### Assignment #1:

### Online Delivery Platform Evaluation Rubric

### Group Assignment

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**Précis**

Yukon Education Student Network (YESNet) and Yukon First Nations Programs & Partnerships Unit of the Yukon’s Ministry of Education seek to explore the advantages of a blended learning approach on educational success for Aboriginal students located in remote areas in the Yukon. Therefore, a learning management system (LMS) that is capable of supporting the learning objectives conducive to a blended learning environment will be required.

The Na Cho Nyak Dun First Nation has agreed to pilot the program, however, various challenges need to be taken into consideration when selecting a learning management system. Due to the remote nature of their traditional, unceded territories, community members often have to rely on 3G technologies, owing to the low bandwidth and unreliable Internet accessibility. Given these limitations, it is also probable that students in the area will have varying digital literacies and computer skills. Moreover, it is imperative that the LMS selected not only addresses technical needs, but also the students’ educational and cultural needs. Therefore, the platform should facilitate the delivery of relevant content in a context that respects “ancient knowledge and teachings to restore control over Indigenous development and capacity building” (Battiste, 2002).

Should the pilot program prove to be successful, YESNet’s goals are to expand the project such that Yukon’s other 12 First Nations will have access to the program, thereby resulting in an increase in student enrollment and workload on the server.

As members of the YESNet's Learning Technologies Advisory Committee (LTAC), we have been asked to develop a rubric that will facilitate the evaluation of various LMS in order to determine which will best meet the technical, instructional, and educational needs, as well as support the overall current and future goals.

LMS Platform: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ URL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Criteria** | **Does not meet expectations** | **Approaching expectations** | **Meets expectations** |
| **Operations** | **Software costs** | The software costs are not within the allocated budget and costs are non-negotiable. | The software costs are not within the allocated budget, but costs are negotiable. | The software costs are within the allocated budget. |
| **Cost predictability** | Licensing costs are not predictable. | Licensing costs are predictable over 2 years. | Licensing costs are predictable over 5 years. |
| **Licensing options****(Installed vs. SaaS)** | The LMS does not provide cost-effective licensing options. | The LMS provides limited cost-effective license options depending on the number of registered users. | The LMS provides cost-effective licensing options based on the number of registered users. |
| **Maintenance and technical updates** | Maintenance costs are above allocated budget and updates require external IT contractors.Technical updates are inconsistent and unannounced.During updates, the system is unavailable to instructors and students, which may take 2-5 hours. | Maintenance costs are reasonably fair and updates do not require external IT contractors.Technical updates are consistently scheduled.During updates, the system may be unavailable to instructors and students, which may take 2-5 hours. | Maintenance costs are minimal or included in the total cost.Technical updates are consistently scheduled.Updates cause minimal disruption to the availability of the system to instructors and students. |
| **Ease of use** | Time and training is required for students and instructors to effectively use the LMS. | The LMS is fairly intuitive and would require minimal assistance for instructors and students to effectively using it. | The system is easy to use and can support the varying digital literacies and computer skills for both instructors and students. |
| **Development** | Development and implementation time is unreasonable and does not fit in the organization’s timeframe.The material developed is not scalable.The LMS does not support open educational resources. | Development and implementation time is fair but slightly surpasses the organization’s timeframe.The material developed is scalable.The LMS supports open educational resources. | Development and implementation time is reasonable and fits within the organization’s timeframe.The material developed is scalable.The LMS supports open educational resources. |
| **Support availability** | IT support is available only by email.The response time exceeds 72 hours. | IT support is available by email, phone, and online chats.The response time is within 72 hours.Tech support is available Monday thru Friday, 9-5. | IT support is available by email, phone and online chats.The response time is within 24 hours.Tech support and assistance is available 24/7. |
| **Scalability** | The server is unable to support enrolment exceeding 100 students without disrupting the LMS functionality and response time.The LMS cannot support course sizes exceeding 20 MB.The system is not flexible enough to adapt to the organization’s future needs. | The server and system is able to support enrolments up to 500 students without disrupting the LMS functionality and response time.The LMS can only support course sizes up to 60 MBThe system is flexible enough to adapt to the organization’s future needs. | The server is able to support unlimited enrolments without disrupting the LMS functionality and response time.The LMS can support course sizes exceeding 60 MBThe system is flexible enough to adapt to the organization’s future needs. |

