



SPRING 2019

Postsecondary Electronic Standards Council proudly presents

SPRING 2019 DATA SUMMIT

STATE OF TECHNOLOGY & STANDARDS IN HIGHER EDUCATION

20TH ANNUAL BEST PRACTICES | MAY 8 – 10, 2019 | WASHINGTON, D.C.

PROGRAM

MULTIPLE STAKEHOLDERS. ONE VISION.



DIGITARY



DegreeData



WWW.PESC.ORG

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Welcome!

Postsecondary Electronic Standards Council proudly presents

SPRING 2019 DATA SUMMIT

STATE OF TECHNOLOGY & STANDARDS IN HIGHER EDUCATION

20TH ANNUAL BEST PRACTICES | MAY 8 – 10, 2019 | WASHINGTON, D.C.

PESC PESC PESC PESC PESC PESC PESC PESC PESC PESC PESC



MULTIPLE STAKEHOLDERS. ONE VISION.



MICHAEL D. SESSA
PRESIDENT & CEO
michael.sessa@pesc.org
+1.202.261.6516

© 2019. PESC. ALL RIGHTS RESERVED



www.PESC.org

#PESCspring19summit



DIGITALIZATION | EVOLUTION OR REVOLUTION?

KEYNOTE PANEL I

CHALLENGES & PERSPECTIVES ON BRIDGING EDUCATION'S RELUCTANT EVOLUTION IN THE FACE OF AN EMERGING DIGITAL REVOLUTION



Silvia Brunet-Jones
Technical Program
Manager, Data Driven
Education, MSDP

HARNESSING THE POWER OF STANDARDS & TECHNOLOGY IN IMPROVING TALENT MARKETS

KEYNOTE PANEL II

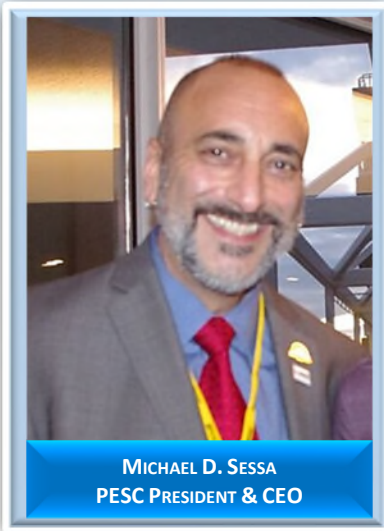
CRITICAL STAKEHOLDER USE CASES & IMPLICATIONS FOR STANDARDS ORGANIZATIONS



Bob Sheets, Ph.D.
Research Professor
George Washington
Institute for Public Policy

Jason A. Tyszkowski
Vice President
Center for Education
Workforce, USCC

A Personal Welcome



From PESC President & CEO Michael D. Sessa
Your Chief Standards Evangelist

As we convene for our 21st Annual Spring Summit and Member Meeting in Washington, D.C., we find ourselves on familiar territory. Standards awareness seems at an all-time high. A new community and mixture of stakeholders is emerging. New technologies are sparking creativity and innovation, while numerous pilots test their value and usability. It is an exciting time...and a busy one.

Familiar though, in that we've been here before. In the early 1990s, leaders and stakeholders worked with government to collaborate, create and operationalize the 1st education-wide (PK20) record, the SPEEDE/ExPRESS standard, yet PK failed to adopt it. In the early 2000s, we worked and partnered with US FSA to modernize and operationalize financial aid under Common Record; and US FSA migrated all of student aid to PESX XML (~\$140B/annually).

Shortly thereafter, however, US FSA retreated from all external activities and PESC. Banks and student lenders, once the largest membership sector within PESC but then eliminated from aid programs by law, also left the sector and PESC. More recently, we worked and partnered with US NCES to launch and operationalize Common Education Data Standards (CEDS) even though in doing so, US NCES established itself as a government-based, standards-setting body, frowned upon by federal law.

Now we stand here again with a renewed purpose and awareness of standardization. Will things be different this time? What have we learned from past efforts and how can we ensure we instill a long-term, harmonious and sustainable environment in which the entire thriving ecosystem realizes the true benefits of standardization?

First we must understand, in the most crucial case, why standards matter. While standards are all about the data, the data is all about your business...and your business model. The moment of awareness in which one connects the dots between 'standards' and their 'business model', I call it the moment of inevitability, can be exhilarating and glorious. What finally puts the final piece of the puzzle into place is the realization that at some point all industries mature or change business models.

Any system change requires new standards. The potential loss of business or disruption now all-of-a-sudden causes a standards frenzy. I like frenzies. What's causing this latest frenzy across education and workforce?

At the recent 8th Annual Meeting of the Groningen Declaration Network at the Universidad Popular Autónoma del Estado de Puebla in Mexico, the most common message I heard from leaders across over 20 countries, “we are all trying to do the same thing.” Wow. Yes of course the regional factors and variables are different for sure...but what does it all mean?

For PESC, we see this as a unique opportunity to enable global standardization and we have ‘put the petal-to-the-metal.’ At PESC, we do not host an exhibit hall, or an event ‘app’, or a coordinated sports event. We focus on you, the common business problems you face daily, your students and their needs, and how to make it all happen.

Together, our crowd-power can move mountains. What are we capable of? What are we able to achieve? At our Spring 2019 Data Summit, we've learned from past efforts and are now ready for real global solutions.

Thank you for joining us in Washington, D.C.! I look forward to a success event, many conversations and some good food with colleagues and friends!

-Michael





MULTIPLE STAKEHOLDERS. ONE VISION.

WWW.PESC.ORG

SPRING 2019

Postsecondary Electronic Standards Council proudly presents

SPRING 2019 DATA SUMMIT

STATE OF TECHNOLOGY & STANDARDS IN HIGHER EDUCATION

20TH ANNUAL BEST PRACTICES | MAY 8 – 10, 2019 | WASHINGTON, D.C.

The PESC Membership and the General Public are welcome and encouraged to register and attend!

The **SPRING 2019 DATA SUMMIT** includes a range of topics all targeting:

- access, integration and implementation of data systems;
- maintenance and promotion of data standards;
- community-driven innovation and development of technology in an open, transparent, neutral environment;
- data management, data privacy, data quality, and data collection and reporting;
- mobility and overall interoperability, and;
- other key factors that drive global education data systems development and technology.

PESC & PESC MEMBERS lead open, transparent, collaborative development across the education domain. Supporting this mission are PESC Partners: AACRAO, APEREO, ARUCC, A4L Community, Connecting Credentials, DXtera Institute, EMREX, Erasmus Without Paper, Groningen Declaration Network, HR Open Standards, SHEEO & U.S. CEDS.

PESC SPONSORS: ANNUAL DIAMOND SPONSOR MEMBERS: **Credentials Solutions, Digitary, National Student Clearinghouse, Oracle and Parchment**; ANNUAL GOLD SPONSOR MEMBER: **DegreeData**; SILVER SPONSOR MEMBER: **Educational Credential Evaluators**.

Join Us & Get Connected!

SPRING 2019

Postsecondary Electronic Standards Council proudly presents

SPRING 2019 DATA SUMMIT

STATE OF TECHNOLOGY & STANDARDS IN HIGHER EDUCATION

20TH ANNUAL BEST PRACTICES | MAY 8 – 10, 2019 | WASHINGTON, D.C.

WELCOME TO THE DUPONT CIRCLE HOTEL AND THE PESC SPRING 2019 DATA SUMMIT!

We are very pleased and excited to have you join us for a very timely and information-packed series of meetings and presentations. To ensure you have all the information you need for a successful event, some last-minute reminders:

- **THE SPRING 2019 DATA SUMMIT** begins at 8:30am on Wednesday morning May 8, 2019 in the Glover Room (1st Floor) and continues all day with General Sessions. Continental Breakfast and Registration open at 7:30am with Lunch at noon.
- **THE SPRING 2019 DATA SUMMIT** continues on Thursday May 9, 2019 at 8:30am with General Sessions until Lunch at noon. The rest of the day is comprised of Breakout Sessions and PESC's Annual Member Meeting at 5:00pm.
- **THE SPRING 2017 DATA SUMMIT** continues Friday May 10, 2019 at 8:30am with Breakout Sessions and concludes by noon.

WELCOME TO THE DUPONT CIRCLE HOTEL AND THE PESC SPRING 2019 DATA SUMMIT!

Highlights and additional important items:

- **ANNUAL SPRING RECEPTION** Join us at 6:30pm on Wednesday May 8, 2019 with hors d'oeuvres and a complimentary beverage of your choice.
- **20TH ANNUAL BEST PRACTICES** Awards Ceremony to 1st Place Winner on Wednesday May 8, 2019.
- **DRESS CODE** is business casual and all Summit events and activities are open to all registrants, unless otherwise noted.
- **WIRELESS INTERNET ACCESS** is provided in meeting rooms throughout the Summit free of charge.
- **NO EXHIBIT HALL, NO EVENT 'APP'** PESC's focus is on congregating, connecting & collaborating.
- **WWW.PESC.ORG** Check our website for all Summit information & things to do in Dupont Circle.

To respect presenters and other attendees, when attending General Sessions please ensure that all mobile phones are muted.

**Thank you for your continued support of PESC
and have a wonderful Summit!**

THANK YOU TO OUR DIAMOND, GOLD & SILVER SPONSORS WHO HELP MAKE THE PESC SPRING 2019 DATA SUMMIT POSSIBLE!



DIGITARY



ORACLE®



degreeData



>> KEYNOTE PANEL I <<

DIGITALIZATION: REVOLUTION OR EVOLUTION?

SCOTT CHENEY

Executive Director
Credential Engine

MATTHEW PITTINSKY, PH.D.

CEO
Parchment

JOELLEN SHENDY

Product Strategy Director
Workday

RICK TORRES

President & CEO
National Student Clearinghouse

>> KEYNOTE PANEL II <<

RESHAPING THE ECOSYSTEM

BOB SHEETS, PH.D.

RESEARCH PROFESSOR
GEORGE WASHINGTON INSTITUTE OF PUBLIC POLICY

NATASHA JANKOWSKI, PH.D.

DIRECTOR, EDUCATION POLICY, ORGANIZATION AND LEADERSHIP
NATIONAL INSTITUTE FOR LEARNING OUTCOMES ASSESSMENT

JASON TYSZKO

VICE PRESIDENT, CENTER FOR EDUCATION & WORKFORCE
US CHAMBER OF COMMERCE FOUNDATION

SILVIA BRUNET-JONES

TECHNICAL PROGRAM DIRECTOR, DATA DRIVEN EDUCATION
MICHAEL & SUSAN DELL FOUNDATION

>> PRE-SUMMIT TRAINING WORKSHOP – EDI, JSON, PDF & XML – DIGITAL DATA 101 <<

MATT BEMIS, ASSOCIATE REGISTRAR, UNIVERSITY OF SOUTHERN CALIFORNIA

JERRY BRACKEN, SOFTWARE ENGINEER, OFFICE OF INFORMATION TECHNOLOGY, BRIGHAM YOUNG UNIVERSITY

DOUG HOLMES, ACTING MANAGER, eTRANSCRIPTS, ONTARIO UNIVERSITIES' APPLICATION CENTRE

ALEX JACKL, PRESIDENT & CEO, BARDIC SYSTEMS

>> PRE-SUMMIT TRAINING WORKSHOP – DATA PRIVACY & PROTECTION 101 <<

MARY CHAPIN, CHIEF LEGAL OFFICER, VP & CORPORATE SECRETARY, NATIONAL STUDENT CLEARINGHOUSE

DOUG FALK, CIO & VP, NATIONAL STUDENT CLEARINGHOUSE

JULIA FUNAKI, ASSOCIATE DIRECTOR, AMERICAN ASSOCIATION OF COLLEGIATE REGISTRARS AND ADMISSIONS OFFICERS (AACRAO)

RICK SKEEL, DIRECTOR OF PRODUCT MANAGEMENT, ELLUCIAN

>> LEARNER CENTRIC HUB/SPOKE–SCALABILITY/PORTABILITY <<

BERT VAN DER GEEST

PROJECT DIRECTOR, BRITISH COLUMBIA MINISTRY OF EDUCATION

VICTORIANO GIRALT

CIO, UNIVERSITY OF MALAGA, FOUNDING PRESIDENT GDN

CATHY VAN SOEST

MANAGER, EDUCATIONPLANNERBC TRANSCRIPT SERVICES

TOM BLACK

Assistant Vice Provost & University Registrar
Johns Hopkins University

TAKIS DIAKOUIMIS

Chief Technology Officer, Digitary

JAMES KELLY

Senior Director of Technology
Educational Credential Evaluators

>> INTEGRATION & IMPLEMENTATION <<

KIRSTEN SCHROEDER

GLOBAL BUSINESS SERVICES PARTNER EDUCATION, EPA, OPM,
CONGRESSIONAL OFFICES, IBM

MEGAN COVAL

VICE PRESIDENT, POLICY & FEDERAL RELATIONS, NASFAA

KEN SAUER, PH.D.

ASSOCIATE COMMISSIONER & CHIEF ACADEMIC OFFICER, INDIANA
COMMISSION FOR HIGHER EDUCATION

JASON WEAVER

HEAD OF PRODUCT, PARCHMENT

TOM GREEN, PH.D.

ASSOCIATE EXECUTIVE DIRECTOR, AACRAO

MARK LEUBA

VICE PRESIDENT, PRODUCT MANAGEMENT, IMS GLOBAL

>> BREAKOUTS <<

- ACADEMIC CREDENTIALING & EXPERIENTIAL LEARNING TASK FORCE
- CANADIAN PESC USER GROUP
- CREDENTIAL ENGINE
- DATA PRIVACY & PROTECTION TASK FORCE
- EDExchange USER GROUP

>> BREAKOUTS <<

- GLOBAL EDUCATION ORGANIZATION (GEO) CODE USER GROUP
- GRONINGEN DECLARATION NETWORK UPDATE
- USCCF JDX
- JSON-LD TASK FORCE
- USCCF T3 INNOVATION NETWORK



>> 20TH ANNUAL BEST PRACTICES <<



NOVA SCOTIA COUNCIL ON ADMISSION & TRANSFER (NSCAT)

1ST PLACE WINNER FOR MyTRANSCRIPTS: ELECTRONIC TRANSCRIPT & DATA EXCHANGE SYSTEM

PROMOTING INNOVATION & INGENUITY IN THE APPLICATION & IMPLEMENTATION OF INTEROPERABLE DATA STANDARDS FOR BUSINESS NEEDS
THE PESC ANNUAL BEST PRACTICES COMPETITION IS HELD BY PESC TO HIGHLIGHT AND PROMOTE INNOVATION AND INGENUITY IN THE APPLICATION AND IMPLEMENTATION OF INTEROPERABLE DATA STANDARDS FOR BUSINESS NEEDS.

