LMAC Minutes Nov. 30, 2004

Present: Bill Barry (ex-officio), Randy Bentson, Sigrun Bodine, Karen Fischer (exofficio), John Hanson, Rob Hutchinson, Norman Imamshah (ex-officio), Matt Murray, Michael Nanfito (visitor), Lotus Perry, Matt Warning (chair), Paula Wilson

Warning called the meeting to order at 4:00 p.m.

There were no announcements. The minutes from the November 16, 2004 meeting were approved with one correction of "streaming" server.

Warning stated the purpose of this meeting was to brainstorm the strategic plan, with the following two focuses:

- 1. Discuss the wish lists submitted by the LAMC faculty members (see attached);
- 2. Nanfito will lay out the current status of IT on campus.

Based on the wish lists, three main themes were highlighted:

- 1. More wireless;
- 2. More service space;
- 3. More e-classrooms.

Nanfito then suggested the following four categories to focus our discussion:

- 1. Mobile computing;
- 2. Curriculum development;
- 3. Classroom development/design;
- 4. Server/hardware/software acquisition.

Barry commented that the administration has focused its attention on e-classroom development. A brief discussion on the importance of both e-classrooms and wireless connectivity followed. Warning concluded that the two were not mutually exclusive. Bentson stressed the need for multiple screens in e-classrooms. Hanson noted that the old boards were still needed. Perry mentioned the use of Altiris Vision to display computer screens from student stations in the Wyatt turn-around classrooms. Nanfito agreed that e-classroom design would be an important issue.

Imamshah inquired about the issue of converting analog resources to digitized format. Nanfito said that this was being done at the Media Center and adequate staff support of such a process would be a concern when the scope increases. Fischer said that technology changes and the future of digital standards are not fixed. The library has lots of materials in standardized digitized format and that as DVDs have now replaced Beta and VHS videotapes, it is difficult to know what standards will endure for converting and storing digital databases.

Warning then invited suggestions on how to proceed with our discussion. Barry suggested that the group look at how all the issues could be phased in and how to set priorities. Imamshah pointed out that the request for more printer/fax/copy machines on

the faculty wish lists was left out and did not seem to fit into any category listed on the board. In addition, he noted that a requirement for freshmen to purchase laptops might not be necessary, as more and more incoming freshmen own laptops. Hutchinson suggested that we proceed to Nanfito's report on the current state of IT (see attached).

Warning asked Nanfito to proceed and to include comments on future plans. Nanfito went over his prepared document. Questions, comments and discussion focused on the following areas:

1. <u>Academic servers & server space</u>:

OIS maintains several academic servers including <projects.ups.edu>, <media.ups.edu> and <digitalcollections.ups.edu>, among others. Warning asked for examples of how these servers were used by faculty members. Perry talked about use of these servers in Foreign Languages to host course web projects and senior portfolios that often utilized the streaming server to deliver their multimedia content (audio and video clips). Materials hosted by the streaming servers could also include licensed multimedia lab materials in foreign languages. Nanfito noted that as digital materials grew, larger storage space would be needed. Issue of server space was brought up at various points in the meeting. 2. Event and lecture support:

OIS supports events on campus, e.g. Swopes, Pierce and Regester lectures and Concert Hall events. Bentson mentioned the need to also tape Thompson Hall lectures and suggested that equipment be installed for automatic taping. Nanfito agreed that such a proposal will require prioritization and planning. Bodine pointed out that this might decrease student attendance. Hanson confirmed the need for taping, as there were always some scheduling conflicts.

3. <u>Digital archival issue</u>:

Bentson invited Fischer to comment on digital archiving in the library. Fischer pointed out that Peggy Firman has been involved in the digital collection development. The key issue here, Fischer stressed, was that the digital storage would have to last over time before the move to electronic format became viable for archival storage UPS institutional materials. Barry brought up the possibility of a technical center on the West Coast funded by the Mellon Foundation and collaboration among affiliated institutions could focus on building a digital archival repository. Bentson noted that student research papers and seniors' theses could be digitized for collection. Nanfito mentioned that both Math and Econ have had on-line journals. Fischer noted that the library archivist, Elizabeth Knight, has been attending a workshop, part of which covers state-of-the-art technology in digital archiving. In addition, two outside consultants were brought in recently in preparation for a proposal that will assist the University in deciding future needs of the University Archives.

