

# Learning Technology: Current State of the Canada School of Public Service



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National Research  
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# Background Information

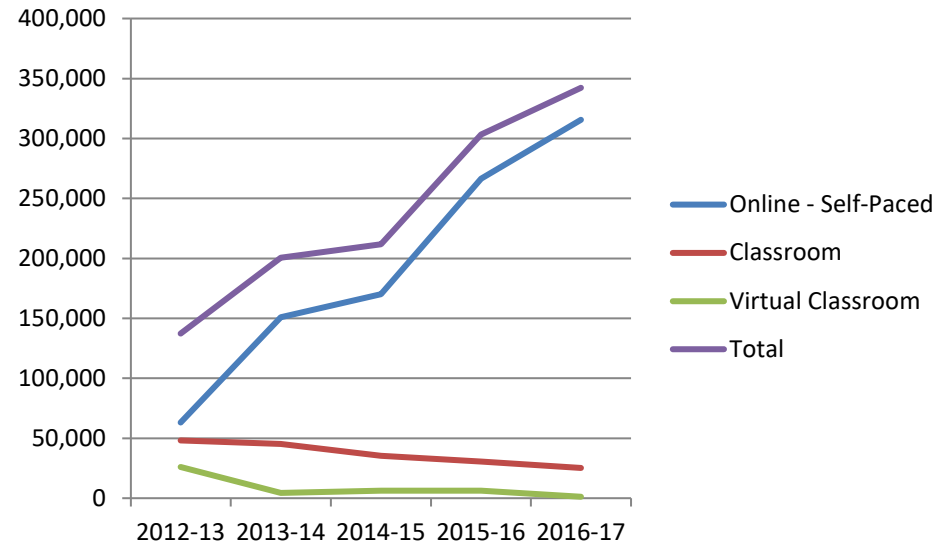


# Methodology

- Review of background Documents
  - Usability studies
  - GCCampus Business Plan
  - CSPA Annual Reports
- Interviews with CSPA staff
  - 12 interviews, 1 hour avg, 16 people
  - Wide representation of functions
- Assessment of CSPA website
  - Review of videos, learning aids
  - Enrollment and completion of several courses

# In-Class Learning

- Traditional focus on in-class learning
  - something the school understands and has developed expertise



- Through online learning has increased dramatically, classroom-based learning has declined by only a bit more than 25 percent.

# Business Model and Transformation

- Learning is offered to departments as a centralized service.
- This changes the way the school designs and offers courses.
- Data collection and storage is necessary to track usage.

# GC Campus Suite

- Saba learning management system (LMS)
- Drupal 7 content management system (CMS)
- Moodle LMS
- Kaltura OVP
- CSPA service bus





# Events

- Recently launched an events service using WebEx for online access and Moodle for asynchronous content
- Video broadcast / player CanWebCast (now [Collaborate.video](https://collaborate.video))

Several people expressed enthusiastic support for the online events being broadcast on WebEx (and which also could be distributed as podcasts). A specific block of time is allocated for them, which makes scheduling much less *ad hoc*, and they address current and timely issues, and support immediate feedback.



# Wider Environment

1. GC Tools, including including GCConnex, and
  2. Human Resource (HR) and Treasury Board tools and applications, which include services such as MyGCHR
- Neither replaces the LMS
  - Other tools event scheduling system, an email newsletter system, Survey Monkey and [Cognos](#)



# Mobile Learning



# Notes from the Workshop

- Mobile learning is an emerging trend
- Much more than simply playing existing courses on a mobile device
- What is the business case for using mobile learning for the school?
- What are the applications of mobile in large classrooms?
- What do our CSPA learners need?



