

November 30, 2011

RALPH HEXTER

Provost/Executive Vice Chancellor

Re: PPM 200-45 Review: Online Degree Certification

The Davis Division of the Academic Senate forwarded the referenced review request to all of the standing committees of the Division as well as Faculty Executive Committees within each college/professional school. Responses were received from the Committees on Planning and Budget, Information Technology and Undergraduate Council as well as the Faculty Executive Committee from the College of Letters and Science.

The following response is broken into two sections. The first section responds to the proposal received on May 31, 2011. The second describes concerns associated with funding allocation to this project and its impact on institutional efficiency initiatives as well as the overall consultation process.

Proposal

The proposal was viewed favorably by respondents, with reservation. Many clearly see the advantages of developing a consistent online, simple, easy-to-use process for certifying degree awards. Respondents believe the online system will assist both staff advisers and faculty. The Committee on Information Technology suggested creation of a similar system within Graduate Studies to manage the degree certification process for graduate students. The Undergraduate Council (UGC) stated it “enthusiastically supports its implementation as a tool to increase efficiency and foster better record keeping of degree candidates. Distribution of this system across campus is encouraged.”

Respondents also expressed concerns regarding the proposal. The Committee on Planning and Budget stated; “Any such system must work uniformly over the campus across colleges. It must be integrated with the Registrar and department offices in order to avoid error and function smoothly. It is important to avoid a ‘patchwork’ software approach that in the end cannot be upgraded, modified and ends up obsolete as the designers move away from the project. Finally, courses taken elsewhere, such as community colleges or other UC’s that have equivalency with UC Davis courses should be able to be easily entered into the program.” The Committee on Information Technology indicated; “A concern may be the timeliness of updates to graduation requirements as the unsettled budgetary situation forces departments to modify these requirements. Currently changes in course requirements are made only by programmers who write ad-hoc code. Moving forward, this project would greatly benefit from coordinating with the registrar’s office and the majors in the development of a semi-automated hierarchical approval workflow for publishing changes to, and retrieving changes from, the course catalog. Without requiring a dependency on available programmer time to make the changes to write ad hoc codes, staff advisers should be able to directly update these requirements.”

Thus although the goals of this proposal have merit and we fully support development of technology that is cost-effective and accessible, the reliance on programmer time to make simple changes in degree requirements and the potential lack of compatibility with the Office of the Registrar’s existing technology, preclude support of this proposal at this time.

Project and Funding Review Processes

The UC Davis campus suffers from a proliferation of incompatible technologies proposed and implemented to meet local needs but with more global impacts that are not considered but that consume resources needlessly. The intent of PPM 200-45 was to facilitate discussion and feedback concerning campus technology improvements and their integration. The Division was and remains supportive of the

intent behind PPM 200-45 because there is value in open debate concerning proposed technology improvements given the potential for broad campus impact and cost of developing, implementing and maintaining systems.

However, over the last couple of years we have seen the PPM 200-45 processes deteriorate. Proposals have been distributed that are not fully developed and thus too abstract for meaningful dialog and feedback. There seems to be no control over the proposal distribution process in terms of impact to the campus overall or staggering distribution such that the community is not overwhelmed by sheer volume. Proposals by and large fail to provide basic financial information or sound cost benefit analysis. Therefore the consultation process has become ineffective. Comments are submitted but the impact is invisible despite the significant amount of campus wide workload associated with responding thoughtfully.

It appears the only required review is at the conceptual stage. Thus, there is little evidence there is a financial impact review or cost benefit analysis evaluation at any stage. Given the ongoing fiscal crisis, there should be evidence of a financial review and a sound evaluation of the cost vs. the benefit before the campus begins review at any level.

The process associated with review of this particular proposal raised significant concerns amongst Divisional leadership. As you will note in attachment A, the proposal was received by the Davis Division on May 31, 2011. That same day, Executive Director Anderson wrote to the 200-45 Policy Coordinator indicating the Division would not review the proposal until fall 2011 and asked for a pause given the proposal may impact the Division's delegated authorities. Davis Division leadership recently became aware that on June 10, 2011, you sent a letter to project sponsors committing \$380,000 in funding to the proposed project (Attachment B), absent any review. A project sponsor representative, Minh Nguyen, contacted Executive Director Anderson on June 17, 2011. Nguyen and Anderson discussed the college's need to work on pilot development over the summer. Sponsors asked if development could proceed given the College had already allocated resources to work on the project during Summer Session. Executive Director Anderson agreed that the Senate could not halt progress on the project, but did caution that there was no guarantee the Division would agree with the project and sponsors were proceeding with development at their own risk. At no time during this discussion did the representative disclose that the system had moved from a conceptual proposal to a funded project. Nor, despite notification that that Academic Senate would not review until fall 2011, did the sponsors submit an updated proposal listing the financial information provided to you in the funding request or the fact that you had committed funding to the project. Thus, the proposal reviewed by the Davis Division was inaccurate.

