

# Learning Management System Future Directions Committee Report

January 28, 2013

## Background

In July 2012, the LMS Future Directions committee was established to assess current learning and course management needs and to provide recommendations regarding the future of learning/course management system(s) at UCI. This report summarizes the committee's recommendations and the process and information that led to them.

## Summary of Recommendations

1. EEE should be maintained as the primary course management system at UCI.
2. EEE should be enhanced to allow interoperability with and provide a seamless interface to 3<sup>rd</sup> party systems.
3. EEE should design and add high priority new tools.
4. EEE should not, at this time, be developed as an all-encompassing learning management system.
5. A similar group should be reconvened every 2-3 years to be sure that EEE and course/learning management technology at UCI are keeping pace with evolving needs of UCI faculty and students.

## Detailed Recommendations

The committee based their recommendations on wide-ranging discussions, review of current research and literature, and surveys conducted to assess faculty and graduate student needs and experience with EEE and other learning management systems. The committee also explored alternative learning management systems used at UCI (e.g. Moodle) or other UCs (e.g. Canvas) as well as comparing and contrasting other systems.

Early on we made a distinction between course- and learning-management systems and tools and evaluated EEE and other products with respect to these two separate functionalities. When referring to *course management*, we mean those tools that are largely administrative (e.g. gradebook, mailing lists, website). For tools that may more directly impact student learning (e.g. messageboard, quiz, web-conferencing), we refer to them as being *learning management tools/system*. We recognize that not all tools fit neatly into one of these two categories.

1. *EEE should be maintained as the primary course management system at UCI.*

The committee finds that EEE functionality provides course-management support to the UCI community that is comparable to or better than that currently available with other available systems. The EEE Survey reflected that there are no glaring omissions in the current offerings of EEE. All features are used, and most features are valued. What seems to be most desired going forward is a continued high level of customer service and a steady implementation of new features.

The community particularly appreciates the high quality of the on-campus support. The committee strongly recommends that the campus continue to support EEE as the primary course management system at UCI.

- 2. EEE should be enhanced to allow interoperability with and provide a seamless interface to 3<sup>rd</sup> party systems.*

The committee suggests that the EEE infrastructure be redesigned to make it more maintainable, flexible and extensible. The EEE team reports that in order to efficiently implement new features into EEE and make it more flexible, a back-end redesign is necessary. As this committee understands it, this redesign will not affect any end user experience, but updating the software code will allow EEE to more efficiently and effectively implement new features in the future. This committee feels that the most useful next step in EEE's life is to focus energy on redesigning the code base of EEE. This will facilitate development of interfaces between EEE and vendor-based or open source products and technologies. This would enable instructors to take advantage of various new tools, developed outside of UCI, to enrich their students' classroom experience. This approach will allow UCI to remain current with learning management technology in a cost-effective manner.

- 3. EEE should design and add high priority new tools.*

A few tools being used extensively by faculty now or which were proposed by either faculty or the committee are high priority for addition to EEE as new à la carte tools. The one mentioned most often is integration of I-Clicker functionality with webrosters and the EEE gradebook. Many faculty use I-Clickers in pedagogically important ways and would like to motivate students to attend class and participate by giving points for their use. This currently requires hand-entry of participation points from separate software. Designing a way to make this process seamless is a high priority. Another "tool" that came up repeatedly was the ability to perform some kind of analytical analysis of student performance (high and low) and, perhaps, to correlate that with student tool use. Knowing which tools most contribute to student performance could help faculty design appropriate pedagogy for specific learning goals.

- 4. EEE should not, at this time, be developed as an all-encompassing learning management system.*

Our surveys of current and past faculty and graduate students with EEE experience show that, even among those who consider themselves to be heavy users of instructional technology, their major use and strength of EEE (and other learning/course management systems) is for administrative functions. There are new learning and teaching tools being developed all the time by 3<sup>rd</sup> party vendors who have the advantage of focusing on a single tool (e.g. Piazza, Google Apps). Having a redesigned EEE that could interface with the most interesting of these tools would maximize the range of tools available and also allow it to evolve through time with minimal additional development resources. We recommend putting our efforts into supporting and interfacing with excellent new 3<sup>rd</sup> party teaching and learning tools, rather than developing them locally.

5. *A similar group should be reconvened every 2-3 years to be sure that EEE and course/learning management technology at UCI is keeping pace with evolving needs of UCI faculty and students.*

EEE supports the needs of online, hybrid, and “flipped” courses in an à la carte manner with individualized staff support. Recently, the Teaching, Learning and Technology Center of the Division of Undergraduate Education hired a full-time staff member to help faculty design and support online course modules. Faculty, who use EEE for online modules, appreciate the ability to revise their own course modules using Camtasia Relay and other tools. UCI Extension and Summer Session have provided staff support for faculty who wish to design online courses using Moodle. In the end, the learning management system employed for a course is one of many tools required for it to be effective. Because learning technologies are changing rapidly, the committee recommends that support for these courses continue to be handled by Extension and OIT on an ad hoc basis. However, the adequacy of this approach should be monitored closely and should be revisited in the next two years.

### **Additional Comments**

While our survey responses showed unanimity in their praise of EEE, particularly of the high level of support the EEE staff provide to users, the requests for increased functionality showed very little pattern, indicating that allowing faculty to use 3<sup>rd</sup> party resources will serve many more of them than would developing a few new tools. However, there were a few tools that were requested multiple times and that might be prioritized for interfacing with EEE. These include:

- Plagiarism detection tool (e.g. Turnitin.com)
- Collaboration tool (e.g. Piazza, Web Conferencing, Google Apps)
- I-Clicker
- E-portfolios and/or interfacing with a vendor tool for this (e.g. Nuventive)
- Ability to run “analytics” on student tool use (e.g. does some level of participation in X correlate with some level of performance in the course?)
- Linking Student Learning Outcome information and data into current EEE tools (e.g. having them as modules in the EZ-website syllabus and student evaluations)

### **References**

The Learning Management Future team wiki site (<http://sites.uci.edu/lmsfuture>) contains comprehensive project documentation including the following:

- Learning Management Review team charge
- Learning Management Review team membership
- Learning Management Review team meeting notes
- Faculty and graduate student survey results
- Research materials (articles & papers)