# Defining Mobile Learning

- *Access* - learning as you go, with different devices
- *Device* – smartphone only? Or tablets and laptops?
- *Location* - learners can learn outside their office
- *Design* - content specifically designed for mobile
- How does GCCampus currently support mobile?
  - People can use GC Campus on mobile, versus
  - GCCampus was not developed for mobile

# Mobile device employment

- Most everybody has a mobile device, including especially Androids or iPhones
- Many department-issued Blackberries.
- Not many people are using mobile devices to access content on GCCampus,
- The market for mobile would be different than that for traditional learning content, and would not include all of GCCampus content.
- People also mentioned the use of mobiles in classrooms

# Mobile device employment

**Figure 1.0 – Session by Device Category**

Desktop	Tablet	Mobile
17757	76	251

**Figure 2.0 – Session by Browser**

Browser Sessions	Number
Internet Explore	15,716
Chrome	1,534
Firefox	591
Safari	179
Edge	26
BlackBerry	24
Android Browse	6
Opera	4
UC Browser	3
Iron	1

**Figure 3.0 – Session by Mobile Device**

Mobile Device	# Session
(not set)	168
Apple iPad	70
Apple iPhone	34
BlackBerry KBD	19
BlackBerry Z10	3
Google Nexus 5	3
LG D852 G3	3
Samsung SGH	3
Samsung SGH-I	3
Samsung SM-G	3

**Figure 4.0 – Session by Browser version**

Browser by version	Number
11	6,028
7	4,697
9	3,451
10	1,378
8	162

# Mobile policy frameworks


























- Policy frameworks mentioned:
  - *Treasury Board Secretariat (TBS) guidelines:*
    - the [Standard on Web Accessibility](#),
    - the [Standard on Web Usability](#) and
    - the [Standard on Web Interoperability](#),
    - The [Web Experience Template](#) (WET) kit
  - *The Government of Canada Policy on Acceptable Network and Device Use*
  - *The World Wide Web Content Accessibility Guidelines ([WCAG](#))*
- Need to incorporate background knowledge and best practices
  - Eg. Jay Cross and Clark Quinn.
- Policy matters: security requirements, device provision or device standards, equity of access, and the need for a smooth transition.

# Mobile delivery standards

- Participants weren't aware of specific mobile delivery standards
- Assumed delivery would be supported for both WiFi and telecom cellular phone standards.
- CSPA is available outside the intranet
- Universal Design for Learning ([UDL](#)) mentioned several times and currently used by CSPA.
- Sharable Courseware Object Reference Model ([SCORM](#)) specifications and software as well as HTML and Javascript.



# Mobile Delivery Standards (2)

	Web Site	e-School Platform	ILMS	Custom Courses	Third Party Product
<b>Mobile Aware</b>					
<b>Access:</b> the content is accessible					
<b>Mobile Friendly</b>					
<b>Design Principles &amp; Approaches:</b> Embedding principles (images, links, layout) with mobile friendliness in mind.					
<b>Optimization:</b> Development based on screen size and resolution.					
<b>Mobile recognition:</b> service or application recognise the computing device.					
<b>Mobile Market</b>					
<b>Content:</b> Specific content for mobile users					

# Devices

- Nobody suggested standardizing on Blackberry
- Wide recognition that CSPS would need to be able to support a range of devices
- Government is trending toward BYOD
- Issues of support, security and service delivery
- Impractical and too expensive to provide devices
- Need to be as device-agnostic as possible; a preference for HTML5 rather than native applications

# Pedagogical principles

- The only formal principle mentioned as ADDIE
  - Analyze, Design, Develop, Implement, and Evaluate
- Need to standardize on a pedagogical model
- Broad agreement what CSPA is doing is not sufficient to support mobile pedagogy
  - The bias toward formal courses and the widespread employment of presentation mode were seen as an issues
  - Other modalities such as performance support or knowledge management, would be difficult to deploy in the current environment
- Suggestions for mobile included job aids, podcasting, spaced learning
- Business needs should drive the mobile technology employed

# Capacity and tools

- Confidence in the team's capacity in HTML5
- Shortage of staffing resource
- No capacity to venture into multiple directions.
- Skills upgrading or time for learning needed.  
Possibly specialist staff would be needed
- Larger-scale applications more challenging
- Governance an issue - priorities shift frequently
- Cultural shift among the largest challenges

# Assessment and quality control standards

- Course-completion surveys - Kirkpatrick Level 1
- In-person scores slightly better than online
- Unclear how much learning actually occurs
  - UDL and WETkit themselves ensured quality, say some
  - others argued that training is more than just transmitting information and more than just compliance
- Quality control needs to focus more on business goals and learner needs
- CPS needs to consider in its assessment process what feedback it actually needs

