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.

www.PESC.org  #PESCspring19summit
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 SPEDE/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 PESC 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!
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!**
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.

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!
### 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

### 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 Diakoumis**  
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
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.


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
DegreeData
DIGARC
Digitary
Educational Credential Evaluators
EducationPlannerBC
Ellician
Federation of State Medical Boards
Florida International University
George Washington Institute for Public Policy
HR Open Standards Consortium
IBM
IMS Global
Instructional Media + Magic

Implementation of PESC High School Transcript
Lifelong Learning
Pathways
Perspective from the CIO
Student Unit Record

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
SPEDE
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

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.
PESC Spring 2019 Data Summit
@ Dupont Circle Hotel
1500 New Hampshire Ave NW
Washington, D.C. 20036
www.pesc.org
Tuesday May 7, 2019

Noon – 1.30pm  Pre-Summit Training Workshops
Georgetown Room 2nd Floor

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, PESC 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
Wednesday May 8, 2019

7.30am  Registration  |  Spring 2019 Data Summit
Glover Park 1st Floor

7.30am – 8.30am  Continental Breakfast
Georgetown Room 2nd Floor

8.30am – 9.00am  Welcome & Introductions
Glover Park 1st Floor
- Michael Sessa, PESC President & CEO

9.00am – 9.30am  Improving Student Transition to Post-Secondary Education:
Exploring British Columbia’s Partnerships and Business Transformations
Using PESC Approved XML Transcripts Session
Glover Park 1st Floor
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 StudentTranscripts 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.

9.30am – 10.00am  European Initiatives and the Global Groningen Declaration Network
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
Wednesday May 8, 2019

Keynote Panel I:
Challenges & Perspectives on Bridging Education’s Reluctant Evolution in the Face of an Emerging Digital Revolution
Glover Park 1st Floor
Theme: Digitalization | Revolution or Evolution?

Featured Speakers:
- Scott Cheney, Executive Director, Credential Engineering
- 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.

Keynote Panel II:
Harnessing the Power of Standards & Technology In Improving Talent Markets
Critical Stakeholder Use Cases & Implications for Standards Organizations
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.
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**
Thursday May 9, 2019

7.30am  Registration | Spring 2019 Data Summit & Continental Breakfast
        Glover Park 1st Floor

8.30am – 9.00am  Big Government Moving Big Data | Large-Scale Applications Driving Artificial Intelligence & Blockchain
        Glover 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.

9.00am – 9.30am  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.

9.30am – 10.00am  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
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
Thursday May 9, 2019

1.30pm – 3.00pm  Breakout Sessions

**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 PESC Board of Directors. https://www.pesc.org/standards-development-1.html

3.00pm – 3.30pm  Break
Thursday May 9, 2019

3.30pm – 5.00pm  Breakout Sessions

**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](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](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:

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](https://www.pesc.org/json-ld-task-force-1.html)

5.00pm  Adjourn for Day

5.00pm – 6.00pm  PESC Member Meeting
Breakout Sessions

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 an 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 directed 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
Friday May 9, 2019

10.30am - Noon  Breakout Sessions

**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 worldwide 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 worldwide 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
At the Fall 2016 Data Summit in San Diego

PESC Members and resources collaborated under the Academic Credentialing and Experiential Learning Task Force to produce the PESC Approved Common XML Credential for e-Certificates, Degrees and Diplomas in record time, implemented at Johns Hopkins University and Stanford University as part of the AACRAO-NASPA Comprehensive Learner Record Project. Keynote Speaker was Valere Meus, Director, Erasmus Without Paper, Ghent University.

Spring 2017 Data Summit in Washington, D.C.

PESC looked externally in producing “Empowering the Mobility of Digital Academic Credentials,” showcasing external projects, resources and speakers (e.g. Credential Engine, Groningen Declaration Network, US NICE NIST, USCCF, etc.) and exemplifying the value and need for collaboration and engagement of all stakeholders in the ecosystem. Academic Credentials were examined and discussed from various perspectives: Admissions/Registrar, International, Systems/Technology, Policy/Research and Marketplace. PESC launched the JSON Task Force and the Credential Data Mapping Initiative launched under the Academic Credentialing and Experiential Learning Task Force. PESC awarded iQ4 and National Student Clearinghouse with its 18th Annual Best Practices Award.

Fall 2017 Data Summit in Toronto

For its 20th Anniversary, PESC returned to Canada, now one of the largest users of all PESC Approved Standards, to invigorate global mobility and national collaboration across all ten provinces and three territories and honor ARUCC with its Distinguished Service Award. Topics ranged from Blockchain, Diploma Supplement and Student Mobility, to initiatives and pilots including MyeQuals in Australia/New Zealand; Data Exchange and Matching with McGill university, National Student Clearinghouse and CHESSIC; and the emergence of provincial Councils on Admissions and Transfer. (PESC held its Fall 2007 Data Summit 10th Anniversary in Montreal and its Fall 2012 Data Summit 15th Anniversary in Vancouver.)

