

Currently Successful Items Identified by the Instructional Technology Task Force
December 2, 2003
Summarized by Richard Rogers

Interactive Learning Tools

N=20

- Web CT, OWL, CCBIT all have been incredibly beneficial, and a positive learning tool in classrooms.
- PRS systems are very successful and encourage participation in large lecture classrooms.
- Experts for these interactive tools are helpful.

Instruction for Teachers/Academic Computing and the Center for Teaching

N=8

- Faculty get value from the TEACHnology programs
- A strong commitment to teaching quality is evident through efforts of the CFT.
- The CFT's model for faculty development is a key strength.
- Workshops for faculty are proving to be very beneficial.
- One-to-one help with technological problems, AC has consulted with 91 faculty in 31 departments in roughly two months this fall.

OIT Successes

N=4

- OIT provides important supports to students and faculty.
- OIT e-mail.
- Internet service for the entire campus is working and must be maintained.

Campus Resources

N=3

- Library resources that provide students and faculty with electronic access to information.
- Standard room AV-any room, any professor
- Electronic library access to databases works and is essential to programs on and off campus.
- Limited resources, but creative ideas to expand the use of instructional technology.

IT Minor

N=3

- IT minor offers students skills and perspectives for an emerging information society.
- Works as a cooperative academic enterprise, which expands student possibilities.
- Opens the door to diverse populations inviting students who may not have considered themselves technologically savvy or technology people to test the technological waters.

Distance Learning

N=2

- Distance Learning through Continuing Education works and should continue to grow.
- CE has design and help staff for distance learning students and faculty.

Innovation

N=3

- Innovations going on through projects like the Davis large course redesign project will not only coordinate out efforts and improve education for our students, but will help attract more and better undergraduates to campus
- Innovation will also attract funding for cross-disciplinary activities.
- We have some departments who have invested heavily in innovation and electronic support of their teaching.

AIMS

N=1

- AIMS is working, but it is dramatically under-resourced. It must be maintained.

Revenue Source

N=1

- Existing revenue streams for intellectual property.

Priority Items for Instructional Technology Task Force--December 2, 2003 Summarized by Richard Rogers

AIMS

N=5

- Cannot handle the demands on a modern campus need for IT
- Classroom AV equipment
- Teaching tools that make classrooms interactive centers of learning by doing.
- Common spaces for students to access computers. Infrastructure of classrooms and auditoriums.
- A classification taxonomy (detailed by Rick Adrion).

Classroom Instructional Technology Equipment

N=5

- Tools for making classrooms better teaching environments
- Projection and other such equipment in classes. It is not easy to gain access to this type of equipment.
- AV support teams for each department on campus
- Teaching tools that make classrooms interactive centers of learning by doing
- More common space computers and wired classrooms.

OWL and CCBIT

N=6

- Must have stable support, future is clearly in doubt
- Appropriate reporting channels for CCBIT
- Outreach to public school teachers throughout which the University shares its technological insights for better education K-12.
- Stability in times of budget crisis.

Training for Faculty

N=13

- Teachers want to know about technologies that improve their teaching without requiring huge amounts of time to learn or use.
- Faculty do not know which web-based learning platform to use.
- Continuous education in technology options for faculty. Keep them updated.
- Pair students with faculty as technology mentors to increase use in classrooms.
- College level CFT-type programs for faculty enhancement.
- Expect faculty to have a basic knowledge of certain technological applications.
- Skilled teaching assistants.
- "Basic/bootcamp" training for faculty, staff and students who lack high level of software skills.

Campus Resources

N=9

- Collaborate licensing on software. Make it legally available to all faculty.
- Resources: What are they, Where are they and is there ongoing financial and technical support?
- Library and information resources that support research by faculty and the accessing of research by students.
- More common computer spaces for student access.
- Student access to technology, preparation for the function of technology literacy competency, collaboration.

OIT Concerns

N=4

- Standard online platform and tools for all courses
- Departments are still weak in web development. Each area within each department needs to have web presence. There is little to no funding to hire web masters for home pages and school websites.
- School has to rely on OIT for assistance with computer updating.
- Adequate software licensing.

Collaborative/Efficiency

N=2

- Given our resource constraints, we should do all we can to promote collaboration and synergistic interactions among groups on campus with IT interests and expertise.
- Faculty do not know which web-based learning platform to use.

Revenue Source/Funding

N=3

- We need to be more adept in the business aspects of profiting by our capacity for innovation.
- Developing value out of our intellectual property
- Building valuable courseware

First Meeting of the Task Force on Instructional Technology
Friday, November 21, 2003

Please **list three items that are now working** at UMass-Amherst and must be maintained as we address the Instructional Technology problems confronting us. For each item, give a short reason as to why it made your list.

