

How Aligned is our PSE System with Meeting Labour Market Occupational Projections?

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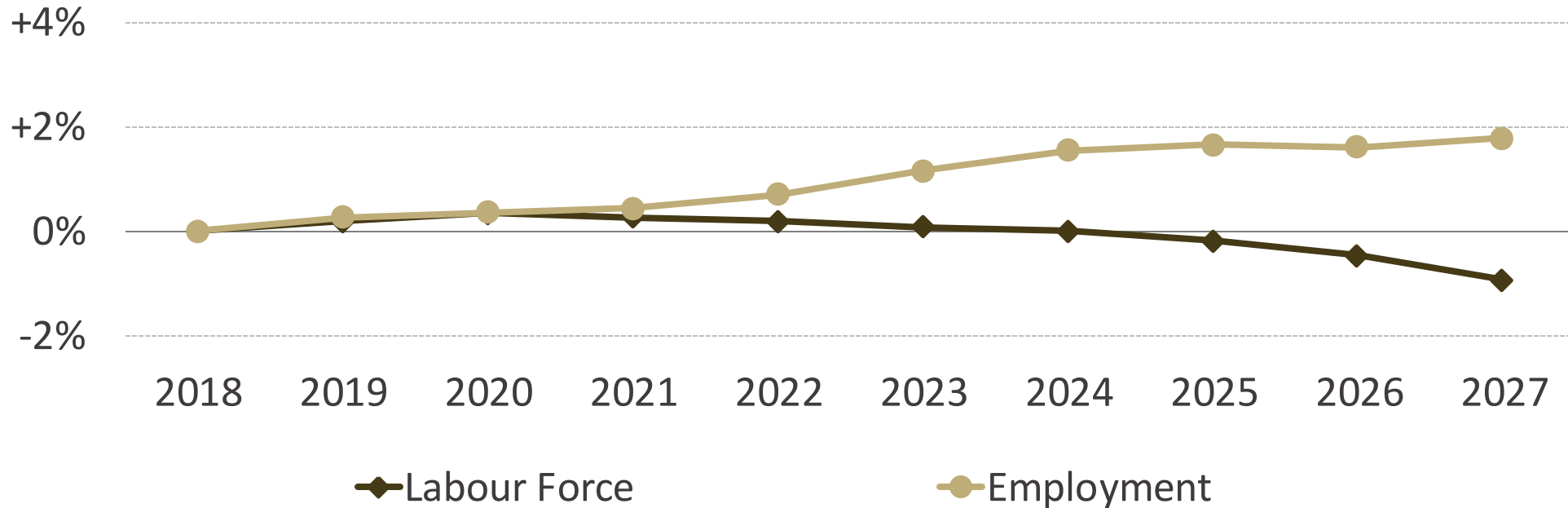


unb.ca/nbirdt

Labour Force Challenges

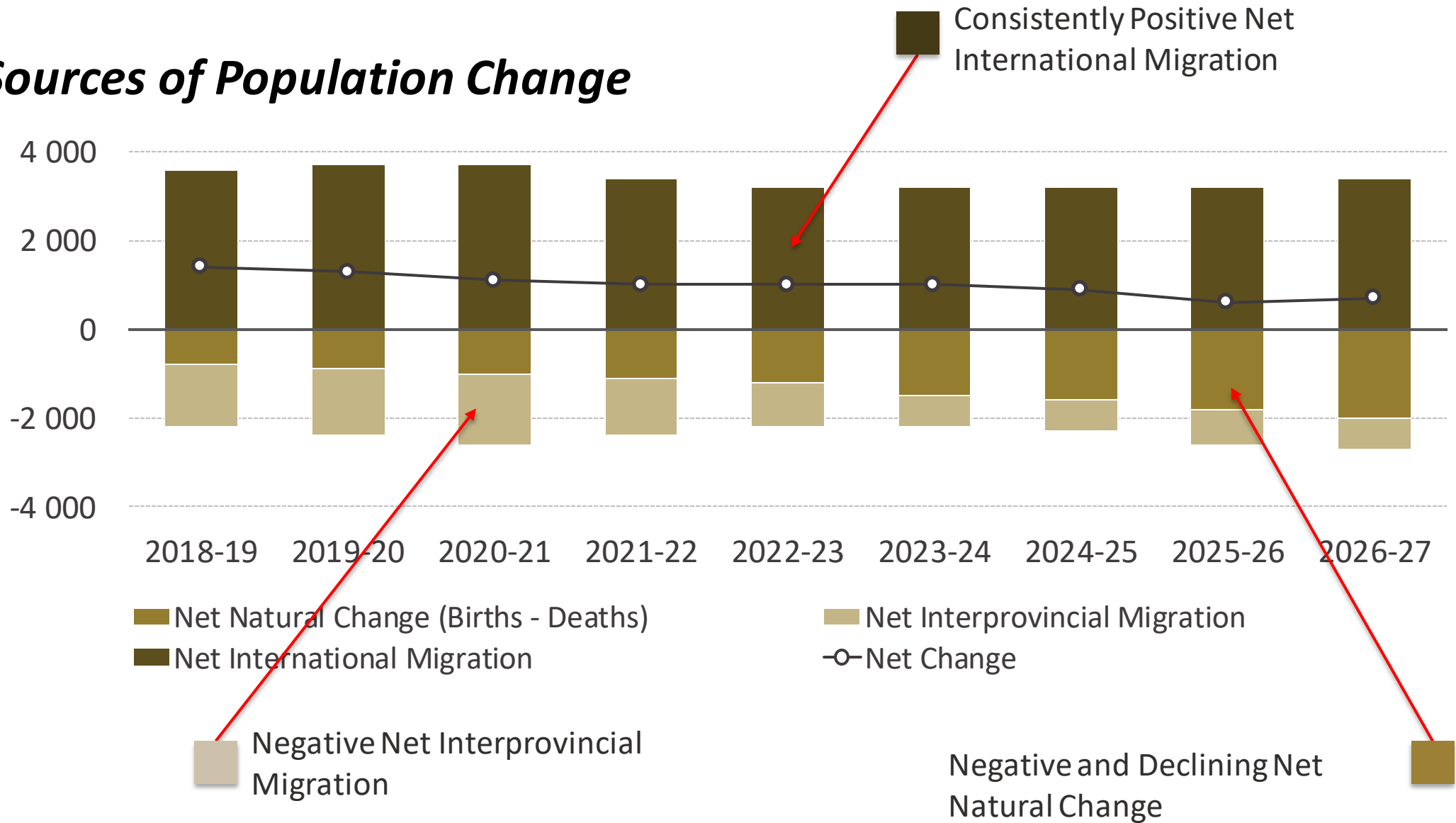
- Aging population
- Labour shortages and mismatches
- Stagnant labour productivity