FIRST HELD IN 1999, THE COMPETITION IS OPEN TO COLLEGES & UNIVERSITIES, ASSOCIATIONS, ORGANIZATIONS, GOVERNMENT AGENCIES & DEPARTMENTS, DISTRICTS, CONSORTIA, NON-PROFIT AND COMMERCIAL SERVICE PROVIDERS AND OTHER EDUCATION STAKEHOLDERS THAT HAVE COLLABORATED TO DESIGN AND/OR ADOPT AN ELECTRONIC STANDARDIZATION INITIATIVE.

[Read More at www.PESC.org](http://www.PESC.org).

>> COMPETENCIES & CREDENTIALS USER GROUP <<

THE USER GROUP IS THE 3RD INITIATIVE TO LAUNCH UNDER PESC's **ACADEMIC CREDENTIALING & EXPERIENTIAL LEARNING TASK FORCE** WHICH FORMED AT THE FALL 2015 DATA SUMMIT IN WASHINGTON, D.C. THE PESC BOARD OF DIRECTORS AUTHORIZED THE FORMATION OF THIS TASK FORCE AT ITS ANNUAL RETREAT IN JUNE 2015 DUE TO THE IMPACT OF STUDENT MOBILITY ON THE INTERNATIONAL CREDENTIALING LANDSCAPE.

AS A DISCUSSION GROUP, CLEARINGHOUSES AND POINT OF CONTACT FOR THE EMERGENCE AND AWARENESS RELATED TO KNOWLEDGE, SKILLS AND ABILITIES, THE ACADEMIC CREDENTIALING & EXPERIENTIAL TASK FORCE COLLABORATED WITH CREDENTIAL ENGINE TO LAUNCH AND HOST THE **CREDENTIAL DATA MAPPING INITIATIVE** AT THE SPRING 2016 DATA SUMMIT.

THE 2ND MAJOR INITIATIVE WAS DEVELOPMENT, APPROVAL AND RELEASE OF A **COMMON XML CREDENTIAL FOR CERTIFICATES, DEGREES & DIPLOMAS** IN MARCH 2017 USED BY STANFORD UNIVERSITY AND JOHNS HOPKINS UNIVERSITY (AS PART OF AACRAO'S COMPREHENSIVE LEARNER RECORD INITIATIVE).

TOPICS INCLUDED IN THE MISSION OF THE USER GROUP, IN ADDITION TO COMPETENCIES & CREDENTIALS: **ARTIFICIAL INTELLIGENCE, BUSINESS ANALYTICS, BLOCKCHAIN, COURSES, CURRICULUM, DISTRIBUTED LEDGER TECHNOLOGY, OPEN BADGES & PATHWAYS.**

THE COMPETENCIES & CREDENTIALS USER GROUP WILL ALSO ESTABLISH FORMAL LINKS WITH CREDENTIAL ENGINE, USCCF's JDX & T3 INNOVATION NETWORK, JSON-LD TASK FORCE, EdExchange User Group, GLOBAL EDUCATION ORGANIZATION (GEO) CODE USER GROUP AND STANDARDS DEVELOPMENT FORUM.

[PESC MEMBERS – SIGN UP ONLINE AT WWW.PESC.ORG](http://www.PESC.org).

>> HOSTING <<

AACRAO SPEEDE COMMITTEE
CREDENTIAL ENGINE
USCCF JDX & T3 INNOVATION NETWORK

Leading the
**ESTABLISHMENT & ADOPTION OF
TRUSTED, OPEN DATA STANDARDS
ACROSS THE EDUCATION DOMAIN**



EDExchange

DATA EXCHANGE PLATFORM

TRUSTED. OPEN. TRANSPORT.

[HTTPS://EDEXCHANGE.PESC.ORG](https://edexchange.pesc.org)

>> SESSION TOPICS <<

- BLOCKCHAIN AND ARTIFICIAL INTELLIGENCE
- BLOCKCHAIN AND PESC COMPATIBILITY
- COMPREHENSIVE LEARNER RECORD
- DATA TRANSPORT WITH PESC EDXCHANGE
- DIGITAL CREDENTIALS

>> SESSION TOPICS <<

- IMPLEMENTATION OF PESC HIGH SCHOOL TRANSCRIPT
- LIFELONG LEARNING
- PATHWAYS
- PERSPECTIVE FROM THE CIO
- STUDENT UNIT RECORD

>> WHO'S ATTENDING? <<

REPRESENTATIVES FROM THE FOLLOWING ORGANIZATIONS ARE
ATTENDING PESC'S SPRING 2019 DATA SUMMIT:

AMERICAN ASSOCIATION OF COLLEGIATE REGISTRARS & ADMISSION OFFICERS
ASSOCIATION OF AMERICAN MEDICAL COLLEGES
ACADEMYONE
ACCESS 4 LEARNING COMMUNITY
ASCENDIUM EDUCATION
BARDIC SYSTEMS
BILL AND MELINDA GATES FOUNDATION
BRIGHAM YOUNG UNIVERSITY
BRITISH COLUMBIA MINISTRY OF EDUCATION
CALIFORNIA COMMUNITY COLLEGES
CALIFORNIA STATE UNIVERSITIES
CARNEGIE MELLON UNIVERSITY
COLLEGE BOARD
COLLEGE SOURCE
CREDENTIAL ENGINE
DEGREE DATA
DIGARC
DIGITARY
EDUCATIONAL CREDENTIAL EVALUATORS
EDUCATIONPLANNERBC
ELLUCIAN
FEDERATION OF STATE MEDICAL BOARDS
FLORIDA INTERNATIONAL UNIVERSITY
GEORGE WASHINGTON INSTITUTE FOR PUBLIC POLICY
HR OPEN STANDARDS CONSORTIUM
IBM
IMS GLOBAL
INSTRUCTIONAL MEDIA + MAGIC

>> WHO'S ATTENDING? <<

REPRESENTATIVES FROM THE FOLLOWING ORGANIZATIONS ARE
ATTENDING PESC'S SPRING 2019 DATA SUMMIT:

JENZABAR
JOHNS HOPKINS UNIVERSITY
MICHAEL AND SUSAN DELL FOUNDATION
MIDWESTERN HIGHER EDUCATION COMPACT
NATIONAL ASSOCIATION OF STUDENT FINANCIAL AID ADMINISTRATORS
NATIONAL ASSOCIATION OF STUDENT PERSONNEL ADMINISTRATORS
NATIONAL STUDENT CLEARINGHOUSE
NATIONAL INSTITUTE FOR LEARNING OUTCOMES ASSESSMENT
ORACLE
ONTARIO UNIVERSITIES' APPLICATION CENTRE
PARADIGM
PARCHMENT
QUALITY INFORMATION PARTNERS
SAN DIEGO STATE UNIVERSITY
SPEEDE
TALEMETRY
UNIVERSITY OF DENVER
UNIVERSITY OF MALAGA
UNIVERSITY OF MICHIGAN
UNIVERSITY OF PHOENIX
UNIVERSITY OF SOUTHERN CALIFORNIA
US CHAMBER OF COMMERCE FOUNDATION
VIRGINIA DEPARTMENT OF EDUCATION
WORLD EDUCATION SERVICES
WESTERN GOVERNORS UNIVERSITY
WORKDAY



>> UPCOMING EVENTS <<


DXTERA INSTITUTE | 2019 ACADEMY
JUNE 10 – 12, 2019 | INDIANAPOLIS
AACRAO TECH & TRANSFER | ANNUAL CONFERENCE
JULY 14 – 16, 2019 | LAS VEGAS
U.S. IES & NATIONAL CENTER FOR EDUCATION STATISTICS
NATIONAL FORUM & STATS-DC CONFERENCE
JULY 22 – 26, 2019 | WASHINGTON, D.C.

Washington, D.C.
May 7 – 10, 2019
Warm
18c/65f



PESC Spring 2019 Data Summit
@ Dupont Circle Hotel
1500 New Hampshire Ave NW
Washington, D.C. 20036
www.pesc.org



 Metro is accessible.

N

Map is not to scale

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Tuesday May 7, 2019

Noon – 1.30pm

Registration | Pre-Summit Training Workshops
Georgetown Room 2nd Floor

PRE-SUMMIT TRAINING WORKSHOPS

1.30pm – 3.00pm

Pre-Summit Training Workshop

Theme: *Development & Production*

➤ **Digital Data 101 | EDI, PDF, XML & JSON**

Featured Speakers:

- **Matt Bemis, Associate Registrar, University of Southern California**
- **Jerry Bracken, Software Engineer, Office of Information Technology, Brigham Young University**
- **Doug Holmes, Acting Manager, eTranscripts, Ontario Universities' Application Centre**
- **Alex Jackl, President & CEO, Bardic Systems**

Moderator:

- **Michael Sessa, PESCE President & CEO**

A segment of your overall business processes may rely on EDI, PDF and/or XML. Ensuring data quality, data integrity, and data privacy and protection requires constant meticulous care. As more colleges, universities, states, provinces, vendors and service providers, application centers, systems and networks adopt PESC Approved EDI, PDF and XML Standards and migrate toward automated, electronic, machine-to-machine processing, the need to maintain and update these systems and networks also increases.

3.00pm – 3.30pm

Break

3.30pm – 5.00pm

Pre-Summit Training Workshop

Theme: *Development & Production*

➤ Data Privacy & Protection 101

Featured Speakers:

- **Mary Chapin, Chief Legal Officer, Vice President & Corporate Secretary, National Student Clearinghouse**
- **Doug Falk, Chief Information Officer & Vice President, National Student Clearinghouse**
- **Julia Funaki, Associate Director, American Association of Collegiate Registrars & Admissions Officers**
- **Rick Skeel, Director of Product Management, Ellucian**

Moderator:

- **Michael Sessa, PESC President & CEO**

With newly emerging privacy and protection rules, which join FERPA and GDPR, ensuring proper and accurate data exchange is the highest priority for PESC. Through establishment of the Data Privacy & Protection Task Force, PESC Members have identified several critical updates for adoption across all PESC EDI, JSON and XML Approved Standards. The Data Privacy & Protection Task Force is an open collaborative group spanning policy, practice and technology that serves as an information clearinghouse for the education community, focused on technical implementation of data privacy & protection rules and regulations. The Task Force ensures that PESC is informed and prepared for any corresponding standards development and production of PESC approved standards. Topics for the Workshop include: the charge of the Task Force; the areas the Task Force is tackling; education and background on GDPR and other laws (e.g. CCPA and other country privacy laws); conversations about GDPR compliance; an overview and progress report of the efforts of the Task Force; Task Force recommendations to PESC and community about flagging records; the SIS vendor perspective as it pertains to controllers and processors of data; clarifying the different roles of processors and how they are different within GDPR; how a vendor provides processing services (examples National Student Clearinghouse, other) and how organizations will honor privacy flags; use of a contract between controllers and processors to direct processing on records with flags; the AACRAO membership institution view and how it will enable institutions to be compliant with GDPR.

5.00pm

Adjourn for Day

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Wednesday May 8, 2019

WELCOME!

- **Michael Sessa, PESCE President & CEO**

Theme: Learner/Student-Centric, Hub & Spoke Models

Featured Speakers:

- Bert van der Geest, Consultant to the Ministry of Education, British Columbia
- Cathy van Soest, Manager, EducationplannerBC Transcript Services

Moderator:

- **Doug Holmes, Acting Manager, eTranscripts, Ontario Universities' Application Centre**

Exciting work has been underway to support students with options for immediate electronic delivery of their high school transcripts throughout British Columbia. At the press of a button, current and former high school students can now view, send and track their transcripts dynamically. The British Columbia Ministry of Education's new **Student Transcripts** Service allows students to send their transcripts to select post-secondary institutions via EducationPlannerBC's XML transcript exchange system. Five key BC universities have implemented the new approach to transcript delivery since Sept 2018. Plans are in place for other institutions both within BC and across Canada to connect to this service. Join us as we talk about our experiences to implement this significant business transformation and the partnerships required to make this opportunity a reality. We will focus on the benefits and challenges we encountered as the project unfolded and how the implementation of these high school transcript PESC standards is anticipated to fundamentally change admissions support for students.

Glover Park 1st Floor
Theme: Learner/Student-Centric, Hub & Spoke Models

Featured Speaker:

- Victoriano Giralt, Chief Information Officer, University of Malaga

Moderator:

- **Doug Falk, Chief Information Officer and Vice President, National Student Clearinghouse**

Description:

10.00am – 10.30am **Break**

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Wednesday May 8, 2019

10.30am – Noon

KEYNOTE PANEL I

Keynote Panel I:

Glover Park 1st Floor

Theme: Digitalization | Revolution or Evolution?

Featured Speakers:

- **Scott Cheney, Executive Director, Credential Enging**
- **Matthew Pittinsky, Ph.D., CEO, Parchment**
- **Joellen Shendy, Product Strategy Director, Workday**
- **Rick Torres, President & CEO, National Student Clearinghouse**

Moderator:

- **Anne Valentine, President, DegreeData**

In an environment of constant change, a proactive disposition is sometimes over-shadowed by a reactive one. How do we as a new ecosystem of education and workforce overcome a reactive disposition so that technology and changing factors do not happen to us, but in concert and cooperation with us? Why is the ecosystem changing? What are the driving factors of this new ecosystem?

With the 'traditional' student model now long gone, institutions alone need much support as there are many implications in moving forward, from a lack of standards, to lack of support, identifying the correct sources of data and capturing that data. At the same time, advances in education technology are causing a revolution and may continue at a faster pace. How do we reconcile the reluctant evolution in a broader discussion in which change seems unavoidable?

This esteemed panel of experts will discuss the new, expanding ecosystem, what data are needed to move education and workforce forward, how we must work to bring all data sources together to establish a more robust, comprehensive learner record, best practices and initiatives to leverage, support and nurture the growth of a new world.