Spring 2018 Data Summit in Washington, D.C.

PESC convened thought-leaders and experts across policy, practice and technology, featuring speakers from the Lumina Foundation, T3 Innovation Network of the USCCF, Lumina Foundation, Credential Engine, AACRAO, EMREX, US NCES National Forum on Education Statistics, Working Nation; and awarded the Indiana Commission for Higher Education with its 19th Annual Best Practices Award. PESC readied the community for the next big jump in technology due to the emergence of JSON, linked data and of the employment and training sectors as users on the supply/demand model, provoking innovation and collaboration like never before.

Fall 2018 Data Summit in San Francisco

PESC focused on those who interact with students and learners directly on the front line: Registrars, SIS Vendors, Application Centers and Credential Evaluators, examining the challenges of keeping pace with emerging technologies, meeting needs and demands of students and customers, continuous roll-out of new features and processes, all while maintaining the highest levels of data integrity, cost efficiency, safety, privacy & security. Inspiring Digitalization Across Education and Employment featured speakers from AACRAO, ACE, ARUCC, Common Application, Credential Engine, DegreeData, DIGARC, DXtera, ECE, Ellucian, National Student Clearinghouse, Oracle, Parchment, Stanford University, USCCF and Workday. PESC launched the Data Privacy and Protection Task Force. AACRAO’s Janie Barnett and USC’s Matt Bemis received PESC’s Distinguished Service Awards.

At the Spring 2019 Data Summit in Washington, D.C.

PESC charges forward in promoting its mission of connectivity, celebrates its 20th Annual Best Practices and reflects back as PESC embarks on its 21st year to present State of Technology and Standards in Higher Education. Where Are We? Where Have We Been? What Did We Learn? Where Are We Going? How Will We Get There? Featuring Speakers from AACRAO SPEEDE Committee, BC Ministry of Education, Digiary, EdExchange, George Washington Institute for Public Policy, Groningen Declaration Network, IBM, IMS Global, Johns Hopkins University, Michael and Susan Dell Foundation, NASFAA, NILOA and the USCCF. PESC launches History of Data Standards in Education and Timeline.
About Our Speakers

**Matt Bemis**  
Associate Registrar  
University of Southern California  
PESC Board Vice Chair

Matt Bemis, Associate Registrar at the University of Southern California, is responsible for the Degree Progress and Transfer Articulation operations for the University. He serves as the administrator over the Degree Audit and Transfer Credit applications, is responsible for the certification of student athlete academic eligibility and is the project lead for the electronic data interchange (EDI) initiative at USC. He currently serves on the PESC Board as Vice Chair, on the AACRAO SPEEDE Committee and is former Chair; is Co-Chair for the PESC Education Record User Group and Co-Chair of the GEO Code User Group. Matt has a demonstrated appreciation for the important work that PESC supports, guides and directs. He remains very active in his volunteer commitments to PESC and AACRAO, through leadership and participation in PESC and AACRAO workgroups and Data Summits. Matt has also been representing PESC as speaker and presenter at Annual Meetings of the Groningen Declaration Network.

**Jerry Bracken**  
Software Engineer, Office of IT  
Brigham Young University

**Mary Chapin**  
Chief Legal Officer, Vice President & Corporate Secretary  
National Student Clearinghouse

Mary Chapin is Vice President, Chief Legal Officer and Corporate Secretary for the National Student Clearinghouse, a position she has held since 2016. Formerly the general counsel of Direct Response Consulting Services, Euro DM Ltd. and Washington Lists, Inc., Mary has 26 years of experience advising domestic and international private and publicly-held corporations and nonprofit organizations. Her expertise includes data management and protection, privacy, regulatory issues, intellectual property, employment law, corporate governance and compliance, cybersecurity, and technology transactions. Prior to becoming general counsel, Ms. Chapin was a partner in the Intellectual Property, Media and Technology Department of McDermott, Will & Emery LLP, where she represented Fortune 100 companies to emerging growth companies in a broad range of litigation and transaction matters. She is licensed to practice law in Virginia, the District of Columbia, and New York. She is co-chair of the Association of Corporate Counsel National Capital Region Privacy and Data Security Forum. Ms. Chapin also serves on the board of directors of Shelter House, Inc. Mary earned a bachelor’s degree from the State University of New York at Buffalo and a law degree from the University of Toledo College of Law. She is a frequent speaker at conferences on data privacy and cybersecurity issues.