Labour Force and Employment Relative to 2018



- Labour force expected to continue to shrink (-0.9% between 2018-2027)
- Employment is expected to increase slightly (+2.0% between 2018-2027)
- The unemployment rate is expected to decrease to 5.8% by 2027

Sources of Population Change



10-Year Job Openings (2018-2027)

120,000



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graph TD; A[120,000] --> B[3,200]; A --> C[116,800];
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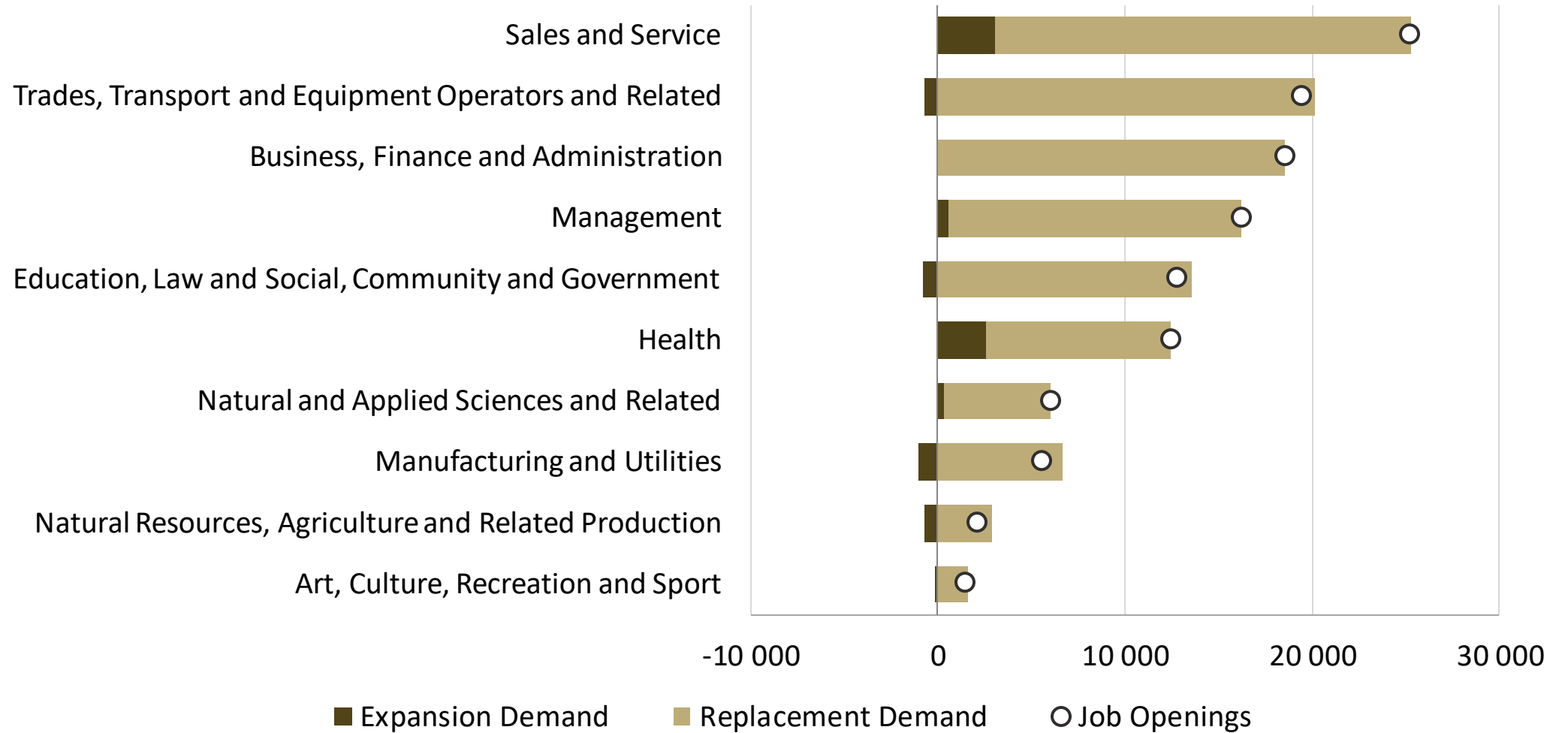
3,200

