

ONCAT Project 2015-12

Creating Low Affinity Pathways

Final Report

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EXECUTIVE SUMMARY

PURPOSE OF PROJECT

Since the inception of the Ontario Council on Articulation and Transfer, over 1200 pathways have been listed on ONTransfer.ca, and many are formed between high affinity programs. The Ontario college student profile is, however, changing. Today, an increasing number of college students are non-direct applicants and 44% of these students have completed some form of prior postsecondary education (PSE). In response, colleges in Ontario are exploring ways to create pathways that meet diversified student demands. With the system placing most of its focus on high affinity pathways development, there exists a low affinity pathways void. Since a majority of students who continue their education at diploma or degree level pursue a completely different field, colleges and universities alike should seek out this call to action in identifying what means exist to articulate minimization of learning redundancies between two programs of low curricular affinity. Targeting low affinity pathways between high enrolment, high employment competition programs against low enrolment, low employment competition programs seems like a logical place to start this work.

In addressing the current paucity of pathways between different fields, this project explores the creation of system-wide low affinity pathways based on programs at Centennial College. Contained within this report is an explanation of how the project was undertaken, what programs were investigated and the results of such, limitations discovered before or during this process, pathways to be developed as a result of this work, and future considerations.

METHODOLOGY

This project has been designed to support outcomes-based curriculum affinity assessment between programs from different disciplines. There were three different stages to the project: 1) program-program identification, 2) curriculum mapping, and 3) low affinity articulation.

First, overenrolled and underenrolled programs were identified by analyzing Fall 2015 data from Centennial's Corporate Planning and Institutional Research (CPIR) team records, AISmartR reports, and the Banner student information system. Underenrolled programs were limited to programs within the School of Business (SB) and School of Engineering Technology and Applied

Science (SETAS), based on skilled worker shortages and Ontario College Application Service applicant data.

Then, programs were narrowed down by admission requirements, curriculum affinity, and career prospects. Programs requiring a PSE credential for admission, having 0% curriculum affinity, and resulting in no prospective career convergence were excluded. Finally, program learning outcomes (PLOs) were mapped to confirm the pursuit of potential pathways.

Based on the above process, Law Clerk to Office Administration (Executive) or Office Administration (Health Services), and Architectural Technology to Energy Systems Engineering Technology or Mechanical Engineering Technology were identified as programs eligible for building pathways.

To identify both overlaps and gaps in program curriculum, researchers mapped the outcomes of the sending program's courses in semester one and two against the receiving program's. By comparing all the course learning outcomes (CLOs) of the sending program to the course-by-course CLOs of the receiving program, it was possible to identify combinations of CLOs that could be used to meet course requirements. According to Centennial College's Transfer Credit Procedures policy, 80% affinity between CLOs results in granting credit; therefore, this criterion was used to recommend the granting of credit at the end of this mapping process.

RESULTS

Through mapping program-to-program CLOs, the following pathways were created for students who have finished Semester 2 of:

- Law Clerk to

- 1) Office Administration (Executive): full credit for up to six courses, self-directed learning and credit equivalency after successful completion of self-directed learning for four
- 2) Office Administration (Health Services): full credit for up to six courses, self-directed learning and credit equivalency after successful completion of self-directed learning for four

- Architectural Technology to

- 1) Energy Systems Engineering Technology: full credit for up to four courses, self-directed learning and credit equivalency after successful completion of self-directed learning for one
- 2) Mechanical Engineering Technology – Industrial: full credit for up to four courses, self-directed learning and credit equivalency after successful completion of self-directed learning for one
- 3) Mechanical Engineering Technology – Design: full credit for up to four courses, self-directed learning and credit equivalency after successful completion of self-directed learning for one

LIMITATIONS

Though this report was prepared through careful examination and analysis of data, the researchers are aware of its shortcomings:

- Potential low affinity pathways were without any complete PLO matches, therefore elements of performance were excluded from consideration in order to preserve the possibility of creating any new system-wide pathways.

- EMSI data was limited by breakdown of job prospects for instructional programs. While the CIP website offers up to a tertiary level of breakdowns (e.g., 52.0402 for Executive assistant/executive secretary), EMSI only provides data up to the secondary level (e.g., 52.04 for Business operations support and assistant services). Consequently, queried jobs had to be edited to match more specific career prospects.

- Due to restraints on time and resources, researchers were unable to survey demand for potential low affinity pathways. Without this, student satisfaction and utilization can only be speculated.

CONCLUSIONS

With an increasing number of students returning to PSE, there is an ever-growing need for pathways built between low affinity fields. This project addresses that need by creating the

pathways from Law Clerk to Office Administration (Executive) or Office Administration (Health Services), and Architectural Technology to Energy Systems Engineering Technology or Mechanical Engineering Technology. Centennial's SB, SETAS and the researchers' pathways team will collaborate to create and implement new model routes for these pathways within the coming school year.

The process of building these pathways resulted in valuable lessons learned and reflections that could help facilitate the development of more daring, creative pathways as well as the undertaking of other related projects in the future.

The valuable lessons learned during the process of this research were 1) that various educators within Centennial could have different perceptions of program job prospects, and 2) that some college staff have concerns regarding the pathways mandate; beliefs that this agenda can lead to other colleges "stealing" their students. Though the authors of this report take no opinion on the aforementioned concern, it is important to note this feedback received from multiple staff involved.

Also, the project resulted in two recommendations for best practices: 1) Curriculum training for subject matter experts (SMEs) to avoid confusion regarding outcome mapping vs. week-by-week achievement mapping, and 2) Maintaining current, relevant, and measurable PLOs and CLOs that reflect the most recent practices and technologies in a measurable manner.

Over the course of this project, researchers discovered potential topics for further research — 1) exploring dual diploma pathways or new advanced diploma and graduate certificate combinations for future projects to offer programs with added value to students, and 2) exploring the educational goals and employability expectations of students entering programs with low (sometimes even negative) job prospects.