Delivery Platform Evaluation Rubric (Higher Education)

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Précis:

Students in UBC's Undergraduate Medical Program (UMP) are tasked with recording, uploading and annotating videos of specific clinical skill demonstrations. To facilitate this, they require an Learning Management System (LMS) that will allow them to upload, view and give feedback on videos; participate in discussion forums; and view other multimedia educational artifacts. This rubric will aid these students and faculty in choosing the LMS that will best suit their needs.

Rationale for the rubric criteria:

We chose to group our rubric criteria under five broad categories inspired by Tony Bates's SECTIONS model (Bates, 2015). In practice, selecting an LMS for a university is an incredibly complicated and contentious task as the administration, faculty, and students often have different priorities. Thus for the purposes of this rubric, we focused mainly on the key requirements based on the limited information from the case:

- robust tools, hosting, and storage capabilities for multimedia and learning objects, including support for video annotation features in particular;
- access and ease of use for faculty and students who may be located in remote areas due to their rural family clinical practice;
- strong grouping and communication features to support their work in groups of four or five, as indicated in the case; and
- ability to support three partner institutions simultaneously on one platform.

RUBRIC

	Ideal (3 Points)	**Good (2 Points)**	**Poor (1 Point) Unacceptable (0 Point)**	**Score**
Students				
Access	Multimedia record and playback, and LMS features are fully accessible based on network capacity and hardware across all clinical settings.	Multimedia record and playback, and LMS features are not fully accessible based on network capacity and hardware at some clinical settings; some additional expenditure required for usability across all locations.	Multimedia record and playback, and LMS features cannot be reliably used at several clinical settings due to network capacity and hardware limitations; a large amount of additional expenditure required for usability across all locations.	

Design/aesthetics & ease of use	Simple, intuitive interface that is pleasing to the eye. Little or no training needed to get started. Look and feel is inviting.	Good functional interface that can be navigated with minimal training. Good look and feel.	Interface is functional but somewhat complex and counterintuitive. Design is confusing or distracting.	
Costs				
Cost of LMS overhead	Infrastructural costs of LMS (licensing, hosting, and other overhead) falls within budget range.	Infrastructural costs of LMS (licensing, hosting, and other overhead) is within 10% above budget.	Infrastructural costs of LMS (licensing, hosting, and other overhead) is above 10% of projected budget.	
Interaction (student-student & student-content)				
Communication & Collaboration	Provides email for student to student and between instructor and students (asynchronous by roster, individual or group) as well as instant messaging and threaded discussions.	Provides email student to student and between instructor and students (asynchronous by roster, individual or group) and threaded discussions.	Provides email between instructor and students (asynchronous by individual or group) and threaded discussions.	
Grouping (features to subgroup students within courses)	Grouping features are robust and easy to use; groups have private collaboration space with full suite of communication tools.	Grouping features are available but are not all easy to use and/or collaboration and communication tools are limited.	Grouping features are difficult to use or do not exist.	
Video annotation	Video annotation tool is available and supported by vendor.	Video annotation tool can be integrated by a third party.	Video annotation tool is not available and cannot be integrated by a third party.	
Multimedia/ learning object integration (LTI - Learning Tools Interoperability)	LMS is able to seamlessly integrate multimedia and learning object libraries from major medical textbook publishers.	LMS is able to integrate multimedia and learning object libraries from limited selection of major medical textbook publishers.	LMS is not able to integrate multimedia and learning object libraries from major medical textbook publishers.	
Mobile learning	LMS has a mobile application that's free. Text and media are adjustable to allow for easy viewing on any tablet or smartphone.	LMS has a mobile application available at a minimal cost to the user. It adjusts text and media size to make it easy to view on most tablets and smartphones.	LMS has a mobile application available that may be considered expensive to the user. It does not adjusts text and media size. Or, mobile application is not available.	
Grading & learning analytics	Instructor able to input grades, create rubrics and gather in-depth data on	Instructor able to input grades and gather some data on student activities.	Instructor able to input grades. No ability to gather some data on student activities.	