From Expansion/Growth

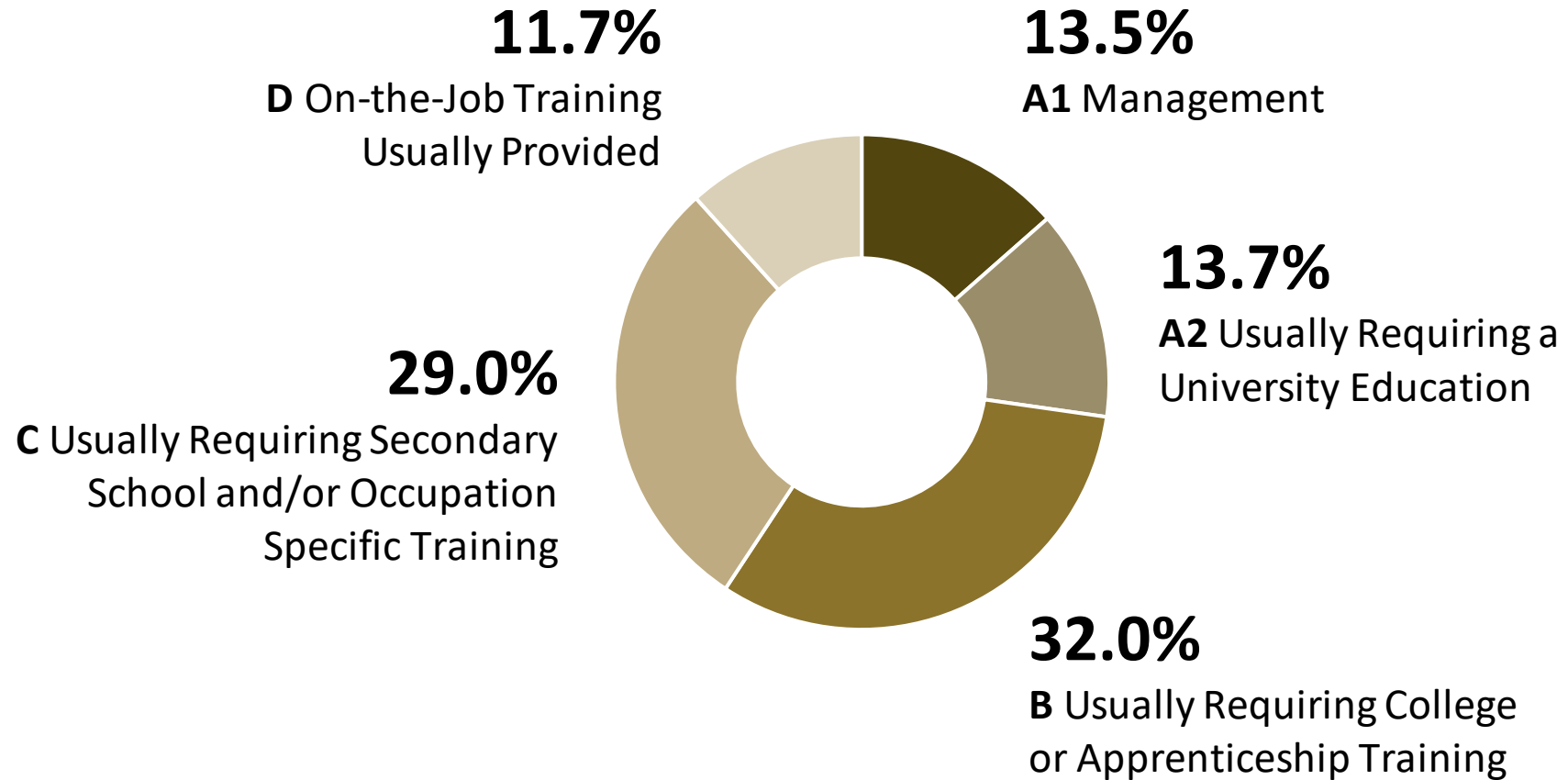
116,800

From Replacement/Attrition

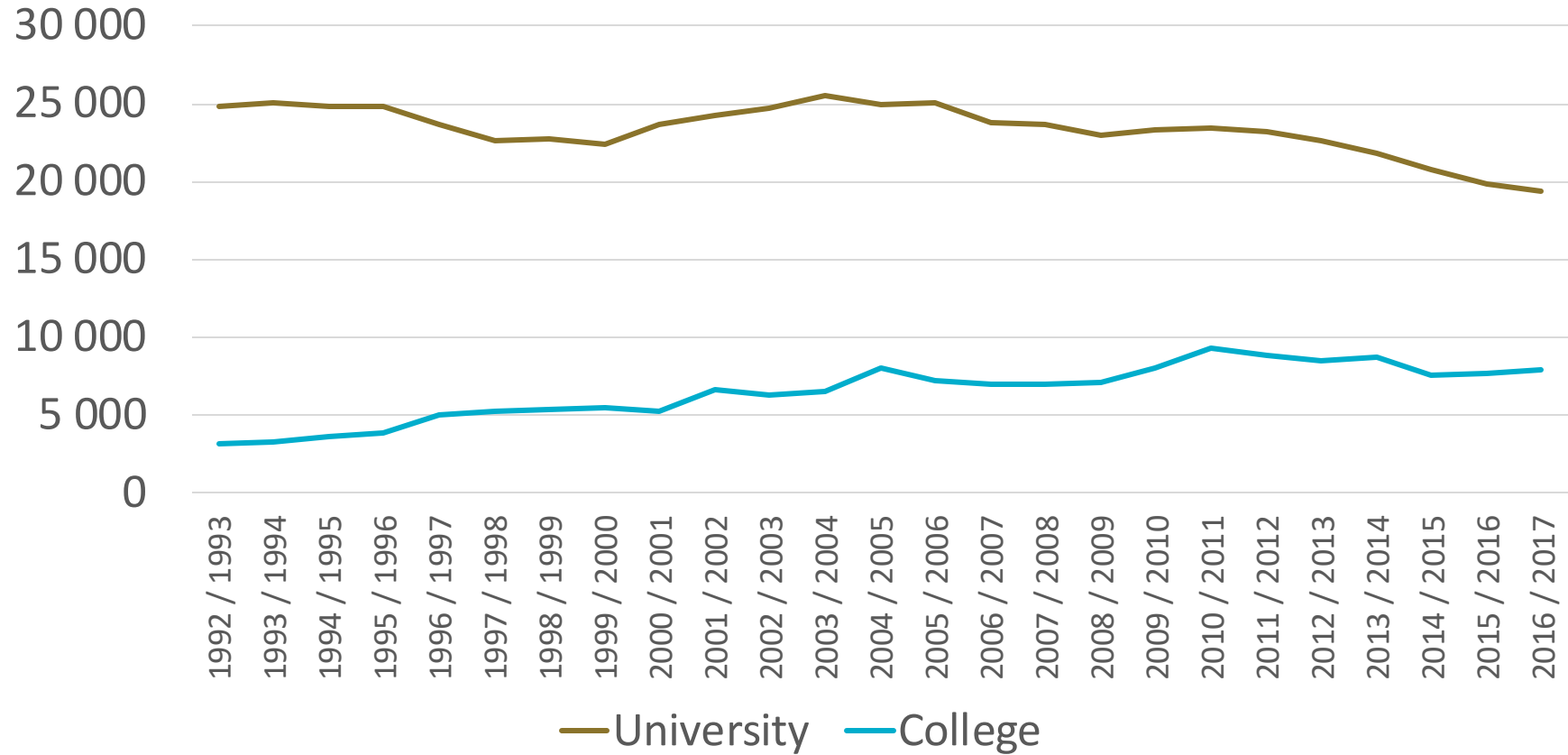
Forecasted Job Openings by Broad Occupational Group (New Brunswick, 2018-2027)



