

## Stakeholder summary

### Mohawk College study explores apprenticeship pathways and outcomes

A new HEQCO study explores apprenticeship pathways at Mohawk College, which offers the largest variety of apprenticeship programs in Ontario. The study, *Understanding the Determinants of Academic Success in Apprenticeship Programs at Mohawk College*, finds that regardless of the type of apprenticeship program, apprentices take five years or more to complete their programs, although the traditional skilled trades pathway has a lower failure and dropout rate.

#### Project description

The study uses various data sets to examine the outcomes of apprenticeship students in three pathways. Student-level administrative data were collected from 2000-2012 on entrants to the Mohawk programs. The data were linked with census data on the socioeconomic characteristics of the neighbourhoods in which the students lived.

Students can enter apprenticeship programs through the traditional skilled-trades apprenticeships like plumbing, automotive repair and carpentry, whereby students must have a job with an employer who has agreed to sponsor the apprentice and be registered with the Ministry of Training, Colleges and Universities; the Ontario Youth Apprenticeship Program (OYAP), where high school students take co-operative education in an apprenticed trade; and the Co-op Diploma Apprenticeship Program (CODA), which requires two years of full-time study and students graduate with both a college diploma and apprenticeship certificate. For this study, most trades within the traditional apprenticeships were analyzed; however only the OYAP child and youth worker program had sufficient data for analysis and Mohawk only offers CODA programs in electrical engineering and manufacturing engineering.

#### Findings

Students in traditional apprenticeships take longer to complete their programs, with 64% of entrants completing their final level of courses within five years. According to the authors, there is no evidence that this is due to academic challenges or dissatisfaction with the program offerings, as course failure rates in most cases are under 10% and only about 1% of students switch to other programs.

However, a different picture emerges when looking at the child and youth worker program, where course failure rates are high; the dropout rate after level 1 is 84%, and only 9% of students take their final level of courses within five years. Reasons for this poor performance have not been documented.

Electrical engineering and manufacturing engineering have higher course failure and dropout rates than traditional apprenticeship programs but these programs have more demanding academic content than traditional apprenticeships. However, 43% of electrical engineering students and 55% of manufacturing engineering students complete their final level of courses within five years.

## **Further research**

More data and larger sample sizes are needed to further understand the determinants of success in apprenticeship programs.

*Understanding the Determinants of Academic Success in Apprenticeship Programs at Mohawk College was written by Martin Dooley and Abigail Payne, with the assistance of Karen Armstrong, all from the Public Economics Data Analysis Laboratory (PEDAL) at McMaster University.*