

Loyola Marymount University Online Graduate Program

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Systems Engineering Integrative Project
SELP 695/696
Fall 2009
December 14, 2009

Outline

1. **Key Questions**
2. **Objective**
3. **Introduction/Background**
4. **Research Methodology**
5. **Infrastructure**
6. **Gap Analysis**
7. **Trade Study**
8. **Summary**
9. **Recommendations**
10. **Conclusion**

Key Questions

- ❑ Why aren't LMU offering on-line Graduate Courses?
- ❑ What is the infrastructure?
- ❑ What are the technical capabilities?
- ❑ What are the show stoppers/main barriers to online learning?

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Objective

- ▣ To implement on-line courses into LMU Graduate programs as an alternative learning solution.

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Introduction/Background

- ❑ The internet has changed the way we do business, manage money, shop, research, and communicate.
- ❑ The internet is becoming an increasingly popular and valid avenue to higher education through online degrees.
- ❑ Online enrollment currently growing at a staggering **33%** a year.²
- ❑ According to the Distance Education and Training Council, currently more than **3.9 million** students involved in online learning.²
 - **12%** increase over the previous year.²

Introduction/Background

- ❑ Online learning is an opportunity for those unable to take traditional full-time classes such as working professionals and parents.
- ❑ Offers more **freedom** and **flexibility** to students of all types.
- ❑ Offered at the same price to students whether they are in state or out-of-state, national or international.²
- ❑ Offers a wide variety of material along different media formats.
- ❑ Opportunity for LMU to gain **International exposure**.

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Research Methodology

- Analyzed LMU's current infrastructure
- Interviewed the Information Technology Personnel.
- Case Study of University of Cincinnati
- Researched Other Universities successfully offering on-line graduate courses.
 - USC Viterbi School of Engineering
 - DeVry University
 - KAPLAN University
 - UCLA Henry Samueli School of Engineering and Applied Science
- Literature Review

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Infrastructure

- ▣ The basic underlying framework or features of a system or organization.²¹
- ▣ The physical and organizational structures needed for the operation of LMU online program.

Current Infrastructure

Technology	-Applications and platforms that support online courses
Support	- Faculty member's direct support and training resources for multimedia development, workshops, and collaboration using the latest hardware, and software.
Culture	- Administration and Faculty support of the technical change
Facilities	- Classrooms equipped with the proper equipment to support online learning

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Technology

–Applications and platforms that support online courses

Technology Infrastructure

- **MyLMU Connect**– utilizing Blackboard 9 content management.⁸
 - Anytime, anywhere, course material
 - Chat, and virtual classroom
 - Drag and drop
 - Group work, assign task and communicate through blogs
 - Delivers notifications in Facebook platform
 - Electronic gradebook, in line grade editing
 - private blog and journal creation
 - self and peer assessments
 - iPhone Application integration
- **Jabber/iChat** –instant messaging platform. Has online video, audio, text chat, allows one-to-one chat and multiuser chat, with screen-sharing capabilities.¹⁷
- **Google Mail**- Exchange Server for faculty, LionMail for students.¹⁷
- **Google Docs** - Free, web-based word processor, spreadsheet, presentation and form application. Allows users to create and edit documents online while collaborating in real-time with other users.¹⁷

Technology Infrastructure

- ❑ **Echo360**-Partnership with Blackboard^{8,17}
 - ❑ Reliably captures class lectures, and teaching materials and converts them into podcasts, and video, for anytime, anywhere playback.
 - ❑ Allows educators to:
 - Create and playback media
 - Easily record on PC and Mac laptops or desktop computers
 - Capture audio and webcam video along with presentations, documents or applications displayed on their personal computer
 - Create and edit content online and offline
 - Upload and publish lectures and teaching materials directly to the Blackboard system
 - Installed in all four of the William H. Hannon Library classrooms¹⁷, in addition to the following locations:
 - ❑ COM 205
 - ❑ **PER 109**
 - ❑ **PER 211**
 - ❑ SEA 200
 - ❑ STR 357
 - ❑ UNH 3218
 - ❑ UNH 1847
 - ❑ BURNS 229