Forecasted Job Openings by Skill Level (2018 to 2027)



Post-Secondary Enrolments in New Brunswick (Public Institutions Only)



Post-Secondary Credentials Granted in New Brunswick (2016; Public Institutions Only)

Level of Education	Total
College/University Below Bachelor's/Apprenticeship/Trades	4,605
Certificates Granted to Registered Apprentices/Trade Qualifiers	1,011
College or University Below Bachelor's Level	3,594
Bachelor's or Equivalent	3,723
Master's/Doctoral or Equivalent	798
<u>Total</u>	<u>9,126</u>

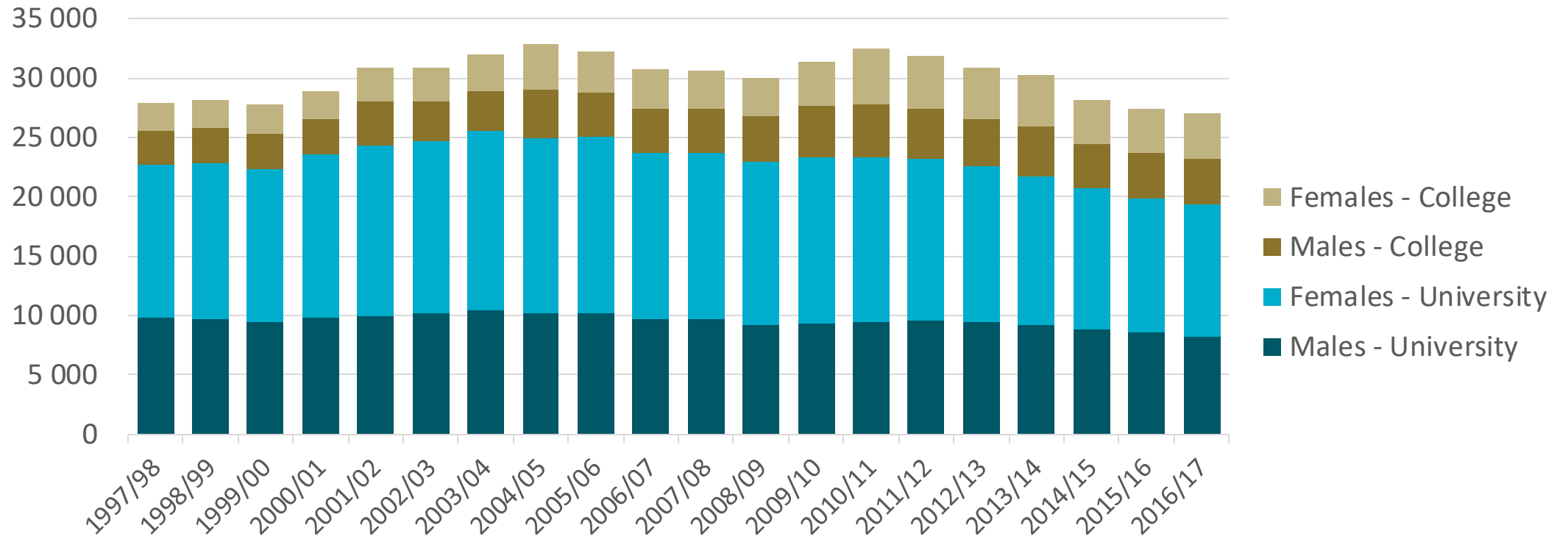
Are PSE investments aligned with NB labour market projections of job openings?

PSE

- Considerable public revenues already allocated to PSE, can we do more with them?
 - Extensive margins -- More graduates, more skills, more human capital
 - Intensive margins – skills/graduates aligned to specific occupation or skill needs in labour market

Male participation in University is low, but it has been since 1997

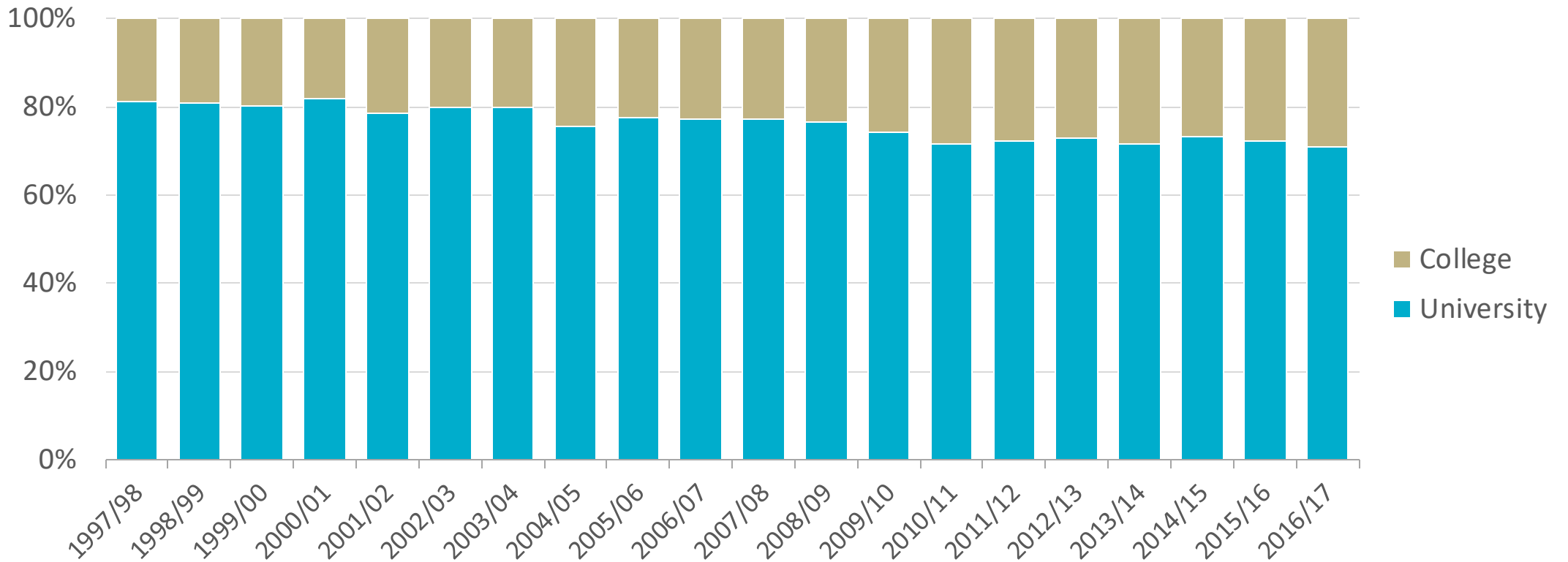
PSE Enrolment by Sex, by Institution Type, NB 1997/98 to 2016/17



