



AIC2018

Education in Agricultural Sciences and
Technology - Ready for the Future?

Identifying the Educational Challenges Discovery Talk

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The Educational Landscape in Ontario and
Further Afield: Challenges and Opportunities

The Educational Landscape in Ontario and Further Afield: Challenges and Opportunities

Jonathan Newman

Outline

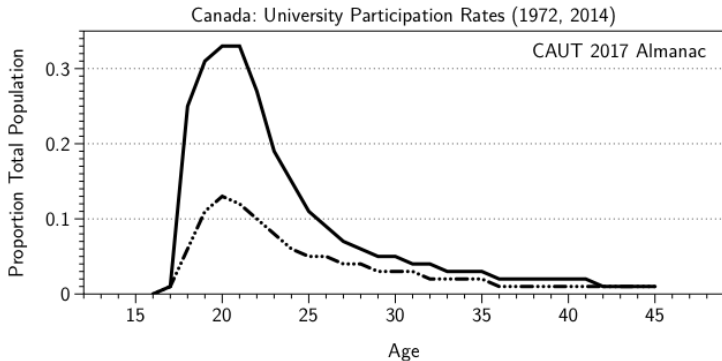
Accessibility & demand

University funding

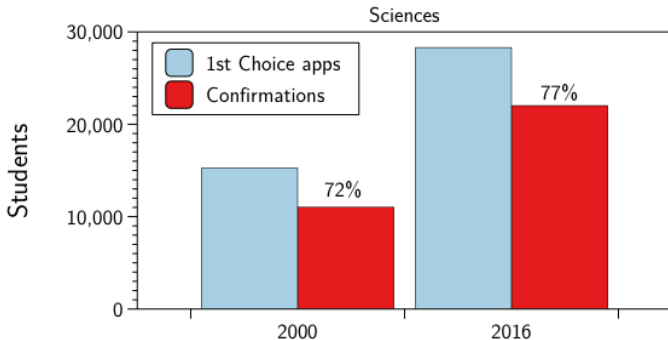
Accountability

Summary

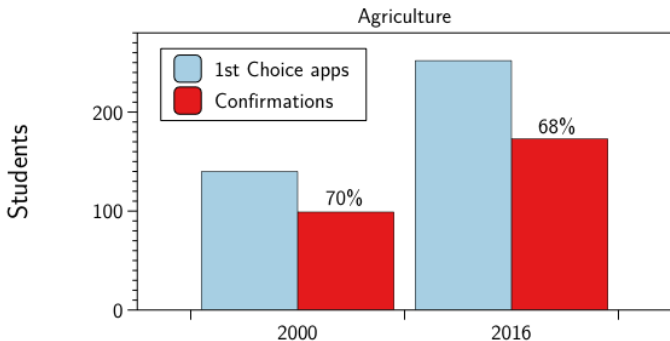
Accessibility & demand



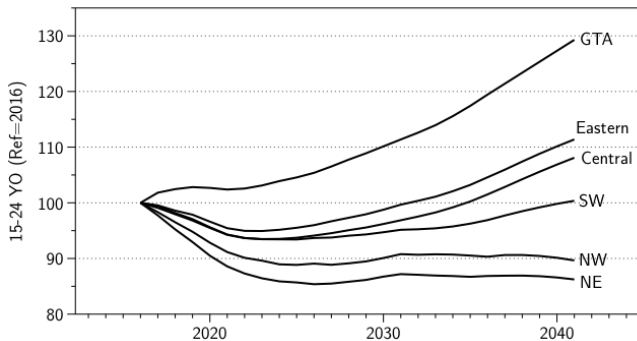
Ontario Science



Ontario Agriculture



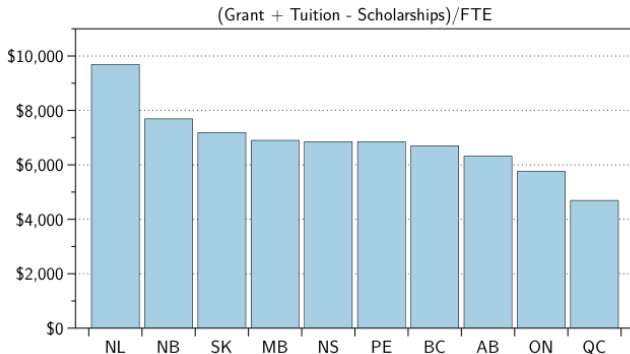
Ontario Population



Consequences

- Stave off financial collapse of northern universities \Rightarrow corridor funding
- Growth in the GTA \Rightarrow campuses in Markham (York), Milton (WLU), Brampton (UTM)