# Adaptability to change

- Recent transformation initiative – a lot of change has already taken place
  - CSPA is adapting well to change
  - a limit to how much change CSPA can handle.
- Some the school isn't adaptable to change
  - the structure of the school hasn't changed
  - the major focus is still on classes and classroom delivery.
- Some felt the school sometimes leapt into change without justification
  - it was following “the next big thing”
  - CSPA is very good at changing, but lacks the follow-through

# Personalized Learning





# Notes from the Workshop

- A discussion of competencies
  - CSPA works reasonably well with competencies
  - the capture of learning activities is a difficult challenge.
- A tension in different approaches
  - GCConnex and GCCampus were developed using open source tools. But by contrast, the government employs large enterprise systems such as Saba and Skillsoft.
- Transferability of learning
  - Their records should follow them, perhaps tied to Prior Learning Assessment (PLA/PLR)
  - some records might be private or proprietary.

# Defining personalized learning

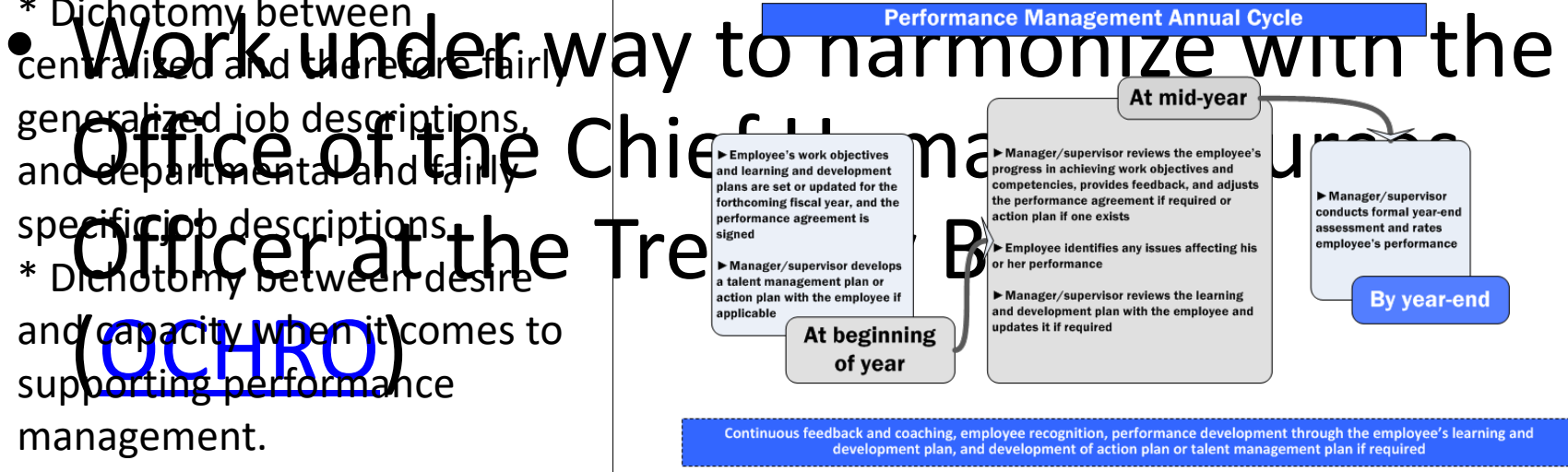
- *Content-awareness* - the system knows who I am
- *Broker* – the system brokers my access to resources
- *Adaptivity* – the system adapts to my learning
- Examples: Duolingo and Netflix
- Mechanisms: metadata, recommendations, learning paths.
- Issues related to personalization:
  - the trap of always receiving the same kind of content
  - balance individual preferences with corporate and business objectives.

# Existing tools for performance management

- Learner's pick topics of interest in GCCampus and MySchool News
- No specific tools linked to performance management were identified.

\* Dichotomy between centralized and therefore fairly generalized job descriptions, and departmental and fairly specific job descriptions

\* Dichotomy between desire and capacity when it comes to supporting performance management.



