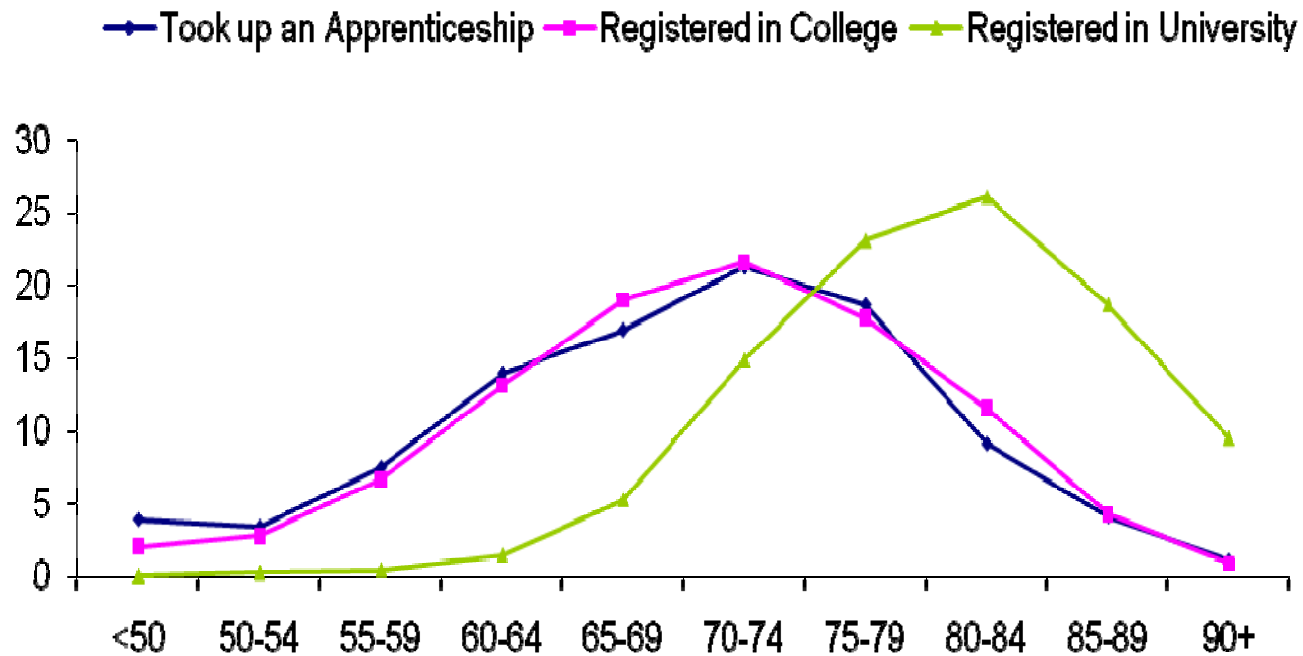


Table 2, Eq. 8: Model Includes Controls, Parental Income Interactions, HS overall grades interactions, no Parental education interactions



# Academics: High School Grades

Average Marks Distributions (Grades 11 & 12) by PSE Destination

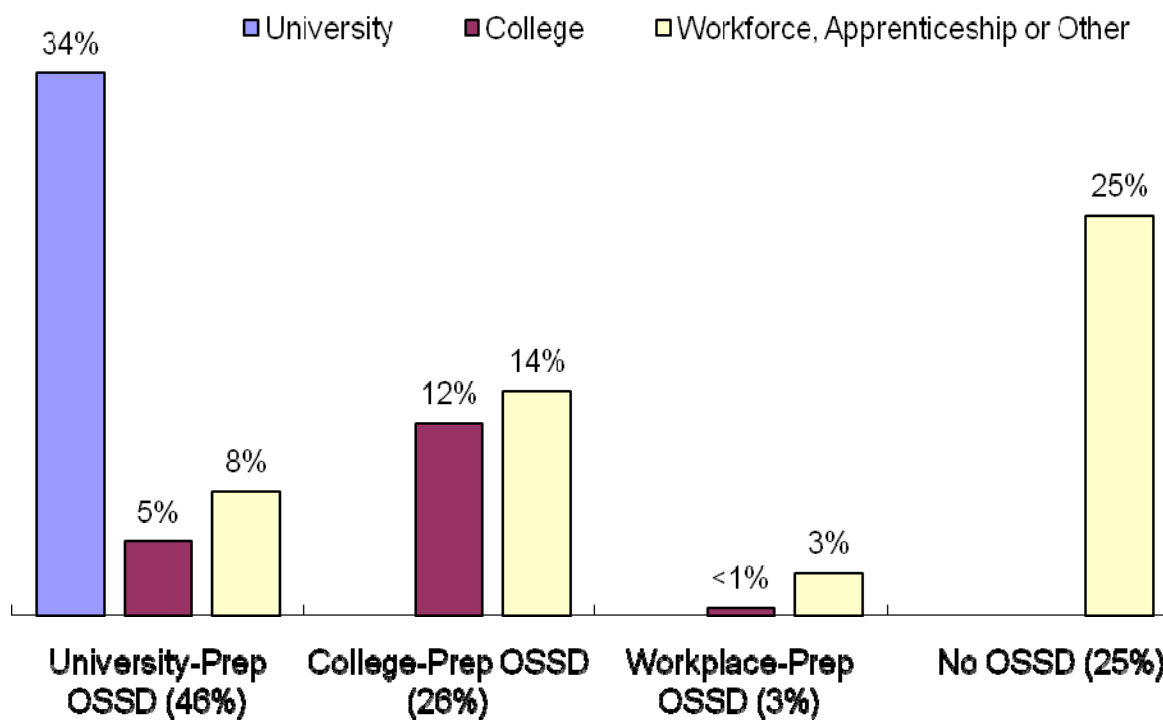


Source: King et al., *Who Doesn't Go to PSE* (2009).