The commitment of funding to a proposal that is in the midst of campus wide review reinforces the perception that the goals of PPM-200-45 and institutional efficiency in use of technological resources are not truly valued by the administration.

Institutional Efficiency

A final concern of the Division is the apparent duplication of the features of this system with that under development by the Office of the Registrar, Degree Navigator. Several years ago the administration tasked the Office of the Registrar with development of a comprehensive, integrated IT system that would connect the on-line and print catalog, degree certification and course approval. Prior to that time information was being entered first by the Senate into the existing course management system that had been created and supported by the administration which had an output that then needed to be re-entered into three different systems by the Office of the Registrar which not only required staff time to do but resulted in the inevitable incorrect entry of information and need to proof-read data in multiple systems. The system used by the senate for course approval was quirky, difficult to use and monitor and was

aimed more at room assignments than actual course review. The Senate had proposed adopting the course approval module from UCSB as an alternative. We were induced instead to join with the Office of the Registrar and Student Affairs in the formation of an administrative steering committee to develop a solution that would allow all systems to be fully integrated.

Via the steering committee, the Davis Division of the Academic Senate and Student Affairs submitted a joint proposal for funding of an integrated curriculum management system with improvements to the then existing Degree Navigator technology that had been adopted by the Office of the Registrar. The proposal was a culmination of a multi-year project in which the campus explored options for improving the process. During development the steering committee was advised that the campus preferred to find a solution that could be purchased from an outside vendor rather than spend the time and resources necessary to develop a home-grown solution. The proposed system was based upon integration with the Degree Navigator System available on campus. It was proposed that the campus purchase course approval/on-line catalog module that would integrate with Degree Navigator. The proposal was adopted and campus provided \$700,000 in funding.

The system now known as ICMS is being implemented at this time. The analysis provided by BIA of the L&S proposal curiously did not address whether or not the online degree certification system proposed would duplicate functionality of ICMS, and it appears to us that it may. The Division would like to know if the new proposed online degree certification system will utilize data from ICMS and if so, have project sponsors accounted for the fiscal impact of Registrar's Office support for transferring data (programming, planning and compatibility)? Will the module being developed by College of Letters and Science integrate smoothly with the ICMS system? Will simultaneous implementation of ICMS and Online Degree Certification negatively impact implementation of ICMS?

The analysis failed to capture the relationship between these two projects. As a consequence and due to our commitment to true institutional efficiency, we are unable to provide support for this proposal until we are presented with a thorough analysis of the proposal's impact on current systems. We would also like to receive a financial and cost/benefit analysis from a neutral perspective.

Sincerely,



Linda F. Bisson, Chair
Davis Division of the Academic Senate
Professor: Viticulture and Enology

Attachments:

- A. Proposal Review Activity Summary
- B. L&S Online Degree Certification Application *Funding Recommendation provided by Vice Provost Turner*
- c: Vice Chancellor Wood (w/enclosures)
Vice Provost Turner (w/enclosures)
PPM 200-45 Coordinator Barrett (w/enclosures)

Date: October 27, 2011

Subject: Request for Administrative Systems Review under PPM 200-45
Project: Online Degree Certification
Sponsor: College of Letters and Science

Timeline:

- May 31, 2011: Academic Senate Office (ASO) received request for review
- May 31, 2011: ASO responded indicating receipt late in the academic year prevented immediate review. ASO requested a pause during summer to allow the Senate time in fall 2011 to review when committees were fully functional.
- June 9, 2011: IET (Dave Shelby) responded apologizing for the delay in responding and forwarded ASO request for pause to project sponsors in Letters and Science (Nguyen and Trask)
- June 10, 2011: Provost issued a letter setting aside funding in the amount of \$380,000 during 2011-12 and 2012-13 for the systems roll out to the colleges.
- June 17, 2011: L&S (Minh Nguyen) contacts ED Anderson to discuss the Senate's request for a pause. It was agreed while the Senate could not stop development during the summer or the pilot project that the Senate had an interest in reviewing and should L&S precede it was at their own risk.
- September 15, 2011: The original proposal (absent an update concerning the campus commitment to funding) was distributed to all of the standing committees. Comments are due on November 3, 2011.

**ADMINISTRATIVE AND
RESOURCE MANAGEMENT***Budget and Institutional Analysis*

ANALYSIS

OCTOBER 2011

L&S Online Degree Certification Application

Funding Recommendation provided to Vice Provost Turner

BACKGROUND

L&S developed the L&S Online Degree Certification application to provide advisors a more efficient process for determining a student's remaining course requirements for a bachelor degree and freeing advisor time to interact directly with students on more complex issues. The improved and timely data decreases last-minute graduation requirement problems and optimizes time-to-degree. In spring 2011, the Colleges of Agricultural and Environmental Sciences (CA&ES), Biology (CBS) and Engineering (COE) requested that the application be modified and expanded so that they could use it; in his June 10, 2011 letter, the Provost set aside up to \$380,000 during 2011-12 and 2012-13 for this purpose. BIA then requested that L&S submit a detailed description and cost estimate, which is summarized in this document.

