Task Force on Blended and Technology-Rich Teaching/Learning Environment & Support Systems

Summative Report
April 19, 2012

This taskforce was convened in October 2011 by the Provost to articulate a clear vision and direction for the teaching/learning environment and support systems at Michigan Tech, as well as an organizational structure for realizing this vision through strong and coordinated leadership and effective, efficient, and integrated use of resources.

Task Force members included:

Christa Walck, Associate Provost (Chair)
Britta Andersen, Undergraduate Student, Computer & Electrical Engineering
Chad Arney, Technology Strategy & Innovation, J.R. Van Pelt Library
Leonard Bohmann, Associate Dean, College of Engineering
Dave Chard, Information Technology & Security Services
James DeClerck, Professor of Practice, ME-EM
Jean DeClerck, Graduate Student, Humanities
Tom Freeman, eLearning Services
Stephen Kampe, Professor, Materials Science & Engineering
Ellen Marks, Director, J.R. Van Pelt Library and John and Ruanne Opie Library
Michael Meyer, Senior Lecturer, Physics
Walt Milligan, Chief Information Officer
Darrell Radson, Dean, School of Business & Economics
Nancy Seely, Associate Director, Center for Teaching, Learning & Faculty Development
Erin Smith, Director, Humanities Digital Media Zone
Jacque Smith, Graduate School
Jeff Toorongian, eLearning Services
Linda Wanless, Instructor, School of Technology

The final report of the task force includes the following documents:

1. Task Force Charge from the Provost Pages 2-4
2. Vision & Goals Subteam Report 5-9
3. Inventory Subteam Report 10-26
6. Feedback from presentations (Deans, Senate, USG, GSG) 40-43
7. Recommendations presented to Academic Forum 43-46

The provost accepted the results of the task force and convened a search committee for a Director of the Center for Teaching Learning in April 2012; the position is appended to this report (pp. 46-48)
**Task Force on Blended and Technology-Rich Teaching/Learning Environment & Support Systems**

This taskforce is convened by the Provost’s office to articulate a clear vision and direction for teaching/learning environment and support systems at Michigan Tech, as well as an organizational structure for realizing this vision through strong and coordinated leadership and effective, efficient, and integrated use of resources. As Michigan Tech endeavors to be a “high tech/high touch” university, this vision and leadership will be critical to creating a successful environment for blended and technology-rich teaching/learning that will serve students and faculty both on and off campus, expand educational delivery systems for distance learning, and provide Information Technology Services with the guidance it needs to acquire and support technology resources that serve teaching and learning.

The task force will be chaired by Associate Provost Christa Walck, who will convene task force and initial team meetings. The work of the task force has been divided among several teams that will meet independently, select their own chair, and then come together as a task force to make recommendations to the Provost, CIO and academic deans. A breakdown of tasks, a timeline, and a diagram of work flow is included.

Tasks include:

1. **Draft a vision and goals for technology-rich teaching/learning environment & support systems on campus**
   1. Team: Leonard Bohmann, Ellen Marks, Walt Milligan, Darrell Radson, Erin Smith, Jean DeClerk (graduate student), undergraduate student
   2. Complete by Oct. 28

2. **Inventory existing support services, where they are provided, and associated costs (e.g., LMS, library, Center for Teaching, Learning, and Faculty Development/CTLFD), studios, computing labs, online courses or programs offered currently or proposed)**
   1. Team: Chad Arney, Dave Chard, Jeff Toorongian, Jacque Smith
   2. Complete by Oct. 28

3. **Research/benchmark teaching/learning environment & support systems at other institutions**
   1. Team: James DeClerk, Steve Kampe (Senate), Mike Meyer, Nancy Seely, Jeff Toorongian, Linda Wanless
   2. Complete by Oct. 28

4. **Finalize Vision & Goal Statement**
   1. Teams 1-2-3 come together to develop vision and goal statement informed by benchmarking and inventory results by Nov. 1
   2. Present to Provost & Deans on Nov. 16 at Deans Council
5. Design an organizational structure that will integrate and coordinate the activities that support teaching/learning through clearly defined partnerships and/or structural changes
   1. Team: Walt Milligan, Leonard Bohmann, Ellen Marks, Erin Smith, Steve Kampe, Nancy Seely
   2. Activities
      - Review role of Center for Teaching, Learning & Faculty Development to achieve vision for technology-rich teaching/learning environment
        - Write job description for new Center director that incorporates this vision
      - Identify support services for faculty and students that could be meaningfully coordinated
      - Identify opportunities for clearly-defined partnerships
      - Present to Provost, Deans & CIO on Jan. 18