# Academics: High School Courses

Destinations of Students by OSSD Type

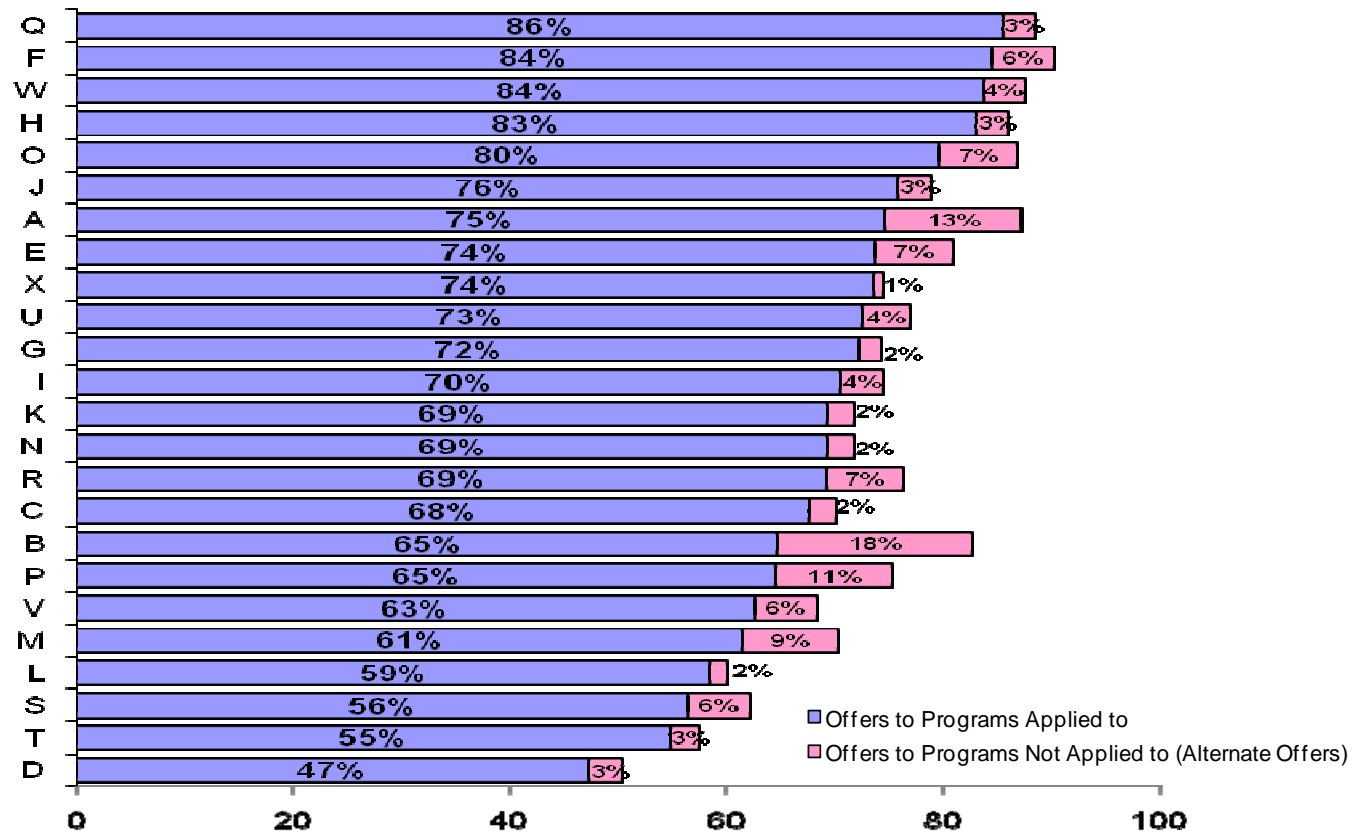


Source: King et al., *Who Doesn't Go to PSE* (2009).



# Academics: College Offers

Applicants Who Received Offers: Percentages by College

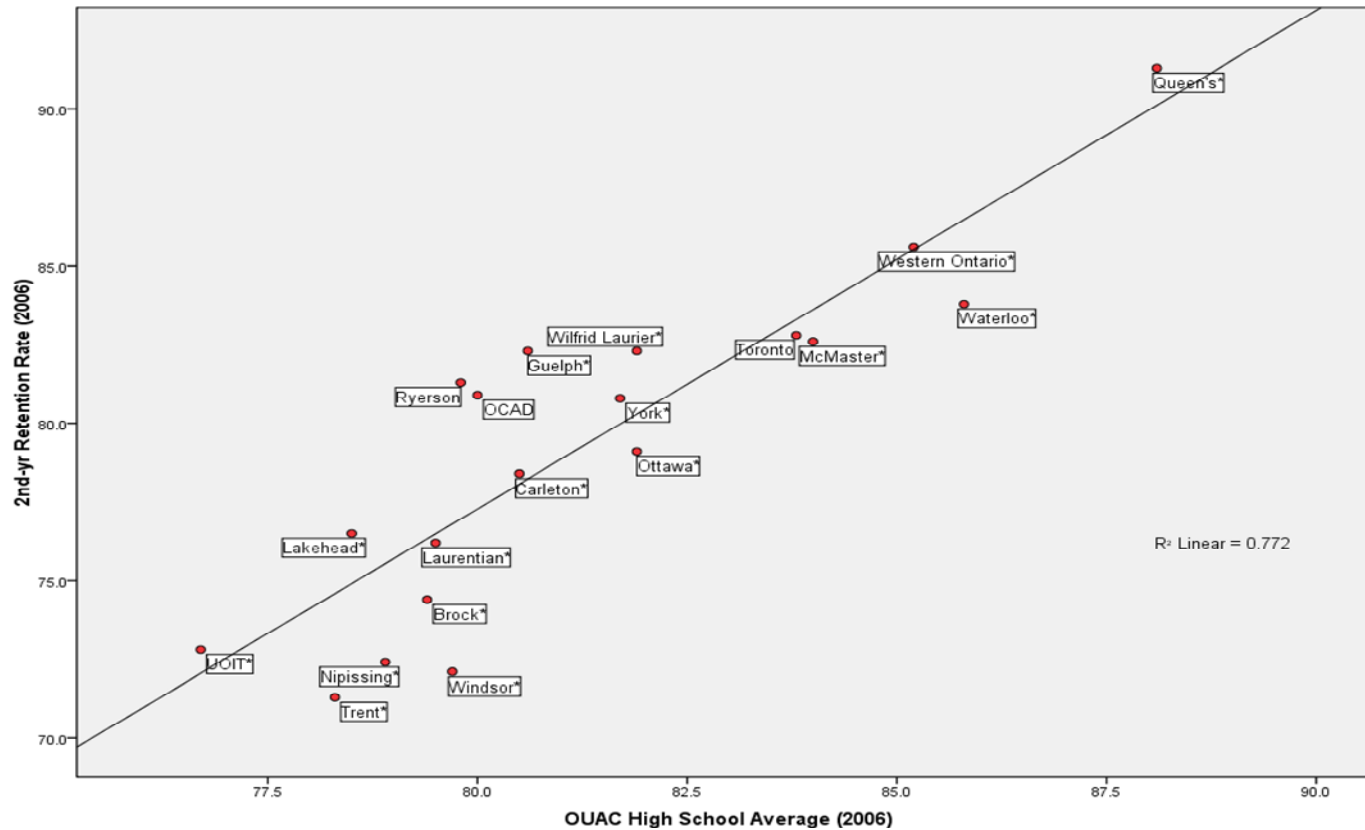


Source: King et al., *Who Doesn't Go to PSE* (2009).



# Academics: University Persistence

CSRDE 2nd Year Retention and OUAC High School Entrance Average



Office of Institutional Research and Planning: July 14, 2009

Source: Carleton University, Office of Institutional Research and Planning (2009).



# Academics: Reading Scores

Average marginal effects of PISA reading scores on the probability of going to university, by province

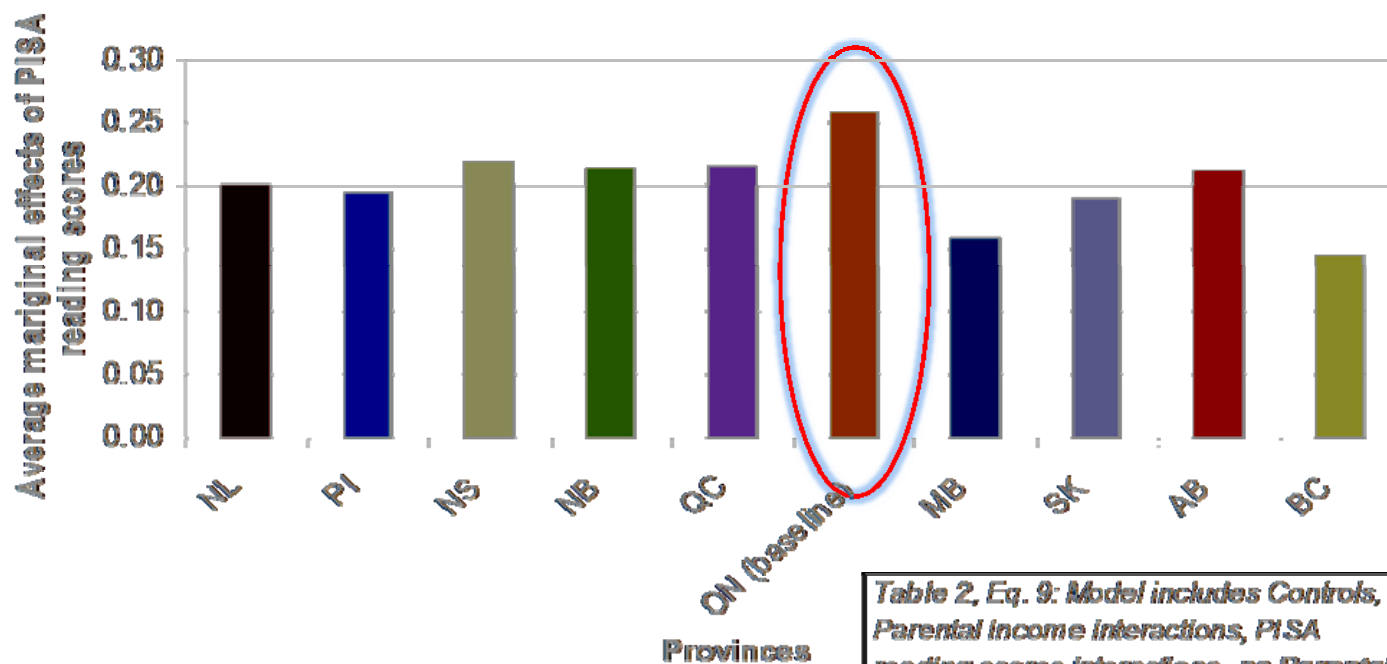


Table 2, Eq. 9: Model includes Controls, Parental income interactions, PISA reading scores interactions, no Parental education interactions