Noon – 1.30pm

Lunch – Awards Ceremony

1.30pm – 3.00pm

Keynote Panel II:

Glover Park 1st Floor

Theme: Reshaping the Ecosystem

Featured Speakers:

- **Bob Sheets, Ph.D., Research Professor, George Washington Institute of Public Policy**
- **Silvia Brunet-Jones, Technical Program Manager, Data Driven Education, Michael and Susan Dell Foundation**
- **Natasha Jankowski, Ph.D., Director, National Institute for Learning Outcomes Assessment**
- **Jason A. Tyszko, Vice President, Center for Education & Workforce, US Chamber of Commerce Foundation**

The escalating employability gap now demands better data, and more data that reflects workforce-ready knowledge, skills and abilities. A demand for better data must be met by those that supply it, but what data exactly? In order to establish a healthy, thriving ecosystem, the workforce sector is emerging to identify data, technology and standards needed to support the infrastructure, and focus on key stakeholder use cases. Under the principles of linked, open data and a platform of 'searchable & discoverable' combined with emerging technologies like artificial intelligence and distributed ledger technology, leaders in the new ecosystem will discuss their missions, visions, impacts on education and workforce, and share future plans for development, pilots, initiatives and ways to participate.

3.00pm – 3.30pm

Break

3.30pm – 4.00pm

Group Photo

Dupont Circle Fountain



SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Wednesday May 8, 2019

4.00pm – 4.30pm

PESC EdExchange: A Pilot's Journey

Glover Park 1st Floor

Theme: Portability & Scalability

Featured Speaker:

- **Takis Diakoumis, Chief Technology Officer, Digitary**
- **James Kelly, Senior Director of Technology, Educational Credential Evaluators**

Moderator:

- **Monterey Sims, Director of Admissions & Evaluations, University of Phoenix**

Description:

4.30pm – 5.30pm

Blockchain & PESC Compatibility

Open Discussion Exploring Options and Opportunities

Glover Park 1st Floor

Theme: New World, New Ecosystem

Moderator:

- **Michael D. Sessa, President & CEO, PESC**

All data needs standards. PESC's long-standing focus on data allows reliable compatibility with all technologies from EDI, PDF and XML, to JSON-LD, Blockchain and Artificial Intelligence. As institutions and organizations become more familiar with Blockchain's application in particular, more and more opportunities emerge for collaboration between Blockchain and PESC, and EdExchange and Global Education Organization (GEO) Code as well. This session will explore these opportunities, identify key factors driving adoption, discuss process flows, options for data access and data exchange, and next steps for development and pilots at PESC.

6.30 – 7.30pm

Annual Spring Reception

Glover Park 1st Floor

7.30pm

Dinner on Your Own



SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Thursday May 9, 2019

Glover Park 1st FloorGlover Park 1st Floor

Theme: *Integration & Implementation*

Featured Speaker:

- **Kirsten Schroeder, Global Business Services Partner, Education, EPA, OPA, Congressional Offices, IBM**

Moderator:

- **Chris Jackson, CEO, Paradigm**

New emerging technologies are disrupting all industries and nations. Opportunities for improved data management, support and support are inspiring big picture thinking and investment. Federal governments, as structured hub-and-spokes, are prime candidates to benefit from the promise and potential of large-scale application and functionality, and the benefits included for privacy and security. What's driving governments and their interest in artificial intelligence and blockchain? Are there lessons to be learned from other industries? This session will discuss the main drivers and trends observed in government and large-scale applications.

School Courses for the Exchange of Data (SCED): K12 and Beyond

Glover Park 1st Floor

Theme: *Integration & Implementation*

Featured Speakers:

- Rachel Kruse, U.S. National Forum on Education Statistics
- Susan Williams, U.S. National Forum on Education Statistics

The National Forum on Education Statistics (the Forum) is a collaborative group that includes representatives from federal, state, and local education agencies and other organizations with an interest in education data. The Forum strives to provide states, districts, and schools with best practice resources on topics related to the collection, maintenance, and use of elementary and secondary education data. One such resource is the School Courses for the Exchange of Data (SCED). SCED is a voluntary, common classification system for prior-to-secondary and secondary school courses that can be used to compare course information, maintain longitudinal data about student coursework, and efficiently exchange course-taking records. SCED is designed to be flexible enough that education agencies can modify it to meet their needs. This session will provide an overview of SCED and an in-depth look at how the Iowa Department of Education is using SCED to build postsecondary connections, including using SCED to classify the high school courses students can complete as part of the automatic admission process to Iowa public universities.

NASFAA Federal Update

Glover Park 1st Floor

Theme: *Integration & Implementation*

Featured Speaker:

- **Megan Coval, Vice President, Policy & Federal Relations, National Association of Student Financial Aid Administrators**

Moderator:

- Francisco Valines, Director of Financial Aid, Florida International University

This NASFAA Federal Update will provide a high-level landscape of the Washington political climate with a particular focus on federal financial aid policy over the past year and how it has impacted students and institutions. Overall trends and hot topics in student aid will be discussed along with an overview of proposals for Reauthorization of the Higher Education Act of 1965, as amended, including the interest in a student unit record. The session will also focus on predictions for how student aid funding will fare in the upcoming years.

10.00am – 10.30am **Break**

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Thursday May 9, 2019

10.30am – 11.00am **Indiana Pathways**

Glover Park 1st Floor

Theme: *Integration & Implementation*

Featured Speaker:

- **Ken Sauer, Ph.D., Associate Commissioner & Chief Academic Officer, Indiana Commission for Higher Education**
- **Jason Weaver, Head of Product, Parchment**

Moderator:

- **Larry Fruth, Executive Director, A4L Community**

Description:

11.00am – 11.30am Comprehensive Learner Records – A National & International Movement

Glover Park 1st Floor

Theme: *Integration & Implementation*

Featured Speaker:

- **Tom Green, Ph.D., Associate Executive Director, American Association of Collegiate Registrars & Admissions Officers**

Moderator:

- **Melanie Gottlieb, Deputy Director, American Association of Collegiate Registrars & Admissions Officers**

AACRAO's Comprehensive Learner Records Project and discuss the next multi-year phases of the project. The major driver is the official student record expanding beyond the traditional transcript or diploma to a digital learner record. Focused on what is learned in higher education, rather than what was taken or the degree conferred, we are in a period of rapid experimentation. Examples of this work and a brief overview of the landscape will be provided. Suggestions for possible directions toward standards will also be presented.

11.30am – Noon Making Connections - Innovations for Lifelong Learning

Glover Park 1st Floor

Theme: *Integration & Implementation*

Featured Speaker:

- **Mark Leuba, Vice President, Product Management, IMS Global**

Moderator:

- **Alex Jackl, President & CEO, Bardic Systems**

Collaborative, responsive, adaptable and learner-centric - these are not terms we typically associate with education institutions or for that matter, standards organizations. But the times, they are a'changing, and technology and standards can play a critical enabling role in education's evolution. Historically, ed-tech technologies helped automate established processes, but the next wave of innovation will focus on enabling connections and by doing so make new models of education, collaboration and lifelong learning possible. Mark Leuba, will present IMS Global's open ed-tech standards that enable connected, lifelong learning.

Noon – 1.30pm

Lunch – It's All About the Data: History on Standards in Education

- **Michael D. Sessa, PESC President & CEO**

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Thursday May 9, 2019

1.30pm – 3.00pm **Breakout Sessions**

BREAKOUTS

T3 Innovation Network & JDX

Glover Park 1st Floor

Chair:

- **Jason Tyszko, Vice President, Center for Education and Workforce, US Chamber of Commerce Foundation**

Web/Phone:

Invitation Only:

EdPath Standards Workgroup

Georgetown Room 2nd Floor

Chair::

- **Mark Cohen, Product Manager, California Community Colleges Technology Center**

Web/Phone:

- **PESC Line 1-888-205-5513 (USA /Canada toll free), 952016# <https://pesc.globalmeet.com/JSON2017>**

The EdPlan Standard is a data format used by institutions and vendors to describe the Education Plans established by institutions and students that map student journeys toward certificates and degrees. This Workgroup initiated on its own in California and will be adopted by PESC as a development workgroup.

Standards Development Forum for Education

Kalorama Room 2nd Floor

Chairs::

- **Kristi Blabaum, Integration Analyst, Ascendium Education**
- **Susan McCrackin, Senior Director of Financial Aid Methodology, College Board**
- **Michael Morris, Director, Quality Management, EIS-Quality Assurance, ACT**

Founded August 4, 2002, the Standards Development Forum for Education includes all Workgroups, development initiatives & efforts; and is the authoritative body that governs resource mapping and maintenance of education ecosystem schemas, taxonomies shared code sets in various technologies (e.g. EDI, XML, PDF, JSON, etc.). The Standards Development Forum is governed by the Change Control Board (CCB), Education Record User Group (ERUG), Technical Advisory Board (TAB) and Steering Committee; with reporting directly to the PESCB Board of Directors. <https://www.pescb.org/standards-development-1.html>

3.00pm – 3.30pm **Break**

Thursday May 9, 2019

3.30pm – 5.00pm **Breakout Sessions**

BREAKOUTS

Canadian PESC User Group

Georgetown Room 2nd Floor

Co-Chairs:

- **Doug Holmes, Acting Manager, eTranscripts, Ontario Universities' Application Centre**
- **Cathy van Soest, Manager, EducationplannerBC Transcript Services**

Web/Phone:

- See CanPESC List.

See CanPESC list for meeting agenda, webinar and teleconference logistics, and additional information. CanPESC is an open, collaborative group of volunteer stakeholders ensuring PESC's Mission, PESC Approved Standards, Technology & Services support and incorporate the needs and interests of Canadian students, institutions and stakeholders. <https://www.pesc.org/canadian-pesc-user-group.html>

EdExchange User Group

Kalorama Room 2nd Floor

Co-Chairs:

- **Mark Cohen, Product Manager, California Community Colleges Technology Center**
- **David Moldoff, CEO & Founder, AcademyOne**

EDEXCHANGE is a data exchange service offered and operated by PESC and directly managed by PESC Members. The foundation of the service is a directory 'look up' server that lists institutions, service providers and others that are able to exchange data electronically. The server itemizes the technical capacity of each, which document types are supported electronically and additional identifier data. To exchange data, users then connect directly with the respective recipient. The EDEXCHANGE User Group established a Steering Committee in 2015, ultimately governed by the PESC Board of Directors, to administer more direct management, oversight and strategic planning of EDEXCHANGE. The Steering Committee is made up of nine PESC member representatives, is diverse, representing the various sectors across education, is semi-autonomous, and is responsible for the overall management and operation of EDEXCHANGE.

<https://www.pesc.org/edexchange-user-group.html>

JSON-LD Task Force

Glover Park 1st Floor

Chair:

- **Michael Morris, Director, Quality Management, EIS-Quality Assurance, ACT**

Web/Phone:

- **PESC Line 1-888-205-5513 (USA /Canada toll free), 952016# <https://pesc.globalmeet.com/JSON2017>**

The JSON-LD Task Force is an open, collaborative group of volunteers spanning policy, practice and technology serving as an information clearinghouse for the education community focused on training, education and production of tools, resources and data standards in JSON-LD. <https://www.pesc.org/json-ld-task-force-1.html>

5.00pm

Adjourn for Day

5.00pm – 6.00pm

PESC Member Meeting



SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Friday May 9, 2019

8.30am – 10.00am **Breakout Sessions**

BREAKOUTS

All Together Now – Cross Sector Collaboration

Glover Park 1st Floor

Featured Speaker:

- **Matt Gee, CEO & Founder, BrightHive**
- **Jim Goodell, QIP**
- **Alex Jackl, President & CEO, Bardic Systems**
- **Jeanne Kitchens, Associate Director, Southern Illinois University Center for Workforce Development**
- **Bob Sheets Ph.D., Research Professor, GWIPP**

APIs are Not Enough!

The prevalence of APIs can create an impression that offering and using them, is a good enough solution for sharing credential, competency, job, and other information. It's true that when systems can be mapped to each other's language, data can be shared. However, mapping languages from system to system doesn't scale well. As a result, APIs alone are not the sole solution to interoperability, scalability, or ease of use when sharing data. This session is to start a conversation about the implications of improving data access and scalability that can lead to agreement on the building blocks and guidance for developers, employers, credentialing organizations, and government. Join us to discuss solutions for scalable efforts that can make a lasting impact on the talent marketplace.

Data Privacy & Protection Task Force

Georgetown Room 2nd Floor

Co-Chairs:

- **Doug Falk, Chief Information Officer and Vice President, National Student Clearinghouse**
- **Julia Funaki, Association Director, American Association of Collegiate Registrars and Admissions Officers**

Web/Phone:

- **PESC Line 1-888-205-5513 (USA /Canada toll free). 952016#**

The Data Privacy and Protection Task Force is an open collaborative group spanning policy, practice & technology serving as in information clearinghouse for the education community focused on technical implementation of data privacy & protection rules and regulations ensuring PESC and the education community are prepared for any corresponding standards development and production of PESC Approved Standards. <https://www.pesc.org/data-privacy—protection.html>

GEO Code User Group

Kalorama Room 2nd Floor

Co-Chairs:

- **Matt Bemis, Associate Registrar, University of Southern California**
- **James Kelly, Senior Director of Technology, Educational Credential Evaluators**

Global Education Organization (GEO) CODE is a 'look-up' service offered & operated by PESC & directly managed by PESC Members. The foundation of the service is a directory 'look up' server listing active and inactive institutions, including historical data, additional demographic and identifier data. The GEO Code User Group established a Steering Committee in 2017 at the Spring 2017 Data Summit, ultimately governed by the PESC Board of Directors, to administer more direct management, oversight and strategic planning of GEO Code. The Steering Committee is made up of nine (9) PESC Member representatives, is diverse, representing the various sectors across education, is semi-autonomous, and is responsible for the functional management of GEO Code. <https://www.pesc.org/geo-code-user-group.html>

10.00am – 10.30am **Break**

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Friday May 9, 2019

10.30am - Noon

Breakout Sessions

BREAKOUTS

Academic Credentialing & Experiential Learning Task Force

Glover Park 1st Floor

Co-Chairs:

- **Alex Jackl, President & CEO, Bardic Systems**
- **Joellen Shendy, Product Strategy Director, Workday**

Web/Phone:

- **PESC Line 1-888-205-5513 (USA /Canada toll free), 952016# <https://pesc.globalmeet.com/AcademicCredentialing>**

Leaders of PESC's Academic Credentialing & Experiential Learning Task Force host leaders of AACRAO's Comprehensive Learner Record and IMS Global's Comprehensive Learner Record & Open Badges for an open discussion on alignment across initiatives, mapping of data elements across specifications and standards, relationship to Mapping Initiative, lifelong learner perspective, and next steps including PESC's Launch of Competency & Credential User Group. www.pesc.org www.aacrao.org www.imsglobal.org

AACRAO SPEEDE Committee

Georgetown Room 2nd Floor

Chair:

- Joey LaConte, Associate Registrar, Technology, Communications & Reporting. Technology, Communications & Reporting, University of Colorado Boulder

Web/Phone:

- See AACRAO SPEEDE.