ENDORSEMENTS

- The CA&ES, CBS and COE associate deans of undergraduate education—who are responsible for advising programs in their colleges—would like to have the application as soon as possible because it will improve their service to students.
- Student Affairs wrote a very positive endorsement of the planned expansion noting that the Registrar collaborated with L&S on original development of the application and supports the idea of L&S expansion of the application to the other colleges.

PLANNED CONSULTATION

For consultation purposes, L&S will:

- Establish a functional advisory committee and a technical advisory committee with representatives from each college.
- Confer with staff responsible for degree certification in each of the colleges.
- Continue to consult with the Registrar.

REPORT TOPIC: L&S Online Degree Certification Application, *Funding Recommendation provided to Vice Provost Turner*

IMPLEMENTATION AND OWNERSHIP PLAN, TIMEFRAME, COST ESTIMATE

L&S anticipates that initial programming and deployment will be completed by about January 2013 and that subsequent work will be primarily maintenance. The other colleges may be brought on line incrementally with full usage planned by summer 2013.

L&S will host the application, retain ownership of the code, and will have sole responsibility for updates and upgrades to the software and for decisions to revise the application. This will be most efficient and will assure that there are not multiple applications that diverge over time. (Divergence would create challenges for the colleges when students transfer between colleges and for the Registrar).

Colleges will be responsible for inputting into the application their college and major requirements.

The table below includes the L&S cost estimates plus a BIA recommended amount for the other colleges to partially fund initial programming and deployment related specifically to their degree requirements. (Expansion with the desired level of scalability and functionality will require a major upgrade to version 2.0 of the program so the time and cost estimates are slightly higher than the preliminary estimate provided to BIA in spring 2011.)

L&S Degree Certification Application: Budget for Expansion		
	Sum for 2011-12 & 2012-13	Annual starting 2013-14
Total Sources from Campus	\$ 380,000	\$ 65,000
Uses		
<i>Initial Programming and Deployment</i>		
L&S programming salaries & benefits	\$ 274,000	
L&S hardware: purchase 2 servers	\$ 14,000	
CA&ES, CBS & COE partial programming costs @\$10K / yr *2	\$ 60,000	
<i>Annual Maintenance (begin mid-year 2012-13)</i>		
L&S programming salaries & benefits	\$ 30,000	\$ 61,500
L&S hardware: replacement \$ for 2 servers	\$ 2,000	\$ 3,500
Total Uses	\$ 380,000	\$ 65,000
* Funds available in 2011-12 and 2012-13 ~ \$190K per year per Provost's letter. Funding in subsequent years from central campus because L&S will be maintaining an application for campus.		

OPEN ISSUE: *Location of two new servers and whether virtual or not*

L&S recommends that the production database server be a physical server (i.e., not be virtualized) and be in the same physical location as the web server and that the servers be located in the L&S Deans' Office server room. The production server will be purchased with central campus funds of ~\$11,000 and the web server will be purchased with central campus funds of ~\$3,000. (L&S thinks the current L&S backup server will be adequate to provide backup for the application so a third server will not need to be purchased for back-up.)

The recommendations are based on L&S's experience that virtualization can slow processing. This application will have some very high demand times and L&S wants to take care to avoid risk of slow processing in the first few years; L&S indicates willingness to consider virtualization but would prefer to wait until the application is well established and virtualization has matured. L&S also prefers to have the servers in close proximity to the L&S technical support staff to ease server maintenance tasks.

Locating the servers in the L&S Deans' Office server room — which has an alarm system, dedicated air conditioning, and very limited key access—may satisfy the campus goals to secure our computing hardware and to reduce total campus energy and computing costs. Resolution of this issue requires further discussion between L&S and IET.

Programming can commence before this issue is resolved.

RECOMMENDATION

- For the two-year period 2011-12 and 2012-13, approve a total of \$380,000 one-time funding distributed \$320,000 for L&S and \$20,000 each for CA&ES, CBS and COE as detailed in the budget table in the analysis.
 - The \$320,000 for L&S includes funds for servers; those funds will be allocated upon IET and L&S email notification to BIA that L&S and IET have reached agreement regarding server location and virtualization.
- Approval of the budget plan commits \$65,000 annual ongoing campus funding starting in 2013-14 for L&S work on an application that will serve the campus, not just L&S.
- Request that L&S provide a brief report (~ 1 page) to the VP for Undergraduate Studies at least every 6 months (first report approximately March 2012) so that VP Turner can apprise the Undergraduate Deans' Council of application status.