	student activities and learning outcomes.			
Organizational Issues				
Hosting and storage	Hosting, data storage, and backup are easily scalable to accommodate growing repositories of multimedia.	Hosting, data storage, and backup are easily scalable to accommodate growing repositories of multimedia.	Hosting, data storage, and backup are easily scalable to accommodate growing repositories of multimedia.	
Technical support and training resources	Training videos and written materials accessible through LMS for all instructor and student needs. Pop-ups or rollovers provide "just-in-time" information for specific actions.	Training videos and written materials accessible through LMS for all instructor and student needs.	Written materials accessible through LMS for all instructor and student needs.	
Compatibility with existing institutional information systems	Vendor has proposed clear solution for integrating, managing, and authenticating student information across three institutions; solution has previously been tested.	Vendor has proposed possible solution for integrating, managing, and authenticating student information across three institutions, but solution is untested.	Vendor has no proposed solution for integrating, managing, and authenticating student information across three institutions.	

Reasoning for the Components of the Rubic:

Rubric Category	Reason for Choosing
Privacy/Access Options	Privacy is a major concern for both teachers and their students. A secure site is key factor when deciding on and LMS. Access is also very important because if you limit access you limit interaction.[1]

[1] (2014). Selecting a Learning Management System: Advice - Educause. Retrieved June 9, 2015, from http://www.educause.edu/ero/article/selecting-learning-management-system-advice-academic-perspective.

Aesthetics	Some may think that function is more important that form in the case of an LMS but how something looks is very important to how we interact with it and perceive it. Dr. Fritz Mengert, a neurocognitive specialist, believes that our brain is constantly looking for things that are aesthetically pleasing and links those things with positive emotion. If an LMS is designed with aesthetics in minds then students are more likely to enjoy using it and therefore become more engaged in learning.[2]
Compatibility with Existing Technology	Having an LMS that is compatible with existing technology is important for the structure and implementation of the course. If the system is difficult to navigate or operate, students or educators will have an even greater workload to conquer. When the LMS is accessible and has some amount of familiarity, users are able to focus their efforts more on the content they are developing and producing, as well as giving the instructor the ability greater ability to monitor and critique the work being done.
Communication Capabilities	For and LMS to be an effective teaching and learning tool it must be able to seamlessly allow communication between all those involved. Online education is based on the ability for individuals who are not in each others physical presence to communicate in ways that overcomes this geographical divide.
Cost	The implementation of any LMS system can place a large economic impetus on a University. It is necessary that the Universities find a system that will not place a major strain on their budget, whether it is in the lease of the system or the technological support that will go into the system. We must take into account not only the cost of acquiring the LMS by the university, but also additional costs that can be placed on the users for software or features that may be needed in addition to the basic system.
Tech Support	An important question to ask when implementing a new LMS is the technical support that is provided with the system. If there is no support, it will be another economic factor that will be added to the cost of the LMS that must be taken into account. If the tech support is integrated into the LMS, it must have a high level of accessibility and ease of use for both the students and instructor of all levels of computer literacy.
Ease of Use (To Create)	Instructors must use both time and resources to create the course material within the LMS. If the process is not streamline it will place a large burden on the instructor.
Ease of Use (For End User)	In the final selection process the user experience cannot be overlooked. If

[2] (2012). http://www.teacher-support-force.com/ 2014-11-23T15:56 ... Retrieved June 9, 2015, from http://www.teacher-support-force.com/GszEBDkD.xml.

	the user experience is not smooth then the whole purpose of the LMS is moot.[3] Frustration while using technology is detrimental to productivity, user mood and their relationships with those they are working with.
Multimedia Support	Since this project is based on the ability to exchange and annotate video, the ability of the LMS to support various types of multimedia is a key consideration.

Works Cited

Bates, A. W. (2015). *Teaching in a digital age: Guidelines for designing teaching and learning for a digital age*. BCcampus.

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