See AACRAO SPEEDE for meeting agenda, webinar and teleconference logistics, and additional information. SPEEDE is the AACRAO Committee for Standardization of Postsecondary Education Electronic Data Exchange. The AACRAO SPEEDE Committee is a standing committee of AACRAO that represents the interests of the AACRAO community in developing and promoting the implementation of standards for electronic exchange of student education data. To accomplish these goals the committee members facilitate webinars, sessions, workshops and roundtables at the AACRAO Annual Meeting, Technology and Transfer Conference and Regional AACRAO Conferences. Committee members are actively engaged in various P20W Education Standards Council (PESC) workgroups focused on creating new standards, updating existing standards and identifying opportunities to increasing interoperability and adoption. If you have a question for the committee, need help with EDX, or are interested in serving on the committee send an email to speede@aacrao.org.

Groningen Declaration Network Update

Kalorama Room 2nd Floor

Moderators:

- **Attendees of GDN's 8th Annual Meeting – Puebla April 24 – 26, 2019**

The Groningen Declaration Network seeks common ground in best serving the academic and professional mobility needs of citizens world wide by bringing together key stakeholders in the Digital Student Data Ecosystem at its Annual Meeting. OUR GOAL: We make Digital Student Data Portability happen. Citizens world wide should be able to consult and share their authentic educational data with whomever they want, whenever they want, wherever they are. JOIN US: We build a network of like-minded organizations and people who see the potential of the Groningen Declaration. Get involved to further global human capital cross border mobility and make it happen.

www.groningendeclaration.org

Noon

Adjourn




SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

- Program -

About Our Speakers



Before going to Capitol Hill, Scott formed his own consulting firm, working with a number of states, companies, foundations, and think tanks on a host of education, training and employment issues. He also held positions with the National Alliance of Business the American Society for Training and Development, the U.S. Chamber of Commerce, and worked with foster-care, homeless youth, and adult literacy programs. His first paycheck in this career path came from Dr. Seuss. Scott holds a Bachelor of Arts in Philosophy from Carleton College, and a Master of Public Policy degree from Georgetown University.

SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

- Program -



SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

- Program -



SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

- Program -



SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

- Program -



SPRING 2019 DATA SUMMIT | 20TH ANNUAL BEST PRACTICES IN EDUCATION DATA SYSTEMS

Expanding PESC's AMBASSADOR PROGRAM

To activate awareness & adoption of data standards, PESC and its Members promote digitalization and advocate for automated, machine-to-machine connectivity. In supporting and governing PESC, Members are the best spokespeople to champion the need & value of data standards and communicate a common, shared vision of seamless life-long learning.

PESC established International Ambassadors in 2018 after partnering with the Groningen Declaration Network (GDN). **International PESC Ambassadors** were established for leaders from PESC Members who also attend the Annual GDN Meetings held around the world to ensure a unified message. With 15 International PESC Ambassadors at last year's Annual GDN Meeting in Paris, PESC was very well represented and our mission resonated clearly.

In expanding the Ambassador Program, PESC adds several new categories based on key topics & functions. Sign up today to help spread the word and expand the movement!

Join one or all so that PESC is well represented year-round!

- 1) PESC International Ambassadors
- 2) PESC Ambassadors for **Credentialing**
- 3) PESC Ambassadors for **Transcripts**
- 4) PESC Ambassadors for **EdExchange**
- 5) PESC Ambassadors for **GEO Code**

What's expected as a PESC Ambassador? PESC will list you on its website, promote you as a contact person & liaison for PESC, and you agree to be available should someone contact you with questions about PESC, data standards and interoperability.

To sign up to be a PESC Ambassador, please visit www.PESC.org or contact Jennifer Kim at PESC.



STANDARDS MAKE THE WORLD GO 'ROUND

PESC Members Make Standards Free & Open

Join the Effort. Join the Community. Join PESC.

www.PESC.org



FOR IMMEDIATE RELEASE
MAY 3, 2019
CONTACT:
JENNIFER KIM
+1.202.261.6516



NOVA SCOTIA COUNCIL ON ADMISSION & TRANSFER AWARDED 1ST PLACE IN 20TH BEST PRACTICES COMPETITION

MyTRANSCRIPTS

NOVA SCOTIA'S ELECTRONIC TRANSCRIPT & DATA EXCHANGE SYSTEM

Washington, D.C. The Board of Directors of PESC is pleased to announce the Nova Scotia Council on Admission & Transfer (NSCAT) as 1st Place Winner of PESC's 20th Annual Best Practices Competition for its submission, ***"MyTranscripts | Nova Scotia's Electronic Transcript & Data Exchange System."***

From the award winning submission,

"Nova Scotia is home to eleven universities and colleges, with 29 campuses located throughout the province. Each year over 13,000 students begin their post-secondary education journey at one of these institutions. Many of our students come from within the province, but over 40% are attracted here from elsewhere in Canada and over 145 countries worldwide. The MyTranscripts Hub is an integral part of the success of the MyTranscripts solution. It provides secure and reliable delivery of transcripts among the member institutions. MyTranscripts (Phase 1) is fully implemented at the ten institutions that admit students directly from high school."

"The Nova Scotia Council on Admission and Transfer is honoured to be awarded 1st Place in PESC's 20th Anniversary Best Practices Competition. We would like to thank all our project partners hard work and ongoing commitment, as well as the Government of Nova Scotia for their support of this initiative," states Ruth Blades, MLIS, PMP - Operations Manager, Nova Scotia Council on Admission & Transfer. "Our success would not be possible without the standards developed and maintained by PESC, and we look forward to continuing to support the development of these tools that facilitate post-secondary data exchange," she continued.

The award-winning submission received high praise from the PESC Board for its open and broad collaborative approach, sophisticated automation, transparent capacity, use of standards and innovative technology employed, and for the positive results and outcomes it immediately produces.

Francisco Valines, Director of Financial Aid at Florida International University and PESC Board Member (former Board Chair), stated in scoring the submission with a perfect score, “Wonderfully organized...amazing to see what they’ve accomplished for their students!”

The award-winning submission made by NSCAT is posted on the PESC website with prior winners at <http://www.PESC.org>. An Awards Ceremony will be held during the General Sessions at PESC's Spring 2019 Data Summit being held May 7-10, 2019 in Washington DC at the Dupont Circle Hotel.

About NSCAT

Established in 2016, the Nova Scotia Council on Admission and Transfer (NSCAT) was created to develop and manage collaborative systems that support student enrolment, mobility and success. For more information about NSCAT, please contact visit <https://www.mynsfuture.ca/>.

About PESC

ESTABLISHED IN 1997 AT THE NATIONAL CENTER FOR HIGHER EDUCATION & HEADQUARTERED IN WASHINGTON DC, PESC is an international, 501 (c)(3) non-profit, community-based, umbrella association of data, software and education technology service providers; schools, districts, colleges and universities; college, university and state/provincial systems; local, state/provincial and federal government agencies; professional, commercial and non-profit organizations; and non-profit associations & foundations.

LEADING THE ESTABLISHMENT & ADOPTION OF TRUSTED, OPEN DATA STANDARDS ACROSS THE EDUCATION DOMAIN. Through open and transparent community participation, PESC enables cost-effective connectivity between data systems to accelerate performance and service, to simplify data access and research, and to improve data quality along the Education lifecycle. PESC envisions global interoperability within the Education domain, supported by a trustworthy, inter-connected network built by and between communities of interest in which data flows digitally and seamlessly from one community or system to another and throughout the entire eco-system when and where needed without compatibility barriers but in a safe, secure, reliable, legal, and efficient manner.

PESC IS SPONSORED ANNUALLY by (Diamond) [Credentials Solutions](#), [Digitary](#), [National Student Clearinghouse](#), [Oracle](#) and [Parchment Inc.](#); (Gold) [DegreeData](#); (Silver) [ECE](#). PESC partners include [AACRAO](#), A4L Community, [APEREO](#), [ARUCC](#), DXtera Institute, [EMREX](#), [EWP](#), [Groningen Declaration Network](#), [SHEEO](#), and the [US Department of Education's Common Education Data Standards \(CEDS\) Initiative](#).

PESC IS A PROUD EXHIBITOR at [AACRAO's Annual Meeting](#), [ARUCC's Annual Meeting](#), and the [Annual STATS-DC Conference](#) of the National Center for Education Statistics (NCES) of the US Department of Education.

PESC IS A PROUD SPONSOR of [AIR's Annual Conference](#) and of the [Annual California Electronic Transcripts Workshop and CCCApply](#).

PESC IS A PROUD MEMBER/AFFILIATE/SIGNATORY of [AACRAO](#), of the [NCES National Forum on Education Statistics](#), and of the [Groningen Declaration Network](#).

PESC HAS A STRONG HISTORY that includes AACRAO, SPEEDE, EDI, ANSI, X12, Canada, the US Department of Education and Y2K. Read more at www.PESC.org.

IN FULFILLING ITS NON-PROFIT MISSION, all PESC Approved Standards are available to the education community online free of charge at www.PESC.org.

ABOUT PRIVACY While PESC promotes the implementation and usage of data exchange standards, PESC does not set (create or establish) policies related to privacy and security. Organizations and entities using PESC Approved Standards and services should ensure they comply with FERPA and all local, state, federal and international rules on privacy and security as applicable. For more information, see www.PESC.org.

About PESC & CANADA

The Canadian presence and influence within PESC has existed since the very formation of PESC. As Canadian students cross provincial and international borders to attain their education, the need for institutions, software providers and systems vendors that support Canadian and international markets to ensure mobility and interoperability has never been greater.

The formation of the Canadian PESC User Group (CanPESC) in 2011 solidified the importance of Canada's role within PESC and drew together many Canadians from across the country to work towards a common goal. Its main mission is twofold:

- To encourage participation in PESC workgroups developing PESC APPROVED STANDARDS
- To promote and educate Canadian stakeholders on the importance of data standards and interoperability, thereby avoiding duplication of efforts, costs and of data standards.

As the voice and official committee representing Canadian interests, CanPESC also serves in a liaison role. It coordinates and communicates its efforts across all provinces and territories, and works closely with Canadian organizations such as the Association of Registrars of the Universities and Colleges of Canada (ARUCC).