4. <u>Software titles and acquisition</u>:

In response to a question from Hanson, Barry clarified the differences between the list of annually funded academic software titles and the list of unfunded academic software. Costs for software titles that are funded annually have been built into the OIS budget, while the unfunded titles were one-time purchases with funds often coming out of the contingency budget from either OIS and/or the Associate Deans Office. The two lists contain academic software titles on the IT budget and do not include software titles for general use. A discussion ensued on whether a list of all software titles should be provided to LMAC. Hanson noted that general software might have academic implications. Bentson said that he would also like to see the list as we might find better and more cost-effective options in open source software. Warning questioned the wisdom of evaluation on individual choice of software made by OIS. In response to Hanson's concern regarding faculty who have specialized software needs, Barry stressed the current budgetary constraint in software acquisition and would like to see an increase in the OIS contingency budget. Imamshah responded that as OIS could not roll over their budget, it would be better for the Academic Deans Office to include the funds in their budget. He also noted that based on the priority set by LMAC, OIS had just proposed \$10,000 for academic software to the Task Force.

As the clock drew closer to five, Warning asked the members to think about how to move forward in preparation for the next meeting set for December 7. After some discussion, the committee agreed to send their top three IT priorities from the perspective of the university as a whole to the Chair of LMAC on or before Friday December 3.

The meeting was adjourned at around 5:05 p.m.

Submitted by: Lotus Perry Next Meeting: December 7, 2004

Attached Files

- 1. Faculty Wish Lists for November 30, 2004 Meeting
- 2. Michael Nanfito's document, "Current State of Instructional Technology"

Below are the wish lists submitted by the LMAC faculty members. I've stripped the lists of their names largely because we didn't establish a clear policy on whether members would be held responsible for their wishes. I initially intended to group the ideas into categories but many of the wishes fall into multiple categories and some wishes make reference to adjacent wishes. So, here they are in their unedited form. (My wishes were horses and thus beggars are now riding.)

- 1. More staff to support development of technology-based curricular materials.
- 2. Ubiquitous net access ~ i.e., having a completely wired campus.
- 3. Ubiquitous computing ~ i.e., having all students have a laptop computer that they can bring to classes, labs, or.... equipped with a standard suite of software.
- 4. More online access to information. This goes along with issues one and two. Specifically I would like to see a convenient method for faculty to pay for access to sources that we don't subscribe to. For example, there are a number of journals that have online access and pay per article pricing. If the university had an account setup so that faculty could just charge these it would be more convenient than having to pay with a credit card and get reimbursed.
- 5. More dissemination of examples of effective use of technology in teaching and learning.
- 1. continuation with the programs/projects that OIS et al. has done well on so far: faculty inservices on how to use software, staff to help with specific projects such as a web site redesign, unit release time to develop web resources, an image database project, etc.
- 2. additional server space for the department so we can load large numbers of images and, in time, video
- 3. another electronic classroom in Jones 101 for the teaching of our design course which has to meet on the third floor
- 4. a service that would move some of our older videos onto CDs
- 5. to continue to learn about new resources, new ideas, which, as I've said, OIS has done well in the past.

1. Copy machine with the capability to e-mail copies without printing them in the same time that a normal copy machine takes to make copies (a fantastic way to send papers, notes etc. to colleagues, collaborators)

2. Wireless connection from a laptop to a projection system on a cart

3. Printers with the capability to print on both pages everywhere (save many, many trees!)

4. Same price copies in Thompson Hall as in the print shop (saves time)

- 1. Fast and reliable modem dial-up connection for faculty to work from home (and I'm not asking for broadband or cable modems, just something faster that 28.8 K).
- 2. I still like the laptop idea for faculty, with the ability to keep our desktops even after the four-year switch-out period while getting a new laptop.
- 3. Tech Staff whose only job is to help faculty create instructional software, like the Univ. of Oregon's Interactice Media Group ("formed from the original New Media Center and now part of <u>Media Services</u>, develops a range of full-service technology design and consulting solutions for faculty research and instructional use. Our cross-disciplinary team designs and develops new media projects for interactive courseware and promotional purposes, and consults with faculty members on the instructional use of creative technology." go to <u>http://img.uoregon.edu/index.html</u> and also see what they created way back in 1997 or so for the computer music classes: Electronic Music Interactice <u>http://img.uoregon.edu/emi.php</u>)