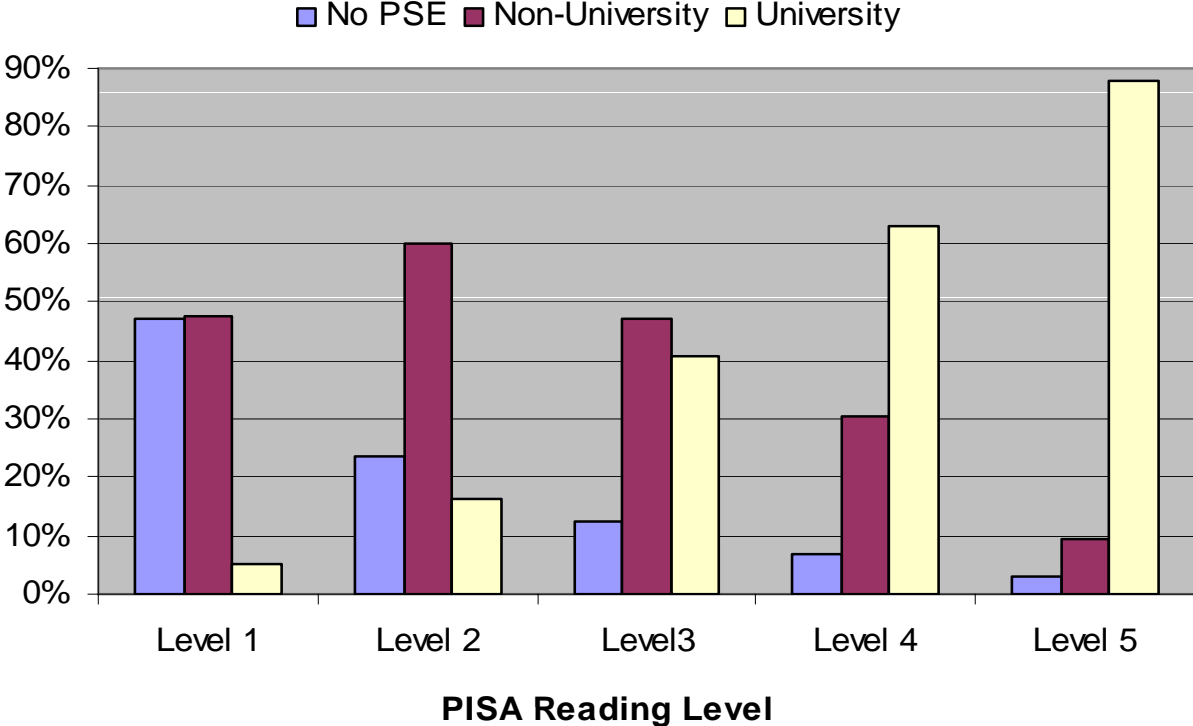
Source: Finnie et al., Access to Postsecondary Education: How Ontario Compares (forthcoming).





# Academics: Reading Scores

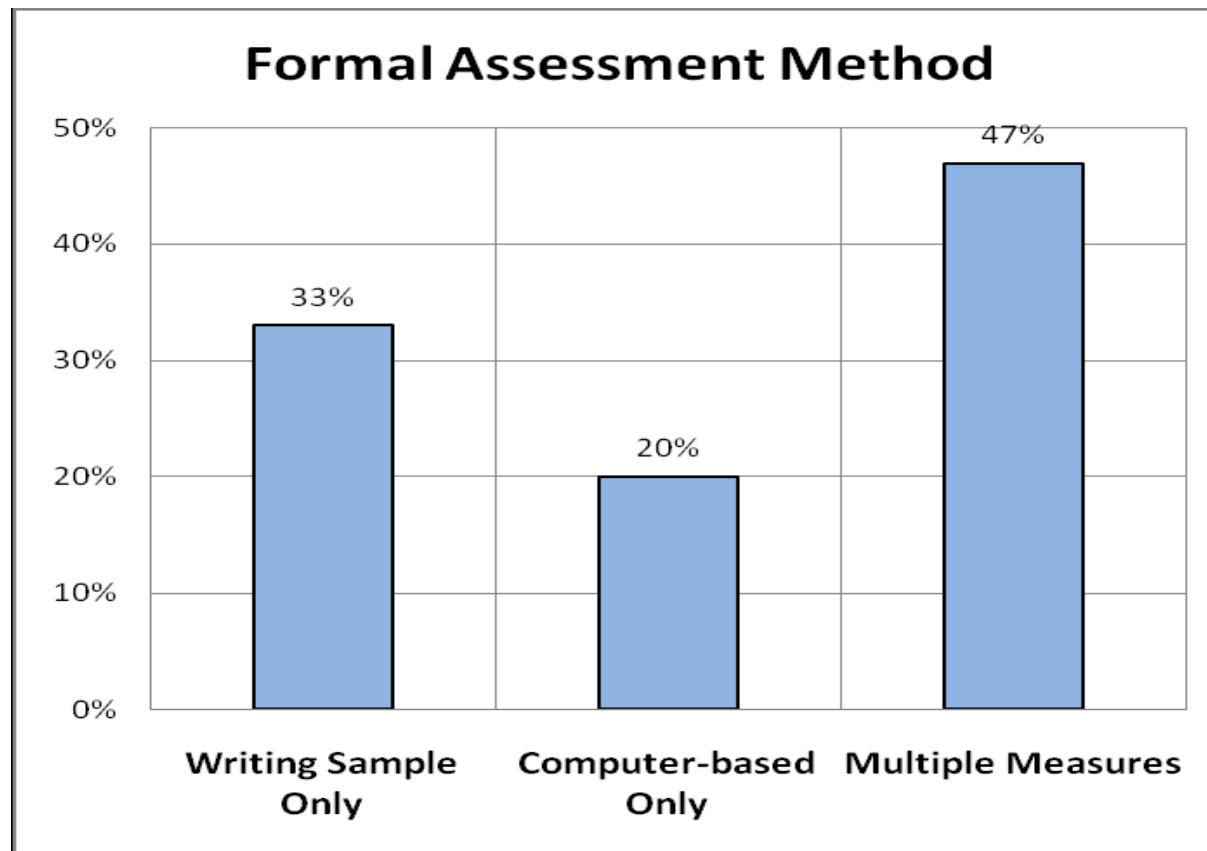
Figure 5: PSE participation rates by reading skill levels



Source: Tomasz Gluzsynski, HRSDC (2010).