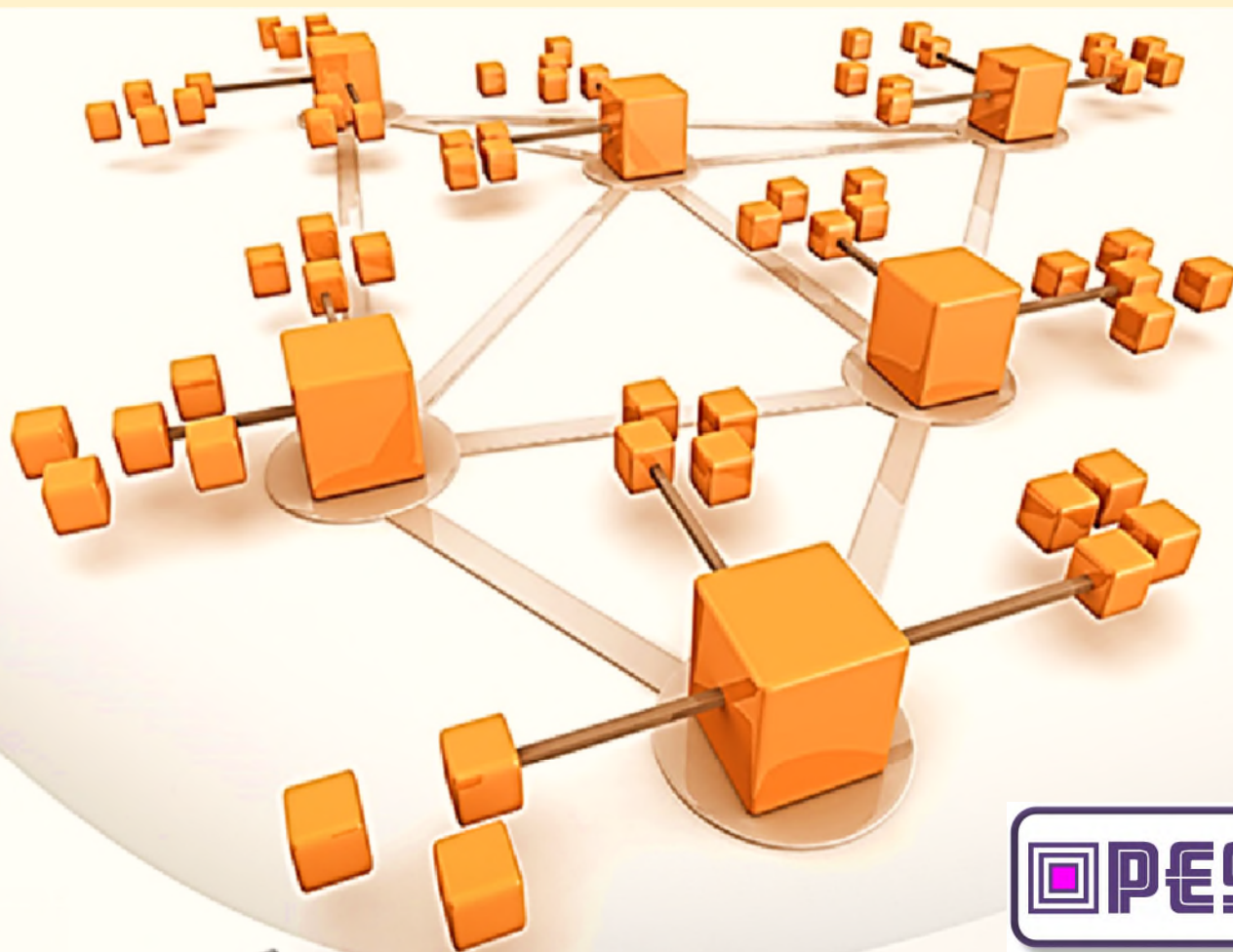
THE CANADIAN INFLUENCE AND HISTORY WITHIN PESC

- In 1999 for PESC's 1st Annual Best Practices Competition, the Ontario Universities' Application Centre (OUAC) was awarded 1st PLACE for its submission, "Ontario Universities Electronic Transcript System (OUETS): A Model of an Electronic Standardization Initiative."
- In 2007, for PESC's 10th Year Anniversary, the PESC Fall 2007 Data Summit was held at the Ritz-Carlton Hotel in Montreal.
- In 2011, at the PESC Fall 2011 Data Summit held October 26, 2011 in San Francisco, PESC launched the Canadian PESC User Group.
- In 2012, for PESC's 14th Annual Best Practices Competition, the Ontario College Application Service (OCAS) was awarded 1st PLACE for its submission, "OCAS XML Transcript Initiative."
- In 2012, for PESC's 15th Year Anniversary Year, the PESC Fall 2012 Data Summit was held at the Four Seasons Hotel in Vancouver.
- From 2013-2015, OCAS' William McKee served on the PESC Board of Directors,
- In 2013, through establishment of CanPESC, PESC entered into a formal MOU with ARUCC, allowing ARUCC and PESC to attend each other's events without charge, thereby fostering a closer working relationship.
- In 2013 and 2016, OUAC's Doug Holmes and OUAC's Leisa Wellsman, respectively, were recognized with PESC's Distinguished Service Award.
- In 2017, for PESC's 20th Year Anniversary, the PESC Fall 2017 Data Summit was held at the Radisson Waterfront Hotel in Toronto.
- In 2018, at the PESC Fall 2018 Data Summit in San Francisco, Charmaine Hack, ARUCC Past-President and Chair of the ARUCC-GDN Student Mobility Project, served as Keynote Speaker.

#

COMMON CREDENTIAL *for* CERTIFICATES DEGREES & DIPLOMAS

www.PESC.org



MyTranscripts: Nova Scotia's Electronic Transcript and Data Exchange System

Submission to the PESC 2019 Best Practices Competition

Prepared by: Ruth Blades, Operations Manager, Nova Scotia Council on Admission & Transfer, and
Ross MacDougall, President, Concertia Technologies Inc.

Introduction

Nova Scotia is home to eleven universities and colleges, with 29 campuses located throughout the province. Each year over 13,000 students begin their post-secondary education journey at one of these institutions. Many of our students come from within the province, but over 40% are attracted here from elsewhere in Canada and over 145 countries worldwide.

With this volume of enrolment comes a much higher volume of application processing with the accompanying quantities of paper documents. While all but one of the institutions have online/electronic application systems, much of the supporting documentation is still submitted in hard copy through the mail. Recognizing that time and resources could be better spent, the institutions received project funding from the Nova Scotia government to develop ways to improve application processes across the province.

The initial intent of the initiative was the development of a common application platform for all the universities in Nova Scotia; however, through consultation with application centres and institutions across Canada and New York, we quickly identified that building an electronic data exchange network would provide significant benefit to students and institutions, at much less cost. During the consultation process we were introduced to the PESC standards, and the benefits of using a format that would allow exchange beyond our borders.

Bringing all eleven post-secondary institutions together to work on this initiative was a primary goal of the project. However, as shown in the following table, the institutions vary greatly in size, programming, and technology platforms.

Through our support of NSCAT and the development of the MyTranscripts system, we are making it easier for students to apply to Nova Scotia post-secondary institutions, and easier for those institutions to get the information they need – quickly and easily – to make decisions on enrolment.

*Ava Czapalay
Senior Executive Director
Higher Education Branch
NS Labour and Advanced Education*

Institution (year founded)	Programming	SIS Platform	Enrolment (2018-19)
Acadia University (1838)	Undergraduate & Graduate	Ellucian Colleague	4,498
Atlantic School of Theology (1971)	Graduate – theological	Custom built	109
Cape Breton University (1974)	Undergraduate & Graduate	Ellucian Colleague	4,106
Dalhousie University (1818)	Undergraduate, Graduate & Professional (3 campuses)	Ellucian Banner	19,223
Mount Saint Vincent University (1873)	Undergraduate & Graduate	Ellucian Colleague	3,633
Nova Scotia Community College (1996)	Community college (13 campuses)	PeopleSoft Campus Solutions	10,720
NSCAD University (1887)	Undergraduate & Graduate - Fine Arts	Ellucian Colleague	910
Saint Mary's University (1802)	Undergraduate & Graduate	Ellucian Banner	7,030
St Francis Xavier University (1853)	Undergraduate & Graduate	Ellucian Banner	5,348
Université Sainte-Anne (1890)	Françophone – Undergraduate & Graduate university, and community college (5 campuses)	Blackbaud Student Information System	547
University of King's College (1789)	Undergraduate & Graduate – specializing in Journalism	Ellucian Banner	912

The speed with which any one institution can move to adopt new processes is impacted by its IT resource capacity and competing priorities within the institution. Therefore, the allocation of implementation support funds for each institution in the project budget ensured that all partners were able to participate and make use of this valuable new tool, without putting excess strain on their already tight budgets.

Collaboration

Collaboration is key to any initiative of this nature, and we would not have been successful without the committed and resourceful individuals that gave much time, expertise, and energy to the project.

A working group was established with representation from a variety of institutions: large and small; English and French; university and college; and urban and rural. We also included representatives from the Nova Scotia Department of Education and Early Childhood Development (NS EECD), as they were

the custodians of the NS public high school transcript data, and the Mi'kmaw Kina'matnewey schools' technology team (see Our Future below). This group worked through the technical specifications development, data mapping to the PESC XML schemas, system development, and user acceptance testing phases over the ensuing five years.

We also worked closely with our colleagues across the country, through many conference calls, emails, shared documents, discussions at meetings and conferences, and of course the CanPESC monthly calls. Without the support of others across the country we would still be thinking about how to move forward.

Concertia Technologies Inc., a locally owned and operated professional services company was contracted as our development partner. The team at Concertia helped us choose the best platform for our system, develop the necessary system code, support implementation at each institution, and ensured we adhered to the PESC standards throughout. They are invested in this system along with our institutions and will continue to support the ongoing growth of MyTranscripts.

Concertia is proud to have the opportunity to work with NSCAT in the development of the MyTranscripts solution – with a shared mission to deliver collaborative solutions for the benefit of student learners and post-secondary education institutions in the Atlantic region.

*Ross MacDougall
President
Concertia Technologies Inc.*

PESC – A Critical Success Factor

Our most important collaboration is with the Postsecondary Electronic Standards Council (PESC). The standards developed by PESC have allowed us to implement a systems integration pattern that affords us a great deal of flexibility, ease of use, and economies of scale for all stakeholder organizations. As a result, we believe that MyTranscripts is an excellent example of “innovation and ingenuity in the application and implementation of interoperable data standards for business needs”.

- **Flexibility** – Our MyTranscripts integration system employs a “hub and spoke” architecture with a canonical data model based on PESC’s approved standards. Member organizations map their data to the PESC schemas, which allows member organizations to perform the mapping once, as opposed to mapping multiple point-to-point interfaces for each institution. This level of flexibility also allows member organizations to join the network at their own pace.
- **Compatibility** – PESC’s standard definitions for High School Transcripts and College Transcripts, along with other supporting schemas, creates both a language and platform-neutral environment for data exchange. By employing PESC standards at the core of our integration hub, member institutions are insulated from the various technological implementations of the other member organizations.
- **Agility** – As more member organizations are brought onboard, our level of maturity in mapping data to and from the PESC standards increases allowing us to accelerate the rate of adoption in utilizing the MyTranscripts hub.

Without the standards that have been so thoughtfully and carefully developed, and updated by PESC,

our system would be isolated from the rest of the data exchange world. The open accessibility to the standards documentation provided our team with invaluable resources and a place to go back to whenever questions arose (and still arise). We can emphatically say that PESC is a key to our success.

Objectives

The original goal of MyTranscripts was to facilitate the application process, to encourage Nova Scotia's high school students to remain in the province to pursue post-secondary education. As it expands the system will also provide support to students looking for the best learning opportunities to meet their needs, regardless of where it is located. Ultimately, the system will enable the mobility of students, and their data, thereby making it more straightforward for them to pursue higher education, wherever that may take them.

MyTranscripts benefits everyone in the system:

- Students receive better service, with faster turnaround on decisions when applying to continue their education;
- Public schools and school boards have reduced costs associated with producing and sending paper transcripts (staff and supplies); and
- Post-secondary education institutions are:
 - making more timely decisions on applications;
 - freeing up staff/resources from entering data to providing more valuable services to students and applicants;
 - ensuring the receipt of accurate, valid data for students submitting applications for admission thereby eliminating the risk of fraud;
 - making decisions on accurate data without the risk of data entry errors; and
 - saving the costs associated with producing and sending paper transcripts (staff and supplies) to other institutions in Nova Scotia, and ultimately beyond our borders.

Through our recent partnership with the Council on Articulation and Transfer for New Brunswick (CATNB), and ongoing discussions with institutions in Prince Edward Island and Newfoundland and Labrador, we are also meeting our objective of increasing collaboration among post-secondary institutions in the Atlantic Canadian region.

The successful launch of the MyTranscripts initiative is a notable improvement to the post-secondary applicant experience across Nova Scotia. The use of technology to support information gathering is now more consistent and efficient, and it creates an opportunity for high schools and post-secondary institutions to partner on behalf of students in the progression of their learning.

*Christine Arsenault
Director of Enrolment and Registrar
Nova Scotia Community College*

Project Scope

Phase I – Public high school

The first phase of the project was focused on the exchange of Nova Scotia public high school records with the ten universities and colleges in Nova Scotia that admit students directly from high school (one institution is graduate level only, so is not participating in Phase I). All eleven institutions in the province participated, where appropriate, in the development, review, testing, and implementation of MyTranscripts.

This has been an incredible tool for our high school counsellors. The system offers an ease of function (secure network) that fully supports agency collaboration to the benefit of students.

*Maureen Banfield
Acting Guidance Specialist
NS Education and Early
Childhood Development*

In Nova Scotia, public school records are housed in eight instances of PowerSchool (one for each of the eight regional education centres in the province). The PowerSchool databases are all housed on servers at the NS Department of Education and Early Childhood Development (EECD). EECD undertook to build an integration database that extracts the relevant records from the eight PowerSchool instances, and serves as the “provider” of records. EECD also built their own interface for communicating with the hub that met their internal-to-government system requirements.

An information sharing agreement (ISA) was developed and signed by the twenty data exchange partners – the eight regional education centres, the NS Department of Education and Early Childhood Development, the ten participating, and the Nova Scotia Council on Admission and Transfer. The ISA is a key element in managing the privacy of Nova Scotia public high school students’ personal information in the exchange and admission process.

Other high schools in the province, including private, independent, and first nations, are currently not using the system, but the opportunity exists for any authenticated transcript provider to use the system for exchange of data. In some cases, the student body is too small to warrant the investment in getting the system set up; however, as our exchange reach expands to the rest of Canada there may be a greater incentive to participate. Our system has the flexibility to incorporate new methods of data submission, which could include a transcript submission portal for smaller institutions.

Phase II – Public post-secondary

The second phase of the project is focused on the exchange of official transcript data between the eleven post-secondary education institutions in Nova Scotia. As ten of the institutions are already receiving high school records through MyTranscripts, this next phase should require fewer resources and time.

In January 2019, NSCAT began working with the Council on Articulation and Transfer for New Brunswick (CATNB) to enable the use of MyTranscripts for exchange of official post-secondary transcript data in New Brunswick, among that organization’s eight member institutions:

- Collège communautaire du Nouveau-Brunswick;
- Crandall University;
- Mount Allison University;
- New Brunswick College of Craft & Design;
- New Brunswick Community College;
- St Thomas University;
- Université de Moncton; and
- University of New Brunswick.

CATNB is very pleased to partner with NSCAT on this interprovincial, collaborative initiative towards strengthening student mobility within the Atlantic region; this is one of the first agreements between jurisdictions of its kind in the country.

Phil Bélanger
Executive Director
CATNB

Inter-provincial exchange is an objective for this phase, and it will happen, but it may be 2020 before we begin crossing provincial borders with data. NSCAT and CATNB are both mandated to work towards keeping students in our provinces, therefore adjustments will need to be made to accommodate the broader exchange model. Information sharing agreements will need to be in place between each hub organization, their members, and between hub organizations to ensure responsibilities, privacy of personal information, and authorizations are clearly understood and approved.

Governance

Development

The development process for all NSCAT initiatives, including MyTranscripts, is managed through our governance structure:



A Management Committee, with members from both the Council of Members and Operations Committee, provides day-to-day direction to the Operations Manager on both development and operational matters and makes decisions on change requests. With significant overlap among these

groups, the communication of issues, challenges, opportunities, and resolutions is simplified.

All our work is coordinated by a single employee (Project/Operations Manager) who oversees all aspects of project development; manages project and organizational budgets; develops and implements marketing, promotion and communication activities; represents NSCAT nationally and internationally; coordinates meetings of all groups and committees; and provides hands-on support and day-to-day administration of our systems.

Development is also supported through Microsoft SharePoint © sites for each project, allowing easy access to documents, contacts, discussions, software releases and service requests. Each new project has a distinct site, to allow for differentiated user access.

