

University of Toronto Common Digital Layout Transcript Implementation

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AGENDA

- Background/Context
- Problem Being Addressed
- CanPESC CDL Working Group
- CDL transcript (methodology and tool)
- Project Objectives
- Project Methodology
- Project Outcome

BACKGROUND/CONTEXT

- The University of Toronto (UofT) has been participating, in partnership with the Ontario Universities' Application Centre (OUAC), to receive electronic postsecondary transcripts through the OUETS (Ontario Universities' Electronic Transcript System) since its creation in the mid-1990s.
- Working closely with OUAC, the UofT initiated a project aimed at transitioning the exchange of transcripts from SPEEDE EDI formatted transcripts to PESC standard XML in 2020.
- The UofT successfully migrated to PESC XML in August of 2022.
- Building upon this work, a second project was launched in parallel in the fall of 2020, with the central goal of creating a PDF transcript from the inbound post-secondary XML data received from OUAC through OUETS.

PROBLEM BEING ADDRESSED

- XML Transcript data that is received from a variety of trading partners through OUAC can appear with significant variations in data placement.
 - For example, one institution may display the GPA information at the top of each academic session, while another displays it at the bottom of the transcript.
- No one transcript is alike, due to inherent differences in institutional policies and academic practices, which adds a layer of complexity when working with a multitude of transcripts for admissions purposes.
- Admissions staff at the UofT had grown accustomed to antiquated student information screens (SIS) to view and reference EDI transcript data to make admission decisions, outside of their admissions system and regular workflow.
- The institution's transition to PESC standard XML presented an opportunity to reimagine ways to better work with this transcript data, with the central goal of improving workflow through the creation of visually standardized PDF transcripts.

CANPESC COMMON DIGITAL LAYOUT WORKING GROUP

- Common Digital Layout (CDL) Working Group was established in June-2019 to develop options to address interest by CanPESC members to digitally display electronic transcript data in a consistent format.
- Primary goal of reducing the effort for other institutions and transcript hubs to implement a transcript-to-pdf solution.

The working group is made up of a collection of volunteer members bringing input from various Canadian provinces:

- Jennifer Kitching, Ontario Universities' Application Centre (OUAC)
- Ben Harper, Application Centre for Ontario's Public Colleges (OCAS)
- Cathy van Soest, Education Planner BC
- Ruth Blades, Council on Admission & Transfer for Nova Scotia (CATNS)
- Joseph Minichini, University of Toronto

CDL TRANSCRIPT (METHODOLOGY AND TOOL)

- The Common Digital Layout (CDL) Working Group created a generic transcript layout and sets of transformation rules which could be used separately or together as a tool to generate an HTML or PDF rendering of an electronic transcript adhering to the PESC XML data standards.
- The tool and methodology developed by the CDL Working Group creates PDF transcripts with a standardized visual experience to ensure all transcript elements appear in the same sections, regardless of sending institution.
- CDL represents a minimally agreed-upon layout determined by the working group but could then be extended and adapted to meet each institution's specific needs.
- Tool uses Extensible Stylesheet Language Transformations (XSLT) to transform the PESC XML College or High School transcript data into HTML.
- A Cascading Style Sheet (CSS) is applied to the HTML for rendering in a browser and/or printed as a PDF
- The methodology doesn't pre-suppose a platform or technology to execute the transformation; this can be completed using any appropriate technology that aligns with the institution's technical ecosystem or standards (e.g., PHP at OUAC or Docmosis at UofT)

Available Resources

- GIT Hub | <https://github.com/canpesc/common-digital-layout>
- White Paper | <https://www.pesc.org/canadian-pesc-user-group-1.html>

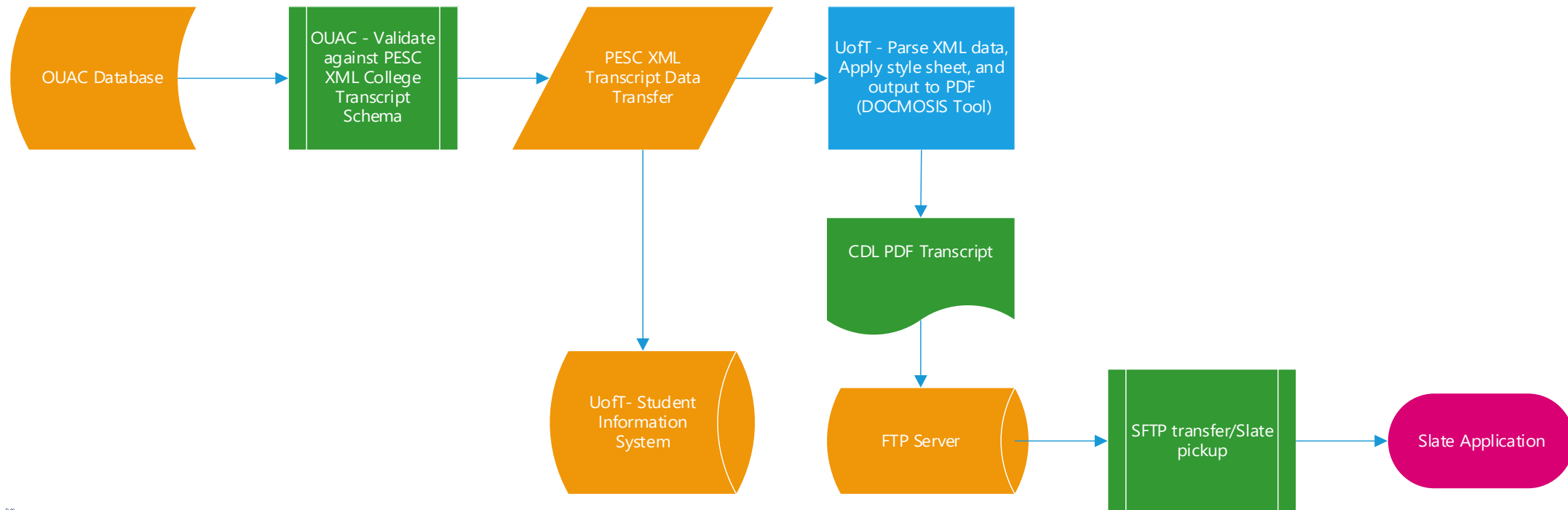
PROJECT OBJECTIVES

Implement an XML to PDF transcript solution that was well integrated into the existing system of exchange of electronic postsecondary transcripts through the OUETS network.