Occupational projections - need 50% University, 50% College

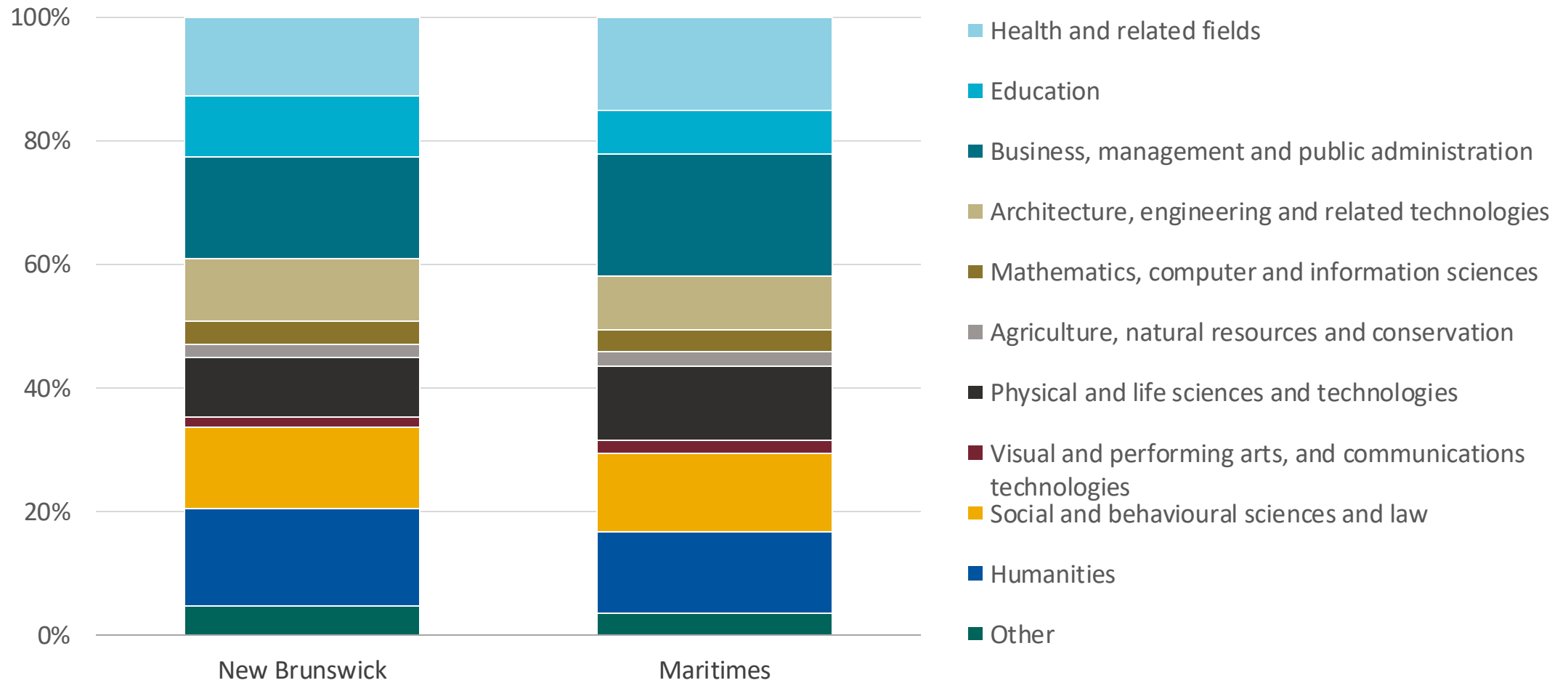
PSE enrolment is 70% University and 30% College

