**Thoughts and Musings on the OLTD 504 Critical Challenge Question (CCQ)**

Throughout OLTD 504 we have been asked to keep the end goal in mind, a highly effective design strategy, as outlined by Wiggins in his Understanding by Design model (2012, 2014). Instructor Avi Luxenburg has encouraged us to focus on the Critical Challenge Question (quoted below), and to use this question to guide our learning and reflections throughout the course. I have found this process useful, as each week has added another layer of understanding to the guiding CCQ (and further questions or considerations). Avi Luxenburg has also emphasized the need to evaluate our overarching principles and philosophies of education. So, although I have addressed philosophies and beliefs in [My Non-LMS Toolkit](http://fenellalearnsonline.weebly.com/non-lms-toolkit.html) (and in other documentation in this e-Portfolio), I will restate some of my beliefs below.

Some of my overarching principles and philosophies are:

* Twenty-first century learners need the tools and skills to become self-directed ‘masters of learning’.
* Students should be able to use information and process it at all levels of the Digital Bloom's Taxonomy: remembering, understanding, applying, analyzing, evaluating, and creating.
* We should encourage: collaborating, connecting, sharing, curating, critical-thinking and sense making.
* We need to provide students with the skills they will need to navigate a future where flexibility, adaptability, creativity and innovation will contribute towards success.
* Learning should be social - this networked social learning is authentic and very powerful.
* Students should be connected, networked, responsible citizens (kind, caring, sharing), who have an interest in lifelong learning and are willing to contribute positively to the digital and non-digital world.
* Through constructing real-world inventions (which can be shared with others), education can better address the skills and needs of 21st Century learners. (Papert)
* Learning should be student-directed and student-centric.
* Learning is a continuum that requires multiple means of assessment (both formative and summative). Students need opportunities for self-assessment, in addition to opportunities for feedback and assessment by peers, teachers, and a larger audience (when deemed appropriate).
* **We don't just want students to be consumers of information; we want them to be creators too.**

Pugliese notes (2012), “recent innovations in distributed learning point to emerging technologies supporting deeper engagement in the *open* world as a significant guidepost for the future” (p. 51). Thus, in order to address why we do what we do, I believe pedagogy should drive the design of learning environments. Weigel (2005) makes an insightful, and unfortunately all too true observation, that “Many educators and administrators are locked into a “class-room on steroids” model of e-learning that is more preoccupied with the categories of accessibility and convenience than pedagogical effectiveness and skill development” (p. 55). It is extremely easy to add content and low order thinking tasks to an LMS, without proper consideration of the desired end goals, or the needs of the learners.

In a discussion posted for this OLTD 504 e-Portfolio, [What are the Pros and Cons of Using a Learning Management System (LMS) such as Moodle?](http://fenellalearnsonline.weebly.com/uploads/3/9/5/4/39540317/what_are_the_pros_and_cons_of_using_a_learning_management_system.pdf), I outline a few observations and considerations, based on my limited experience, of working in the online world using an LMS environment. I note challenges, including time, teacher proficiency and training, ease of use and flexibility, and other internal and external factors that can impact the functionality and success of courses designed using a LMS such as Moodle. Furthermore, I fully support Sclater’s statement (2008) that, “The shortcomings of LMSs may, however, have as much to do with institutions’ lack of understanding about how to facilitate learning with them as with the inadequacies of the systems themselves” (p. 2). The learning curve is steep to fully recognize the vast array of possibilities available to create a social and engaging learning environment. LMS tools are often not used to their fullest capacity, due to the time needed to attain proficiency (or for implementation/organization) by both the instructor and the learner.

In my e-Portfolio reflection pieces and in [My Non-LMS Toolkit](http://fenellalearnsonline.weebly.com/non-lms-toolkit.html) I discuss some of the benefits and challenges of Non-LMS environments when working towards the goals of:

* Building community and inspiring discourse
* Providing content, interactivity with content, and organization
* Handling assessment as, for and of learning

As noted in my reflections, I believe we should be using a blend of LMS and Non-LMS tools and platforms to meet the needs of learners - multiple learning styles require multiple tools and platforms to adequately meet the range of needs (i.e., non-LMS tools often need to be integrated with Moodle to address universal accessibility standards). The ‘net’ generation doesn’t have boundaries or clearly defined learning spaces, as we know them. They can learn anywhere in the ‘real’ or virtual world. As educators, we should be considering the advantages and shortcomings of LMS and Non-LMS environments, examining features and capabilities such as:

* The ability to move content, grades, etc., within and across systems and the ability of a system to integrate with other resources and services, (plugins available), etc.
* The ease of use
* The support (and any legal) requirements for a chosen LMS and for using (free?) software hosted externally
* The ability to support increasingly sophisticated learners in creative and innovative ways

We should be considering how we integrate LMS and Non-LMS tools in a fluid, dynamic and flexible way, which will allow us to meet the ever-changing needs of today’s learners. After all, we are preparing students for an unknown future, so surely adaptability and flexibility will contribute to their success. The key question, therefore, might be: What is the appropriate blend of LMS and non-LMS tools?

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