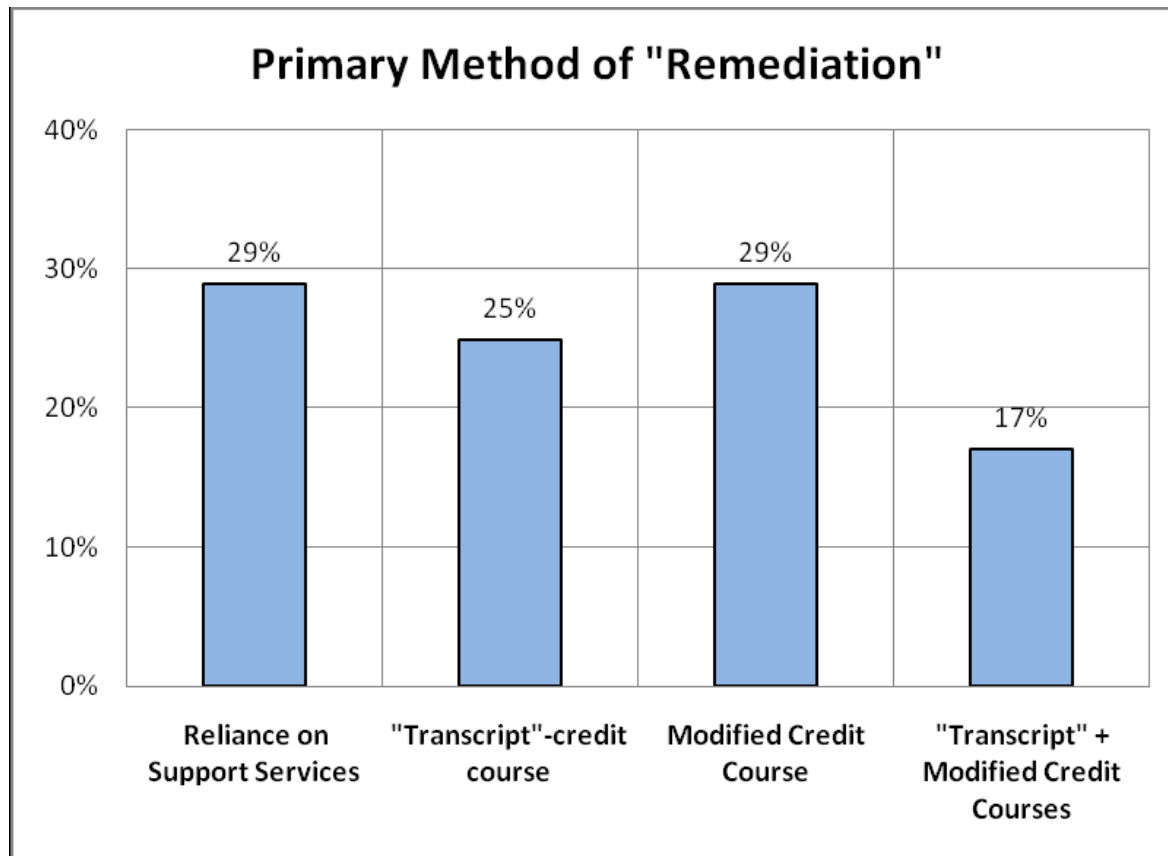
# College Skills Assessments



Source: Fisher et al.. & Fanshawe College (forthcoming).



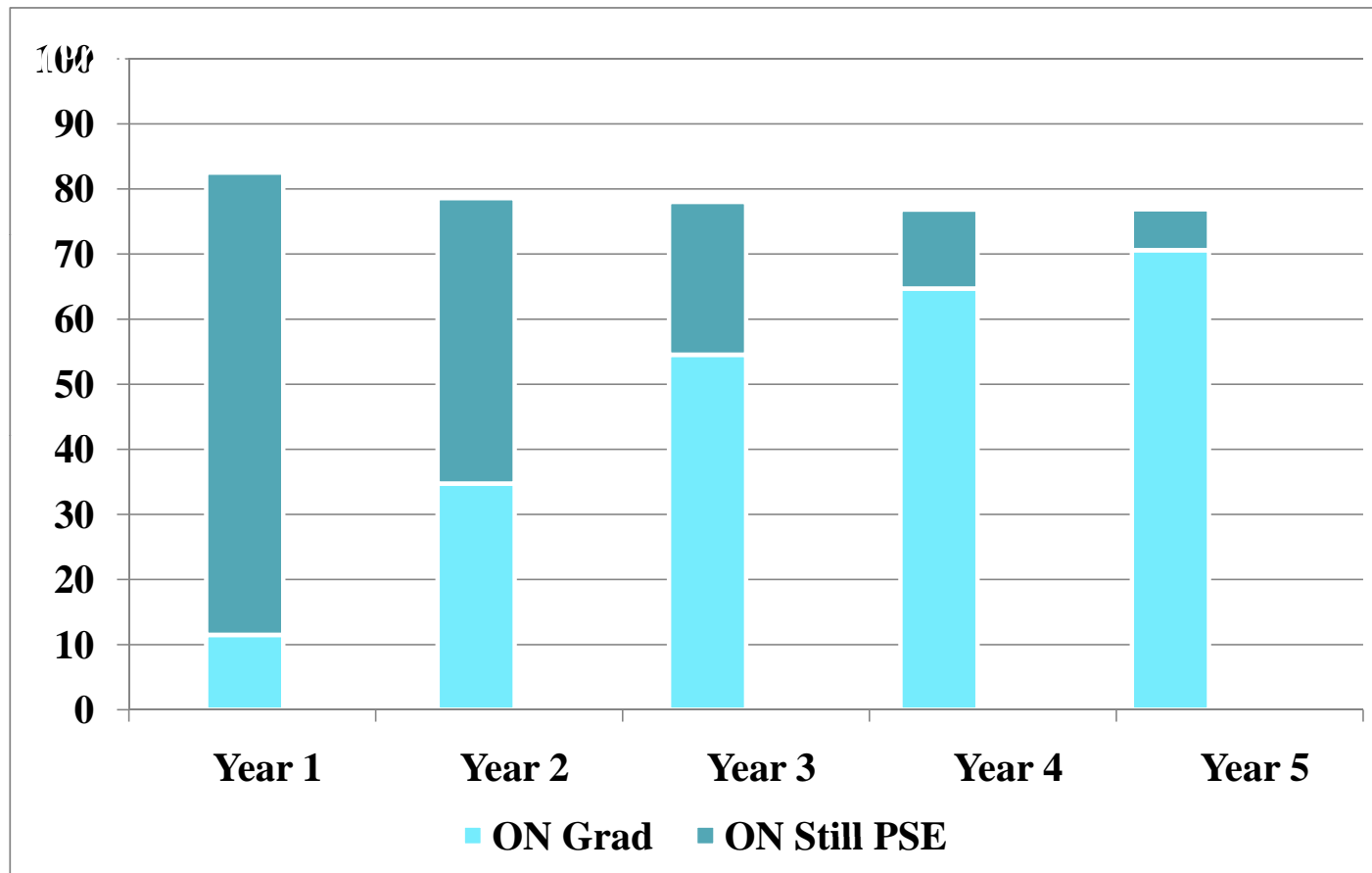
# College Skills Remediation



Source: Fisher et al.. & Fanshawe College (forthcoming).