**Scott Cheney**  
Executive Director  
Credential Engine

Scott Cheney is Credential Engine’s 1st Executive Director where he leads the organization’s efforts to bring transparency to credentials and reveal the marketplace of credentials. Scott has over 25 years of experience in and brings a multi-faceted perspective to, developing skills of the US workforce to meet the needs of the economy.

Prior to Credential Engine, he served as the Policy Director for Workforce, Economic Development, and Pensions for Senator Patty Murray and the Senate Health, Education, Labor and Pensions (HELP) Committee. He led the reauthorization of the country’s central workforce development legislation, the Workforce Innovation and Opportunity Act. Scott also led the Senator’s work to reauthorize Perkins, expand registered apprenticeships, provide training for ex-offenders to support successful re-entry, formalize research and evaluation standards at the Department of Labor, enhance services and resources for dislocated workers, modernize unemployment insurance, and better align workforce and economic development in distressed regions around the country. Previous positions with the Senator’s office include serving as a Senior Advisor on the Senate Budget Committee, and as her Staff Director for the HELP Subcommittee on Employment and Workplace Safety.

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.
| **MEGAN MCCLEAN COVAL**  
**VICE PRESIDENT, POLICY & FEDERAL RELATIONS, NATIONAL ASSOCIATION OF STUDENT FINANCIAL AID ADMINISTRATORS** | Megan is the Vice President for Policy and Federal Relations at the National Association of Student Financial Aid Administrators (NASFAA) where she oversees the Association’s policy and advocacy efforts. Prior to joining NASFAA in the fall of 2010, she served as the Director of Government Relations for the federal Advisory Committee on Student Financial Assistance, where she contributed to several congressionally mandated reports on the postsecondary access and persistence of low- and moderate-income students. Megan began her career in higher education as an admissions counselor at Penn State University. She received her master’s in higher education at Penn State and BA in political science from Allegheny College. |
| **TAKIS DIAKOUMIS**  
**CHIEF TECHNOLOGY OFFICER, DIGITARY** | Takis Diakoumis is Chief Technology Officer at Digitary in Melbourne, Australia. Prior to Digitary, Takis was Head of Technology at Prefectus Group. |
| **DOUG FALK**  
**CHIEF INFORMATION OFFICER & VICE PRESIDENT, NATIONAL STUDENT CLEARINGHOUSE PESC BOARD CHAIR** | Doug Falk has served in technology leadership positions for 18 years at the National Student Clearinghouse, where he is currently VP & CIO. As CIO, Doug provides vision and leadership for information technology initiatives that align with business goals to improve client responsiveness, quality, security and compliance, and cost effectiveness. He is responsible for providing leadership across multiple areas, including development, implementation and governance of information systems, enterprise architecture, information security, and technology infrastructure. Doug has served on the PESC Board of Directors for 12 years and as Chair for 6 years. |
| **JULIA FUNAKI**  
**ASSOCIATE DIRECTOR, AACRAO** | Julia Funaki received her Bachelor of Science from The Ohio State University and worked for the Columbus Council on World Affairs. Julia attended a graduate program at American University and worked in domestic and international admissions for the University. Upon completion of her Master’s in International Communication she took a job in the foreign student services office at Ohio Wesleyan University. After returning to Washington and completing a Master’s in International Education with an emphasis in Higher Ed Administration, Julia worked for the University of Maryland College Park in International Education Services. In 1996, Julia joined the staff at AACRAO. She has been involved with NASFAA and AACRAO as an author, presenter, and committee member and chair and serves on the faculty for the AACRAO Summer and Winter Institute. |
| **MATT GEE**  
**CEO & FOUNDER, BRIGHTHIVE** | Matt Gee is co-founder and CEO of BrightHive, a public benefit corporation building data collaboratives that power smarter government and more effective social service delivery. He is also a Senior Research Scientist at the University of Chicago’s Center for Data Science and Public Policy. He is the co-founder of the Eric and Wendy Schmidt Data Science for Social Good fellowship, which over the last five years has paired 250 data science fellows with over 85 national, state, and local government organizations and NGOs to build data-driven solutions to social problems. Matt works to find new ways to increase individual efficacy and equality of opportunity with new data and new tools like machine learning, focusing primarily on social service systems, workforce and education, and sustainable development. He has been principal investigator on major research initiatives in data science, machine learning, and AI research initiatives funded by the National Science Foundation, the Sloan Foundation, the JP Morgan Chase Foundation and others, developed new models for public-private data partnerships with nonprofit organizations, corporations, and governments. He has previously worked at the US Treasury and has founded several companies using data to improve society. He’s served as an advisor to Code for America, DataKind, and the World Bank. He is an open source software evangelist and an active advocate for improving access to STEM opportunities for disadvantaged youth. |
| **BERT VAN DER GEEST**  
**CONSULTANT TO THE MINISTRY OF EDUCATION, BRITISH COLUMBIA** | Bert van der Geest provides strategic direction and leadership to the BC Ministry of Education for a portfolio of projects to create efficiencies for Students, School Districts, Post-Secondary Institutions and modernize the Ministry’s applications. Bert has extensive experience in IT/IT projects in both K-12 and Post-Secondary education including implementation of electronic transcripts with EducationPlannerBC. The StudentTranscripts service provides improved access to transcript information and secure delivery of PESC XML high school transcripts to Post Secondary Institutions. |
**Program**