6. Develop business model for blended and on-line learning by Feb. 15
   1. Team: Darrell Radson, Walt Milligan, Leonard Bohmann, Jeff Toorongian
   2. Present to Provost, Deans & CIO by Feb. 15

TIMELINE

Oct 10: Initiate 3 teams: Vision & Goals, Inventory, Benchmark
Oct 28: Complete vision & goals draft, benchmarking, and inventory
Nov 1: Convene 3 teams to develop Vision & Goals Statement
Nov. 16: Present Vision & Goals Statement to Deans Council & Provost
Jan 18: Present organizational structure to Deans Council, Provost, & CIO, including job description for CTLFD Director that incorporates technology-rich teaching/learning
Jan. 25: Decision about organizational structure, including CTLFD
Jan. 31: Provost forms search committee for new Director of Center for Teaching, Learning & Faculty Development
Feb. 15: Business model presented to Deans Council, Provost, CIO
Feb. 29: Decision about business model
Vision and Goals
For a Technology-Rich Teaching/Learning Environment and
Campus Support Systems

Our Context

Michigan Tech lives in a rapidly changing higher education environment with increasing
expectations and demands. Students expect our campus environment to match their rich
information technology environment. Employers expect our graduates to excel in
today's fast-moving information rich and collaborative work environments where
multiple means of information delivery are commonplace. Increasing demands for
research have seen an associated increase in demands on faculty time.

We also compete with universities who have been quick to adopt new technology to
deliver higher education. Since the inception of its open course initiative ten years ago,
MIT has offered materials for over 2,000 courses online. When Stanford announced the
second offering of its free online Artificial Intelligence course in August, it enrolled over
70,000 people who will watch lectures and receive graded work. Universities and
colleges across the country have begun to institutionalize teaching and learning methods
that take advantage of new technologies and provide new ways to engage learners with
different learning styles—enhancing the educational experience of their on-campus
students while disseminating and branding their institution’s educational content and
research. In today’s technology-, media- and information-rich world, the gap between
“education” and “online education” is quickly closing.

Michigan Tech students arrive on campus expecting to have a residential experience
where they learn not only through 50-minute class lectures, but also through
collaboration and problem-solving challenges delivered via channels and modes more
typical to the ones they navigate every day for entertainment, social networking and
self-education. They expect interactive instruction and learning resources that are
technology-based and supported, as well as immediate, reliable, and flexible access to
instructional content.

At the same time, faculty have seen an increase in teaching demands that require email
correspondence, courseware, new media and a host of other new technologies and skills
that add to their workloads and make it increasingly difficult to succeed as teachers
without time investments that challenge their ability to conduct research and publish.
To meet both teaching and research goals, Michigan Tech faculty will require robust
instructional and technological support systems that they believe will save their time
and enable them to balance competing time constraints. Teaching must become more
efficient, while at the same time helping students learn more effectively.

Blended Learning most commonly refers to courses that combine traditional classroom
meetings and face-to-face teaching with online learning. The balance of face-to-face
teaching and online learning is flexible and exists on a continuum determined by disciplinary demands and course objectives, as well as pedagogy and teaching style. They can range from classes where most of the teaching is face-to-face to those where the majority of the class is taught online. As a mixed-mode method of teaching, blended learning has the potential not only to introduce new teaching tools and technologies, but to change the practices that take place in regular class meetings, address different learning styles, and invite students to participate in virtual contexts that require new skills and critical thinking. Further, both online and blended learning approaches offer opportunities for faculty to explore new types of course content by merging teacher-produced content with open source or proprietary digital materials and, potentially, opening new avenues for innovative publishing opportunities.

The goal of providing learning experiences through online and blended delivery approaches will require strong and well-coordinated support systems for faculty—systems that provide knowledge-based, technical and pedagogical support, as well as incentives for innovative teaching and opportunities for exchange and collaboration among faculty. By providing blended and online learning experiences we will effectively prepare Michigan Tech students to meet the challenges of globalized, hi-tech and information-rich environments of the 21st century. We can move from teaching our students that there is a fixed time and place to learn and help them focus on mastering course materials through a range of communication modes and media, including face-to-face meetings. In this way, we can meet Michigan Tech’s strategic goals, better preparing our students to create the future while finding new ways to promote and share the world-class teaching and research of Michigan Tech’s faculty.

**Vision: One University Focused on All Students Learning**

Michigan Tech strives to create an innovative and ubiquitous teaching and learning environment—one that enhances and expands the education of residential students through blended learning and effectively extends the institution’s reach and resources to non-residential students online. Thereby, Michigan Tech will be recognized as a higher education leader in creating and continually improving an enhanced learning environment taking advantage of technologies, tools and techniques aimed at improved student learning.