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| **Criteria** | **Does not meet expectations** | **Approaching expectations** | **Meets expectations** |
| **Functionality** | **Speed** | Content cannot be viewed or accessed within the LMS in low-bandwidth situations.  | Content cannot be consistently viewed or accessed within the LMS in low-bandwidth situations.  LMS is slow and content downloading/uploading is affected. | Content can be consistently viewed and accessed within the LMS without freezing or stalling in low bandwidth.  Learner can easily view, download and upload content with few issues. |
| **3G capabilities** | The LMS does not provide a standard app for mobile eLearning. No 3G connectivity is available. | The LMS provides a standard app for mobile eLearning but the functionality does not match the LMS web version.  3G connectivity is available but limited in function. | The LMS provides apps for mobile eLearning and matches the functionality of the web version.  3G connectivity is not limited to a particular type of mobile device. |
| **Blended learning****(face-to-face in conjunction with online components)** | The LMS does not support both synchronous and asynchronous communication environments. | The LMS supports public synchronous and asynchronous text-based communication. | The LMS supports both private and public synchronous and asynchronous text, voice and video communication. |
| **Offline resources** | The LMS does not allow content to be downloaded.  The learner is unable to work offline. | The LMS allows limited content to be downloaded.  The learner is able to partially work offline. | The LMS allows all content to be downloaded and learner is able to work offline. |

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| **Criteria** | **Does not meet expectations** | **Approaching expectations** | **Meeting expectations** |
| **Interactivity** | **Student****ownership** | Students cannot edit their user profile. | Students are able to upload a picture to user profile. | Student ownership is encouraged by allowing students to create complete personalized user profiles. |
| **Participation** | Participation cannot be tracked. | Participation is only tracked by the teacher. | Student participation can be tracked by the instructor and the student. |
| **Assessments** | Assessment is not supported. | Only formative assignment is supported.Individual student drop boxes for assignments. | A variety of formative and summative assessment types are supported.Individual student drop boxes for assignments.Students are able to receive feedback and resubmit. |
| **Reporting** | Only numerical grades are provided to student. | Students can monitor their own progress.Reporting allows for both numerical and anecdotal teacher comments. | Students can monitor their own progress.Reporting format can be customized by teacher.Reporting allows for both numerical and anecdotal teacher comments. |
| **Collaboration** | LMS does not have features that support collaboration. | Students can provide feedback on work, but cannot edit documents or create groups. | Students can create groups, share a workspace, share files, edit shared documents and provide feedback to each other. |
| **Parent involvement** | Only enrolled students can access course information. | Elders and parents can communicate with teacher via email. | Registered elders and parents can view student progress and communicate with teacher via a secure parent portal. |

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| **Criteria** | **Does not meet expectations** | **Approaching expectations** | **Meets expectations** |
| **Cultural Considerations** | **Language** | Delivery of content is text-based and made available only in English. | Delivery of content is primarily text-based, but is made available in English and in the indigenous language of the First Nation. | Delivery of content blends written and oral language, and is made available in English and in the indigenous language of the First Nation. |
| **Consultation**  | Input into the development of the LMS is limited to administrators and policy-makers. | The development of the LMS incorporates input from administrators and policy-makers, in addition to some input from educators and elders within the community. | The development of the LMS incorporates input from all stakeholders, with an emphasis placed on consultations with elders, parents, students and educators within the community. |
| **Adaptability & cultural contextualization** | LMS does not support plug-ins, limiting the ability to adapt the LMS to fit emerging learning needs or the cultural and contemporary concerns of the community. | LMS supports some plug-ins that allow elders, teachers and students to adapt the LMS to fit emerging learning needs or the cultural and contemporary concerns of the community. | LMS supports interactive plug-ins that allow elders, teachers and students to communicate in a variety of forms and can be adapted to fit emerging learning needs or cultural and contemporary concerns of the community. |
| **Archivability** | Content developed by educators and students in the LMS is not archived or is not made available for use. | Content developed by educators and students in the LMS is easily archived but is only available to program administrators, educators and students. | Content developed by educators and students in the LMS is easily archived and made accessible to the wider community. |

**Rationale**

In the creation of the evaluation rubric, our group divided the content into four distinct sections.  The main sections consist of operations, functionality, interactivity and cultural considerations.  Furthermore, each classification is then subdivided to allow for in depth assessment of the LMS. Separating the sections in this manner allowed for examination of the operational aspects as well as to meet the needs of the learners and the facilitator.

In accessing any LMS system, examination of operational aspects and functionality must occur.  Examination of items such as cost, licensing and ease of use must meet the needs of the institution (Bates, 2014).  In order to identify an LMS system to fulfil the needs of the Yukon Education Student Network (YESNet) and Yukon First Nations Programs & Partnerships Unit, the criteria had to expand to elements such as 3G capabilities, blended-learning options as well as scalability.