**Victoriano Giralt**  
CIO  
University of Málaga

Victoriano Giralt currently works as CIO at the University of Málaga. Victoriano does research in Computer and Society and Computer Communications (Networks). Their current project is ‘App UMA’. He is the founding Board President of the Groningen Declaration Network, founded in 2012 and has traveled all over the world inspiring a global movement toward mobility. Victoriano is active in all European initiatives from Erasmus Without Paper, Europass, Student Card, BLISS and EMREX.

**Jim Goodell**  
Senior Analyst  
QIP

Jim Goodell has extensive experience with data standards and learning management initiatives. He leads standards development for the Common Education Data Standards and works with stakeholders from early learning, K12, postsecondary, and workforce organizations. Jim has also been a voice in many education technology standards initiatives and has delivered numerous presentations at national data, interoperability, and advocacy meetings and conferences.

Jim co-authored a paper on integrated systems for student-centered learning and developed a best-practice guide on the teacher-student data link. He has been an invited speaker at numerous conferences on education data standards, educational technology, formative assessment, school improvement, and change management.

Prior to working at QIP, Jim was executive vice president at the Center for Educational Leadership and Technology. He worked with state education agencies, local education agencies, and other learning organizations on education data projects and was the lead architect for the organization’s school improvement planning and performance management systems.

Jim holds a BS in Management from Worcester Polytechnic Institute. He has held an elementary-level teacher license and served on a local school board. Jim is active in his church and family life with three children.

**Tom Green, Ph.D.**  
Associate Executive Director  
AACRAO

Dr. Tom Green brings over 30 years of SEM experience and expertise to AACRAO, where he serves as the Associate Executive Director for Consulting and SEM. He served as dean or vice president of enrollment management at seven institutions, both public and private. Dr. Green led admissions, financial aid, registrar, student accounts, academic advising and support, adult re-entry services and one-stop shop areas, twice serving as director of financial aid. His expertise in SEM planning, recruitment techniques, enrollment marketing and communications, financial aid analysis and resource utilization and student success techniques resulted in enrollment increases, improvements in student profile and retention rates, as well as net revenue. In 2006, Dr. Green joined AACRAO Consulting and since 2008 he has devoted his career full-time to helping institutions reach their enrollment goals. His work has included both private and public institutions, from small private colleges to public flagships, from rural to highly-urban, and specializations such as online programs, law schools, Hispanic Serving Institutions and Historically Black Colleges and Universities. His consultations have been performed in every region of the United States, in Canada, the United Kingdom, the Middle East and in Eastern Europe. As the Association’s Associate Executive Director, he oversees all SEM initiatives, including the SEM Conference, content for member professional development, and also serves as Editor-in-Chief of SEM Quarterly, AACRAO’s peer-reviewed journal of research and practice in the field. He oversees the AACRAO-NASPA partnership on Comprehensive Student Records, a Lumina Foundation-funded initiative on the future of digital student records. Tom Green holds a bachelor’s degree from the University of Iowa, a master’s degree from the American Conservatory of Music, where he later began his academic career as a faculty member in music performance, and a Ph.D. in higher education leadership, management and policy from Seton Hall University. He is a frequent speaker and workshop leader at national and international conferences and has published articles and book chapters on a wide variety of SEM issues.

**Doug Holmes**  
Acting Manager, eTranscripts  
Ontario Universities’ Application Centre

Doug has worked at the Ontario Universities’ Application Centre (OUAC), a centralized admission application processing service for the 20 universities in Ontario, since January 1995. He was a software developer until September 2018, at which point he moved to his new role of Acting Manager, eTranscripts. He was part of the original team which developed OUAC’s EDI-based postsecondary transcript exchange system and also augmented that system for PESC XML transcripts (both high school and postsecondary).

He has worked with calculating GPA’s from incoming electronic transcript data and has supported the OUAC’s various proprietary admission application exchange systems. Doug was also part of the team which recently mapped and implemented PESC XML standards for both the Admissions Application and Test Scores, as part of the OUAC’s new Application Management System (AMS), which is responsible for controlling the data exchanges with their various university, college and high school partners across Canada. He has served as the ARUCC representative to the AACRAO SPEEDE Committee from 1998 - 2005, and again from 2011 to present, and in October 2017 was appointed as a Co-Chair of the Canadian PESC User Group. He received the PESC...
Distinguished Service Award (2013/2014) and was a member of the OUAC team which won the first PESC Best Practices award (1999/2000).