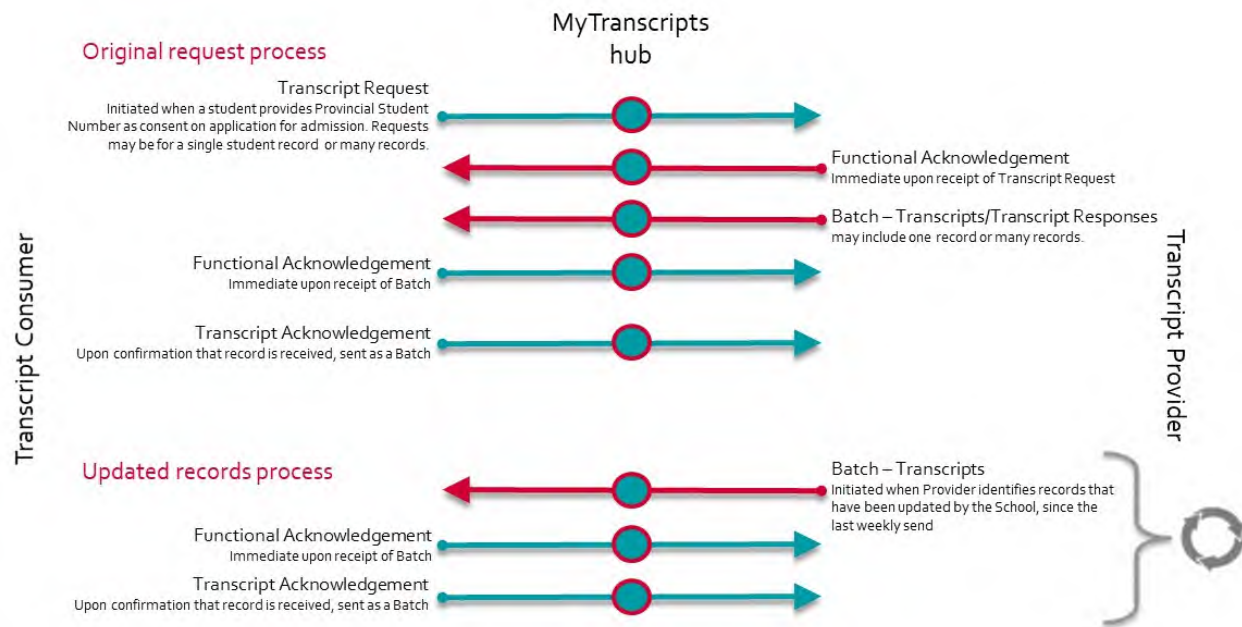
Operations

Now that the system is live, governance has moved into an operational mode. The Operations Committee reviews requests for system changes and makes recommendations, as appropriate, to the Council of Members which retains ultimate accountability for the system. The Microsoft SharePoint© site continues to be used as a means of communication with the member institutions, providing them with ongoing access to new software releases, and service requests. An annual meeting of all system participants is held in late May to review the successes and challenges of the past admissions cycle and make requests and recommendations for improvements to all parts of the process.

Process

Phase I – Public high school

Our process begins when a public high school student applies to a post-secondary institution. The student is asked to provide their Provincial Student Number (PSN) as a means of providing their consent for the institution to receive their record and any subsequent updates. The institution then creates a PESC XML formatted Transcript Request, and the process flows as shown in the following diagram:



- The Transcript Consumer (e.g. post-secondary institution) will create a Transcript Request with the correct headers and payload and send it to the MyTranscripts hub.
- The frequency of Transcript Requests is at the discretion of the institution; some submit a Transcript Request every day, while others submit a Transcript Request once a week, or even every two weeks. The frequency of requests is largely dependent on the volume of applications and can vary throughout the admissions cycle.
- The timing of Transcript Requests is also at the discretion of the institution. Most institutions submit their requests through an automated process at night, so the transcript files are waiting for them when they arrive the next morning. A few institutions run their requests during the day.
- The MyTranscripts hub will validate the Transcript Request headers, security tokens and whether the Request is compressed/encoded correctly. Once verified the hub sends the Request to the Transcript Provider.
- The Transcript Provider (e.g. EECD) will create a Functional Acknowledgment immediately upon receipt of the Transcript Request and send it to the MyTranscripts hub to indicate acknowledgement that it has received the request. This Functional Acknowledgement is in turn forwarded to the Transcript Consumer to indicate that the transcript request is being processed.
- EECD will match the students in the Transcript Request to student records in their database based on PSN and date of birth; if either do not match a Transcript Response is returned identifying the student for which no match could be obtained.
- The Transcript Provider will prepare an Academic Record Batch complete with either a Transcript or a Transcript Response for each record in the Transcript Request. The Transcript Provider will then send the Academic Record Batch back to the MyTranscripts hub which will

validate headers, security and whether the Batch is compressed/encoded correctly and send the Batch to the Transcript Consumer (e.g. the requesting post-secondary institution).

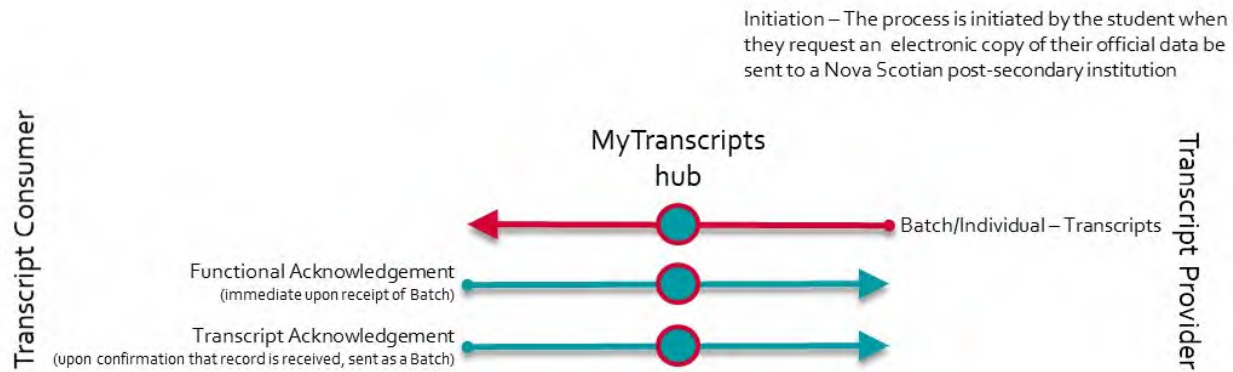
- Immediately upon receipt of the Academic Record Batch, the Transcript Consumer will create and send a Functional Acknowledgement to the MyTranscripts hub to acknowledge that it has received the Academic Record Batch. Once validated at the MyTranscripts hub, the Functional Acknowledgement is sent to the Transcript Provider to indicate receipt of the Academic Record Batch.
- The Transcript Consumer, upon successful decryption and validation of an individual transcript, will prepare a Transcript Acknowledgement for each individual transcript that is successfully processed, whether an original transcript or an automated transcript update. The Transcript Consumer will then send a Transcript Acknowledgment for each Transcript to the MyTranscripts hub as an Academic Record Batch. The MyTranscripts hub will validate the Transcript Acknowledgment and direct it to the Transcript Provider.
- The Transcript Provider, on a weekly basis, will prepare a transcript update for any previously delivered transcripts. The Transcript Provider will prepare a separate Academic Record Batch for each Transcript Consumer of all previously requested Transcripts that have been updated (e.g., changes in grades or courses). These transcript updates will have a TransmissionType of "Replace" to indicate that the transcript is an update.
- Immediately upon receipt of the Academic Record Batch, the Transcript Consumer will create and send a Functional Acknowledgement to the MyTranscripts hub to acknowledge receipt which is in turn forwarded to the Transcript Provider. Once the transcript update has been processed by the Transcript Consumer, a Transcript Acknowledgement is also sent.

MyTranscripts allows us to automatically receive updated transcripts when new grades are available and at the end of the school year, without having to ask the applicants. As well, it allows us access to student records during the summer, when most schools are closed.

*Cynthia Robicheau
Registrar
Université Sainte-Anne*

Phase II – Public post-secondary data exchange

The process for exchange between post-secondary institutions is simpler than the high school process, with fewer steps and no automated updates. This process begins when a student makes a transcript request at the Transcript Provider and indicates that they want their record to be sent electronically to another post-secondary institution. The process then flows as follows:

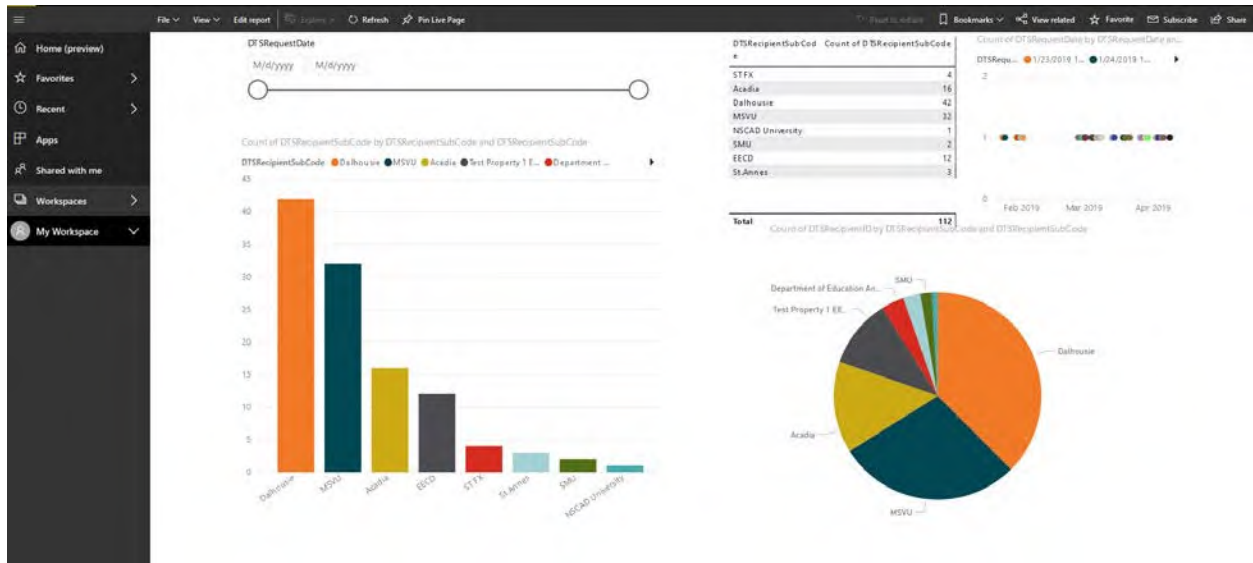


- The transcript exchange process is initiated at the Transcript Provider. The Transcript Provider will prepare an Academic Record Batch containing one or more transcripts. The Transcript Provider will then send the Academic Record Batch to the MyTranscripts hub which will validate the header, security token and whether the Batch is compressed/encoded correctly. Upon verification the MyTranscripts hub will then send the Academic Record Batch to the Transcript Consumer.
- Immediately upon receipt of the Academic Record Batch, the Transcript Consumer will create and send a Functional Acknowledgement to the MyTranscripts hub to acknowledge receipt of the Academic Record Batch which, following validation, is forwarded to the Transcript Provider.
- The Transcript Consumer, upon successful decryption and validation of an individual transcript, will prepare a Transcript Acknowledgement for each individual transcript that is successfully processed. The Transcript Consumer will then send a Transcript Acknowledgment for each Transcript to the MyTranscripts hub as an Academic Record Batch. The MyTranscripts hub will validate the Transcript Acknowledgment and send it to the Transcript Provider to indicate that the transcript has been received and processed.

MyTranscripts Hub

A key element of the MyTranscripts solution is the MyTranscripts hub, which is an integration server built using IBM Business Process Manager (BPM). IBM BPM supports the whole business process management lifecycle approach, which includes discover and document, plan, implement, deploy, manage, and optimize. IBM BPM was used during the initial stages of MyTranscripts Phase I to document the process, incorporating the PESC XML schemas and implementation models to help design the overall process flow. The MyTranscripts hub utilizes Business Process Execution Language (BPEL) flows to orchestrate the receipt, validation and forwarding of transcript requests and responses.

The MyTranscripts hub utilizes the capabilities of the BPM platform to manage all transcript request/response flows while maintaining the security and integrity of all end to end transcript flows. The hub provides central management visibility and control of all transcript requests and responses. With the implementation of Phase II, enhanced reporting will be supported by Microsoft Power BI ©, as demonstrated in the following simulated screenshot.

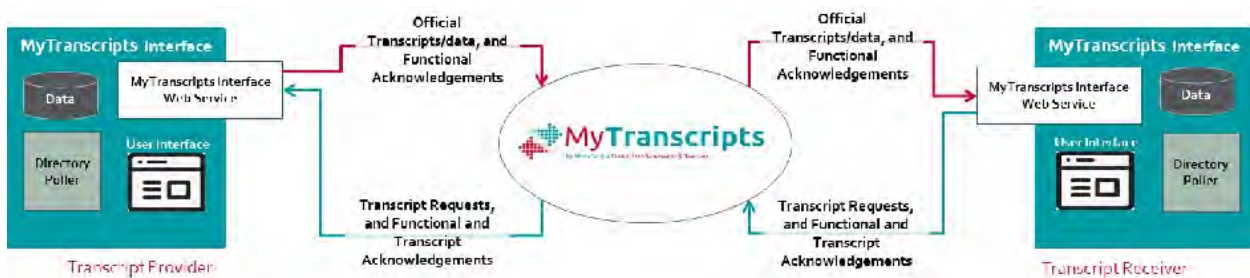


The MyTranscripts hub is currently situated in a secure computing facility located at the Dalhousie University Data Centre. All servers are virtualized and can be scaled to meet any throughput demand, as well as easily migrated to another data center facility as business needs change. Access to the server is secured via firewall and additional network routing protocols which restrict network access to the MyTranscripts Hub only to partner institutions. All MyTranscripts Hub webservices are secured using SSL encryption, and all MyTranscripts interfaces are secured Web Services Security (WS Security) to protect the web services from external attacks messages by implementing the principles of confidentiality, integrity and authentication.

The MyTranscripts Hub is an integral part of the success of the MyTranscripts solution. It provides secure and reliable delivery of transcripts among the member institutions.

MyTranscripts Interface

To facilitate easy communication between the hub and the post-secondary institutions, the MyTranscripts Interface was developed to allow for secure and reliable sending and receiving of transcripts among member institutions. Initially this interface is only being using by the post-secondary institutions, but in future it can be used by any transcript provider or receiver that is approved to connect to the MyTranscripts hub.