To support this vision, Michigan Tech will shape a campus-wide focus on student learning and successful, career-long learning outcomes when students arrive on campus or enroll in their first campus or online course. An enhanced learning environment that locates students at its center will be an academic and administrative commitment that provides incentives and rewards to shape a seamless network of partners among all university stakeholders, including future employers. A university-wide enhanced learning environment that places students at its center reduces the student’s need to navigate discrete services and programs and places greater responsibility on the respective units to work as true partners. Michigan Tech will be
one university focused on student learning through effective use of instructional
technologies, tools and techniques.

By reliably offering such tools, resources and support systems, our enhanced learning
environment will encourage faculty and students to explore how, where and by what
means teaching and learning can occur and to take advantage of, and innovate with
new technologies that help bridge teaching/learning imperatives with fast-paced
technological change and new learning and course delivery environments.

Both academic and administrative efforts will be focused on developing the master
student: Where students, at all levels, willingly and actively assume responsibility for
learning, where students systematically learn how to effectively study and learn
throughout their college years and beyond; where study and learning lead to
knowledge mastery and also to the capacity to innovate and lead; where students
know they are associated with a university that genuinely cares about differences in
learning styles and preferences, cultural and gender differences, and the expectations
of globally competitive work or scholarship. To enable us to achieve this vision, a
campus-wide commitment to an enhanced learning environment needs to be rapidly
constructed.

**Michigan Tech’s Enhanced Learning Environment:**

Our Enhanced Learning Environment is comprised of the teaching environment (from
the view of the faculty), the learning environment (from the view of the students), the
instructional technologies and media we use, and our systems that support the
teaching, learning, and technology.

**Goals**

- Move away from the dominant instructional paradigm of the fixed time to learn and
  the fixed classroom location to more flexible models that take advantage of
technology and permits instructors to re-think and maximize the ways information
  is organized, presented, and learned.
  - A shift from lecture to student centered instruction in which students become
    active and interactive learners.

- Provide teaching and learning that can be synchronous and asynchronous to
  facilitate both campus-based courses and courses delivered solely online with
  flexible learning models permitted in each.

- Development and communication of clear expectations, incentives and policies, that
  promote the adoption of blended and online learning and the integration of
instructional technology including promotion, merit, and IP ownership and copyright.

• For the Enhanced Learning Environment (from the view of the faculty):
  o Adopt and use technology that:
    ▪ Is curriculum centered (appropriate for the particular learning goals).
    ▪ Increases active vs. passive student learning.
    ▪ Allows for the mastery of material in time appropriate for individual students,
    ▪ Increases collaborative learning between students across time and across geographic locations.
    ▪ Allows for the redesign of face-to-face classroom interactions to maximize learning instead of material presentation.
    ▪ Is adaptable to the various ways students learn.

• For the Teaching Environment (from the view of the student):
  o Adopt and use technology that:
    ▪ Is student centered (tools that are expected by and will be embraced by students).
    ▪ Permits easy, fast, and flexible access to instructional materials.
    ▪ Enables students to master material in timeframes appropriate to the student and the course.
    ▪ Increases interaction among student-instructor, student-student, student-content, and student-outside resources.

• For the Enhanced Learning Environment, develop and maintain support systems that:
  o Provides ongoing and easily accessible instruction and support of instructional technologies for both faculty and students.
  o Assists faculty in identifying the best methods, modes and technologies to support their pedagogical goals.
  o Expands the concept of “instructional technology” to include creative pedagogical approaches to support the judicious use of consumer technologies such as mobile devices, gaming platforms and social media, encouraging educational engagement with technologies already in use by students, both on campus and off.
  o Ensures that technology initiatives align with teaching/learning objectives and adequately considers the workloads of faculty and instructors.
  o Creates opportunities, incentives and structured support for faculty to participate in new teaching and learning initiatives by:
    ▪ Developing support programs, such as undergrad and graduate teaching fellows, which will assist faculty in considering and implementing new instructional technologies while affording students a unique opportunity to collaborate with faculty.
- Coordinating support systems that faculty depend upon for effective teaching.
- Providing services that reduce time spent on tasks that can be handled easily by a supervised student workforce, such as digitizing materials or uploading instructional files to learning management systems.
- Creating regular forums and online resources that help the campus to consider the development and impact of new technologies, to learn about initiatives and best practices at other universities, and to promote collaboration and innovation among Michigan Tech faculty.
- Conducting educational and training workshops and seminars to allow faculty to showcase their effective and innovative use of instructional technology.
- Conducting workshops and training in cycles that are appropriate for how and when faculty work on developing course content.