University and College Shares of Total PSE Enrolment, NB 1997/98 to 2016/17



Enrollments by University program

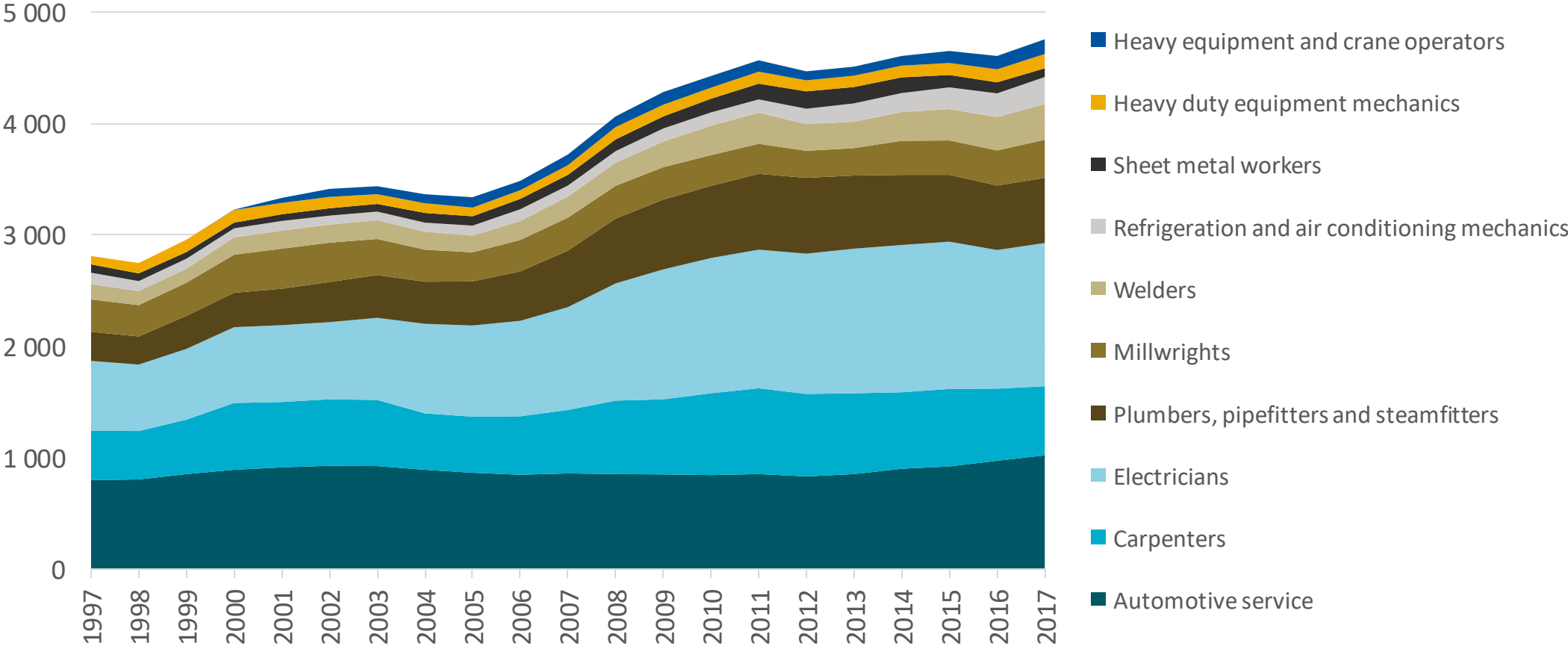
Distribution of enrolled students by program 2016/17, NB and Maritimes