(Image: [TBS](#))

# Performance Support

- Although it wasn't explicitly addressed in the questions, a number of people raised the topic of performance support in this and other contexts.
- One person reported having created a prototype in Moodle based on contextual and role-based navigation and focused on linking up workflow with processes and tasks.
  - While completing tasks in a workplace environment a person could access tabs describing step-by-step instructions, details of steps, related resources, and contact information for help.
- The existing system employed by CSPA was seen by several as offering poor performance support

# Performance Support (2)

- Personalized learning and performance support linked, suggesting the service should be more like Google than anything, where it knows what you need and will help get it for you.
- At the executive level there have been many promotions in the system and the school hears a desperate need for "show me how":
  - - "show me how to think strategically"
  - - show me how to reframe an issue
  - - show me how to deal with the ambiguity of the world right now

# Talent management framework

- Treasury Board (and OCHRO specifically) employs PeopleSoft as the primary talent management system.
  - issue of using PeopleSoft for talent management while using Saba for learning management
  - There may be a change of approach when the existing Saba contract expires in 2018.
- Individual departments also have their own learning management systems and their approach varies widely
- In management training there is a more specific linkage between courses and competencies.
- Contrast with talent management to design learning in the corporate sector

# Competencies

- More frequently mentioned were the Key Leadership Competencies ([KLC](#)) defined by the Treasury Branch.
- Respondents also referred to the “16 core competencies” as well as competencies for functional communities. For example, the IS group (IS1-IS6) has 20 or 30 competencies which are increased as you go along (in a grid).
- There has been a project underway to map competencies to courses.



# Competencies (2)

- Discussions about tagging learning materials directly
  - significant undertaking, especially when consultations with the 16 functional communities is included
  - what tags have business value, and what will be the outcome of this work?
  - competencies can be subjective and subjectively evaluated
- Prior learning assessment
  - support for the idea but nothing currently in place
  - Need a clear understanding of the concept.

# Personal learning plans or learning paths

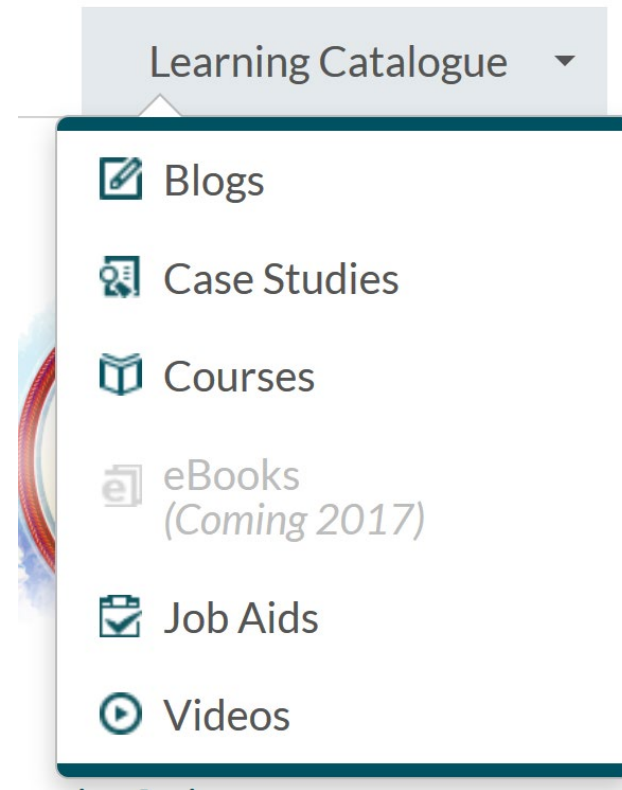
- CSPS would like to support personalized learning paths, but that it's not there yet.
- Right now, people can create their own learning plans but there is no formal support
  - CSPA was offering personalized learning plans for executives
  - Also, people in regulatory functional communities have personalized learning paths
  - But these were paper-based and not part of the online learning system
- Saba supports learning paths, the features weren't turned on

# Recommendation systems

- A number of people mentioned resource recommendations
- Aspects of content recommendation exist, such as the 'MyPicks' system in Drupal, but full-fledged collaborative filtering and push notifications are not implemented
- A significant challenge is the low number of resources
  - 310 courses are listed, 33 job aids, about 100 videos, 2 case studies and a couple dozen blog posts
- The underlying platforms have the capacity to support recommendations.
- Recommendations would be more useful if they included external resources, but this raises a new set of issues