Challenges

To successfully achieve these goals, three immediate challenges exist:

1. The roles and responsibilities of the provost, deans, department chairs, and the Center for Teaching and Learning must be clearly delineated.
2. Incentives for faculty and instruction staff, including promotion and merit salary, must be developed.
3. Intellectual property and copyright policies for online content must be developed campus-wide.
Report from the Inventory Subgroup
of the Task Force on Blended and Technology-Rich
Teaching/Learning Environment and Support Systems

Submitted: November 4, 2011

Inventory Subgroup Team:
Chad Arney-Library
Dave Chard-IT
Jacque Smith-Graduate School
Jeff Toorongian-eLearning
Introduction

The inventory subgroup was tasked with surveying existing campus support services and systems. We endeavored to detail where these resources resided (physical locations, or service units), and to provide their estimated costs. Primary service units detailed in this report include the Center for Teaching, Learning, and Faculty Development (CTLFD), eLearning, Information Technology, and the Library. Technology-based systems include studio and lecture-capture classrooms, the learning management system (LMS), web conferencing rooms, IP videoconferencing rooms, and computing labs. We also collected information on current online course offerings, degree programs, and enrollment figures. To sample the current technology-based teaching practices on campus, the team developed a five question online survey that was distributed to fifty-five instructors. A response rate of 40% was observed. Findings included a strong use of synchronous web conferencing technologies, and asynchronous video systems to provide students with online content. Survey respondents also expressed a need for increased support and training services for software tools, the learning management system, and course design and development. Complete response data is provided later in the report.

The technology resources and service units outlined in this inventory report comprise the critical structures that will support future blended and online learning efforts conducted by Michigan Tech faculty and students. Report findings can assist task force members in developing a vision and goals. These, in turn, will help determine the necessary service and support structures, and their associated technology systems enhancements, as the university strives to achieve its high-tech/high-touch vision.
### Studio classrooms supporting blended and online learning at Michigan Tech

<table>
<thead>
<tr>
<th>Location</th>
<th>Core Technologies</th>
<th>Approximate Operating Costs</th>
</tr>
</thead>
</table>
| EERC B45 Studio Classroom | 43 Loose Tables/Chairs, Mediasite Streaming, Real Media Streaming, Standard Definition H.323 Video Conferencing, High Quality Video with Rich-Media production | Operation of the 4 Studio Classrooms is the responsibility of 3 Information Technology FTE with 80% effort to studios  
Studio Operations Staff Salary (Total of 3) ~125K+benefits  
Student Employee Salaries ~ $5,500 (Average 4 students per year)  
Each 50-minutes of production time in a studio requires ~1.25 hours of staff time produce  
Associated technology with each studio is ~$300,000 with a 12 year lifecycle of equipment replacement  
Annual SS&E ~$5,000 per studio  
Samples of staff work associated with the studio classrooms  
• Pre-Recording:  
  - Media Printing  
  - Recordings Scheduled in Mediasite  
  - Ensuring studio is reset between classes  
  - Meet with Faculty to discuss day  
• Post Recording:  
  - Edit Video Stream  
  - Check all video streams and recorded media  
  - Post materials in LMS |
| Rekhi G05 Studio Classroom | 40-Loose Tables/Chairs, Mediasite Streaming, Real Media Streaming, High Quality Video with Rich-Media production |                                                                                                                                                                                                 |
| Rekhi G06 Studio Classroom | 40-Loose Tables/Chairs, Mediasite Streaming, Real Media Streaming, High Quality Video with Rich-Media production |                                                                                                                                                                                                 |
| MEEM 111 Studio Classroom | Seating: 96-Fixed Tiered, Real Media Streaming, Echo 360 Lecture Capture |                                                                                                                                                                                                 |
Lecture capture equipped classrooms supporting blended and online learning at Michigan Tech

<table>
<thead>
<tr>
<th>Location</th>
<th>Core Technologies</th>
<th>Approximate Operating Costs</th>
</tr>
</thead>
</table>
| Rekhi 214 Lecture Capture Classroom | 48 Loose Tables/Chairs  
Echo 360 Lecture Capture appliance  
High Quality Rich-Media production  
Automated/scheduled Capture or Instructor Operated | Operation of the Lecture Capture Classrooms is shared amongst the Studio Operations Staff (recordings) and with IT Operations (traditional classroom support)  
Associated technology with each lecture capture classroom is ~$25,000 with an 8 year lifecycle of full equipment replacement  
Annual SS&E ~$1,500 per classroom |
| Rekhi G09 Lecture Capture Classroom | Seating 48 Loose Tables/Chairs  
Echo 360 Lecture Capture  
High Quality Rich-Media production  
Automated/scheduled Capture or Instructor Operated |
# Web conferencing equipped rooms