I have one goal (wish): That each faculty be able to reliably access data for professional development and teaching purposes wherever she or he may wish to. In order for us to achieve this goal, I believe we need to make some important decisions. Here are some of the issues I see and recommendations I have:

1. We still have far too few classrooms where electronic data can be viewed by students, and often, when an electronic classroom *is* available, the layout of the classroom is not adequate (too large or small; fixed seating where moveable seating is needed; etc.). Our approach has been to equip classrooms with fixed computers and projectors. We might have a bit more flexibility if we begin to install wireless networks around campus and install electricity in classrooms (so students can plug-in laptops). My recent experience is that at least 1/3 to 1/2 of my students have laptops and would bring them to class if they could use them there. An idea that is worth considering is that all UPS students (or perhaps upper-class students with certain majors) be required to

purchase laptops (perhaps in some cases permitting the student to build the cost into financial aid). If this is done, we might be able to pitch the classroom technology for some courses toward fixed instructor computer/projector classrooms and for other courses focus on laptop access to web pages. As much as I would like to have a computer and projector in all of my classrooms right now, my strong preference would be for all students to be accessing sites on their own laptops during class sessions.

- 2. We need to be sure we have enough "community" hardware and software for all of the information we need to make available. In my view, a streaming media server is vital, as is enough storage for other kinds of data that are byte-intensive. Beyond that, when software is needed there should be a way to explore the need with a specialist who is experienced in both commercial and open source software, who will help to identify what software is meets the need most cost-effectively. Then. There should be the need to purchase the software in a timely manner (sooner than a year hence, if it is essential to meeting certain educational or professional development needs that already exist.
- 3. Faculty who have specialized hardware and software needs should be able to get the hardware and software they require to teach what they teach and to meet their professional development needs. If a conventional desktop computer that costs \$800 meets one person's need, that's what she/he should get. If the teaching or professional development agenda of another faculty requires a\$4200 laptop with 2 gb of RAM, etc., that's what that faculty should get. While from an administrative process, this complicates things, we don't all wear size seven shoes and we should not all be issued size seven computers....
- 1. Consider setting up an Instruction Technology Center, where staff support focus only on instructional issues, like curriculum development, lab/classroom management, etc. (or do our current system already follows this format?)

2. Consider integration of a voice audio tool, likeWimba server, to enhance e-leaning and e-communication in web pages and course management softwares (Blackboard). Links about Wimba: <u>http://www.connectedlearning.co.uk/wimba.htm</u> <u>http://www.horizonwimba.com/solutions/</u> Questions: How does Wimba work differently from Real? Does the cost of Wimba server justify its long-term use? Are there other similar tools available that are more affordable?

- 3. Ensure adequate server capacities to handle more data files with multimedia content, like mov, mp3 and real files.
- 4. Go wireless. Go laptops.

- 5. Rethink the need for our electronic classrooms. What do we have? What do we need to keep? And what do we need to add?
 - SmartBoards
 - Video Playback
 - Video/Audio Recording
 - Document Projection
 - 35mm Slide Projection
 - External Computer Connection
 - Integrated Computer
 - Wireless Networked Laptop Computers

Some useful links (that Michael probably already knew of):

<u>The Campus Computing Project</u> <http://www.campuscomputing.net/> The Campus Computing Project is the largest continuing study of the role of information technology in US higher education. Directed by Kenneth C. Green, the project's annual survey of IT issues affecting American higher education focuses on campus planning, policies and procedures affecting the use of information technology in teaching, learning, and scholarship. The Campus Computing Project website includes information summarizing the results of the annual survey.

The TLT Group - Homepage

The Teaching, Learning, and Technology **Group** (**TLT Group**) is a non-profit corporation. The non-profit TLT Group has helped over 500 educational institutions, associations, and corporations around the world to improve teaching and learning by making more appropriate and cost-effective use of information technology without sacrificing what matters most. Led by <u>Steve Gilbert</u> and <u>Steve Ehrmann</u>, and featuring assessment tools from the award-winning <u>Flashlight Program</u>, The TLT Group can help accelerate educational improvement while easing the stresses of institutional change.