# Informal learning

- Acknowledgement that informal learning is permitted
- Agreement that it is extremely important but unsupported
- Several respondents suggested that the school should take a hands-off approach



# Informal Learning (2)

- We heard that there is a lack of buy-in in the sense of thinking informal learning is a key piece of a person's biography
- The concern that informal learning would lead to abuse was mentioned several times
- There were also concerns expressed about the creation of resources and artifacts for both performance support and informal learning

# Personal learning records

- Record in GCCampus does not extend to courses taken outside the school
- There is a login to the school, and preferences in (for example) the Drupal system can be remembered
- For executives, a stronger system exists, as it's used to record prerequisites for promotion.
- Some referred to a business intelligence (BI) project about 1.5 years into its mandate
- Concerns about the resources needed to undertake such an effort, the focus of management on personal learning records, and the risks created by issues such as learner privacy and data security

# Personal profiles or data archiving

- Functionalities are extremely limited
- A basic profile learners can complete (with an avatar and basic personal information)
- Users can comment on posts and videos
- Otherwise, there are no provisions for individuals to make their own resources available to others on GCCampus (even the blogs are open to instructors only)
- Moreover, there was significant resistance to the idea of supporting that capacity and the view was expressed that GCConnex might be a better option (this will be explored more in the next section).

# Automated mechanisms in place for profile creation

- CSPA supports no mechanisms for automated profile creation or activity updates, and while this may be a useful activity, it seems to be beyond CSPA's capacity at the moment.



# Shared Learning & Crowd-Sourcing



# Notes from the Workshop

- Crowdsourcing ties in well with mobile learning, and as well supports the idea of social learning and collaborative learning.
- Can we trust the information being uploaded by people
  - Different mechanisms were suggested, from reviews to automated trust-evaluation algorithms.
- Where the school is going with crowdsourcing.
  - Co-creation, collaboration - What's the project? What's the strategy?
  - There is a proliferation of platforms available, and hence a need to synch GCCampus with services like GCTools.
- There's a challenge to the idea of the school itself. The very act of bringing people to the school (CSPS) takes them away from their network.

# Defining crowdsourcing

- *The messyspace* - the deputy minister came up with idea of a 'messy space' for user-generated content.
- *Course commentary* - a person could write that they took a course and make a selfie video about the results.
- *User-generated content* – gathering content from users to create courses or other learning resources.
- *External content* – sourcing learning content from other departments
- *Content curation* – get together and share (and rate) resources
- *Collaborative learning* and social learning

# Defining (2)

- A number of respondents also addressed the alternative pedagogies enabled through crowdsourcing methods
  - flexible responses to emerging issues
  - supports hands-on experience-based learning
  - helps in the formation of personal networks and communities.
- But is it useful? It depends on the learning objective, and it depends on the interests of the learners.
- Crowdsourcing can be essential to producing meaningful and relevant content
  - In many cases, content expires very quickly
  - it may take 6 months to produce a nice video on a subject, however, by that time the ship has gone somewhere else.

# Crowdsourcing and the School

- Existing support is quite limited
- Few examples were given, and only one course (the security course) was mentioned
- The technology infrastructure for crowdsourcing does not exist in GCCampus or even in the CSPC technical environment generally
- There is no standard understanding of crowdsourcing in the school
  - Discussions forums are limited to management or above
  - Only CSPS staff are able to blog in the GCCampus blogs
- The voices in favour of crowdsourcing were very strongly in favour (and frustrated by the school's resistance). The voices opposed were very opposed.

# Crowdsourcing models

- Respondents were not aware of specific models
- Some of the different ways crowdsourcing could be approached:
  - Massive Open Online Courses (MOOCs)
  - Communities of practice
  - Other models were new to most participants
- Several people discussed Communities of Practice (CoP) specifically, but with the observations that they had been tried before without success
- Other people couldn't imagine the idea of people uploading their own content to GCCampus, particularly if that content were to be used for learning
  - There are rules that govern such content, ranging from accessibility requirements to copyright clearance to bilingualism

# Open, shared, social and crowd-sourced learning environments

- Beyond discussion groups in Moodle and comments on other resources, there are no such environments supported by the school
  - school is attempting to augment the role of informal learning through the addition of job aids and similar resources
  - 3rd party content on the site but not from departments or individuals
  - the school adopted a wiki maybe 10 years ago and was working on [Tomoye](#) (a social network platform now owned by [Sitriion](#))
  - Contrast with the [waterfall](#) design process currently employed by the school.
- Time and effort it would take to set up such a space
- Creating courses informed by functional communities, departments such as Indigenous and Northern Affairs ([INAC](#)) and OHCRO

# Automated social network formation and management

- Collaborative filtering and privacy preserving technologies exist to facilitate the automated creation of social networks and groups, and we asked whether any such technologies were employed at the school. They were not, with the exception of tools available in Moodle to create a cohort.