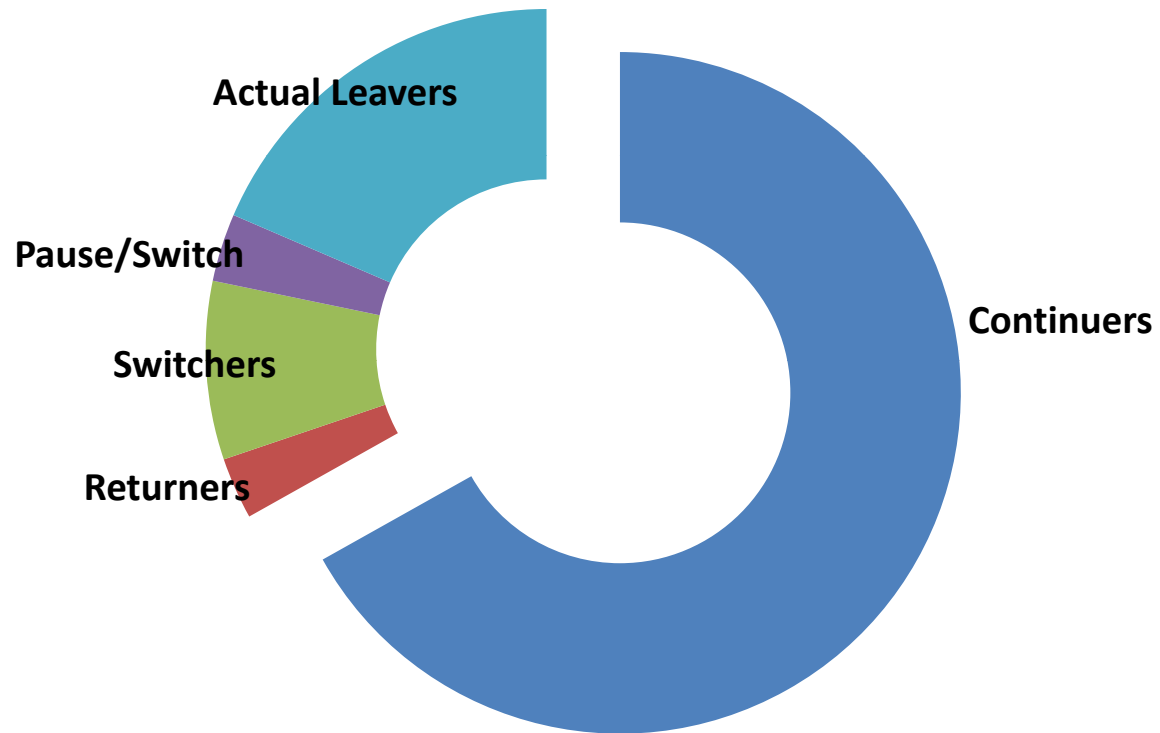
# Post-Secondary Graduation Rates



Source: Ross Finnie, Colleges Ontario (2010).



# Post-Secondary Graduation Rates



Source: Ross Finnie, *Moving Through, Moving on*,  
Statistics Canada (2009)

29



## Reasons for Switching/Leaving

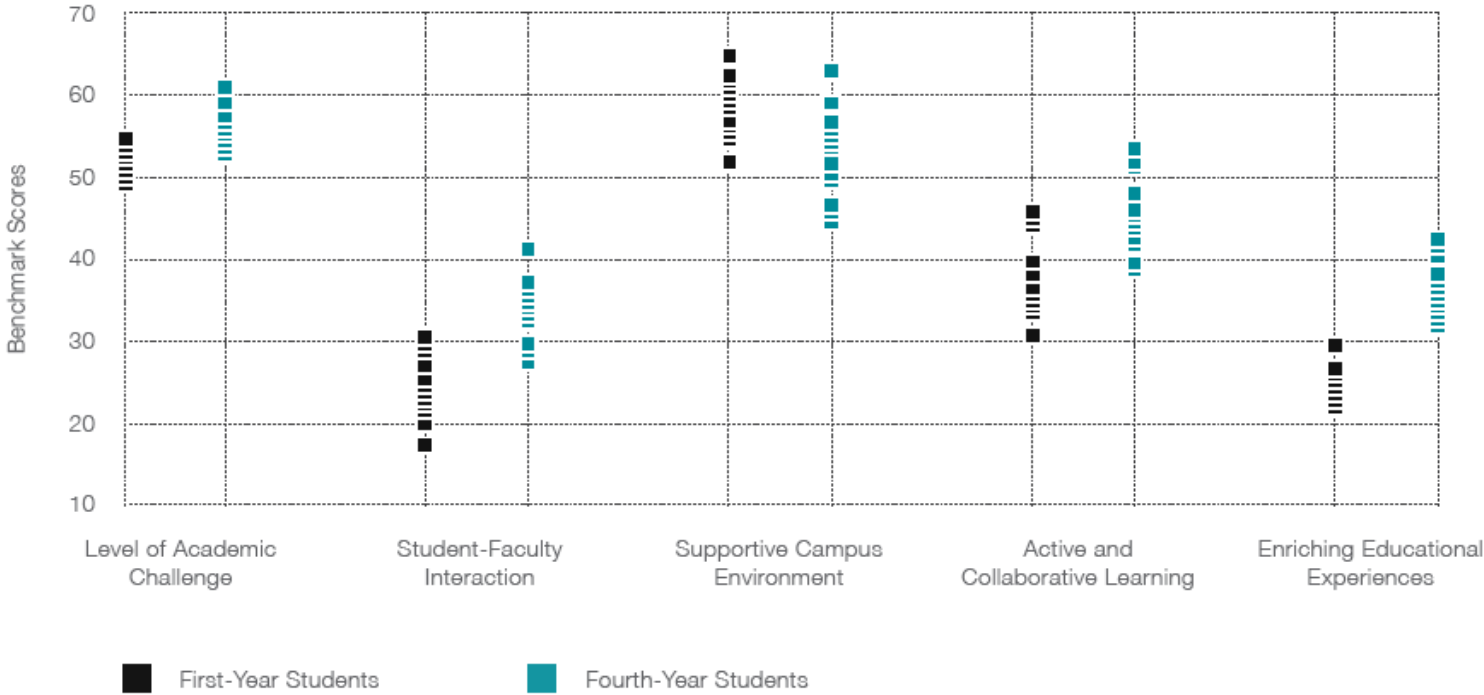
	Switchers	Leavers
Not enough money	6.8	9.7
Wanted to work	2.6	10.3
Marks too low	5.7	9.0
Not for me	45.3	41.1
To change studies	25.0	4.4
Other	13.0	18.7

Source: Ross Finnie, Colleges Ontario (2010).



# Supportive Campuses

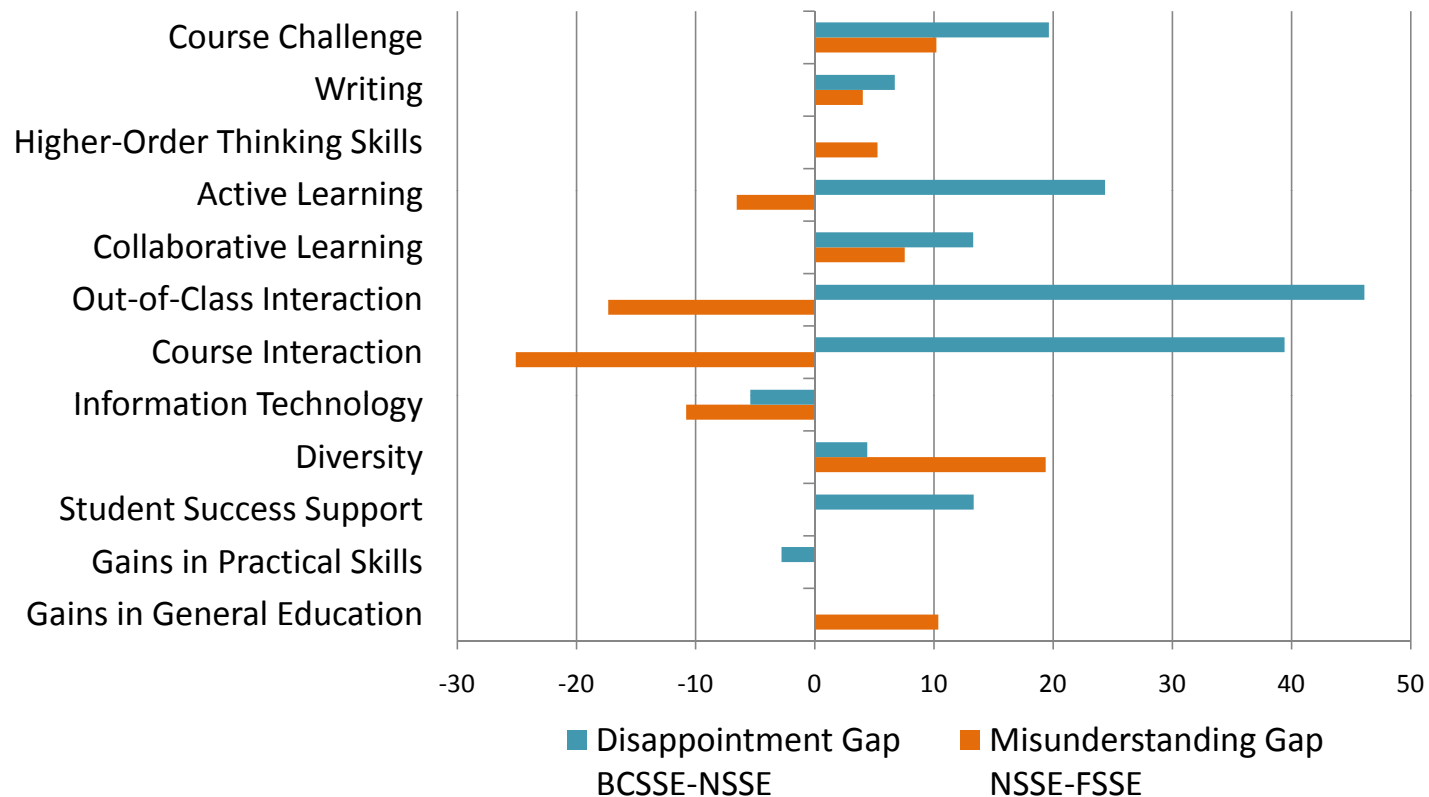
**FIGURE 3.8**  
 2008 NSSE Results for Ontario Universities on Five Benchmarks, First- and Fourth-Year Students  
 Source: NSSE 2008