<table>
<thead>
<tr>
<th>Location</th>
<th>Core technologies</th>
<th>Approximate operating costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin 404 Departmental Conference Room Graduate School</td>
<td>Seating 60 Loose Tables/Chairs Presentation Technologies Adobe Video Conferencing User Operated</td>
<td>Operation, scheduling and funding the maintenance of each of the Adobe Videoconferencing rooms rests with the individual department.</td>
</tr>
<tr>
<td>EERC 501 Departmental Conference Room ECE</td>
<td>Seating 30 Loose Tables/Chairs Presentation Technologies Adobe Video Conferencing User Operated</td>
<td>Associated technology with each Adobe Videoconferencing room ~$25,000 with an 8 year lifecycle of full equipment replacement.</td>
</tr>
<tr>
<td>DOW 610 Departmental Conference Room Geo &amp; Mining Eng.</td>
<td>Seating 26 Loose Tables/Chairs Presentation Technologies Adobe Video Conferencing User Operated</td>
<td>Annual SS&amp;E ~$1,000 per Adobe Videoconferencing room</td>
</tr>
<tr>
<td>Library 243 Departmental Room Library</td>
<td>Seating 25 Loose Tables/Chairs Presentation Technologies Adobe Video Conferencing HD Videoconferencing (H.323) Staff Operated</td>
<td>Cost associated with the HD video conferencing (see next table), covers the Adobe Connect costs.</td>
</tr>
</tbody>
</table>
## Videoconferencing (H.323) equipped rooms

<table>
<thead>
<tr>
<th>Location</th>
<th>Core technologies</th>
<th>Approximate operating costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATDC 101 Departmental Conference Room Keweenaw Research Center</td>
<td>50+ Loose Tables/Chairs Presentation Technologies Standard Definition H.323 Video Conferencing User Operated</td>
<td>Operation, scheduling and funding the maintenance of each of the Standard Definition H.323 Videoconferencing rooms rests with the individual department. Associated technology with each Standard Definition H.323 Videoconferencing room ~$10,000. This technology is no longer current resulting in a poor quality experience with an end-of-life product. Each of these rooms should discontinue the service and remove the technology. The High-Definition rooms offer a better product and service.</td>
</tr>
<tr>
<td>M&amp;M 724 Departmental Conference Room College of Engineering</td>
<td>11 Loose Tables/Chairs Presentation Technologies Standard Definition H.323 Video Conferencing User Operated</td>
<td></td>
</tr>
<tr>
<td>MEEM 208 Enterprise Conference Room ME-EM</td>
<td>11 Loose Tables/Chairs Presentation Technologies Standard Definition H.323 Video Conferencing User Operated</td>
<td></td>
</tr>
<tr>
<td>Library 243 Departmental Room Library</td>
<td>25 Loose Tables/Chairs Presentation Technologies Adobe Video Conferencing HD Videoconferencing (H.323) Staff Operated</td>
<td>Operation, scheduling and funding the maintenance of each of the High Definition H.323 Videoconferencing rooms rests with the individual department. Associated technology with each High Definition H.323 Videoconferencing room ~$25,000 with recommended 8 year lifecycle of full equipment replacement Annual SS&amp;E ~$1,000 per High Definition H.323 Videoconferencing room</td>
</tr>
<tr>
<td>EERC 508 Departmental Conference Room ECE</td>
<td>32 Loose Tables/Chairs Presentation Technologies HD Videoconferencing (H.323) User Operated</td>
<td>Annual SS&amp;E ~$1,000 per High Definition H.323 Videoconferencing room</td>
</tr>
<tr>
<td>EERC B45 Studio Classroom</td>
<td>43 Loose Tables/Chairs Mediasite Streaming Real Media Streaming Standard Definition H.323 Video Conferencing High Quality Video with Rich Media production</td>
<td>See Studio information (earlier table) for operational costs.</td>
</tr>
</tbody>
</table>
Computing labs (from: [http://www.it.mtu.edu/computer-labs/index.php](http://www.it.mtu.edu/computer-labs/index.php))

Operation, scheduling and funding the maintenance of each of the Computer Labs rests with Information Technology. Each lab seat costs $538 per year excluding software and staff support.
## Graduate online degree and certificate programs and enrollment