Alex Jackl is a technology strategist, data scientist, and entrepreneur with over 20 years of experience leading the development of technology and policy solutions for educational enterprise systems. Alex is nationally recognized as a leader in state, national, and multinational initiatives, developing practical applications for use of standards and data. His focus is on the implementation of mature, modern architectures and strategies. Alex also works closely with leaders on visioning skills to prepare and enable organizations to implement effective, successful, and long-lasting transformation. Most recently, Alex was the CIO and Chief Architect of Choice Solutions, Inc., an educational longitudinal data management solution that was purchased by Houghton Mifflin Harcourt, Inc. (HMH) in 2013. Alex served as HMH Chief Data Scientist, Vice-President of Technology Strategy, from the acquisition through March 2015.

Dr. Natasha Jankowski is Director of the National Institute for Learning Outcomes Assessment (NILOA) and research assistant professor with the department of education policy, organization and leadership at the University of Illinois Urbana-Champaign. She is co-author, along with her NILOA colleagues, of the books Using Evidence of Student Learning to Improve Higher Education, and, Degrees That Matter: Moving Higher Education to a Learning Systems Paradigm. Her main research interests include assessment, organizational evidence use, and evidence-based storytelling. She holds a PhD in higher education from the University of Illinois, an MA in higher education administration from Kent State University and worked with the Office of Community College Research and Leadership studying community colleges and public policy.

Silvia has over 20 years of public and private sector experience in database architectures, large-scale data aggregation, data transformation and analysis, and use case discovery. In 2010, she was one of the principal designers and developers of the Ed-Fi education data standards initiative funded by the Michael & Susan Dell Foundation. Since then she has work closely with the foundation and the Ed-Fi Alliance providing project management and technical support to Ed-Fi implementation, product roadmap development. Originally from Mexico City, Silvia immigrated to the United States to work on her BA in Computer Science at Midwestern State University in Wichita Falls, Texas.

Jim serves as Senior Director of Technology at ECE. Over the last 16 years, he has successfully built a foundational framework for technology to support infrastructure, applications, and strategic activities. These initiatives have been key to the growth of services offered by ECE helping the business triple in size during Jim’s tenure. Jim manages a team of skilled technology professionals, sets technology goals and leads strategic planning initiatives. As part of ECE’s senior leadership team, Jim supports internal and external systems while involved in planning, general leadership and management efforts. Jim also works with PESC and the Groningen Declaration Network to standardize credential evaluation data and contributes to educational data mobility internationally. Jim serves as Co-Chair of the PESC GEO Code User Group, Steering Committee Member for PESC EdExchange, and on the PESC Board. Jim has also been representing PESC as speaker and presenter at Annual Meetings of the Groningen Declaration Network. After graduation from the University of Wisconsin Oshkosh with a degree in Biology and a minor in Chemistry, Jim began a career in business and technology professional consulting for organizations that vary in both size and industry. Jim’s consulting experience brings a wealth of knowledge in technology, project management, business systems, warehousing, and distribution to his current efforts.

Jeanne Kitchens is the associate director at the Southern Illinois University Carbondale, Center for Workforce Development. Over the past 20 years, she and her team have designed and implemented career and workforce development programs using technologies to improve access and engagement. Some current initiatives and programs include: Credential Transparency Description Language (CTDL) and Credential Registry services for Credential Engine; Talent Pipeline Management Web Tools, 3 Innovation, and JDX for US Chamber of Commerce, Illinois workNet Web Portal System and Illinois Open Educational Resources for State of Illinois.

Rachel Kruse is an Education Program Consultant with the Iowa Department of Education. She is a longstanding member of the Forum’s School Courses for the Exchange of Data (SCED) Working Group and she was part of the original team that developed the 2011 Prior-to-Secondary SCED codes. Rachel and her colleagues have spearheaded several SCED innovations in Iowa that are designed to reduce data burdens, improve data quality, and streamline data reporting and transfer processes. These include the use of SCED to identify courses that qualify students for automatic admission in Iowa’s public universities and the use of regional course coding workshops to help districts update
### Program