Acknowledgement of the cultural aspects of the Aboriginal learners was an important factor.  According to Chase et al. (2010) there is a higher success rate in Aboriginal students when instructors teach from an Aboriginal-derived curriculum, in which it “reflects learners’ distinct cultures and contributions in history and incorporates teaching methodology that places a higher value on community achievement and equality in the learning process” (p.21).

In developing, implementing and promoting an LMS for the purposes of supporting the needs of aboriginal learners and communities, it is of the utmost importance that the community in which the LMS is intended to serve is consulted and involved in its development and use at all stages. Haughey (2001), Johnston (2008) and Munroe et al. (2013) stress the importance of elder and community involvement in the development of educational initiatives as a crucial step in the decolonizing of education. As Haughey (2001) acknowledges, digital technologies come embedded with their own value systems, which often reflect the ways of knowing, interaction and assessment tools that are informed by Western perspectives and values. Community involvement and cultural contextualisation (McLoughlin & Oliver, 2000) are essential, therefore, in determining the specific needs of the group, which include a recognition of diverse learning needs that are informed by oral traditions (Johnston, 2008). Stressing the importance of collective knowledge in most indigenous cultures, Huang (2015) notes the importance of archiving content generated through platforms such as LMS so as to be made available to the community to document what its members have learned and experienced in order to pass on to future generations.

**References**

Anderson, T.  (2008). “Towards a Theory of Online Learning.” Athabasca University. Retrieved from:<http://www.aupress.ca/books/120146/ebook/02_Anderson_2008-Theory_and_Practice_of_Online_Learning.pdf>

Bates, T. (2014). Teaching in digital age. Retrieved from<http://opentextbc.ca/teachinginadigitalage/>

Battiste, M. (2002). *Indigenous knowledge and pedagogy in First Nations education: A literature review with recommendations*. Ottawa: Apamuwek Institute. Retrieved from<http://www.afn.ca/uploads/files/education/24._2002_oct_marie_battiste_indigenousknowledgeandpedagogy_lit_review_for_min_working_group.pdf>

Chase, M. N., Charnley, K., & McLean, S. J. (2010). *Recognizing aboriginal oral tradition through blended learning: a success story*. In: Cultural Attitudes towards Technology and Communication 2010, Murdoch University, Australia, 19-27. Retrieved from<http://sammelpunkt.philo.at:8080/2004/1/chase.pdf>

Gipple, E. (n.d.). How to Select a Learning Management System (LMS) For Small to Medium Sized Businesses. *ICS Learning Group*. Retrieved from<http://www.inquisiqr4.com/sharedResources/Documents/Inquisiq%20R3%20How%20to%20Select%20a%20Learning%20Management%20System.pdf>

Goldschneider, Bob (2010). Hosted (SaaS) Vs. Licensed Cost Analysis of a Learning Management System/Learning Content Management System (LMS/LCMS). *Syberworks*. Retrieved from <http://www.syberworks.com/articles/licensevshost.htm>

Haughey, M. (2001). For your information: Aboriginal digital opportunities. Addressing

aboriginal learning needs through the use of learning technologies. *International*

*Journal of e-Learning & Distance Education, 16* (1), 126.

Huang, Yueh-Min. (2015). How do we inspire people to contact aboriginal culture with

Web2.0 technology? *Computers and education, 86,* 71-83. DOI: 10.1016/j.compedu.2015.03.001.

Johnston, A. (2008) Using technology to enhance aboriginal evaluations. *The Canadian*

*Journal of Program Evaluation*, *23* (2), 51-72.

McLoughlin, C. & Oliver, R. (2000). Designing learning environments for cultural

inclusivity: A case study of indigenous online learning at tertiary level*. Australian Journal of Educational Technology,* *16* (1), 58-72.

Munroe, E., Borden, L., Orr, A., Toney, D. Meader, J. (2013) Decolonizing aboriginal

education in the 21st century. *McGill Journal of Education (Online),* 48.2,

317.337.

Randall, B., Sweeting, J., Steinbeiser, D. (2010). Learning Management System Feasibility Study, Part II of the Open Source Collaborative Moodle Assessment Report.  Retrieved from<https://oscmoodlereport.files.wordpress.com/2010/08/osc_feasibility_study_full_report.pdf>

Sims, R. (n.d.). The SaaS LMS and Total Cost of Ownership in FDA-Regulated Companies. UL EduNeering. Retrieved from <https://www.uleduneering.com/fileadmin/user/Resource_Center/White_Papers/UL/ULwp13_Saas_LMS_Cost_FDA_cos.pdf>