- **Goal 1:** Convert incoming PESC standard XML data from post-secondary institutions and create a human readable PDF transcript that offers a standard visual experience for staff in a format prescribed by the CDL working group's design and methodology.
- **Goal 2:** Make the PDF transcripts readily available to staff with the intention of improving workflow and administration, namely admissions staff, who are responsible for reviewing thousands of applications monthly.

METHODOLOGY (IT)

- UofT central IT staff (Enterprise Applications and Solutions Integration), in collaboration with the University Registrar's Office and Admissions and Outreach Office, introduced a technical process in which inbound post-secondary transcripts in a PESC XML format were converted into a CDL-styled PDF file.



METHODOLOGY (TESTING)

- **Quality assurance planning:** Staff from the admissions team and the University Registrar's Office conducted thorough testing of inbound transcripts.
 - Examples were identified with the intention of providing a robust testing population from a multitude of post-secondary institutions. Transcripts were reviewed by staff to ensure transcript elements were appearing correctly and consistently.
- OUAC consulted extensively with UofT business users to make the process more efficient and provide customizations specific to the institution.
 - For example, bolding grade columns and sectioning academic sessions into separate boxes, which was not in the original design of the CDL.
 - Changes were made after subject matter experts were consulted and identified essential elements that would improve their business workflows.
- The scope of this project was limited to post-secondary PESC standard XML transcripts transmitted through the OUETS network to the UofT.

OUTCOME (UofT CDL)

Standardized XML PDF transcript

Issued To
 OUAC
 OrgID: [REDACTED]
 RequestID: [REDACTED]
 OUAC RefNo: [REDACTED]

University of Guelph
 PSIS: [REDACTED]

Issued On:
 2023-04-06

Student Information	Academic Awards	Academic Summary
Surname: [REDACTED] First Name: [REDACTED] Date of Birth: [REDACTED] Student Number: [REDACTED] OEN: [REDACTED]		

Session: Fall 2022	Academic Program and Awards	Session Summary
Start Date: 2022-09-08 End Date: 2022-12-16 Designator: 2022-09 (1)	Title: Bachelor of Commerce Level: Baccalaureate (Honors) Degree Program Name: Accounting Coop Program Type: Major	

Session Status/Comment
 SES14=B37 Third Highest Honors

Course Number	Course Title	Credit Value	Credit Earned	Grade	Course Quality Points Earned
ACCT 1220	Intro Financial Accounting	0.5	0.5	056	28.0
		Credit Basis: Regular Credit Level: Undergraduate		Grade Scale Code: 73 Quality Points Earned: 28.0	
MATH 1030	Business Mathematics	0.5	0.5	091	45.5
		Credit Basis: Regular Credit Level: Undergraduate		Grade Scale Code: 73 Quality Points Earned: 45.5	
MGMT 1000	Introduction to Business	1.0	1.0	082	82.0
		Credit Basis: Regular Credit Level: Undergraduate		Grade Scale Code: 73 Quality Points Earned: 82.0	
ECON 1050	Introductory Microeconomics	0.5	0.5	059	29.5
		Credit Basis: Regular Credit Level: Undergraduate		Grade Scale Code: 73 Quality Points Earned: 29.5	



Issued To
 OUAC
 OrgID: [REDACTED]
 RequestID: [REDACTED]
 OUAC RefNo: [REDACTED]

York University
 PSIS: [REDACTED]
<http://www.registrar.yorku.ca/grades/legends/>

Issued On:
 2023-04-07

Student Information	Academic Awards	Academic Summary
Surname: [REDACTED] First Name: [REDACTED] Date of Birth: [REDACTED] Student Number: [REDACTED] OEN: [REDACTED]	York University Automatic Entrance Scholarship Date/Period of the activity/award: 2022	

Session: Fall/Winter 2022	Academic Program and Awards	Session Summary
Start Date: 2022-09-01 End Date: 2023-04-01 Designator: 2022-09 (1) Type: LongSession	Program Name: Bachelor Of Fine Arts Title: School of the Arts, Media, Performance and Design, B.F.A., Spec. Hons. Cinema an TITLE CONTINUED d Media Arts (Media Arts) Level: Baccalaureate (Honors) Degree	

Course Number	Course Title	Credit Value	Credit Earned	Grade	Course Quality Points Earned
FA CMA 1001	Making Media	3.0	3.0	A	
Note: CLASS SIZE 25B CLASS AVERAGE 5.9 (B)		Credit Basis: Regular Credit Level: Undergraduate Credit Units: Semester		Grade Scale Code: 15	
FA CMA 1101	Media Practice I	8.0			
		Credit Basis: Regular Credit Level: Undergraduate Credit Units: Semester		InProgress	
FA CMA 1123	Writing for Games & Interactive Med	3.0	3.0	A	
Note: TITLE CONTINUED is I		Credit Basis: Regular Credit Level: Undergraduate		Grade Scale Code: 15	

QUESTIONS

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