# Applications of crowdsourcing

- The most common response was the suggestion that participants could support the creation of a shared knowledge base
  - collaborative development of resources
  - development of tools
  - facilitation of conversations and discussions around selected topics.
- The current approach, we were told, is *ad hoc*
- Broad agreement that the other suggestions in the list were good ideas, but there hadn't been any thought or effort around this.
- One person suggested using crowdsourcing to help CSPA set priorities, for example, about its future, its strategy, lines of business, needs analysis, and the like. "Let them vote up or vote down which things they want us to work on."

# Teaming environments and Messaging

- Respondents were familiar with teaming software but nobody reported using it in a CSPA environment
- No such services are officially supported at the school, though there may be 'skunkworks' applications.
- Experience using such systems in other departments. These included Slack, [JIRA](#), and [Asana](#).
- The LMS supports some messaging, and Cisco [Spark](#) had been supported in the past and may still be used by some
- There was also an initiative to use [Yammer](#) in the past, but it did not gain momentum
- Email, with text messaging also being infrequently used

# Authorship, sharing, annotation and ratings

- Support for such mechanisms at CSPA is limited
- Some people mentioned the use of electronic surveys for Level 1 course evaluations
- Others mentioned comments on resources.
- There is no rating or annotation system used.
- With respect to authorship, as noted previously, no such technologies are currently employed

# Social presence

- There was some awareness but not a deep awareness.
- Research in this area and theory-based approaches were identified
- The school does not have a theoretical approach to design or distance learning development; some people think about it, but not the school as a whole.
- There is no real school philosophy, but it might be a good idea to have a concrete vision.
- Others suggested that aspects of social presence are or would be valuable
  - introducing marketing & communication to influence social presence
  - mechanisms such as responding to comments
  - suggested that social presence is seen as creating risk for the school.

# Security and privacy constraints

- We heard a wide range of responses
- TBS has a variety of rules governing accessibility, bilingualism, common look and feel, information management, the protection of personal privacy, and more
- Some said these regulations make it effectively impossible for the school to manage or host third party or user materials.
- Respondents also pointed to the responsibilities of the school with respect to personal learning information
- In general, respondents agreed with the characterization that security and privacy issues create risk for the school.
- There was disagreement on how risk should be managed.
- The exact security risks are not known. No Privacy Impact Assessment ([PIA](#)) has been performed by the Privacy Commissioner

# The New GCCollab

- Some people thought there could be a role for GCCollab, while others disagreed, saying there's no role at this time.
- It was suggested that GCCollab could be used by the school to illustrate what it takes to perform various jobs in the public service. They also felt that there might be a marketing and communications role.
- Others suggested giving access to colleges and universities to the school's language products, so people who come in to the public service would have language skills.
- They also saw opportunities where students could get involved in learning with policy developers, or to have real world case studies.

# Resources & IT

- We asked some respondents whether existing staff and financial resources would be sufficient to support a shared space or crowd-sourcing initiative.
- More knowledge would be needed, we were told. An effort of perhaps 5 more people on IT, plus 3-4 people on GC Campus side, would be needed to support it.