Source: NSSE 2008



# Gaps Between Expectations/Experience



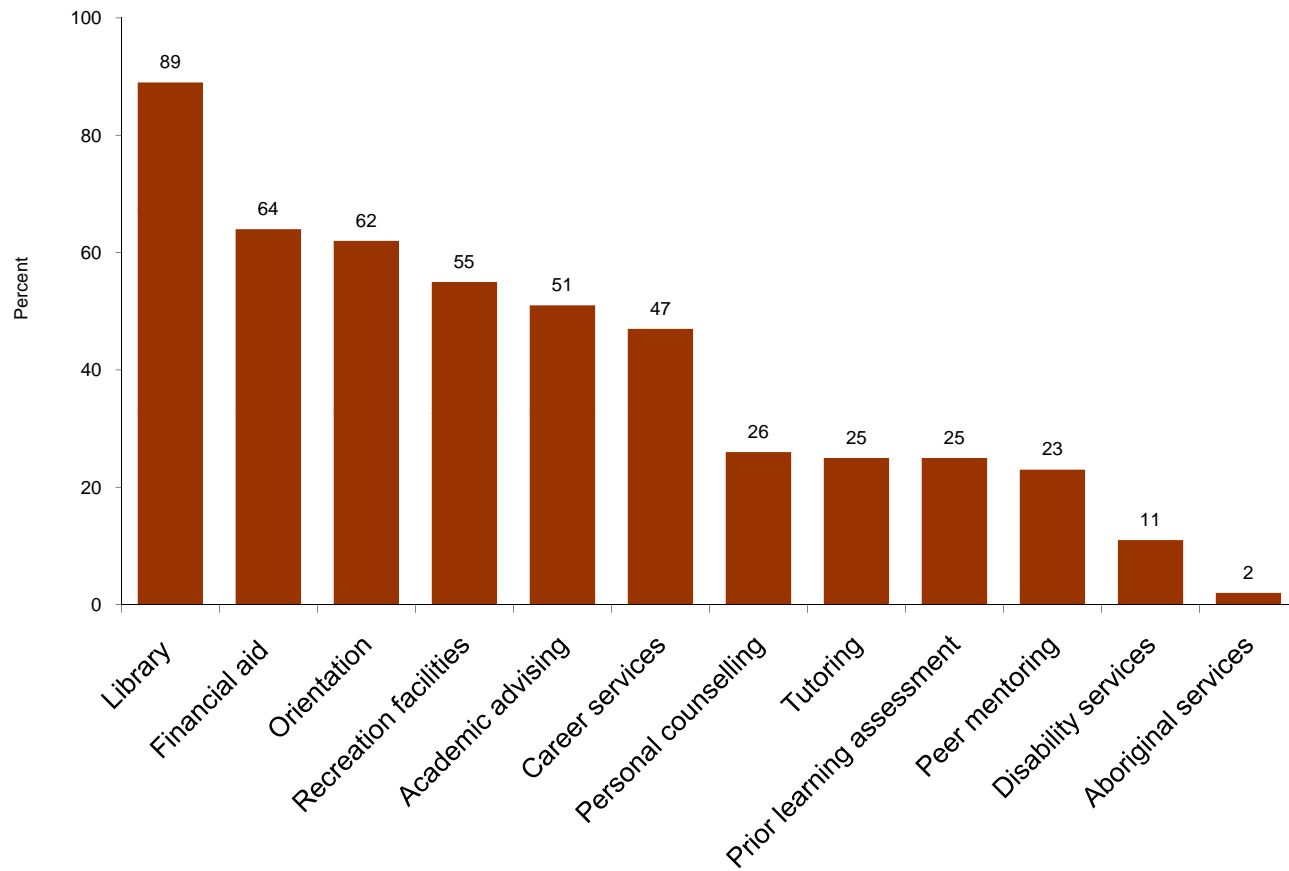
*A negative DG value indicates that experience exceeds expectations*

Source: Mancuso et al., Disappointment, Misunderstanding and Expectations (2010).





# Early Leavers

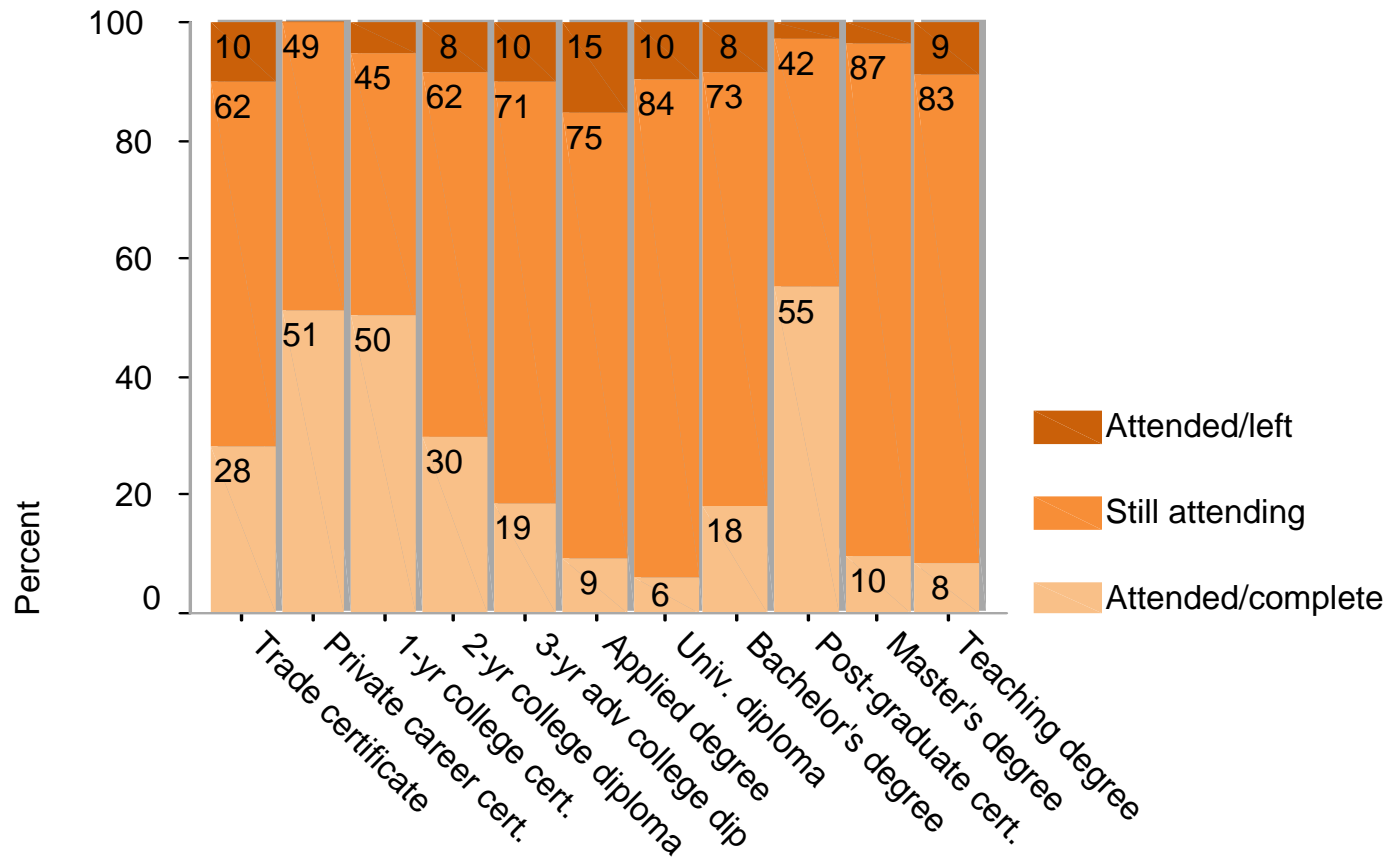


Source: *Academica, From Post-Secondary Application to the Labour Market* (forthcoming).

