SCHOLARSHIP OF TECHNOLOGY ENHANCED LEARNING

SoTEL Symposium 15-17 February 2023

Honey, I shrunk the subject! – LMS navigation design for affective outcomes

Alex Tsirgialos – Learning Environments, University of Melbourne

Presentation Link:
Pre-Recorded Pecha Kucha https://www.pechakucha.com/presentations/alex-tsirgialos-sotel

Keywords: LMS, UX design, learning design, affective outcomes, navigation, functionality, curriculum, blended learning,

Abstract

The consistent Learning Management System (LMS) design of large subjects with multiple instructors/coordinators can prove very challenging. Instructors have the freedom to organise their materials in different ways (without specific training on how to do this effectively) which often impacts students' ability to find key resources in a timely manner (Holmes and Prieto-Rodriguez, 2018). Students in two large subjects at the Melbourne Dental School reported this in subject evaluations: accessing learning materials that were essential prior to campus activities and searching resources for revision was proving impossible.

LMS navigation design is seen as important to students' perceived usefulness of the system (Zanjani et al. 2013). Students will often compare their LMS experience against other (sophisticated) online services, expecting the same standards (Naveh et al. 2012). For Blended Learning (BL) subjects Diep et al. (2017) argue that "institutions should enhance the LMS functionality and design in such a way that they are easier to use, more user-friendly, functional, and personalized" (p.474).

Most designs for online learning strive for learning experiences – this is true for online courses where all or most study is asynchronous. In these cases, the learning designer will aim to incorporate a 'chunked' or 'step-by-step' approach to the curriculum. This results in the familiar sight of modules consisting multiple pages which represent this linear learning experience that begins and ends in the LMS. In Blended Learning courses however, the asynchronous component delivered via LMS is often limited to very few resources and activities that represent only the starting and/or end point in a learning sequence, but not the entire experience.

This presentation will showcase how designing the way students interact with the LMS by re-arranging the site's navigation and structure aims to improve students' affective domain while maintaining the same cognitive outcomes (no changes have been made to the existing content). It will also show how the design, moving away from the established 'module as a learning sequence' approach, is enabling multiple instructors to curate the curriculum in large year-long subjects with improved flexibility.

The subjects' LMS sites have been designed to accommodate the projected student activity. Central to the design is a concise Subject Schedule in which the multiple instructors can 'curate' their component's learning for each week to include single Topic Pages (learning materials and activities), instructions for the Campus activities and reminders for Assessment tasks. Workbooks intended for Campus activities have been removed from the LMS (which isn't an ideal place for file sharing) and hosted in Microsoft Sharepoint instead. Each subject component has a Component Hub (for all the component related information) and a Video Management System space to host video recordings of seminars if needed. This restructure has reduced the number of pages from several hundred to less than 50 for each subject.

The design will be evaluated to determine the degree to which the interventions have improved students' 'relationship' with the LMS and instructors' ability to flexibly control the structure of their intended curriculum.

References

Diep, A-N., Zhu, C., Struyven, K., Blieck, Y., (2017) Who or what contributes to student satisfaction in different blended learning modalities? In *British Journal of Educational Technology* Vol 48, p.474 DOI 10.1111/bjet.12431

Holmes, K. A., & Prieto-Rodriguez, E. (2018). Student and Staff Perceptions of a Learning Management System for Blended Learning in Teacher Education. In *Australian Journal of Teacher Education*, 43(3). DOI 10.14221/ajte.2018v43n3.2

Naveh, G., Tubin, D., & Pliskin, N. (2012) Student satisfaction with learning management systems: a lens of critical success factors. In *Technology, Pedagogy and Education*, 21:3, 337-350. DOI:10.1080/1475939X.2012.720413

Zanjani, N., Nykvist, S., & Geva, S. (2013) What makes an LMS effective: A synthesis of current literature. In Foley, O, Restivo, M T, Helfert, M, & Uhomoibhi, J (Eds.) *Proceedings of the 5th International Conference on Computer Supported Education.* SciTePress - Science and Technology Publications, Portugal, pp. 574-579. DOI 10.5220/0004384905740579