MyTranscripts allows partner institutions to send transcript requests and responses to the MyTranscripts hub, as well as receive batches of transcripts and acknowledgements. The Phase I

implementation allowed partner institutions to request and process high school transcripts through a command line interface. The Phase II implementation introduced the MyTranscripts Interface, which was a significant enhancement over the Phase I implementation, to provide a new user interface to track requests and responses, and added support for both high school and post-secondary transcripts.

The MyTranscripts Interface consists of a lightweight web service to allow for communication with the MyTranscripts hub together with a local web server application and database to allow each institution to view and manage their send and receive requests. The MyTranscripts Interface also includes a file transfer service (via secure ftp) to allow for ease of integration with the institution's student information system. The Interface can be configured to receive transcript data as XML or convert the transcript data files to Adobe Portable Document Format (PDF) documents using a template, or an Excel file format.

The new user interface (as shown below) provides an enhanced view of transcript requests and responses. Users can securely view all transcripts, and filter based on the sending or receiving institution, as well as those that have been submitted, in progress, completed or any failed requests or responses. Users will also have the ability to select an individual record from a batch of records and download it locally, in their chosen format, which will be valuable during critical application deadline periods.

The screenshot shows the MyTranscripts web interface. At the top, there's a logo and a navigation bar. Below it, a 'Filters' section allows users to refine their search. The 'Dest' filter has a dropdown menu set to 'Destination'. The 'Type' filter has a dropdown menu set to 'All'. The 'Time' filter has 'From' and 'To' date pickers. The 'Status' filter has checkboxes for 'Submitted', 'InProgress', 'Completed', and 'Failed'. There are 'Apply Filters' and 'Clear All Filters' buttons. Below the filters is a 'Refresh Table Data' button. The main part of the interface is a table with the following columns: Batch Id, Transcript Type, Source, Destination, Created On, Last Updated On, and Status. The table contains three rows of data.

Batch Id	Transcript Type	Source	Destination	Created On	Last Updated On	Status
0c1032e0-9e2b-11e7-9ce3-005056c00001	Inter University Transfer	Dalhousie	SMU	09/13/2018 12:40:29	09/17/2018 10:45:50	In Progress
0c1032e0-9e2b-11e7-9ce3-005056c00002	Inter University Transfer	Dalhousie	SMU	09/15/2018 21:23:26	09/15/2018 21:23:26	Submitted
0c2456e0-9e1x-11a6-9de3-005056c00002	Inter University Transfer	SMU	Dalhousie	09/15/2018 21:14:06	09/15/2018 21:14:06	Completed

The MyTranscripts Interface provides a high degree of flexibility to the institution:

- As transcripts are received at the institution, they can be directly imported into the Student Information System through a manual process or automatically imported through the secure ftp facility;
- Transcript requests and responses can be managed through the MyTranscripts user interface; and
- Transcripts are available in a variety of formats including PESC formatted XML, Adobe Portable Document Format (PDF), or Microsoft Excel.

The MyTranscripts interface is built in Java 8. It utilizes an Apache Tomcat application server and supports a variety of relational database formats including MySQL, Oracle and Microsoft SQL Server.

PESC Standards Employed

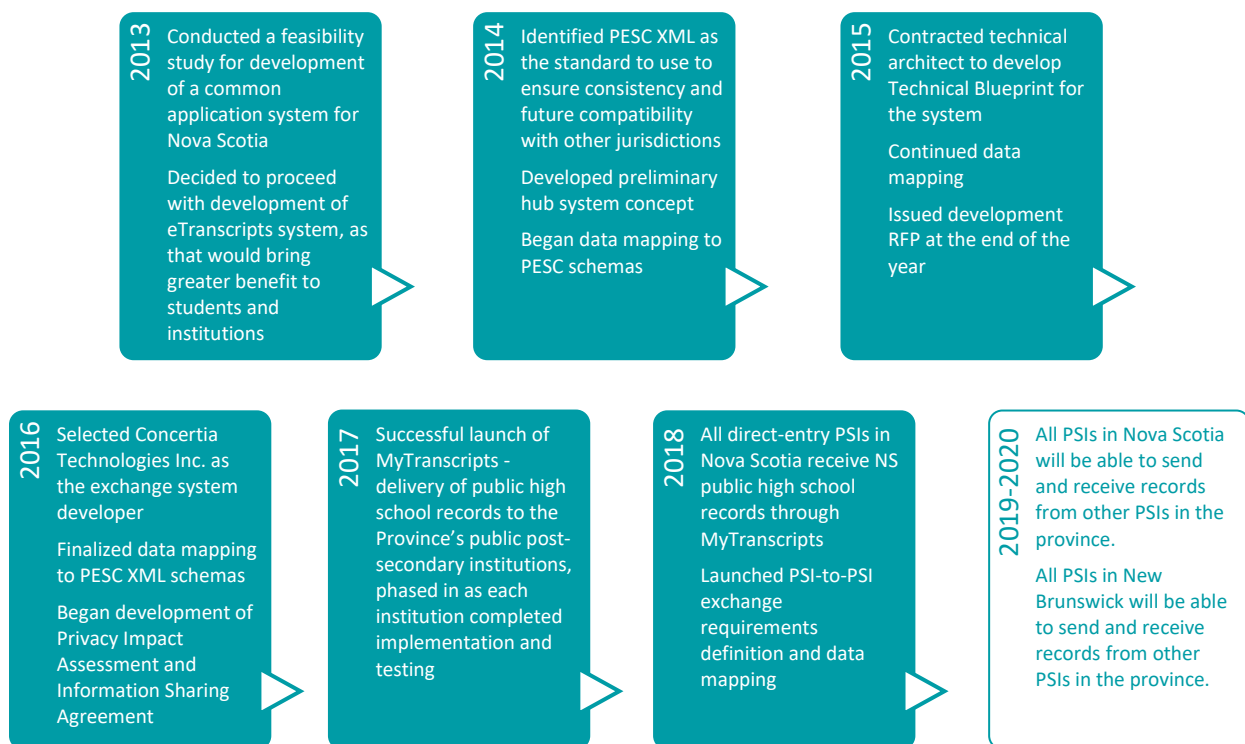
For Phase I – Public High School, which began in 2015, the following standards were used:

- High School Transcript - Version 1.5.0
- CoreMain - Version 1.14.0
- Academic Record Sector Library – Version 1.11.0
- Functional Acknowledgement - Version 1.2.0
- Request and Response of the XML Transcript - Version 1.4.0
- Batch XML Transcript - Version 2.1.0
- Data Transport Specification (DTS) - Version 2
- Data Transport Standard v 2.0 Specification

With the launch of Phase II – Public post-secondary, we are also using:

- College Transcript - Version 1.8.0

Milestones



Outcomes

Institution Status

As shown in the table below, Phase I of MyTranscripts is fully implemented at the ten institutions that admit students directly from high school. Phase II is progressing with our first two institutions now live with the new user interface, and the rest tentatively scheduled for the next two years. Work is currently underway with our first two institutions to develop the capability of formatting academic records in the PESC College Transcript XML schema and sending them between institutions.

Institution	Phase I: Receiving High School Transcripts	Phase II: Receiving College Transcripts	Phase II: Sending College Transcripts
Mount Saint Vincent University	Live	Live	<i>Spring 2019</i>
Saint Mary's University	Live	Live	<i>Spring 2019</i>
St Francis Xavier University	Live	<i>Spring 2019</i>	<i>Summer 2019</i>
Université Sainte-Anne	Live	<i>Spring 2019</i>	<i>Summer 2019</i>
NSCAD University	Live	<i>Spring 2019</i>	<i>Fall 2019</i>
Atlantic School of Theology	n/a	<i>Summer 2019</i>	<i>Fall 2019</i>
Dalhousie University	Live	<i>Summer 2019</i>	<i>Fall 2019</i>
University of King's College	Live	<i>Summer 2019</i>	<i>Fall 2019</i>
Acadia University	Live	<i>Spring 2019</i>	<i>Fall 2020</i>
Cape Breton University	Live	<i>Spring 2019</i>	<i>Fall 2020</i>
Nova Scotia Community College	Live	<i>Summer 2020</i>	<i>Fall 2020</i>

Return on Investment

After one full-year of operations it is difficult to identify any monetary return on investment for any specific institution. However, we know that between September 2017 and September 2018 over 11,500 high school records (including updates) were delivered to post-secondary institutions in Nova Scotia through MyTranscripts. So far in the 2018-2019 admissions cycle, 6,800 records (including updates) have been delivered through MyTranscripts, which would predict an increase of 20% over last year. With this volume of exchange, our objective of student retention in Nova Scotia is well on its way to being achieved.

Our schools are becoming reliant on electronic records. One has used this new service as an incentive to move from a paper-based file system to an electronic file system. Five institutions are loading the XML data directly into their student information systems, and one is pushing PDFs directly to their electronic file system, thereby eliminating the printing and filing of thousands of documents. While others are still printing the PDF transcripts, the electronic delivery has allowed them to improve the turnaround on applications for admission, reduce the volume of incomplete applications, and enable their staff to

focus on higher value services for students.

As we move forward with exchange between institutions, many of our schools are taking the opportunity to review the information included on their paper transcripts, reassess their transcript processes, and improve their policies with regard to release of records. In an environment of constant improvement, reduced budgets, and increasing demands, our institutions see the value of electronic data exchange, and how it can allow them to provide better service with minimal investment.

Our Future

MyTranscripts will continue to be expanded to include additional transcript providers and receivers, as well as new data types.

Mi'kmaw Kina'matnewey (MK) an organization of chiefs, staff, parents and educators who advocate on behalf of and represent the educational interests of their first nations communities, participated in the planning stages of Phase I of development. We will continue to work with MK over the coming years to enable students enrolled in MK managed high schools to use MyTranscripts to submit their transcripts to post-secondary institutions in Nova Scotia.

Enabling the exchange of transcript data, high school and post-secondary, among institutions in all Atlantic Canada is a major objective for the MyTranscripts system. The next step will be the exchange of post-secondary records between universities and colleges in Nova Scotia and those in New Brunswick, to be followed by the exchange of high-school records between the two provinces. We will also be working with universities and colleges, and providers of high school records in Prince Edward Island and Newfoundland & Labrador to bring them into the MyTranscripts exchange network.

Ultimately, the flexibility of MyTranscripts will allow the exchange of data with any authenticated provider or receiver. We have begun discussions with EducationPlannerBC to look at how universities and colleges in our two provinces can exchange data and will continue to have discussions with other hubs in Canada including the Ontario Universities' Application Centre (OUAC), Ontario College Application Service (OCAS), ApplyAlberta, and the Saskatchewan government – all of whom use the PESC standards for their data exchange activities.

Additionally, NSCAT is a supporter of the ARUCC Groningen and Student Mobility project and will continue to work towards the development of a national data exchange system for Canada.

Linking Nova Scotia's post-secondary institutions to those across Canada, and around the globe, will take time and effort, but in the long run it will bring immeasurable benefits to all our institutions and students; and PESC standards will be a key element of our ongoing growth and success.

By using the PESC standards, we have enabled our member institutions to improve service to students, ensure accuracy of information, and increase collaboration with each other. As we expand our reach to other provinces and beyond, the value of using PESC's well established and globally accepted standards will be incalculable.

Kevin B. Wamsley, Academic Vice President & Provost, St Francis Xavier University & Chair, NSCAT Council of Members

As a member of PESC, NSCAT looks forward to contributing to the ongoing development of the PESC approved standards and collaborating with other users around the world as we all work toward secure global data exchange.

About NSCAT

The Nova Scotia Council on Admission & Transfer (NSCAT) is a collaboration of the eleven publicly-funded universities and colleges in Nova Scotia, in partnership with the Nova Scotia Department of Labour and Advanced Education. NSCAT serves as the organization through which collaborative systems that support student enrolment, mobility, and success are managed.

The work of NSCAT has been guided by the following Mandate, Mission, and Vision.

MANDATE - NSCAT is a collaboration of the 11 publicly-funded universities and colleges in Nova Scotia, in partnership with the Department of Labour and Advanced Education. NSCAT serves as the organization through which collaborative systems that support student enrolment, mobility and success are managed.

MISSION - NSCAT promotes the use of its collaborative systems throughout the education sector in Nova Scotia – secondary and post-secondary – and works with its stakeholders for the benefit of learners to ensure smooth transitions from secondary to post-secondary and post-secondary to post-secondary.

VISION - Nova Scotia students and post-secondary institutions have access to systems that are easy to use, provide good processes, are cost effective, are easy to improve and flexible to change to match markets, and support mobility of students in their pursuit of post-secondary education.

GOVERNANCE

NSCAT is governed by a Council of Members which receives support from a Management Committee, an Operations Committee, and one full-time employee (Operations Manager).

The Council of Members serves as the main policy-making, strategy, and objective setting body. The Council is made up of the Vice-President Academic level (or designate) for each of the eleven publicly-funded universities and colleges in Nova Scotia.

The Management Committee is comprised of the Chair and Vice-Chair of the Council of Members, the Chair and two members of the Operations Committee, and *ex officio* members who provide specialized input. This Committee provides direction for day-to-day activities of NSCAT.

The Operations Committee is composed of the Registrar level (or designate) from the eleven participating universities and colleges. The Operations Committee works closely with, and is supported by, the Operations Manager in executing the projects and day-to-day activities of NSCAT. Working groups are formed as needed for specific projects and activities.

Learn more about NSCAT and our other systems and services at: www.mynsfuture.ca.

JSON^{LD} TASK FORCE

||||||| *Join Today!*

DEVELOPMENT IS UNDERWAY AT PESC.

**The JSON Task Force invites
those with & those seeking knowledge & experience
regarding JSON & JSON-LD.**





MULTIPLE STAKEHOLDERS. ONE VISION.

FOR IMMEDIATE RELEASE

March 8, 2019

Contact:

Jennifer Kim

PESC Membership Services Director

+1.202.261.6516

PESC COMPLIANT JSON v 1.0 APPROVED

XML Request & Response v 1.0 Approved

Washington, D.C. The Postsecondary Electronic Standards Council (PESC) is pleased to announce the Approval and Release of *PESC Compliant JSON* version 1.0 and *XML Request & Response* version 1.0. As a PESC Approved Standard, *PESC Compliant JSON v 1.0* defines unified translation rules (used by developers and programmers) for data transformations between XML and JSON technologies. As a PESC Approved Standard, *XML Request & Response v 1.0* provides a digital method, a neutral way to communicate or signal, for requesting, sharing and/or exchanging data via paired standardized XML messages between organizations.