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

Mark Leuba is an ed-tech leader with deep experience in competency-based education in higher education. At IMS, Mr. Leuba oversees and coordinates the IMS road map of innovative open interoperability standards. Previously, through his consulting firm, Pathway Technology Partners, Mark provided advisory and strategy services for leading institutions, foundations, nonprofit and for-profit education organizations. A reference engagement, the Technology Interoperability Pilot project, was sponsored by the Bill and Melinda Gates Foundation and set the stage for several strategic projects at IMS Global in digital credentials and support for competency-based education and lifelong learning. Prior to forming his consultancy Mark served as Chief Technology Officer for Moodle.org, a leading provider of open source learning management solutions now owned by Blackboard, where Mark led Moodle.org’s transition to cloud-based platform services - at the time the largest migration of its kind in online education. As the Chief Information Officer for American Public University System from 2005-2010 Mark developed and executed a five-year plan laying a technology foundation for unparalleled growth in the University’s online programs. Before joining APUS, Mark held leadership roles in corporate IT, including nine years as Vice President of Applications for Random House, the world’s largest consumer trade publisher. Mark’s role in IMS Global is to guide its product management strategy and execution, building on the substantial success of the IMS team. Mark received his B.A. in Business Administration/Finance from the University of Baltimore.

**Matthew Pittinsky, Ph.D.**  
**CEO**  
**Parchment**

Matthew Pittinsky, Ph.D. is the CEO of Parchment and co-founder and former CEO of Blackboard Inc. Matthew is an assistant research professor of sociology at Arizona State University and also serves on the Board of Trustees of The Woodrow Wilson National Fellowship Foundation and the Woodrow Wilson Academy of Teaching and Learning, and the Board of Directors of CampusLogic and Picmonic. In 2012, the Teachers College at Columbia University awarded Matthew with The President’s Medal of Excellence to recognize his impact and innovation in the field of education technology and entrepreneurship. He is a frequent speaker and has recently been invited to present at NewSchools Summit, Association of American Universities meeting, National Association for College Admission Counseling National Conference and SXSWedu. Matthew holds a B.S. in Political Science from American University, Ed.M. in Education Policy from Harvard University Graduate School of Education and a Ph.D. in Sociology of Education from Teachers College, Columbia University.

**Ken Sauer, Ph.D.**  
**Associate Commissioner & Chief Academic Officer**  
**Indiana Commission for Higher Education**

Dr. Ken Sauer is Associate Commissioner and Chief Academic Officer at the Indiana Commission for Higher Education.

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

Kirsten Schroeder is a Partner in the K-12 National Practice component of IBM’s Global Services division. Ms. Schroeder specializes in the development and implementation of business systems as well as business process redesign for public sector clients.

**Michael Sessa**  
**PESC President & CEO**  
**PESC Board**

Michael serves as President, CEO, and on the PESC Board, a position he’s held since 2002. At PESC Michael manages PESC’s membership, finances, events, website, strategic planning and PESC’s fifteen committees and groups. He began his career in 1990 at a local branch of The Boston Five Cents Savings Bank in student loans and consumer lending & compliance and has dedicated his efforts to standardization and interoperability ever since. As evangelist at PESC, Michael speaks regularly at conferences and events throughout the USA, Canada and around the world. Michael first served on the PESC Board of Directors from 1999-2002, representing American Student Assistance (ASA) and the National Association of Student Loan Administrators (NASLA), before coming on board in 2002. Prior to PESC, Michael worked 10 years at American Student Assistance (Massachusetts Higher Education Assistance Corporation) as Director of Program Relations and Planning managing industry and government affairs and strategic technological initiatives. Michael is a 1989 graduate of Dartmouth College and was born and raised in Revere, Massachusetts, just north of Boston. He currently resides in Washington DC where PESC is headquartered.
**Program**

### Bob Sheets, Ph.D.
**Research Professor, George Washington Institute of Public Policy**

Robert Sheets conducts research related to education, workforce development, and economic development policy as well as labor market and education and workforce data systems. He is currently conducting research on innovation in higher education, student loan systems, labor market credentialing systems, and next generation workforce development policy including labor market and workforce information systems.

### Joellen Shendy
**Product Strategy Director, Workday**

Joellen Shendy is Product Strategy Director at Workday. Most recently Joellen was Associate Vice Provost and University Registrar at University of Maryland University College, a position she held for 7 years. She earned an MBA and MPA at National University and brings over 30+ years' experience to Workday.

### Rick Skeel
**Director of Product Management, Ellucian PESC Board**

Rick has been a long-time Member of PESC as a Member of the AACRAO SPEEDE Committee, as a member of Kuali, and was on the Committee that formed the foundation for what became PESC. He has worked with national and community standards groups for more than 30 years through his work on SPEEDE. He was a member of the PESC Board since July 2005, for more than 9 years and had to step down from his position on the Board for one year because of a change in employment. Rick worked at the University of Oklahoma for more than 36 years and retired from that institution at the end of October, 2012. He worked for the Kuali Foundation for two years and is now working for Ellucian. Rick is very interested in continuing the work he has been involved in for so many years, and believes in the value of PESC and its mission.