Apprentice registrations

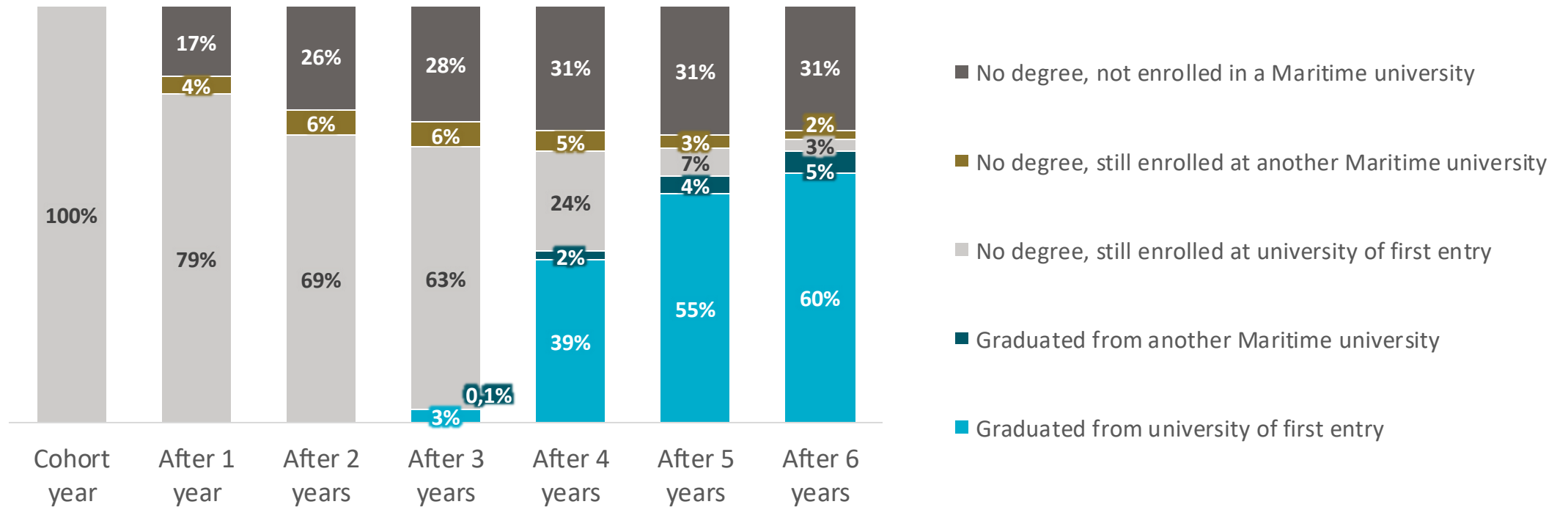
PSE

Registered Apprentices by Trade, NB 1997-2017



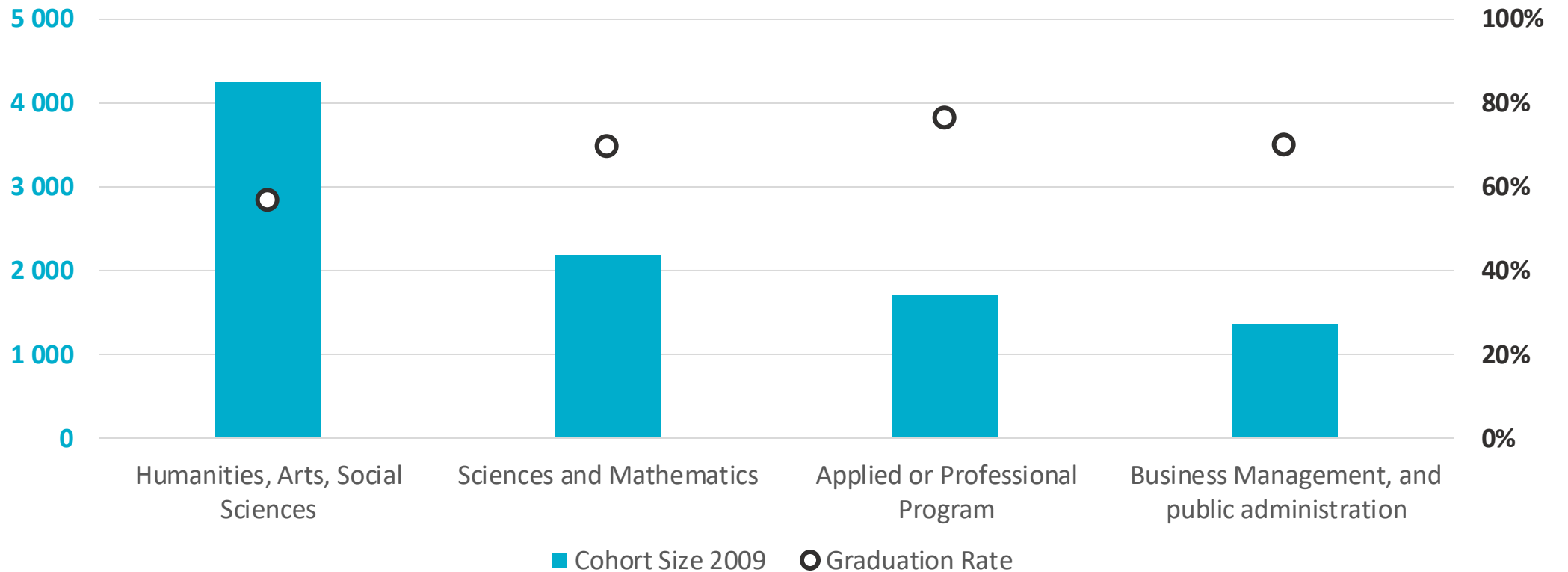
We could be increasing graduation rates

Student progression of the fall 2009 cohort over seven years



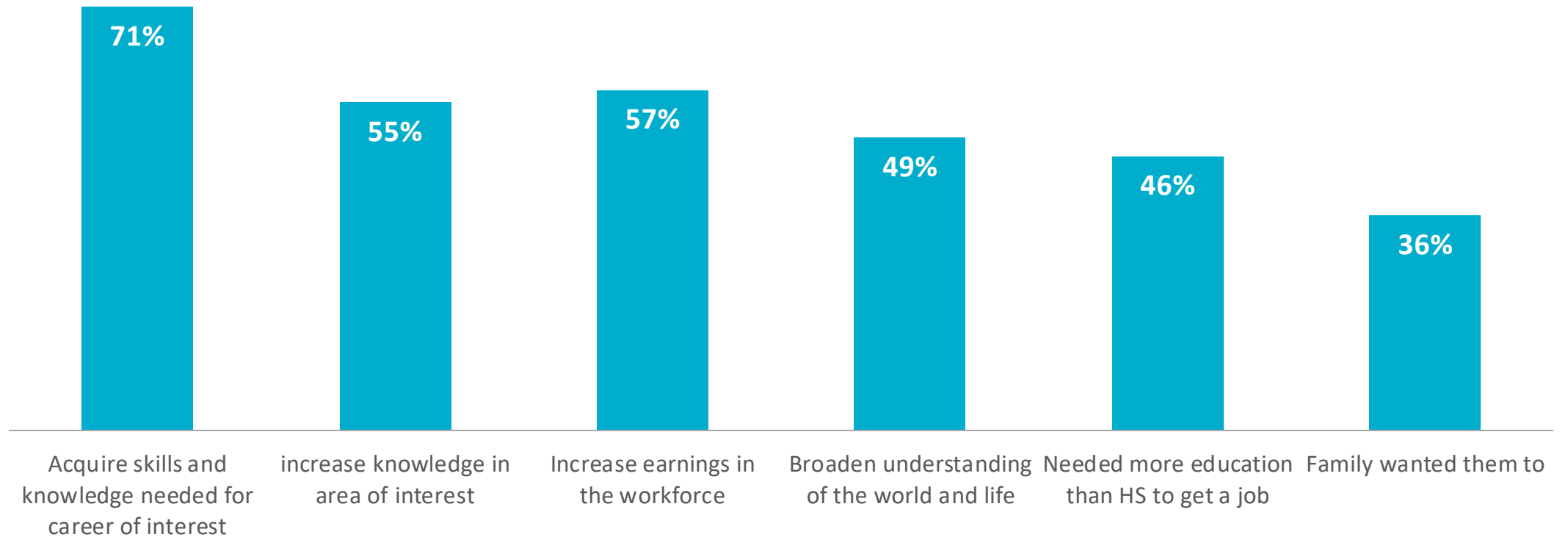
Program sizes and graduation rates

2009 Cohort Size and 6 Year Graduation Rates, all Maritime Universities, by discipline cluster (MPHEC)



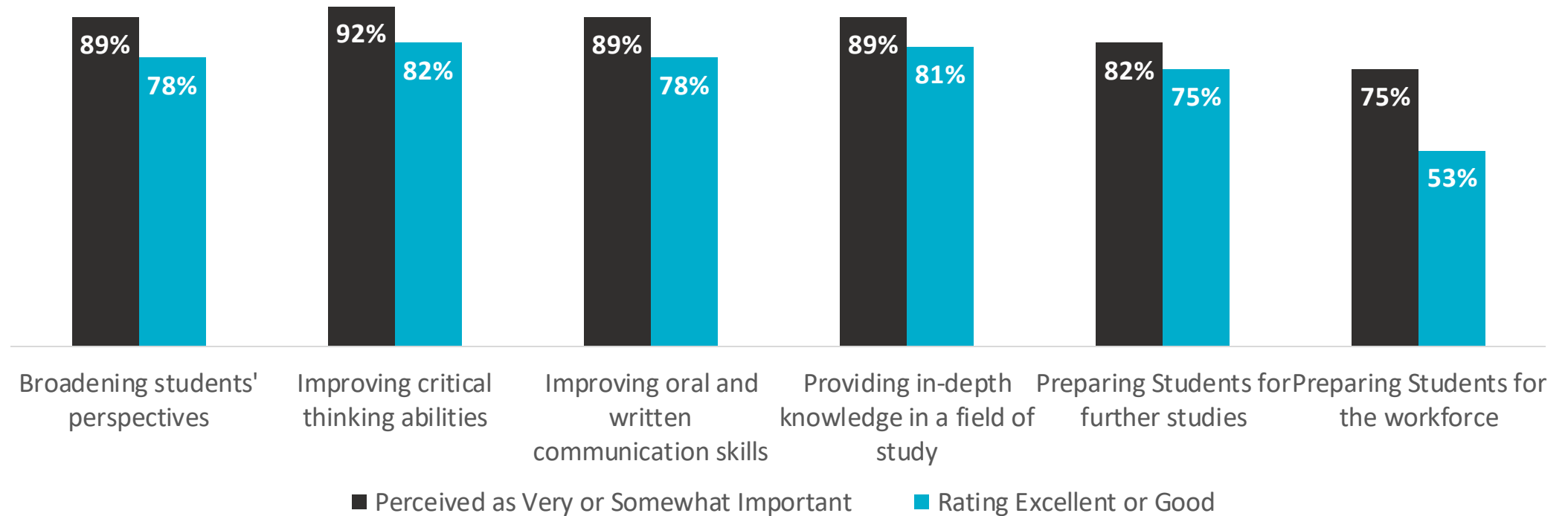
University alignment with student expectations? Students attend to get jobs and higher earnings

Reasons for pursuing a university education, NB respondents (MPHEC 2008)



Students don't score NB universities high on preparing them for the workforce

Perceived importance of different functions of an undergraduate education, and ratings of own degree program at fulfilling these functions (MPHEC 2008)



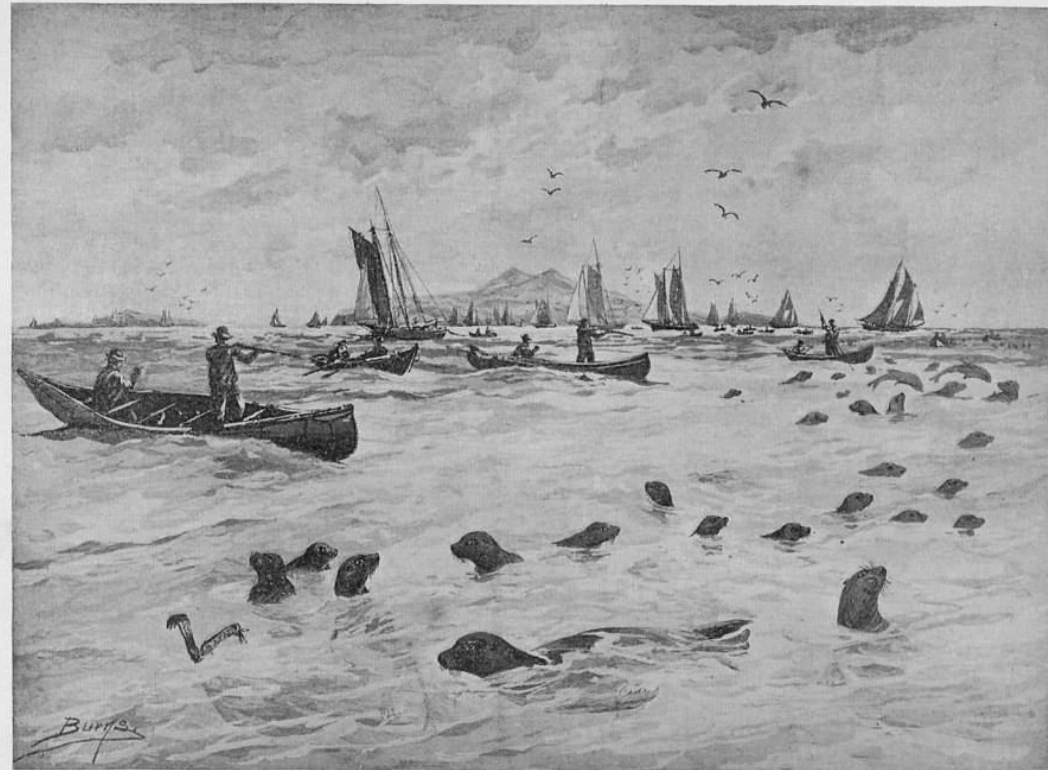
Students pursue PSE for jobs and income, taxpayers fund universities for the same reasons,

so why is it so hard to align PSE with labour market needs and opportunities?

Mary Lou Babineau, President, Federation of New Brunswick Faculty Associations in the Telegraph-Journal

- “Let me be very clear: it is not the role of our public universities to fix economic and demographic problems, nor to train the labour force.”
 - “The mandate of public universities in strong democratic societies is to develop citizens’ ability to analyze, question, criticize, solve problems, innovate and create, adapt and contribute to a constantly changing world. To do this well, they must be dedicated to free inquiry and research that is independent from government and private-sector influence.”
 - But, Babineau notes that universities operating as “passive knowledge factories” are contributing to the economy and workforce development
 - “research shows New Brunswick’s universities are, in fact, already contributing more to economic development and demographic stability than perhaps any other sector.”
 - “88 per cent of New Brunswick’s university graduates are employed two years after graduation, and 75 per cent report that their job is related to their degree.”

The problem with “passive knowledge factories” - - The North Pacific Seal Hunt problem



PELAGIC FUR-SEAL HUNTING OFF AKOOTAN PASS, BERING SEA.—AFTER A SKETCH BY HENRY W. ELLIOTT.



Discussion

- PSE participation, resourcing and performance has considerable inertia
 - We have the same PSE system today as 20 years ago