<table>
<thead>
<tr>
<th>Degree/certificate</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Science Education (MS)</td>
<td>Current enrollment (Fall 2011) is 108 students for all full programs</td>
</tr>
<tr>
<td>Business Administration (MBA)</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering – Power (MS)</td>
<td></td>
</tr>
<tr>
<td>Hybrid Vehicle Engineering (M, Eng.)</td>
<td></td>
</tr>
<tr>
<td>Integrated Geospatial Technology (MS)</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering (MS, PhD)</td>
<td></td>
</tr>
<tr>
<td>Advanced Electric Power (Certificate)</td>
<td></td>
</tr>
<tr>
<td>Electric Power Engineering (Undergraduate Certificate)</td>
<td></td>
</tr>
<tr>
<td>Hybrid Vehicle Engineering (Certificate)</td>
<td></td>
</tr>
</tbody>
</table>

### All online course offerings and enrollment (includes graduate degree programs)

Spring 2011:
47 courses listed as 1OL
Enrollment capacity 723
261 enrollees

Summer 2011:
55 courses listed as 1OL
Enrollment capacity 1168
487 enrollees

Fall 2011:
57 courses listed as 1OL
Enrollment capacity 952
356 enrollees

For individual department and class breakdown, see attached document “Online Course Offerings”.

---

9
Centralized campus support structures and associated programs:

**Center for Teaching, Learning and Faculty Development**
- Conducts several workshops throughout the year concerning teaching and learning innovations.
- Also maintains a library of teaching and learning resources.

**eLearning**
- LMS training and support for instructors and students.
- Adobe Connect web conferencing training and support.
- Instructional design consultations for online and blended course development.
- Course content production and development support and training.
- Administrative support for online learning to academic units.
- Videoconference support services for primarily academic users.

**Information Technology**
- Information Technology Audio-Visual Services provides consulting, design, purchasing, installation and maintenance for all of the facilities referenced in this document.
- Campus Audio-Visual Equipment support is the responsibility of 3 Information Technology FTE with 15% effort to the referenced facilities.
- Audio-Visual Support Staff Salary (Total of 3)~160K+benefits
- All computing technology used in the referenced facilities is supported by Information Technology Staff. The computing technology includes and not limited to the following: Desktop Computers, Networking, Help Desk, email, LMS, Data Storage, etc.
- Note: The costs of the current video storage supporting current online and blended learning are significant. The future costs associated with video storage coupled with the potential growth in online and blended learning need to be evaluated closely with IT.

**Van Pelt and Opie Library**
- Provides many resources for teaching and learning including information literacy instruction and other technology-rich learning environments.
Instructor Online Survey Results:

- Survey invitation sent on October 21, 2011, to 55 instructors on campus.
- 22 responses as of October 31, 2011.

1) Indicate which eLearning technologies you use to engage your students online:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediasite (rich media streaming)</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>Echo 360 classroom and person lecture capture</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>Camtasia screen recording (software-based)</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>YouTube</td>
<td>11</td>
<td>55%</td>
</tr>
<tr>
<td>Vimeo</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Wikis</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Blogs</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Twitter</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Facebook</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Screencast/Jing (online streaming service)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>15%</td>
</tr>
</tbody>
</table>

- People may select more than one checkbox, so percentages may add up to more than 100%.
- “Other” responses: Blackboard, recorded videos of lectures, Zimbra Calendar and Briefcase.
2) Indicate which synchronous communication tools you use in your teaching and learning efforts:

<table>
<thead>
<tr>
<th>Tool</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Connect</td>
<td>12</td>
<td>80%</td>
</tr>
<tr>
<td>GoToMeeting</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>WebEx</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Skype</td>
<td>5</td>
<td>33%</td>
</tr>
<tr>
<td>Google Voice/Video</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>IM Chat</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Telephone</td>
<td>7</td>
<td>47%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>7%</td>
</tr>
</tbody>
</table>

- People may select more than one checkbox, so percentages may add up to more than 100%.
- “Other” response: email communication
Complete open-ended survey responses:

3) Identify the university-supported services you use to help you in your teaching and learning efforts (e.g., eLearning group, Center for Teaching, Learning, and Faculty Development, IT).

- Educational technology services (class recording), blackboard (IT), document cameras and laptop connections in classrooms (IT).
- Center for teaching seminar.
- IT and Adobe Connect group. I would love to use distance learning support, but it doesn't really seem to exist a whole lot.
- I attend training sessions when they are offered. (Please offer more!) I also attend some of the brown bag lunch workshops put on by the CTLFD.
- Mainly Jeff Toorongian's and Steve Wilmers areas. The studio resources are fantastic and essential to my use of blended learning.
- IT
- Email is an important communication tool.
- There are a number of key software tools that are needed that must be shared seamlessly such that the students can access and utilize in their studies. This changes course by course but for me the two keys are Matlab/Simulink, Gamma Technologies - GT-Power
- Library, ME-EM computer labs, CTLFD,
- Just starting with eLearning group. Attended prior CTL seminars.
- I teach several on-line courses and primarily use the ETS services for videos and MLS.
- IT
- eLearning group/ Studios, CFTLFD lunch and learns on technology.
- eLearning
- Attend CFTLFD lunch and learns (one-third of them), IT provides software application assistance, Use the Adobe Connect support
- IT
- Blackboard
- Center for Teaching, Learning and Faculty Development, Info Technology Services & Security
- CTLFD
- eLearning Group, Writing Center
- I mostly interact with educational technology services. I was also able to attend a conference on blended learning using department support.