### Cathy van Soest
**Project Manager, EducationPlannerBC**

Cathy van Soest is Manager of Transcript Services with EducationPlannerBC in British Columbia, Canada. She facilitates the on-going development and implementation of electronic transcript exchange services with post-secondary institutions. In addition, she has collaborated with the British Columbia Ministry of Education to provide electronic high school transcripts to post-secondary institutions via EducationPlannerBC. Cathy has worked in both the post-secondary and K-12 sectors and has a background in open learning, education technology and international education. She is currently the Co-Chair of the Canadian Postsecondary Electronic Standards Council User Group (CanPESC) and a member of the ARUCC Groningen & Student Mobility Steering Committee.

### Rick Torres
**President & CEO, National Student Clearinghouse**

Rick Torres is the Chief Executive Officer and President of the National Student Clearinghouse, a position he has held since January 2008. Prior to joining the Clearinghouse, Torres spent his career in the private sector, both in the U.S. and abroad, spanning several industry sectors, including health care, financial services, and fast-moving consumer goods in leadership positions, including finance, sales, marketing, operations, technology, and executive management for PepsiCo, Philip Morris/Kraft Foods and Capital One. Throughout his career, he has served on several boards, including the John Tyler Community College Foundation, National College Access Network, and the Cesar Chavez Public Charter Schools for Public Policy, and the American Association of Community Colleges, where he is currently on their Commission on Economic and Workforce Development. In addition, Torres was a founding member and sits on the Executive Committee of the Groningen Declaration Network Group, a multi-national group of leaders dedicated to developing a trusted international data exchange ecosystem. Torres holds an M.B.A. in International Finance from Georgetown University and bachelor’s degrees in both Marketing and Management from Manhattan College. In 2013, he was a recipient of the Washington Business Journal’s Minority Business Leader Award.

### Jason A. Tyszko
**Vice President, Center for Education and Workforce U.S. Chamber of Commerce Foundation**

Jason A. Tyszko is vice president at the U.S. Chamber of Commerce Foundation where he advances policies and programs that preserve America’s competitiveness and enhance the career readiness of youth and adult learners. This includes the Talent Pipeline Management initiative, the Foundation’s signature workforce development strategy.

Tyszko’s prior experience focused on coordinating interagency education, workforce, and economic development initiatives. In 2009, he served as a policy adviser to Illinois Gov. Pat Quinn’s administration. In addition, Tyszko was deputy chief of staff and senior policy adviser to the Illinois Department of Commerce and Economic Opportunity.

Tyszko received his Master of Arts from the University of Chicago and his Bachelor of Arts from DePaul University. He is a certified teacher in the state of Illinois.
**Program**

**JASON WEAVER**  
*Head of Product  
Parchment*

Jason Weaver joined Parchment in 2010 and currently leads the product and design teams in his role of Senior Director of Product Management. In his work, Jason brings extensive practical data expertise from across large scale digital credential initiatives, and has served as a partner and consultant on a myriad of projects with state agencies to implement data exchanges at scale, including Indiana, Montana, and West Virginia. Jason is responsible for Parchment’s product strategy, roadmap, solution design, partnerships, and standards compliance. Jason has served as the volunteer co-chair of PESC’s Education Records User Group from 2014-2018. Jason holds a B.S. in Information Science and Technology from Penn State, and currently resides in Omaha, Nebraska.

**JOSHUA WESTFALL**  
*Senior Manager, Policy & Programs  
U.S. Chamber of Commerce Foundation*

Joshua Westfall is the senior manager of policy and programs at the U.S. Chamber of Commerce Foundation’s Center for Education and Workforce (CEW). Before joining the Chamber Foundation, Westfall was a government affairs manager at National PTA and led the association’s policy efforts on Capitol Hill. Earlier in his career, Westfall was a legislative associate at Washington Partners, LLC. His advocacy work began in the Ohio General Assembly working on grassroots efforts which led him to the Canadian Parliament and later to the U.S. Department of Education. Westfall graduated from The Ohio State University with a bachelor’s degree in political science.

**SUSAN WILLIAMS**  
*Director, Office of Education Information Management  
Virginia Department of Education*

Susan Williams is the Director of the Virginia Department of Education’s Office of Education Information Management. She began her career as a mathematics teacher and worked several years as a management consultant before working on education data and accountability systems. Susan has worked on many projects at the Virginia Department of Education including implementing a state-wide student ID system, Virginia’s federated longitudinal system, and the school report cards, to name just a few. Susan serves as a leader in the National Forum on Education Statistics and has been instrumental in helping the Forum fulfill its mission to plan, recommend, and develop education data resources that support local, state, and national efforts to improve education. She has led multiple Forum Committees and Working Groups, including the School Courses for the Exchange of Data (SCED) Working Group; she has helped to develop the Forum’s outreach and dissemination strategies; and she has contributed extensively to Forum resources on topics including data visualization, collecting and using disaggregated data on racial/ethnic subgroups, and teacher-student data links.
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

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,

“MyTranscripts | Nova Scotia’s Electronic Transcript & Data Exchange System.”