University funding



The Educational Landscape

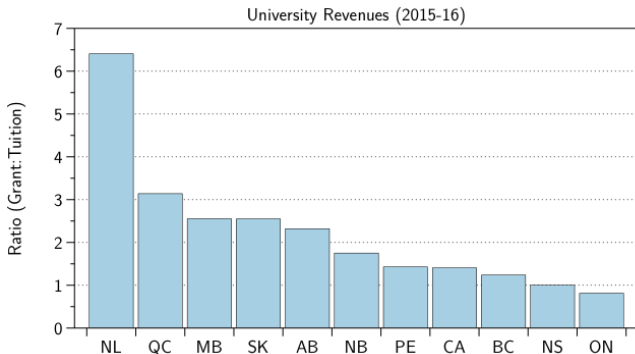
Ontario ranks **10th** in per-student funding by operating grants, and **9th** when both grants and tuition are combined.

If Ontario universities were to receive funding at the average level of the rest of Canada, they would receive between **\$750 million to \$1 billion more** in funding each year than they do today

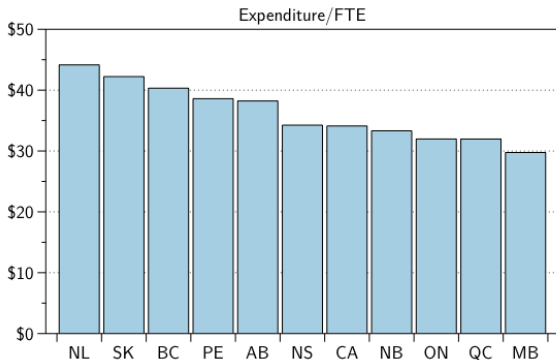
Ontario received **less than 70%** of provincial operating grant revenue per student in comparison to the average for the rest of Canada.

Even when tuition revenue is included in the analysis, Ontario universities still receive about **15% less** per-student revenue than the average of the rest of the country.

Grant and tuition



Expenditure per FTE



Accountability

Performance based funding

- A portion of the government grant that is based on performance against metrics rather than enrollment
 - Outcomes based (payment for results)
 - Performance set asides (compete for a share)
 - Performance contracts
- Competitive (0-sum) vs. non-competitive (entitlement)
- 'Bonus' vs. integral to the budget (at risk)

Benefits

- Universities will use data to make decisions that are more aligned with public policy
- Can change incentives to emphasize quality over growth
- Enhance transparency and accountability

Challenges

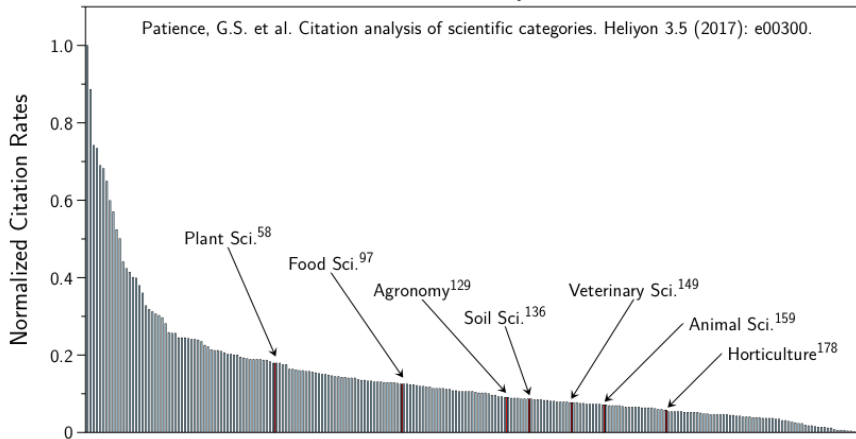
- Can create perverse incentives (e.g. grade inflation to increase retention)
- Hard to match funding to costs (e.g. funding increases linearly, costs may not)
- 0-sum can lead to positive feedback ('death spiral')
- Can encourage homogenization instead of differentiation
- Not everything that matters can be measured ...
- Little reliable evidence that it leads to better outcomes for students

Ontario-wide research excellence and impact metrics

- Tri-council funding share
- Number of papers / faculty FTE / year
- Number of citations / paper / year

The Educational Landscape

Citation rates by field



Summary

- The education landscape is changing in Canada
 - Access agenda succeeded
 - Age-structure is changing
 - Budgets are strained
- Accountability demands are increasing, PBF is coming

Questions?