Technology Infrastructure

- ❑ **iTunes U** - LMU on iTunes U uses the iTunes format to store and manage educational audio or video content created by LMU faculty and makes it available quickly and easily to students.⁷
 - Students can download course content to their computers (Macs or PCs) regardless of their location.
 - Listen to and view content on their computers, or transfer that content to an iPod for listening or viewing on the go.
 - Integrated with Blackboard
- ❑ **Basic User requirements:**¹⁷
 - Firefox 3.0
 - Safari 3.2 or later
 - Internet Explorer 7 or later
 - QuickTime or Flash plug-ins - depending on the course content
 - iTunes 9.0 or later

Technology Infrastructure Summary

No base

	Email	File Sharing	Recording/ Video Lectures	Pod Casting	Live Broadcasting	Forums/ IM Chat	Webcam
MyLMU	X	X	X	X		X	X
Jabber/ iChat		X				X	X
Google	X	X					
Echo 360		X	X				X
iTunes U				X			

Support

– Faculty member's direct support and training resource for multimedia development, workshops, and collaboration using the latest hardware, and software.

Instructional Technology Analysts - ITAs

- ❑ Specialized help in:
 - deciding which techniques or technologies best suit Faculty needs
 - training on software or technical equipment
 - ❑ (Microsoft Office, Blackboard, multi-media & graphic software, digital editing software, iTunesU, etc.)
 - communicating special requests with Information Technology
 - keeping up with LMU's "latest and greatest" technical information
 - shaping and organizing course activities, assignments, and materials
 - improving student retention of course materials
- ❑ College of Science and Engineering ITA – Joe Russo.¹⁶

Academic Media Production (AMP)

- ❑ Ran by Information Technology Solutions Department, managed by an ITA, and staffed with student workers.¹⁷
- ❑ Professional media production for on-line video and audio
- ❑ Provides video recording and editing services for faculty.
 - At faculty's request, they will record a lecture or other academic event, and edit the video.

	ITAs	AMP
Support	X	X

Culture

– Administration and Faculty support of the technical change

LMU's Culture

- ❑ Loyola Marymount's Mission and Goals Statement
 - The encouragement of learning
 - The education of the whole person
 - The service of faith and the promotion of justice
- ❑ The University pursues quality in:
 - Curricula of All Academic Programs
 - Co-curricular Programs and Support Services
 - Faculty, Administration and Staff
 - Students
 - Campus Life, Hospitality, and Services Loyola Marymount University
 - Promotes Academic Excellence
 - Provides a Liberal Education
 - Fosters a Student-centered University
 - Creates a Sense of Community on Campus
 - Participates Actively in the Life of the Larger Community
 - Lives an Institutional Commitment to Roman Catholicism and the Judeo-Christian Tradition
- ❑ Prides itself on small size classrooms with valuable student-teacher interaction.

LMU's Lack Cultural Support

- ❑ Attempting change and the likelihood of long-term success are positively related to cultural support
- ❑ According to Dr. Judd Allen, editor for healthyculuture.com, changes that are supported by the culture are likely to stick.⁵
 - ❑ **Lasting Success = Individual Initiative + Cultural Support⁵**
- ❑ Low representation of faculty support of on-line teaching.
 - ❑ Currently only **24** faculty members are utilizing the MyLMU Connect/Echo 360 systems.¹⁷
 - ❑ **5** faculty members from Engineering Department are recording lectures for students to review.¹⁷
- ❑ Administrators are not promoting online learning as a supplement form of teaching. It is their responsibility to encourage alternatives by:
 - Defining what will not change. Identify specific values, traditions, and relationships that will be preserved (ex. interaction).
 - Recognizing the importance of actions
 - Implementing the right change tools

	Administration Support	Faculty Support
Culture		

Facilities

– Classrooms equipped with the proper equipment to support online learning

Faculty Innovation Center (FIC)

- ❑ Located in the William H. Hannon Library³
- ❑ Explore the use of technology in your teaching strategies.
- ❑ One-on-one support, multimedia development assistance, workshops, and collaboration using the latest hardware, software and peopleware.
 - 3 rooms for recording
 - Echo based classrooms (14 total)
 - Smart classroom with Amex systems
 - Camera/ projectors
 - Link/ Email lectures to students
- ❑ Host Serious Play: Teaching with Technology³
 - ❑ Day where faculty can come and explore the new technologies available
 - MyLMU Connect, Echo360, Web2.0 Social Networking

	Cameras	Smartrooms	Echo Rooms	Email Link Lectures
Facilities	X	X	X	X

Major Gaps

- ❑ 2 major gaps identified: Technology and Culture
 - There is no online live capabilities, where faculty can teach in a classroom environment and student can view lectures live from anywhere.
 - There is little to none faculty and administration support on LMU offering online courses. Only 5 faculty members in the College of Science and Engineering are using MyLMU connect to post video lectures.