Here are our attempt to type up our handwritten comments from our first meeting:

Richard Rogers

1. Center for Teaching. We have the best in the country and the addition of a Coordinator of Teaching Technologies clearly enhanced the Center.
2. Web CT. Very effective course management package that has proven itself a major player in the marketplace.
3. OWL. Has grown from serving a couple of Departments to being broadly used. It is our product which allows us to improve it and build it our way. It proves critical in securing grant funding.
4. PRS. A simple, cheap tool that engages students in lectures.

Copper Giloth

1. Students see value in the use of OWL, the PRS system and Web CT. Students gave an overwhelmingly positive response (“helpful” or “somewhat helpful”) when asked about the value of these tools: 85% OWL, 69% PRS, and 80% Web CT.
2. Faculty get value from the TEACHnology program.
3. One-to-one consulting for simple instructional technology problems/solutions is working: Academic Computing’s Instructional Media Lab has consulted with 91 faculty in 31 departments this fall between September 2nd and November 14th.

Robert Maloy

1. OWL (Online Web-Based Learning) developed by Center for Computer-Based Instructional Technologies is an exciting set of tools for teachers and students in disciplines all across the campus. OWL gives faculty ways to manage large classes while addressing specific needs. This makes high quality teaching happen.
2. Library resources that provide students and faculty with electronic access to information. Strengthening library activities in all areas makes research mission real.
3. IT minor offers students skills and perspectives for an emerging information society. OIT provides important supports to students and faculty.

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1. Classroom internet access in some locations
 2. Online applications in courses. Use of technology in courses (web pages; email/chat ...)
 3. Standard room AV – any room, any professor

Harlan Sturm

1. Distance learning through Continuing Education works and is growing significantly every year. Allow it to flourish.
2. IT minor, while not “technology” per se, it works as a cooperative academic enterprise which expands student possibilities.
3. Electronic library access to databases works and is essential to programs on and off campus

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1. Web-based homework (OWL)
We are teaching ever-increasing numbers in the sciences and doing so with fewer and fewer resources. This is a very cost-efficient and educationally sound way of administering and grading homework.
 2. Active learning technology for large lectures (PRS)
Research on learning indicates that student engagement is better than passive listening for learning. We need to have the infrastructure for carrying out active learning in lecture courses.
 3. A strong commitment to teaching quality, as evidenced, among other things, by the efforts of the CFT.
But, see pink sheet for why this is NOT enough.
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1. OWL – Electronic learning environment that has become integral component of many disciplines across campus.
2. CCBIT – over and above development of OWL, CCBIT team has been extremely effective in bringing together disciplines across campus to discuss learning goals that technology can effectively address and assisting in the preparation of proposals to external agencies to fund these projects.
3. AV support team – Bill Russell, Steve Pielock, John Stacey provide excellent support for teaching.

David Hart

1. Online homework via the OWL system is being used to improve the learning experience for thousands of students on campus (17,000 seats this year).
2. Innovations going on through projects like the Davis large course redesign project will not only coordinate our efforts and improve education for our students, but will help attract more and better undergraduates to campus.
3. Innovation will also attract funding for cross-disciplinary activities, as well as create opportunities for commercialization.

Linda Slakey

1. UMass is now a center for innovation, with nationally used and recognized products or strategies (OWL and the use of personal response systems). We should retain our strengths, and not slip to being shoppers and followers. That means supporting, and further investing in, units that keep us in front, e.g. CCBIT and PERG.
2. The Center for Teaching's model for faculty development is a key strength that will be needed even more to implement the faculty development required for transition to new approaches.
3. We have some departments that have invested heavily in innovation, and electronic support of their teaching. We should make sure they get recognition and support for this.

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1. Faculty support services such as those provided by the Center for Teaching, Academic Computing and the Library.
 2. Ability for groups to decide the best technology – not all to have the same tools – Web CT, OWL, etc.
 3. Workshops for faculty.

Rick Adrion

1. Not much beyond low-tech “infrastructure” is really at a campus level, e.g. projectors, networks, library systems. Some instructional technologies of a more sophisticated level are deployed in a limited manner OWL, class-talk, CMS (Web CT, etc.)
2. Thus I have no opinion about what to “protect.”