33



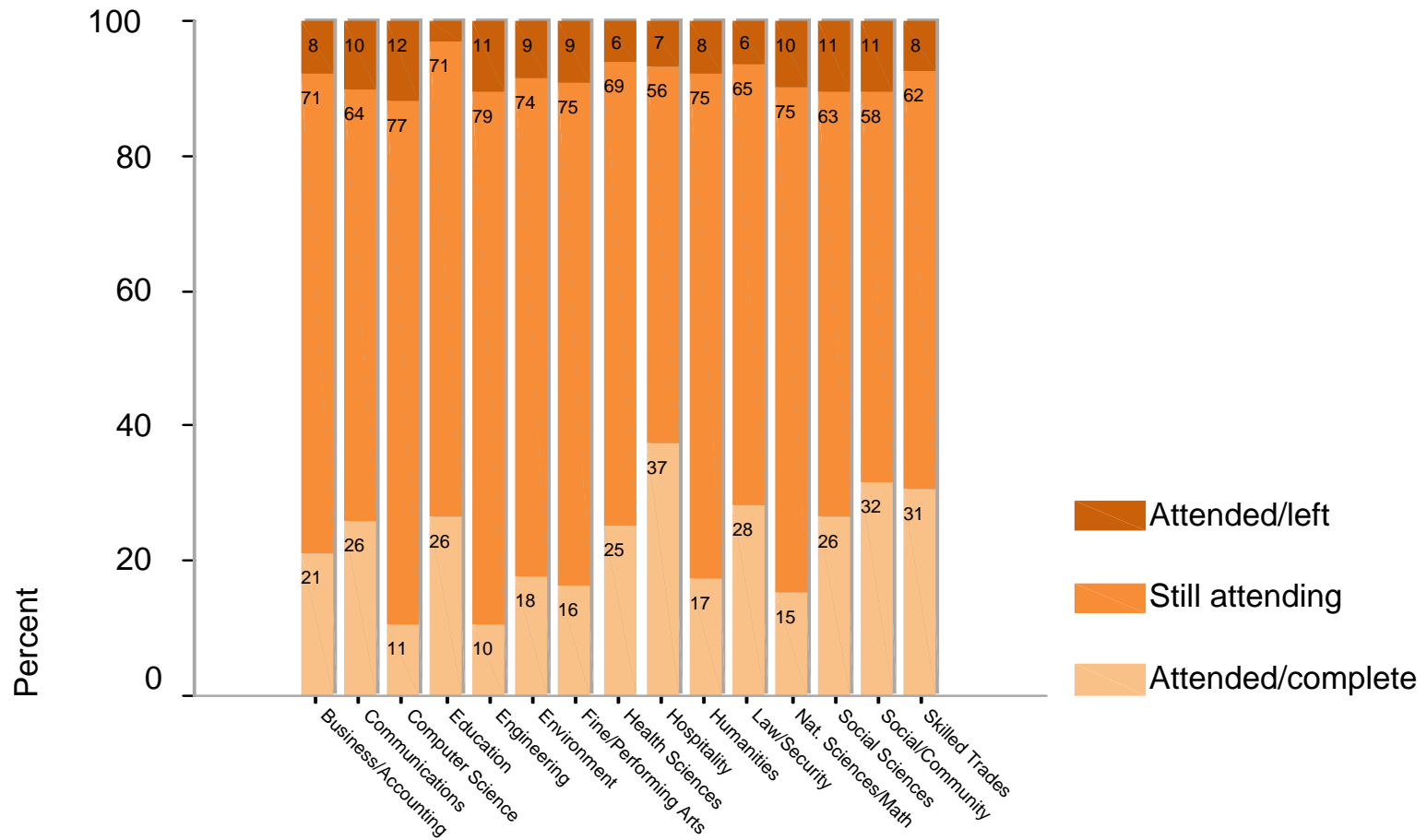
# Type of PSE Program



Source: *Academica, From Post-Secondary Application to the Labour Market* (forthcoming).



# Subject Area



Source: *Academica, From Post-Secondary Application to the Labour Market* (forthcoming).