HUNTINGDON College:

<http://www.huntingdon.edu/academics/smart_classrooms>

Brief overview of Instructional Technology and Training services:

Instructional Technology attempts to bridge the gap between maintaining existing expectations and resources, i.e., keeping classrooms and equipment in good working order, and developing a foundation for emerging requirements for teaching with technology. To that end ITT:

- maintains an equipment circulation service that includes data projectors, cameras, video cameras, and other audio/visual devices (digital and analog).
- works to maintain electronic classrooms, labs, and other teaching spaces.
- fields questions on hardware and software purchases and researches potential solutions for faculty needs in this regard.
- provides consultation to walk-in patrons (usually students) as well as scheduled sessions (with both faculty and students) in the Media Center for multimedia projects.
- provides production services to digitize images, video, and audio recordings.
- supports events on campus, e.g., Swopes, Pierce, and Regester lectures, Concert Hall events, and ASUPS events.
- maintains several academic servers including projects.ups.edu (student/faculty web projects), media.ups.edu (streaming media), grows.ups.edu (salmon fisheries project), digitalcollections.ups.edu (local collections of digital assets),
- works with faculty and students to create web and multimedia projects.
- staff troubleshoot and maintain computers in teaching spaces.
- staff sponsor presentations to faculty on the use of technology.

In order to better serve emerging academic needs, ITT staff are engaged in upgrading their skills to support more sophisticated faculty projects. This includes scripting and programming (JavaScript and ASP), and simple database projects (SQL). In addition, staff will be attending training in GIS programs this spring. Staff training will be directed in response to faculty needs.

Instructional Technology Staff:

<u>Paul Monaghan. Academic Technology Consultant</u>. Troubleshooting, lab, and classroom support for Math/Computer Science as well as the rest of the Sciences in Thompson Hall. Project support as necessary. Paul supports servers in the sciences e.g., e-Commerce server.

<u>Shelley Lima Barker. Academic Technology Consultant</u>. Troubleshooting, lab, and classroom support for Humanities and Social Sciences. Project support as necessary. Shelley supports academic servers e.g., Projects (projects.ups.edu), GROWS, GIS, streaming media, and digital assets servers.

<u>Gordon Gilbert. Media Center Supervisor</u>. Supervises the Media Center. This includes the physical facility (10 multimedia computer systems and related equipment), A/V equipment circulation, and student assistants. He also assists in academic software license management. Gordon assists in supporting streaming media projects. Gordon oversees support of the academic labs in Art (16 computers) and Music (7 computers) buildings.

<u>Stephen Philbrook. Media Technician</u>. Electronic classroom support. A/V equipment circulation. A/V support of academic events including Regester, Swopes, and Pierce lectures, guest lectures in various venues on campus.

Max Vlahovich. Multimedia Technician. Multimedia project support. This includes digital image, audio, and video projects. Max also supports the academic labs in Art and Music.

Instructional Technology by building. (DRAFT in process) Connect to this web site to view a campus map of instructional technology. This document is a start at a more comprehensive listing of instructional technology available to faculty and students including, but not limited to, the standard electronic classroom. Buildings with instructional technology resources are mapped in maroon. These are linked to web pages that detail what resources are available. This is a living document and will be edited over time as resources change.

Current Electronic Classrooms. (List will be updated in Winter). There are 29 existing <u>electronic classrooms</u> and these are listed on the ITT web site at

http://www.ups.edu/ois/itt/eclass/eclass1.htm. These listings are being updated at this time. They include equipment in the room and we have begun to photograph each room – instructor view/student view – as well as provide an online version (in .pdf format) of the equipment instructions. Currently classrooms on Wyatt and McIntyre provide images and instructions online. This winter we will complete the rest and add recently completed e-classrooms in Jones, Wyatt, and Thompson

Current Wireless Access Points:

- Collins Library Room 020
- McIntyre 1st floor Battin Lounge
- McIntyre 2nd floor –Economics
- Thompson Hall 241 (Biology Lab)
- Thompson Hall Rooms 312 & 313 (Chemistry Labs)
- Thompson Hall 324 (Computer Science)
- Thompson Hall 360 (Biology Lab)
- Wheelock Student Center Diversions Café
- Wheelock Student Center Marshall Hall
- Wyatt Hall 2nd Floor (covering Room 203)

Link to wireless plan: http://www.ups.edu/ois/itt/WirelessAccess.doc

Academic Software Titles (funded annually):

- Mathematica
- MatLab
- MiniTab
- SPSS (Windows)
- SPSS (MAC)
- Allegro CL
- Altiris Vision
- MSDN Academic Alliance
- Blackboard

Unfunded Academic Software. This is a lengthy list and is a bit sketchy. Many of the titles are quite old (some circa 1994) but I believe are still in use. I have linked to the <u>title list</u>, saved on the web server as a MS Excel spreadsheet. I have also attached it in my email in case you have trouble accessing it. It is currently organized alphabetically. It may be possible to provide some information on use by department as well as cost information.

Open Source Software currently in use at Puget Sound

- Eclipse 3.0
- Cygwin
- CygwinX
- Linux
- PDF Creator Ghost Script

- Print File
- MikTEX
- SWI Prolog
- Python 2.3.4
- Anachrophilia
- GAP 4r3 (Math)
- NetTime (NTP client)
- GLUT 3.73
- Netpath 2.13 (Geology)
- Melts (Linux app for Geology)

An Annotated List of open source software is available on the ITT web site.

Instructional Technology Services in the Media Center

<u>Streaming media</u>. We currently stream audio for Music and Foreign Languages and have for several years now. As of 2002 we have been able to facilitate live streaming of Puget Sound basketball games for Athletics. We have begun to stream video clips this semester. As this service grows, storage will become an issue to grapple with Examples of streamed media from Survey of Music Literature (MUS100) (requires Real Networks Player):

- <u>Wozzeck</u>. (Video)
- Chopin Piano Concerto No. 2, first movement (Audio)
- Rachmaninoff, Rhapsody on a Theme by Paganini (Audio)

<u>Multimedia project support</u>. ITT staff provide support to students and faculty on digital image, audio, and video projects. Software support includes Photoshop, Flash, Premiere (video production), Flash, and Soundforge (audio production).

Flash and image examples: (requires Flash plugin on your computer):

- <u>Dramaturgy Northwest</u>. (Click the **image** to enter. The link to check for Flash is broken at this moment.)
- <u>Pacific Passages</u>. (in progress) Doug Sackman.

Digital asset management. <u>http://digitalcollections.ups.edu</u>

- The Power of Space. (in progress). History of Theatre image collection. Geoff Proehl.
- Western Washington Flora, botany database. Betsy Kirkpatrick.
- <u>Abby Williams Hill</u>. Collection of paintings. Ron Fields.

Satellite Downlink services. We support satellite downlinks for instructional use. Faculty provide staff with information about satellite events (program, time, channel, etc.). Satellite broadcasts are viewed in the Presentation Room (lib 020).

Scheduled academic event videotaping. ITT staff routinely videotape annual academic lectures (pending approval of the guest speaker). These include:

- Regester
- Swope
- Pierce

Other events can be taped depending upon resources pending staff availability.

Articles and presentations on instructional technology. Below are links to recent articles regarding instructional technology. These are offered to assist with developing a vision for the desired state of instructional technology at Puget Sound.

PDF file on the use of laptops in the classroom by students: <u>Miracle or Menace: Teaching and Learning with Laptops in the Classroom</u>. http://www.ups.edu/ois/itt/teaching%20with%20laptops%20in%20classrooms.pdf

Powerpoint presentation on alternative classroom design and use of technology in teaching: <u>Year One Experience in Wallenberg Hall, Stanford University</u>. Dan Gilbert. Center for Innovations in Learning. (Let me know if this Powerpoint presentation does not open for you. I had some trouble initially.) http://www.ups.edu/ois/itt/learningspaces-2.ppt

PDF file. Creating the Classroom of the Future http://www.ups.edu/ois/itt/smart%20classrooms.pdf

PDF file. Evaluating Course Management Technology http://www.ups.edu/ois/itt/evaluating_course_management_technology.pdf