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1. CE has design and help staff for distance learning students and faculty.
 2. Our school server is important.
 3. (OIT) e-mail tests are essential
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1. Innovative faculty who adopt emerging technologies in teaching.
 2. Technology experts in various areas – PRS, multimedia, online teaching, etc.
 3. Limited resources but creative ideas to expand the use of instructional technologies.
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1. OWL
 2. Classtalk-like student response systems
 3. Existing revenue streams for our intellectual property
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1. Some large lecture halls currently have “multimedia” equipment (e.g., ceiling mounted projectors) that needs to be maintained at a high level.
 2. Campus-wide workshops are periodically offered about technology and its impact on classroom instruction. They should be continued.
 3. Programs like TEACHnology should continue.
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1. PRS is working well and should be expanded to smaller classroom spaces.
Rationale: As classes increase in size the rapid feedback from students to instructors is known to improve the teaching/learning on “True learning environment.”
 2. Of course internet service for the entire campus community is working and must be maintained.
 3. Academic Instructional Media Services is working, though dramatically under-resourced, and must be maintained.
Rationale: As long as UMass Amherst is a bricks and mortar University, face to face teaching will be a foundational pillar of its enterprise. An institution of higher learning without a contemporary support service for teaching/learning in the classroom risks, at its own peril, being cast into the dark ages.
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1. Electronic Response systems used in large lecture halls. We need more! These systems allow for active student engagement and teacher/student collaboration in ways that could not normally happen in large groups.
2. Intelligent tutoring systems created by CCBIT.
Intelligent tutoring systems are one way for students to see tech. as a tool for extending the classroom experience. These systems cater to different learning styles and needs by actively engaging them in a multimedia approach that may better match student’s learning styles.
3. IT Minor
Offering it as a minor cross campus opens the door to diverse populations inviting students who may not have considered themselves technologically savvy or technology people to test the technological waters.

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Please list **three of your highest priorities for items that you feel should be addressed** by this group. Include a brief reason as to why each warrants such high priority.

Richard Rogers

1. AIMS – We have fallen into disrepair and cannot handle the demands on a modern campus need for IT
2. Classroom Instructional Technology equipment. Only our auditoriums even have such equipment and most are dinosaurs ready to go dead; forever. We have over 200 regular rooms with anything but a chalkboard and an overhead projector.
3. OWL's future. Many departments and thousands of students now use OWL and its future is clearly in doubt.

Copper Giloth

1. We need projection and other such equipment in classrooms. We have received requests from faculty to use computer classrooms simply in order to have access to the projectors. A lack of projection equipment prevents even simple uses of technology in the classroom. A recent Educause report this fall indicated that a typical research university our size would have such equipment in about 75 classrooms.
2. Expand support for the "Cautious Mainstream" faculty. They need better equipment. They need one-on-one help with (relatively small) instructional technology steps. They want to know about technologies that improve their teaching without requiring a huge investment of time to learn or use. The greatest progress will be made by providing a lot of faculty with relatively modest help.
3. Collaborate on licensing of software. There has been great success in acquiring statistical software for the campus that can be purchased at reduced rates. There are other areas that can benefit in this regard.

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1. AV support team (on both lists)
Outstanding people who have been under-funded for a long time and have been demoralized by the funding cuts.
 2. Classroom AV equipment
Except for a few select classrooms is either nonexistent or unreliable.
 3. CCBIT (on both lists)
Must have stable support – (not exclusively grant-funded) in order to keep the excellent administrative/software/educational team.

Harlan Sturm

1. We should explore unifying platform issues for all on-campus (day) courses. Students should not need the confusion of multi-platform issues during one semester.
2. We need more doubloons.

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1. Standard online platform and tools for all courses. (Not all courses will be on line, I know. But the option should be there.)

- a. All students should be exposed to online learning while at UM – it prepares them for future learning options while on career path.
 - b. Multiple platforms are confusing, frustrating and I'm tired of the time wasted in petty bickering!
2. Campus resources
 - What are they
 - Where are they
 - Is there ongoing support financial & technical
 3. Continuous education in technology options for faculty. They need to be updated on options and see how to utilize them – instructional design before instructional technology (ID before IT).

David Hart

Since part of the instigation of this Task Force was the initial elimination of CCBIT funding over the summer, I have to raise these as the most critical issues for me, since one of the intended outcomes of the Task Force is their resolution:

1. A stable resource model for CCBIT activities
2. Appropriate reporting channels for CCBIT (currently goes through NSM but should be direct to Provost's Office)
3. Identification of productive synergies with other groups/units/departments working with faculty to improve teaching and learning.

Linda Slakey

1. We need to be more adept in the business aspects of profiting by our capacity for innovation.
2. Given our resource constraints, we should do all we can to promote collaboration and synergistic interactions among groups on campus with IT interests and expertise.
3. We need to recognize the importance of faculty development in the transition to an e-learning environment.

Robert Maloy

Service:

1. Outreach to public school teachers and students through which the University shares its technological insights to make better education happen K-12. Examples are UMass Writing Project, work done by CCBIT on Intelligent Tutoring Systems, and the School of Education's e-Teams Project.