# Virtual Library





# Notes from the Workshop

- Original intent of plans to develop a virtual library was to offer online access to texts and resources employed in CSPA courses
- Impact of government language policies on this initiative. The requirement is to be able to offer resources in multiple languages
- Questions with respect to the corporate culture at CSPA. What are the top priorities for the school: a virtual library vs performance support?
- Practical issues

# Defining a virtual library

- The school used to have a learning library and every department every department had libraries. So a virtual library was just a way to provide additional content support.
- But we can imagine a wider possibility. With all the departmental libraries closing there is a greater opportunity to do something meaningful
- In any case, there is conflict between the EBSCO user-pay model and the school's everything-is-free model
- Another interpretation of the meaning of 'virtual library' might be like GCCampus itself - a collection of courses, job aids, videos and other resources

# Existing VLs in the GoC

- Large number of virtual libraries in other government departments
- Awareness of these libraries was limited, but there was awareness at a superficial level, especially with regard to the activities of Library and Archives Canada ([LAC](#))
- There was some support for working with or interoperating with other departments, question whether it is a core focus for the school.
- Need for curation of materials that would be housed in a CSPA library?
- Some people referenced possible interoperability via GCCampus.

# Canada's Open Government initiative

- We were not able to include questions about Canada's Open Government initiative, and it was not raised by respondents.

# Linkages to the wider library community

- We were not able to include questions about linkages to the wider library community, and these were not raised by respondents.
- We were told, however, that the school's strategic directions branch is reaching out to possible development by universities, and the new executive development branch is looking at public-private sector development, for example, doing a 'teach plan' with [Helios](#) - where the school's participants and their participants get together

# Resource metadata standards

- What we heard was that work on resource metadata standards has been an ongoing activity for the school for some time now
- Staff were aware of initiatives such as Learning Object Metadata and [Cancore](#).
- However, GCCampus was conceived with the idea that metadata was not important, with the result that the system employed has very little metadata capability  
Respondents also described initiatives to employ metadata for learning resources ([MLR](#)) and an effort to develop a taxonomy

# Read and using metadata records

- Work being done in this direction. Developers are working on a tool for 'learning product application' - an in-house tool built from scratch.
- Efforts being made to make metadata creation more integrated with content creation tools
- Respondents also described the role of the School Content Integration Committee (SCIC) with respect to metadata
- The only *use* of metadata discoverable was the set of filtering options available in the Drupal search tool

# Information management environment

- Libraries typically employ content management systems in order to manage assets. We asked whether the school employs a CMS.
- The school does not have a Learning Content Management System ([LCMS](#)). There is lightweight LCMS capability in the Saba LMS. It should be mentioned that Kaltura can function as a video asset CMS.



# Open educational resources

- There is no CSPS policy on open educational resources and no school-wide approach to them
- There is some support for the concept but it is not universal
  - there was a great deal of scepticism about the use of third party resources
- A number of people expressed support for opening the school's own resources
  - and support from the Deputy Minister was cited with respect to some specific courses
  - Frustration was expressed at the slow pace in distributing resources openly
  - There is greater scrutiny of materials which may become public-facing.

# Material assessment & quality control

- There appeared to be no assessment function with respect to third party materials (to be fair, there was very little use of third party materials cited generally).
- The major quality control initiative at the school is the School Content Integration Committee (SCIC)
  - We heard that membership on this committee was unstable, and that it should be valued more than it is currently.
- One respondent suggested that an electronic performance support system could employ a ratings system such that quality content would “float to the top”.
- The school should look at what other institutions are doing, we were told. Other universities have published white papers on that and there is no need to reinvent the wheel.

# Rights management and copy control

- For CSPA materials, translations / copyright / accessibility requirements are validated by SCIC and are based on TBS standards.
- Staff generally felt that the school was very compliant with these regulations , though because the standards are constantly changing it's impossible to be 100% compliant
- Concerns were expressed about the quality of translations

# Integration with Other Platforms



# Notes from the Workshop

- The focus was almost entirely on integration with GCTools.
- The possibility of integration with GCTools creates business challenges for CSPS
  - exactly what would be connected?
  - how deep would the integration go?
  - who would be responsible for technology development?
  - what would branding look like?
  - how would user access be managed?

# What does 'integration' mean?

- *Linkage* - each with a tab or an icon on the other system
- *Single signon* - single signon with GCCampus and GCTools.
- *Common Services* - CSPS listed among the other services
- *Extending the bus* - user information and data exchanged
- *Learning Tools Interoperability* - launched using [SCORM](#) or [LTI](#)
- *Full integration* - CSPS resources are available throughout GCTools and vice versa
- Business value of integration
  - universal support for a single signon mechanism
  - integration as an excellent means to enable CSPS to deliver on its core mandate
  - Several people mentioned the need for extended training and support to help learners use the new system.