Development of JSON was conducted and produced through the JSON Task Force, launched at PESC's Spring 2017 Data Summit. In January 2018, PESC joined forces with Access 4 Learning (previously the SIF Association), one of PESC's long-time Partners in PK12 to adopt a unified, education-wide strategy on JSON. Development of XML Request & Response was conducted and produced under the PESC Standards Development Forum for Education in collaboration with the AACRAO SPEEDE Committee.

"Over the past year, Members of the A4L Community, lead by A4L's Technology Director John W. Lovell, and PESC have been productively working together on a joint approach through the JSON Task Force," states Dr. Larry L Fruth II, A4L CEO. "PESC Compliant JSON v 1.0 will be referenced in the upcoming A4L Unity Technical Specifications as a data exchange option for SIF Specification users and is a model for collaborative open standards development between standards organizations," Dr. Fruth concluded.

"PESC and A4L working together on JSON is the perfect example of the power of collaboration between standards bodies and the value of providing a unified approach for education," adds Michael D. Sessa, PESC President & CEO. "As PESC Members are heavy users of XML, our highest priority was to provide a standardized migration, or mapping, strategy between XML & JSON to these users, many of whom were already experimenting with JSON. XML has proven very successful for efficient, business-to-business digital exchange and delivery of data. The addition of JSON enables standardized business-to-web delivery."

PESC Members Approving PESC Compliant JSON v 1.0 and XML Request & Response v 1.0

AACRAO	Indiana Commission for Higher Education
AcademyOne	Indiana State University
ACT	iQ4
Access 4 Learning	National Association Student Loan Administrators
Alberta Post-Secondary Application System	National Student Clearinghouse
Bardic Systems	Nova Scotia Council on Admissions & Transfer
California Community College System	OCAS
Camosun College	Ontario Universities' Application Centre
Carnegie Mellon University	Oracle
College Board	Parchment
Common Application	Stanford University
Credentials Solutions	University of Chicago
DegreeData	University of Denver
Digitary	University of Louisiana at Lafayette
Educational Credential Evaluators	University of Missouri System
EducationPlannerBC	University of Oregon
Ellucian	University of Phoenix
ELM Resources	University of Southern California
Florida International University	U.S. Chamber of Commerce Foundation
Federation of State Medical Boards	Workday
Gotocollegefairs	



JavaScript Object Notation

"JASON" "J-S-O-N" "JAY-SAWN"

How do you pronounce JSON?

Douglas Crockford of Yahoo, JSON creator, sets the record straight.

Listen to his pronunciation here

<https://www.youtube.com/watch?v=zhVdWQWKRqM>

PESC Compliant JSON v 1.0 and XML Request & Response v 1.0 are posted online as "PESC Approved Standards" at www.pesc.org. All PESC Approved Standards are free, developed through a rigorous, yet open and transparent development, approval and maintenance process; and made available to all education stakeholders worldwide for use, adoption and implementation.

About the Access 4 Learning Community

The Access 4 Learning (A4L) Community, previously the SIF Association, is a unique, non-profit collaboration composed of schools, districts, local authorities, states, US and International Ministries of Education, software vendors and consultants who collectively address all aspects of learning information management and access to support learning. The A4L Community is "Powered by SIF" Specifications as its major technical tool to allow for this management and access simply, securely and in a scalable, standard way regardless of the platform hosting those applications. The Access 4 Learning Community has united these education technology end users and providers in an unprecedented effort to give teachers more time to do what they do best: teach. For further information, visit <http://www.A4L.org>

About PESC

ESTABLISHED IN 1997 AT THE NATIONAL CENTER FOR HIGHER EDUCATION AND HEADQUARTERED IN WASHINGTON DC,

PESC is an international, 501 (c)(3) non-profit, community-based, umbrella association of data, software and education technology service providers; schools, districts, colleges and universities; college, university and state systems; local, state/province and federal government agencies; professional, commercial and non-profit organizations; and non-profit associations & foundations.

LEADING THE ESTABLISHMENT AND ADOPTION OF TRUSTED, OPEN DATA STANDARDS ACROSS THE EDUCATION DOMAIN

Through open and transparent community participation, PESC enables cost-effective connectivity between data systems to accelerate performance and service, to simplify data access and research, and to improve data quality along the Education lifecycle. PESC envisions global interoperability within the Education domain, supported by a trustworthy, inter-connected network built by and between communities of interest in which data flows digitally and seamlessly from one community or system to another and throughout the entire eco-system when and where needed without compatibility barriers but in a safe, secure, reliable, legal, and efficient manner.

ABOUT PRIVACY While PESC promotes the implementation and usage of data exchange standards, PESC does not set (create or establish) policies related to privacy and security. Organizations and entities using PESC Approved Standards and services should ensure they comply with FERPA and all local, state, federal and international rules on privacy and security as applicable. For more information, see www.PESC.org.

PESC IS SPONSORED ANNUALLY by Credentials Solutions, National Student Clearinghouse, Oracle, Parchment, DegreeData & ECE.

PESC PARTNERS include AACRAO, APEREO, ARUCC, A4L, DXtera Institute, EMREX, EWP, Groningen Declaration Network, HR Open Standards, SHEEO, and the US Department of Education's Common Education Data Standards (CEDS) Initiative.

PESC IS A PROUD EXHIBITOR at AACRAO's Annual Meeting, ARUCC's Annual Meeting, and the Annual STATS-DC Conference of the National Center for Education Statistics (NCES) of the US Department of Education.

PESC IS A PROUD SPONSOR of AIR's Annual Conference & of the Annual California Electronic Transcripts Workshop and CCCApply.

PESC IS A PROUD MEMBER/AFFILIATE/SIGNATORY of AACRAO, of the US NCES National Forum on Education Statistics, and of the Groningen Declaration Network.

PESC HAS A STRONG HISTORY that includes AACRAO, SPEEDE, EDI, ANSI, X12, Canada, the US Department of Education and Y2K.

IN FULFILLING ITS NON-PROFIT MISSION, all PESC Approved Standards are available to the education community online free of charge at www.PESC.org.

PESC

IN EVERY HIGH SCHOOL



**DISTRICT BY DISTRICT
STATE BY STATE
PROVINCE BY PROVINCE
REGION BY REGION
COAST TO COAST**

**The PESC High School Transcript
is emerging in every high school
across the land.**

SPRING
2019

THE

STANDARD

SPECIAL EDITION



EDEXCHANGE

NEUTRAL | AUTOMATED | OPEN SOURCE

DATA EXCHANGE | DIGITAL LOOK UP

EDEXCHANGE.PESC.ORG

MULTIPLE STAKEHOLDERS. ONE VISION.



THE DUPONT CIRCLE

DOYLE COLLECTION • WASHINGTON DC

THE DUPONT CIRCLE, WASHINGTON DC REIMAGINED - SPRING 2019 -

Multi-million-dollar transformation to be unveiled by The Doyle Collection's design team in collaboration with Martin Brudnizki and Clodagh Design



Following the recent relaunch of The Bloomsbury which took London by storm, The Doyle Collection - the Irish, family owned and managed group of luxury hotels in Ireland, the UK, and US – has set its sights on Washington DC and The Dupont Circle.

This multimillion-dollar hotel transformation has been led by Bernie Gallagher, Chairman of The Doyle Collection and daughter of the company founder the late PV Doyle, in collaboration with interior designer, Martin Brudnizki and New York based designer Clodagh. The exciting and chic new bar and restaurant have been designed by Martin Brudnizki, while Clodagh has redesigned the hotel foyer and created a spectacular rooftop terrace suite. The Dupont Hotel will bring a fusion of both American and European style and service to the city. It will relaunch in Spring 2019, complete with a new bar, restaurant, lobby, along with 327 rooms and Terrace Suites, including one of the largest penthouses in Washington DC. In addition, renowned General Manager Joel Freyberg has recently joined the team to lead the launch.

Bernie Gallagher, Chairman of The Doyle Collection – *“We are excited to reintroduce The Dupont Circle Hotel following an extensive renovation. The newly completed bar and restaurant along with the lobby and rooftop terrace suites will be the culmination of this major investment. The Dupont Circle is one of Washington’s best located hotels and our vision is for the hotel to become the social hub of this vibrant neighborhood in the center of the city. I am delighted to see this vision for the hotel come to life, alongside Pat King our group CEO and renowned General Manager Joel Freyberg and look forward to sharing it with our guests.”*

A NEW DINING DESTINATION FOR THE CAPITAL

New restaurant and garden terrace to launch alongside *Doyle* bar and *Doyle & Co* coffee and chocolate bar

The iconic Bar Dupont, with its panoramic views of Dupont Circle, has been transformed into *Doyle* by Martin Brudnizki Design Studio – a glamorous club-like bar with a chic mid-century feel. Working with the original 1950s' architecture of the building, rich walnut paneling, open fires and flattering lighting, a warm and welcoming atmosphere has been created. Custom upholstery in shades of rich greens, yellows and blues will be brought together by geometric patterns, brass detailing and polished surfaces.

The new restaurant will have a light, fresh feel with white- finished timber panelled walls and wooden slatted flooring, complete with cherry blossom trees, paying homage to Washington's famous cherry blossom season (typically between March – April). The restaurant will have brass globe light fixtures, mirrors, glass and a colour palette of soft grey blue and red, adding warmth to the mid-century inspired furniture. Large glazed windows give impressive views of the terrace and across the city. The expansive outdoor terrace will overlook the bustling neighborhood. Guests can choose to eat al fresco here and opt for relaxed, soft sofa seating or more traditional drucker-style tables and chairs.

Doyle & Co is the new coffee and chocolate bar at the hotel and will bring a relaxed and casual element to The Dupont Circle and will allow locals and guests to pop in for takeaway drinks and light snacks. Echoing the bright design of the restaurant, Doyle & Co will also blend ceramic tiles with rustic-style shelving. The slatted wooden floor contrasts with leather-finished bar stools, will provide a place in which to perch while guests wait for their coffee or takeout snack.

SUITE DREAMS BY CLODAGH

The most sought-after hotel rooftop suites and a 5,000sq ft Penthouse

The Rooftop Floor will be transformed to house some of the top suites in the city. A 5,000sq ft Penthouse suite will be created with an enormous garden terrace overlooking the Dupont Circle with views of the Washington Monument. This suite will comprise two master bedrooms and a large living and dining area. Designed by Clodagh, the palette will be very neutral with a midcentury aesthetic with stylish details such as ribbed glass mirrors, brass, and live-edge wooden pieces. The fireplace, wet bar, dining table, and lounge area will ensure the suite is home to Washington's most exclusive social gatherings. The terrace will be heated year-round space with lush planting and sleek furniture for lounging and will include a firepit and projector for al fresco movie nights. Many of the remaining 13 suites housed on The Rooftop will have large heated terraces and outdoor furniture of their own, making them some of the only suites in the city with outdoor spaces for guests to enjoy.

LOBBY LOUNGING...

Exclusive to guests, this city oasis is perfect for people watching, celeb spotting and remote working

The exclusive new lobby will also be designed by Clodagh and will entice guests to relax in a new residence-only space, complete with a cosy fireplace and the look of a high-end apartment. It will have a private members club feel and the furnishings will include slatted window fixtures and a look through bookcase with brass accents. There will also be wooden work table in the lobby with inconspicuous outlets as a shared workspace.

The transformation of The Dupont Circle Hotel is an important focus for Gallagher, whose vision for the brand has been to create a group of hotels at the forefront of cool design and product innovation with superb service, whilst remaining deeply rooted to their respective local areas. The timing is ideal as the

Dupont Circle area has become a buzzing hub of social activity in the city for residents and tourists alike. Perfectly located between the upmarket residential districts of Georgetown and Kalorama and the historic and political hub of the city – it's the perfect location for anyone wanting to eat, drink or stay in the capital.

The hotel will relaunch in Spring 2019. Rates will start from \$300 per night.

www.thedoylecollection.com

About The Doyle Collection

At the heart of our business is a warmth of service that stems from our family ownership, imbuing our properties with the familiarity of a member's club and the intimacy of a private home.

Each of our eight hotels – landmark buildings in unrivalled city locations, has its own distinct personality that is rooted in, and authentic to, its neighbourhood.

Innovation and ongoing investment ensure a boutique, cosmopolitan yet local feel – as seen in our cool destination restaurants, bars and event spaces – while our heritage lends character to our vision of informal luxury, timeless style and the very best guest experience.

About Doyle DISCOVERY Loyalty

A memorable trip demands more than a comfortable stay. The Doyle Collection is a proud member of DISCOVERY, an award-winning global loyalty programme, providing 11 million members recognition and perks across over 500 hotels, resorts and palaces in 78 countries. Elite members have the opportunity to immerse themselves in local culture through *Local Experiences*, distinctive activities that capture an authentic taste of each destination. For more information, visit discoveryloyalty.com

Martin Brudnizki Design Studio

Martin Brudnizki Design Studio is an internationally acclaimed interior architecture and design practice with a team composed of over 70 interior designers, architects, lighting designers and product designers. They specialize in transforming hotels, restaurants, bars, private members' clubs, residential developments and more. The Studio has a reputation for creating some of the world's most celebrated interiors including; The Beekman in New York, The Ivy, Soho Beach House Miami, and The Coral Room at The Bloomsbury in London.

Clodagh Design

Clodagh passionately believes that good design supports well-being and that it can transform people's lives. She feels that clutter can undermine serenity, but minimalism should not be self-denying. The experience of entering a Clodagh designed space is one of blissful serenity. A believer in the tenets of integrative medicine which addresses the entire body and psyche as a whole, Clodagh embraces both ancient and cutting-edge methods in an effort to comfort not only the body but also the mind. She was among the earliest adopters of Feng Shui in her design practice. Clodagh is once again ahead of the curve by now incorporating such cutting-edge modalities as chromatherapy and biophilia into all of her projects.





ADVANCING STUDENT ACHIEVEMENT WORLDWIDE



WWW.PESC.ORG