

Learning Public Innovation



Introduction

Incentives

Global Online Conference on Learning and Teaching Public Innovation and Entrepreneurship, January 16th 2019

Input by Neil Bower, Digital Academy, CA

On January 16th 2019, [the GovLab](#) and [Politics for Tomorrow](#) convened a global expert exchange focusing on “**Incentives for Learning Public Innovation**”. The discussion was led with an input by **Neil Bower** on [Canada’s Digital Academy](#).

The main takeaway from this online conference was that individual change or adaptation to a new practice must resonate within the organization. Certificates can only partially serve as a “currency”, the embedding of new skills into the working environment is a structural and cultural endeavour that requires management alignment. The purpose of gaining new competencies needs to be clearly communicated and interlinked with public value propositions. When building digital or innovation literacy, it is important to relate to existing levels of experience. Also, constraints in time and place need to be taken into account when designing the curriculum.

The next online conference is scheduled for **April 17th, 2019** and will focus on “**Curriculum Development for Learning Public Innovation**”.

Hosted by Professor Beth Noveck, Director of the GovLab in the U.S, and Caroline Paulick-Thiel, Director of Politics for Tomorrow in Germany, the online conferences bring together experienced experts who are all currently working on facilitating or teaching innovation processes in the public sector, either on a local, national, or global scale. The purpose of these meetings is to spark mutual inspiration and learning by convening a quarterly expert exchange, operating under the Chatham House Rule.



Neil Bower

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- works on establishing [Canada’s Digital Academy](#)
 - is the Vice-President of [Canada’s School of Public Service](#)
 - has been co-creating [Canada’s Free Agent Program](#)

→ [LinkedIn Profile](#)



Presentation Digital Academy

Digital means many things: tech, change of mindset, rethinking public value proposition, public business model, role of citizens and government

- In Oct 2018 the Digital Academy was created

Objectives: work with partners and experts to develop foundational, specialist, and leadership digital skills

- Re-focus learning on creating value through practical application of tech and tools in government

- Build diverse and inclusive communities and networks

Outcomes: help public servants learn and think in this new paradigm, knowledge and skills in this area

Principles inspired by Government of Canada Digital Standards

Inspired by Government of Canada Digital Standards

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|--------------------------------------|--|
| ① Design with users | ⑥ Build in accessibility from the start |
| ② Iterate and improve frequently | ⑦ Empower staff to deliver better services |
| ③ Work in the open by default | ⑧ Be good data stewards |
| ④ Use open standards and solutions | ⑨ Design ethical services |
| ⑤ Address security and privacy risks | ⑩ Collaborate widely |

5 products that characterize the Academy

Products



Digital Foundations (Bus Rides)

- Any public servant on their way to work can get bite-size info to inform them

- Variety of learning opportunities to raise digital awareness and literacy for public servants
- Combo of original content, third party solutions and community interactions
- Earners will have access to material of a variety of levels

Premium - Specialized Learning

Public servants are invited to nominate learners in the following areas

1. Data
2. Design
3. AI and Machine Learning
4. Development
5. Disruption

2. Premium - Specialized Learning

				
Data: skills and tools required to conduct analytics, develop and test hypotheses, visualize and share reproducible results	Design: skills related to techniques and tools used in user experience research & service design in a digital age	Artificial intelligence and Machine Learning: practical experience in developing and using algorithms to learn from and make predictions or decisions based on data	Development: application & Web development and coding; includes Bootcamp in developing web and mobile applications & introduction to DevOps	Disruption: hands-on experimentation on technologies in an innovative laboratory environment

Leadership - for more senior and executive leaders

Finding that it's an easier shift for many employees to make but tougher for senior employees

Already piloted some leadership programs, worked with UK, Institute on Governance

When nominating a leader, we give them a challenge. Leader comes with challenge that's in their business agreement, marry them with other leaders in that practicum

Anticipating 10-12 to come through in first prototype cohort

They will provide coaching, mentoring, IT and other support for that practicum

Off the back of this practicum that they'll be doing certification

Community aftercare: want to provide a community sandbox; also have learning and networking events to keep relationship

3. Leadership



① Digital Solutions

- Lead agile teams in designing, delivering and operating services
- Leverage data as a business asset
- Use innovative and modern skill-sets and tools to deliver value
- Collaborate and partner effectively with others
- Change leadership within organizations

② Digital for Senior Leaders

- Understand the drivers of success of a digital government
- Be attuned to digital's potential disruptive impact on culture and processes
- Rethink how they organize, measure, recruit, share ideas and partner

More details can be found in Neil Bowers presentation PDF.

Foundation - Curriculum Overview

Annex: Foundation - Curriculum Overview

Digital Government

Showcase domestic and international government best practices, policies, and tools and innovations to educate and inspire across government and beyond.

Design Foundations

Enable public servants to use digital information and communication platforms to find, evaluate, create, and communicate clear information.

Digital Literacy

Encourage public servants to work in a more iterative and creative approach while basing the design of government products and services on end-user's needs, wants, and limitations.