	Live Broadcasting	Faculty Support	Administration Support
Technology			
Culture			

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Universities Successfully Offering On-line Learning

- The following schools are offering Associate, Bachelor, or Masters on-line degrees.
 - UCLA Henry Samueli School of Engineering and Applied Science
 - USC Viterbi School of Engineering
 - DeVry University
 - KAPLAN University
 - University of Cincinnati

UCLA and USC

- ❑ **USC Viterbi School of Engineering -Distance Education Network (DEN)** ²⁴
- ❑ **UCLA Henry Samueli School of Engineering and Applied Science**²³
 - Offers Master of Science, Engineering
 - Allows students to take their classes anytime and anywhere
 - Courses are transmitted from studio classrooms on campus via an Internet-delivery system.
 - Students can view the courses live, or later at their convenience. Lectures are archived for the entire semester and can be downloaded.
 - Learning Management System Supports:
 - ❑ Forums
 - ❑ IM/Chat rooms
 - ❑ Presentations for downloading
 - ❑ Video Conferencing system
 - ❑ Personalized Video Lectures
 - Examinations can be taken either at the campus or at an off-campus proctored exam facility.



DeVry and Kaplan University

- ❑ Offers Associate, Bachelor, and Masters degrees.^{20,22}
- ❑ Utilize Blackboard System as a one stop platform for on-line learning
- ❑ Blackboard System enables:
 - On-line quizzes
 - Access to resources
 - Drop box used for turning in assignments
 - Interactive classrooms, seminars, and discussion threads
 - Communicating with fellow students and faculty via email, chat and message boards
 - Offering technical support available by phone, email, and live chat



University of Cincinnati

- ❑ Blackboard Success Story¹⁸
- ❑ Client since 1999
- ❑ 50 faculty members participated in pilot program.
- ❑ Implemented other tools to make faculty life easier
 - Blackboard student ID system
 - Automatically graded exams that enter test results in electronic grade book.
- ❑ 90% of students and 2/3 faculty rely on Blackboard each semester.
- ❑ 85% of students have at least one Blackboard course.
- ❑ Nearly 4,000 courses with Blackboard-hosted content per semester
- ❑ Student Organizations each had their own BB site.
- ❑ Using Podcasting of their lectures via iTunes U.
 - ❑ More than 700 students received over 120 podcast lectures.



MyLMU and Adobe Connect solves Technology Gap

- ❑ LMU must provide Asynchronous and Synchronous learning.
 - Asynchronous – not at the same time, having each operation started only after the preceding operation is completed.
 - Synchronous – occurring at the same time; coinciding in time; simultaneous.
- ❑ Utilize MyLMU/Echo 360 (Asynchronous learning)¹⁷
 - Pre-record and post lectures
 - Discussion boards
 - Electronic grade book
 - Assessments
- ❑ Upgrade to Adobe Connect (Synchronous learning)¹⁹
 - Live video streaming using Adobe Flash which is currently installed on over 98% of Internet-enabled desktops.
 - Share live presentations, simulations, and multimedia right from your desktop, and get feedback from hundreds of participants.
 - Share your screen at three levels: window, application, or entire desktop.
 - Record, download, and edit classroom sessions for future playback
 - Live document sharing
 - Live electronic whiteboards
 - Electronic polling
 - Live chatting
 - Curriculum management
 - Live interactive quizzes
 - Easy access, students log on using a web browser

LMU's Adaption to Cultural Change

- ❑ According to the United States of Labor, the "baby boomers" (born from 1946 to 1954) are and will be retiring soon. Old cultures will retire with them.⁹
- ❑ Generation X and Y(born 1965 to 1987) will require, a new technology based culture.⁹
- ❑ Generation X, Y and even "Z" will look for institutions that provide the technology and convenience they are seeking.
- ❑ **LMU must adapt their culture to reflect current changes.**

To adapt current culture to new up coming changes:

- ❑ **Create value and belief statements:** use employee focus groups to put the mission, vision, and values into words.^{6,9}
- ❑ **Practice effective communication:** keeping all employees informed about the organizational culture change process. ^{6,9}
- ❑ **Redesign the approach to rewards and recognition:** offer promotions, increase incentives ,distribute rewards based on performance evaluations, etc. ^{6,9}
- ❑ **Provide Sufficient training:** utilize current staff (ITAs) to assist with the learning curve, and training on the new systems. ^{6,9}

Trade Study

- ❑ Cost – the amount of money needed to solve the cultural and technical gaps
- ❑ Risk – the risk with implementing the solution to the cultural (budget) and technical (maturity and interoperability) gap.