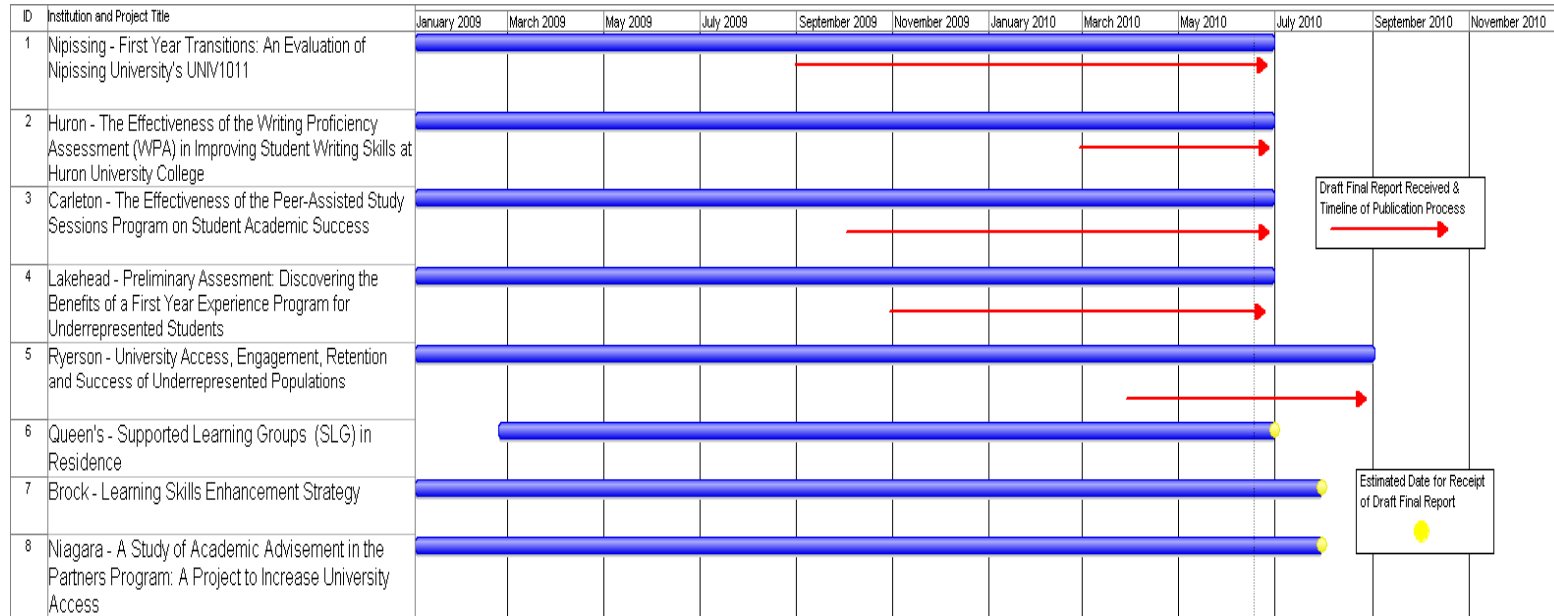


# Student Services Projects

First Year Transitions	
<b>Nipissing University</b>	<i>Introductory University Course (UNIV1011) and Academic Retention &amp; Success</i>
<b>Lakehead University</b>	<i>First Year Experience Program for Under-Represented Students</i>
Queen's University	<i>Supported Learning Groups (SLG) in Residence</i>
Niagara College of Applied Arts	<i>Academic Advisement in the Partners' Program to Increase University Access</i>
Targeted Populations	
Ontario College of Art & Design	<i>Impact of 'Sheltered' English as a Second Language (ESL) Support Programming</i>
Durham College & UOIT	<i>Student Support Associated with College-University Collaborative Outcomes</i>
York University	<i>Student Services and Academic Engagement of Recent Adult Immigrant Students</i>
Ryerson University	<i>Access, Engagement, Retention and Success of Under-Represented Populations</i>
Cambrian College	<i>Impact of Mental Health Problems within Community College Student Population</i>
Brock University	<i>Statistical Variances in Student Financial Aid: Is Less More?</i>
Skills Enhancement Initiatives	
<b>Huron University College</b>	<i>Writing Proficiency Assessment</i>
Brock University	<i>Learning Skills Enhancement Strategy</i>
<b>Carleton University</b>	<i>Effectiveness of the Peer-Assisted Study Sessions (PASS) on Student Success</i>
University of Guelph	<i>Skills Objectives of Peer Helper Program: Longitudinal Analysis</i>
Georgian College of Applied Arts	<i>Information Literacy Competency Standards for Students</i>



# Student Services Projects – Completed



- First four final reports released on June 28, 2010
- Four additional final reports to be published by the end of 2010



# Student Services Projects – Underway

ID	Institution and Project Title	April 2010	July 2010	October 2010	January 2011	April 2011	July 2011	October 2011	January 2012	April 2012	July 2012	
1	Cambrian - Mental Illness in the Post-Secondary Population	[Blue bar from April 2010 to October 2010]										
2	York - Evaluating the Effectiveness of Ontario Postsecondary Student Services on Academic Engagement of RAIS	[Blue bar from April 2010 to January 2011]										
3	Brock - Statistical Variances in Student Financial Aid: Is Less More?	[Blue bar from April 2010 to October 2010]										
4	OCAD - Impact of "Sheltered" ESL Support Programming on Academic Performance and Student Engagement	[Blue bar from April 2010 to January 2011]										
5	Durham - Student Support Services Associated with College-University Collaborative Outcomes	[Blue bar from April 2010 to April 2011]										
6	Georgian - Information Literacy Standards for Students: A Measure of the Effectiveness of Initiatives in Higher Education	[Blue bar from April 2010 to October 2011]										
7	Guelph - Skills Objectives of Peer Helper Program at the University of Guelph: Longitudinal Analysis	[Blue bar from April 2010 to January 2012]										
8	Lakehead - Retention Report: Discovering the Benefits of a First Year Experience Program for Underrepresented Students	[Blue bar from April 2010 to July 2012]										

- By summer 2011, five additional reports will be completed
- Inventory on Student Services also underway

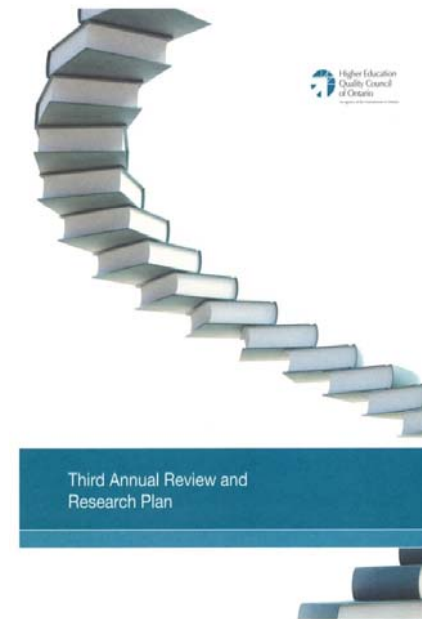
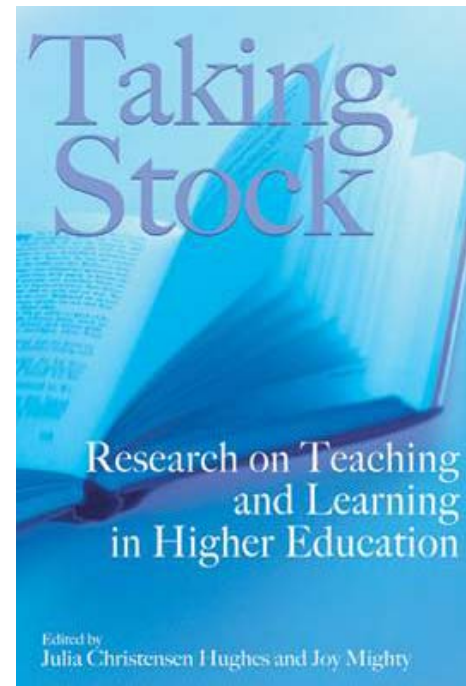
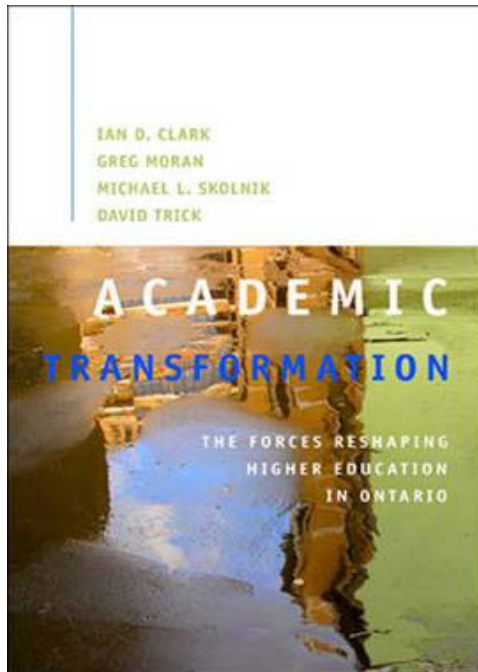


# NSSE Intervention Projects

Course Based	
Queen's University	<i>1st Year: Increasing Student/Faculty Interaction in Large Classes</i>
University of Waterloo	<i>1st &amp; 4th Years: Redesign of Selected Courses to Enhance Engagement</i>
University of Western Ontario	<i>1st Year: Redesign of Selected Courses to Increase Science Literacy</i>
Discipline/Faculty Based	
University of Ottawa	<i>1st Year: Course-Based Learning Community for Social Science</i>
University of Windsor	<i>1st Year: Intrusive Advising Intervention for 1st Year Business Students</i>
Queen's University	<i>4th Year: Enhanced Academic/Tutorial Support System for Electrical Engineering</i>
General Support	
Carleton University	<i>1st Year: Teaching Assistant (TA) Mentorship Model</i>
University of Guelph	<i>1st Year: Supported Learning Groups for "high-risk" courses</i>
Ryerson University	<i>1st Year: Improvement of Writing Skills Competencies</i>
Wilfrid Laurier University	<i>1st Year: Peer Learning Program to Improve Information Literacy, Research &amp; Writing</i>



# HEQCO Publications





# Teaching and Learning

- Call for Proposals issued Tuesday, June 15, 2010
- Title: **Enhancing Teaching and Learning Effectiveness in Ontario Colleges and Universities**
- Deadline Friday, July 9, 2010
- Five priority themes:
  - 1) larger classes
  - 2) teaching skills for new and future faculty
  - 3) information and communication technology in the classroom,
  - 4) high impact practices, and
  - 5) core skills and competencies.
- Limitations of 1 single institution and 2 multi-institution proposals per college/university



# Thank you!

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