Technology & Tools

Foster the use and exploration of technologies to inspire more efficient and innovative ways of working in the public service.

Challenges

- Innovation sounds and looks great when it's working, but a lot of people express extreme frustration approaching barriers
 - To counteract that we created a podcast on innovation - interview people about their frustrations; important to show people this is not a facade, it is change management
 - Also considering giving tech to these participants and trying to get them to keep it
- Leadership side: community around service delivery takes to this naturally, leadership has biggest disconnect



Discussion

In terms of certification or providing following opportunities - since we can give people an intro to data science and skills but much deeper content will come from universities. Is there a learning path that your organization has identified?

Certification - where are your measurements for prototyping, benchmarks, guidelines, skills that you aspire towards? What is the competency framework?

Last year, we offered a training in Data Analysis in Python, and 60% of the participants left the course by the time it finished. It is probably because of the different levels of knowledge the participants had (for some, it was too hard and for others it was too easy). Do you take a test to the potential students beforehand in order to know their level of knowledge?

Selected questions and answers

We're working with agencies and learning institutions to point to their content but also invite them to delivery of learning stream; prototyping their cohorts for the first 3 areas; definitely open to partnerships

We're trying to use the best of what the world has, trusted training partners we point people to. Chatted with some organizations that do design → overlapping learning outcomes, credit for courses transfers

We're in the development stage now so haven't done it yet, still in the process of developing certification; thinking of short term certification, maybe 2 years

In AI, machine learning, and data streams they want some data literacy so they will be doing some mild testing. Also important to baseline the skills. Trying not to put too much emphasis on coding. Dividing people into different streams should help too.

What are the topics that comprise your data curriculum?

We just created an AI curriculum for regulatory frameworks.

Annex: Premium - Sample Data Curriculum

- ① Data Science Universals
- ② Basics of Programming
- ③ Statistical and Math Foundations
- ④ Data and Information Architecture
- ⑤ Data Collection & Processing
- ⑥ Data Exploration & Visualization
- ⑦ Basic Data Analytics Techniques
- ⑧ Measures & Metrics
- ⑨ Advanced Data Visualization and Reporting
- ⑩ Unstructured Data & Sentiment Analysis
- ⑪ Predictive Analytics

On a related note, has anyone done surveys of knowledge of different innovation skills?

OECD has in Chile. It was self-selection of people rating themselves and managers rating those same people. We're also conducting one in Brazil right now as well.

Are the curriculum modules all in these bite sized bits? What's the format? Podcast, video?

Foundation is a grab bag- objective is to build literacy and increase appetite for further learning; the learnings come in different forms, they are researching to see what people like

Is this first iteration more focused on getting a lot of people really interested or is it a deep dive?

There are 5 product owners, and each has a mission. The foundation owner has a mission to reach as many servants as possible. Premium stream is different, fewer people, different learners and KPIs. Leadership side is trickier, practicum is more about experience

In these areas, are you connecting with the largest system focusing on these motivations and opportunities to encourage people to use this system?

Change management is not easy. One of the things we need to do in CA is align innovation and responsibility efforts, not sure if we have management alignment.

How do you see that management alignment coming into play? Which players do you want to work with to exercise that role?

Everyone has their own ecosystem. In CA's case, there is a unit for public sector renewal. We see the school as being a new addition to that. The school can offer a neutral, supportive, and active partner.

Further information

- Draft data, AI/ML, design, and leadership curriculum: attached
- [Government of Canada Data Strategy Roadmap](#)
- Research and development platform – at this point mostly testing processes for rapid content creation and publishing (e.g., machine learning-supported transcription and translation) and very granular analytics: www.busrides.ca
- Example of our prototype analytics dashboard: attached
- PCPO Competency (Skills and Mindsets) Framework for Government of Canada Policy Practitioners: beta attached
 - PCPO Competency Definitions and Icons: attached
- Policy Community Handout - an introduction to the Policy Community Partnership Office: attached
- XFN Program Handout: attached
 - The Cross-Functional Policy Mobility Program (XFN) allows indeterminate public servants to gain experience in different policy functions, and for managers to benefit from multi-disciplinary teams.
- Medium-term policy planning: links to prototype collection of new policy instruments (MTP 8.5X11- BIL Dec 6 2018): attached
- Policy Curriculum Overview: attached
 - This document provides an overview of the approach PCPO is taking towards developing learning material.
 - We are interested in collaborating, if you would like to join us please contact the learning lead at policommpoli@canada.ca
- Webcast: <https://webcasts.welcome2theshow.com/CSPS2018>
- Highlight reel video: https://www.youtube.com/watch?v=_oYUmdjPo5s



Next steps

This documentation has been approved by the participants. Criticism, approval and commentary is all welcome.

The next call will focus on curriculum development with an input by Enrique Martínez from the Center for Leadership Development.

Please let us know if we should reach out to other experts and feel free to invite more public innovation educators and facilitators to the mailing list and [LinkedIn group](#).

We will send invitations and reminders in time.

Looking forward to seeing you!

Caroline Paulick-Thiel, Beth Noveck and Sam DeJohn