Teaching:

2. Teaching tools that make classrooms interactive centers of learning by doing.

Research:

3. Library and information resources that support research by faculty and the accessing of research by students.

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1. There is a disconnect between the faculty's use of technology and the students – pairing students with faculty as technology mentors may be one way to increase the use of technology in classrooms.
 2. Are there enough common spaces for students to access computers? Infrastructure. Are the computer labs that are open functioning well? Are the labs open during hours that meet students' needs?

3. Is/or could there be a common space for faculty to obtain powerful teaching tools that they could test-drive in their classrooms? A technology loan space?

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1. Adequate resources for “Face to Face” teaching in classrooms.

Rationale: See Item #3 on yellow sheet

2. & 3. See item #3 on yellow sheet

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1. Faculty need training/education on research on learning and on how to implement active learning in large lectures. (PRS)

Despite success of CFT thru its TEACHnology and Lilly Prog., this effort reaches too few faculty. Need to ramp this up so active learning is the norm at UMass, not an isolated class or two.

2. Every time there is a budget crunch the first things to be cut are those “peripheral” efforts such as CCBIT (creators of OWL) or SRRI (initiators of active learning on this campus 10 years ago). Need some stability for these efforts.
3. Need college level CFT-type of programs for faculty enhancement. A university-wide CFT is great but # reached is too few. (Related to point 1). Another reason for college-level fac. Enhancement is that different traditions (e.g. science, humanities, social science) are likely to deploy active learning approaches in different ways to highlight what’s most important in their fields. Need to share teaching expertise within your own disciplines.

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1. A technical support staff member for each department on campus. Many departmental faculty don’t know who to contact for support. They don’t want to “bother” some of the techie folks for what they think might be something basic that they should know – so they don’t ask and get frustrated. – Even when there are other faculty members in their department with technical abilities some faculty are reluctant to ask. Having a full-time staff member devoted to each department for training, consultations, on-the-spot help, workshops & a contact for other areas on campus working to help integrate technology would be a huge step!

2. More publicity about who now offers support to the faculty & the type of support. A list of all the support groups, resources used on campus with contact info, labs available, etc. Then a faculty member might be inclined to contact someone for help – all those using OWL, web CT, PDA’s, course management software, etc. and more opportunities for faculty to connect with others around tech issues.

3. Would it be too much to expect all faculty to have a basic knowledge of certain technical applications? Could a list be created based on what students would expect & what faculty need to know? Then provide training workshops dept. by dept. with follow-up support (my #1).

i.e. – All should know how to use: PowerPoint, Word, Excel, Design a web page, course management software, PRS’s, PDA’s, electronic databases through the library to create their own linked bibliographies.

4. There are some departments that are still weak with web development and don’t have the infrastructure to host a server or easily upload web pages. There needs to be a permanent staff member in charge of this. Some departments have renegade web authors but the pages aren’t linked any place on the UMass server. More effort needs to take place to get all departments online & courses, indiv. Web pages linked from the departmental web page. Each area within each dept. needs to have web presence.

5. Wired classrooms.

Rick Adrion

1. A vision for instructional technology
 - increase productivity
 - enhance learning
 - etc.
2. A vision for how to support instructional technology
 - Technical support, development, evaluation
 - Training (for faculty to use)
 - Deployment (including how to pay for it)
 - Assessment!!
3. A classification/taxonomy
 - Infrastructure – cameras, projectors, comm. lines/wireless, etc.
 - Production facilities & staff
 - Course management systems
 - Testing & homework systems
 - Interactive classrooms
 - Dist. Ed. Tech.
 - Learning tech.

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prioritize

And then where are we focusing?

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1. Skilled teaching assistants (while “trainings” are available in CE, there is no structured TA training).
 2. Problems migrating from one LMS to another. (Faculty in online programs find it difficult compromising useful tools in previous LMS).
 3. Student access to technology.
(I teach 12 students over ITV who also need Web CT access. ½ of these students are not “registered” on this campus. Also students in various ISPs have difficulty accessing UMass Web CT.)
 4. Our school has to rely on OIT for assistance with computer updating.
 5. We have little to no funding to hire a web master for our home page & school website.

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1. Communications among service providers. A lot of duplications, competition, divide one energy/resources, rather collaborate.
 2. Supports for various web-based learning platforms, etc. Web CT, Prometheus, OWL, Duck, etc. – faculty don’t know what to pick, and the consequence of picking one (support)
 3. Technology across the curriculum – prepare our students for the function technology literacy competency, collaboration.

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1. Developing value out of our intellectual property
 2. Building valuable courseware (as opposed to platforms)
 3. Establishing an organizational control point for supporting instructional technology.
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1. Physical infrastructure of classrooms and auditoriums.
2. Adequate software licenses so that faculty, staff, and students do not have to make illegal copies of software they wish to use.
3. “Basic/boot camp” training for faculty, staff, and students who lack high level software skills.