# Defining 'other platforms'

- CSPA plan envisioned integration with GCTools specifically
  - Discussions are already underway with GCTools
  - Concern that TBS is moving ahead too quickly
  - GConnex services are located behind the intranet
  - Some others also raised doubts about the utility of GConnex tools
  - Majority indicated growing support for integration with GConnex
- The other major target - OCHRE
  - Some felt CSPA is being pulled in two directions - are they more interested in tools, or performance management?
- Some discussion about integration - or at least interoperability - with external tools such as Facebook and Twitter.
  - On this, opinions were probably more divided than anywhere else, with some vehemently opposed to social networking services, and others pointing out that this is where most people work and communicate online already.

# Knowledge of other platforms

- We asked about participants' knowledge of other platforms, primarily to evaluate what range of options was being considered.
- All respondents were familiar with GCTools (though not necessarily every part of GCTools). Others mentioned services such as GEDS and the HRMS service that existed before Phoenix.
- Several participants discussed the state of learning management systems within the Government of Canada generally



# Employment and occupational platforms

- We explored the question of integration between GCCampus and employment or occupational platforms
- One thread of discussion considered the integration of GCCampus and performance management
  - Maybe managers should be able to see learning records as part of performance review,
  - Maybe there should be recognition of prior learning from work experience by the school.
- The view was expressed that GCCampus could be linked with Government of Canada employment services, but not external services such as Monster or LinkedIn. “We should have a solid internal platform that's seamlessly integrated & not worry about what's outside.”

# Identification and single sign-on

- *Everybody* wants single signon, defined as “you sign on once to your government account, and then you have access to everything,” and
- *Multiple* single signon projects exist in the Government of Canada.
  - CSPA has its own [Shibboleth](#)-based system
  - There is also the [MyKey](#) initiative.
  - There is in addition the general desktop login people use in their own departments
  - (note that we did not attempt a full survey of signon mechanisms).

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# Single Signon (2)

However, several issues were raised:

1. First, the level of security provided by (or required by) different signon systems varies
2. Second, there is not a clear definition of the need for, or business value, of signon requirements

# Support for distributed environments

Different interpretations of 'distributed':

- One respondent spoke of 'distributing learning' and made the point that 'build it and they will come' does not work. Support for subscription-based learning the school needs to remove the walls of learning from the containers they're in right now, said the respondent.
- Development of specific learning solutions for different departments. With the right application of metadata school staff should be able to approach a department and create a tailored program for them, we were told.
- Geographical distribution. The government's social presence in the regions is very important, maybe more important, we were told. In the long run, even Mirimichi (Phoenix) will work.

# Expertise & Resources

- Does CSPS have sufficient expertise and resources to implement the sort of integration programs being contemplated?
- The most common response was that the resources do not exist
  - Respondents said staff were capable of doing the work
  - Gap between expectations and the resources needed to do the job
  - The school could leverage work other people are already doing
  - The school has fuelled the idea that specialists should perform certain tasks, while in fact people could do much more themselves, with the right amount of support
- We also asked specifically about the stability and robustness of the existing platform, and especially the enterprise bus, which was created specifically for GC Campus

# Strategic Directions



# The New Business Model

- As seen from the systems/solutions perspective:
  - no service catalogue / pay once, you're in
  - looking to create 'opt-in' strategy for those outside core audience (eg. Canada Post)
  - key challenge: knowing who CSPS clients are
- They're trying to do partnerships (3 pillar sourcing strategy)
  - eg universities/3<sup>rd</sup> party vendors
  - High interest in OGDs having place to publish content
- Messy space /crowdsourcing
  - DM wants to move forward with that
  - But the department does not take risks (privacy, language, accessibility)
  - Same sort of risks with ebooks/3<sup>rd</sup> party etc.

# Drivers

- Up to now, IT has been driving functionality, but we can't push it much further without content following
- Great opportunity & the business value
  - but the business requirements are not yet defined
  - need the business cases & visions for the future
- Need to change the delivery model
  - can't imagine sitting in front of the screen for 4 hours
  - want to be able to learn quickly
  - or I want the traditional method
  - it's not just the learning opportunity but also the networking opportunity