		Cost	Risk
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Technology</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Culture</div> </div>	Training	\$0	Low
	Incentives/Recognition	Unknown	Low
	Performance Evals	\$0	Low
	MyLMU/Echo 360	No New Cost	Low
	Adobe Connect	~30K	Low- Medium

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Summary

- ❑ Currently more than **3.9 million** students involved in online learning.
- ❑ Technology and Culture are the main barriers to LMU offering graduate online courses.
- ❑ LMU has technology in place to support online learning, but not with live capabilities.
- ❑ LMU has very little administration and faculty support of online coursed.

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Technical Recommendation

- ❑ Online learning is implemented with a combination of solutions. There are two basic modes of delivery: synchronous and asynchronous. A good distance learning program needs to operate in both modes.
- ❑ Lectures may be pre-recorded and delivered on the ECHO system (asynchronous), while other lectures may be delivered live via Adobe Connect (synchronous).
- ❑ Discussions may be done in MYLMU Connect in discussion boards (asynchronous) or discussed live via Adobe Connect (synchronous).

**Utilize MyLMU Connect and Echo360
Upgrade to Adobe Connect**

Cultural Recommendation

- ❑ **"Culture is the most powerful source of leverage for bringing about change in a school – or any organization, for that matter."** - Thomas J. Sergiovanni, author of Rethinking Leadership¹
- ❑ Follow the Normative Systems Culture Change Process, according to HealthyCulture.com.¹²
- ❑ Designed specifically to assist groups in their efforts to build supportive cultural environments for lasting change.
- ❑ Broken down into 4 phases:



- ❑ Phase I: Analysis, Objective Setting and Leadership Commitment- establishes a clear picture of the current situation, sets specific measurable objectives and commits leaders to a vision for change.
- ❑ Phase II: Systems Introduction – build awareness of new system and provide training sessions.
- ❑ Phase III: Systems Integration – deploy new systems, promote peer support, faculty and administration support.
- ❑ Phase IV: Ongoing Evaluation, Renewal and Extension- evaluate and celebrate accomplishments, maintain and promote progress, generates new ideas for future implementations.

Build awareness, offer training, support, and incentives

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Conclusion

- ▣ With an online enrollment currently growing at 33% a year, LMU needs to develop a culture change that utilizes and expand its current technical systems, to successfully offer online courses.

Now Is The Time!

[YouTube - YourTime60](#)

IT IS YOUR RESPONSIBILITY!

References

1. "Rethinking Leadership", Thomas J. Sergiovanni, Trinity University, 2007
2. "The Value of Online Learning" - Caitlin Kneram, Salary.com
3. FIC - Faculty Innovation Center (<http://its.lmu.edu/thefic>)
4. http://en.wikipedia.org/wiki/Organizational_culture
5. http://humanresources.about.com/od/organizationalculture/a/culture_change.htm
6. http://pdonline.ascd.org/pd_online/mi/el200612_reeves.html
7. <http://www.apple.com/safari/>
8. <http://www.blackboard.com/Teaching-Learning/Overview.aspx3>
9. <http://www.bls.gov/opub/cwc/cba.htm>
10. <http://www.healthyculture.com/Articles/CCplanner.html>
11. <http://www.microsoft.com/windows/internet-explorer/default.aspx>
12. <http://www.mozilla.com/>
13. ITA - Instructional Technology Analyst (<http://its2.lmu.edu/mylmuconnect/FIC/ITAs.html>)
14. ITS - Information Technology Services (<http://its.lmu.edu>)
15. University of Cincinnati - www.uc.edu
16. www.adobe.com
17. www.devry.edu
18. www.dictionary.com
19. www.kaplan.com
20. www.ucla.edu
21. www.usc.edu

Questions





Thank you!