“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 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 2013and 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.
**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.

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**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.
<table>
<thead>
<tr>
<th>Institution (year founded)</th>
<th>Programming</th>
<th>SIS Platform</th>
<th>Enrolment (2018-19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acadia University (1838)</td>
<td>Undergraduate &amp; Graduate</td>
<td>Ellucian Colleague</td>
<td>4,498</td>
</tr>
<tr>
<td>Atlantic School of Theology (1971)</td>
<td>Graduate – theological</td>
<td>Custom built</td>
<td>109</td>
</tr>
<tr>
<td>Cape Breton University (1974)</td>
<td>Undergraduate &amp; Graduate</td>
<td>Ellucian Colleague</td>
<td>4,106</td>
</tr>
<tr>
<td>Dalhousie University (1818)</td>
<td>Undergraduate, Graduate &amp; Professional (3 campuses)</td>
<td>Ellucian Banner</td>
<td>19,223</td>
</tr>
<tr>
<td>Mount Saint Vincent University (1873)</td>
<td>Undergraduate &amp; Graduate</td>
<td>Ellucian Colleague</td>
<td>3,633</td>
</tr>
<tr>
<td>NSCAD University (1887)</td>
<td>Undergraduate &amp; Graduate - Fine Arts</td>
<td>Ellucian Colleague</td>
<td>910</td>
</tr>
<tr>
<td>Saint Mary’s University (1802)</td>
<td>Undergraduate &amp; Graduate</td>
<td>Ellucian Banner</td>
<td>7,030</td>
</tr>
<tr>
<td>St Francis Xavier University (1853)</td>
<td>Undergraduate &amp; Graduate</td>
<td>Ellucian Banner</td>
<td>5,348</td>
</tr>
<tr>
<td>Université Sainte-Anne (1890)</td>
<td>Francophone – Undergraduate &amp; Graduate university, and community college (5 campuses)</td>
<td>Blackbaud Student Information System</td>
<td>547</td>
</tr>
<tr>
<td>University of King’s College (1789)</td>
<td>Undergraduate &amp; Graduate – specializing in Journalism</td>
<td>Ellucian Banner</td>
<td>912</td>
</tr>
</tbody>
</table>

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.

**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.

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.

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.

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 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**

**2013**

- Conducted a feasibility study for development of a common application system for Nova Scotia
- Decided to proceed with development of eTranscripts system, as that would bring greater benefit to students and institutions

**2014**

- Identified PESC XML as the standard to use to ensure consistency and future compatibility with other jurisdictions
- Developed preliminary hub system concept
- Began data mapping to PESC schemas

**2015**

- Contracted technical architect to develop Technical Blueprint for the system
- Continued data mapping
- Issued development RFP at the end of the year

**2016**

- Selected Concertia Technologies Inc. as the exchange system developer
- Finalized data mapping to PESC XML schemas
- Began development of Privacy Impact Assessment and Information Sharing Agreement

**2017**

- Successful launch of MyTranscripts - delivery of public high school records to the Province’s public post-secondary institutions; phased in as each institution completed implementation and testing

**2018**

- All direct-entry PSIs in Nova Scotia receive NS public high school records through MyTranscripts
- Launched PSI-to-PSI exchange requirements definition and data mapping

**2019-2020**

- All PSIs in Nova Scotia will be able to send and receive records from other PSIs in the province.
- All PSIs in New Brunswick will be able to send and receive records from other PSIs in the province.
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.

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

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.
Join Today!

Development is underway at PESC.

The JSON Task Force invites those with & those seeking knowledge & experience regarding JSON & JSON-LD.
FOR IMMEDIATE RELEASE
March 8, 2019
Contact:
Jennifer Kim
PESC Membership Services Director
+1.202.261.6516

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

FOR IMMEDIATE RELEASE
March 8, 2019
Contact:
Jennifer Kim
PESC Membership Services Director
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PESC Members Approving PESC Compliant JSON v 1.0 and XML Request & Response v 1.0

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                                         |
| Gotocolleagefairs             |                                                   |
JavaScript Object Notation


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 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.

# # #
The PESC High School Transcript is emerging in every high school across the land.
THE STANDARD

SPECIAL EDITION

SPRING 2019

EDEXCHANGE

NEUTRAL | AUTOMATED | OPEN SOURCE
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EDEXCHANGE.PESC.ORG

MULTIPLE STAKEHOLDERS. ONE VISION.
THE DUPLICATE CIRCLE
DOYLE COLLECTION • WASHINGTON DC

THE DUPLICATE 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.
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