4) Please list other technologies you are using in your online and blended learning activities.

- GPS/Google Earth
- email
- Camtasia studio
- Simulation software both from internet and purchased ones.
- Publisher provided resources (e.g. videos).
- My colleague, Jason Gregersen uses Camtasia Studio. Both of us use the Blackboard LMS.
- Moodle, Canvas
• Tablet PC, Tablet for Workstation.
• Blackboard, dyknow, CATME,
• Always use Blackboard & email
• Online homework systems (WebAssign and Mastering Physics), Canvas, and BlackBoard, scanners/pictures for written homework.
• CTLFD, eLearning@Michigan Tech
• Echo 360, PDF annotator with tablet and adobe connect pro
• Desktop and laptop with headsets and Skype and adobe connect
• Dow 610 and Dow 875 for Adobe Connect meetings
• None
• I have used Adobe Connect, but I am not currently using.
• Self maintained web pages.
• Canvas discussion tools
• I use my personal website, Mathematica, and iClickers.

5) Other Comments:

• IT at MTU is incapable of supplying dependable support for web based activities, based on their helpless maintenance of web based access all semester. We need better computer infrastructure help.

• I'm not sure I know everything I am using....

• I'm glad to see that something is being done for this. With our remote location, technology should be high priority to reduce the disadvantage of challenging travel. So far, it seems that university hasn't dedicated hardly any central resources to these aspects, but everyone dabbles to them on their own. Also, spaces that have capabilities for these are not coordinated....everyone tries to create space that matches them. We need university wide strategy and resources to back it up. I've been in several proposal related to distance-education and in every case, I've been the only one in the calls, who doesn't have someone from "distance learning" department with me.

• The available tools and resources can be overwhelming. More guidance and training would help faculty implement these tools into their teaching. It would be particularly beneficial if the training was fun and interactive. Thank you for the great support!

• If we could have one wish it would be the ability to edit the videos that we make in the studio.

• We really need electronic white boards in the classrooms

• Expanding into this area is a great idea - fully support it.

• I wish something like Camtasia was available on faculty computers across campus.

• I have used Adobe connect in the past. The major limitation for me is the poor quality of the interactive whiteboard.
Blackboard Learning Management System Data:

- Fall 2011, 2121 sections created, 1366 (64%) were being used.

Echo 360 Lecture Capture Statistics: 2009-2011

**Fall 2011**
Courses utilizing technology (11)
Rich Media (10)
Personal Capture (1)
Enrolled (346)

**Summer 2011**
Courses utilizing technology (0)
Rich Media (0)
Personal Capture (0)
Enrolled (0)

**Spring 2011**
Courses utilizing technology (8)
Rich Media (6)
Personal Capture (2)
Enrolled (206)

**Fall 2010**
Courses utilizing technology (6)
Rich Media (4)
Personal Capture (2)
Enrolled (191)

**Summer 2010**
Courses utilizing technology (0)
Rich Media (0)
Personal Capture (0)
Enrolled (0)

**Spring 2010**
Courses utilizing technology (7)
Rich Media (5)
Personal Capture (2)
Enrolled (181)

**Fall 2009**
Courses utilizing technology (6)
Rich Media (5)
Personal Capture (1)
Enrolled (143)
Adobe Connect Usage Data: AY 2010-2011

- 342 total users
- 129 meeting hosts
- 352 meeting rooms
- over 9500 hours of combined meeting time
Mediasite Rich Media-Usage Data:
Fall 2010

Report Summary  Presentation folder history report
Date Range:  Custom 8/23/2010 to 12/17/2010 Presentation: All Presentations
Presentations Watched 509 of 538
Duration  Total (h:mm:ss)  Views
1:06:28  147
Total Views  Total Time Watched (h:mm:ss) 11781  17313:13:32
Total Time  Peak Watched Coverage Connections (h:mm:ss)
280:12:22  100% 4
Folder: Presenter: User: IP Address:
Fall 2010
All Presenters All Users Excluding 141.219.109.0-141.219.109.255
Last refreshed 10/24/2011 7:33 PM EDT

Spring 2011

Report Summary  Presentation folder history report
Date Range:  Custom 1/10/2011 to 5/6/2011 Presentation: All Presentations
Presentations Watched 390 of 403
Total Views 10352
Total Time Watched (h:mm:ss) 4239:30:02
Folder: Presenter: User: IP Address:
Spring 2011
All Presenters All Users Excluding 141.219.109.0-141.219.109.255
Last refreshed 10/24/2011 7:11 PM EDT

Summer 2011

Report Summary  Presentation folder history report
Date Range:  Custom 5/9/2011 to 8/19/2011 Presentation: All Presentations
Presentations Watched 485 of 897
Total Views 7055
Total Time Watched (h:mm:ss) 2721:49:40
Folder: Presenter: User: IP Address:
Spring 2011, Summer 2010, Summer 2011
All Presenters All Users Excluding 141.219.109.0-141.219.109.255
Last refreshed 10/24/2011 7:19 PM EDT

Fall 2011 (partial semester)

Report Summary  Presentation folder history report
Date Range:  Custom 8/29/2011 to 10/24/2011 Presentation: All Presentations
Presentations Watched 320 of 334
Total Views 8545
Total Time Watched (h:mm:ss) 3568:56:21
Folder: Presenter: User: IP Address:
Fall 2011
All Presenters All Users Excluding 141.219.109.0-141.219.109.255
Last refreshed 10/24/2011 7:36 PM EDT
Research & Benchmarking

James DeClerk, Tom Freeman, Steve Kampe, Mike Meyer, Nancy Seely, Jeff Toorongian, Linda Wanless
Questions

- **Example Question: (Support environment)**
  - Describe the organizational model of the support groups for online/blended learning?
    - eLearning Group?
    - Center for Teaching and Learning Group?
    - Distance learning programs group?

- **Example Question: (Learning environment)**
  - How do they view blended and online learning as part of their larger institutional mission/vision statement? Is blended /online learning a central focus or a niche activity?

- *Reference the handout for a detailed list of the questions and benchmark institutions.*
Findings

- Many institutions (including Michigan Tech) have decentralized, faculty-initiated online and blended course offerings.

- Purely online programs tend to be focused at the graduate or continuing ed audience. Undergraduate online offerings are targeted courses.

- The eLearning group is closely aligned with the Center for Teaching, Learning and Faculty Development. They provide the bridge between the IT-supported technologies and pedagogical areas of blended and online.

- Training workshops are available to help faculty develop and teach online and blended courses. (certification)

- Institutions that are successful in blended/online provide faculty with incentives to develop quality blended or online courses.
Defining Learning Environments

- The emerging terminology carries with it varied understanding of its meaning. (ex. blended learning, hybrid, web-enhanced, online, distance)

- Sloan Consortium has one of the most widely accepted set of definitions.

- Are these definitions appropriate? A definition based on content delivery may not match future learning environments since these environments may no longer provide content delivery.
Learning Environments

- Learning environments should be clearly defined for the students.
- Develop definitions for the types of learning environments we wish to provide.
- Define and code the types of learning environments for students when they are registering (ex. Online, Blended or F2F)
- Educate students on what the course expectations are for blended and online courses.
- Avoid using definitions to limit support to faculty.
Teaching Environment

- Workshops for faculty with opportunities to earn certification that would prepare them to more effectively teach online or blended.

- Sessions would include both technology training and pedagogical training.
  - Quality Matters Rubric
  - http://www.qmprogram.org/rubric
  - Blended Learning Toolkit.org http://blended.online.ucf.edu/about/
Teaching Environment

- Space available for:
  - Presenting material in an alternative method with the necessary resources.
  - Faculty to practice using technology off-line from the actual classroom.
  - A Test Center-space for proctoring online and blended exams (mastery learning).
Teaching Environment

- There needs to be a way for faculty to be part of the eLearning team. At some institutions, designated faculty eLearning liaisons are provided the time and compensation needed to assist their department colleagues.

- Establishment of a formal university policy on intellectual property (course ownership issues).

- Faculty need an incentive to devote time and effort to developing a new type of learning environment (portion of one’s job responsibilities)
Support Environment

- **Funding Model-Online/Blended fees to partially fund support services.**
  - It needs to be recognized that blended learning will be more the norm at most institutions and will therefore require general funded institutional support as a part of doing business.

- **Administrative Model**
  - Grant writing
  - Decision-making in regard to what should be taught in an alternative format and when courses should be offered.
Support Environment

- To support the blended/online structure successfully, more institutional and peer support personnel is necessary.

- A separate administrative support unit for online programs. Keeping the connection between the academic units, the eLearning Center and the outward facing customer.
Enhanced Learning Environment
Organization Structure Subgroup
2 February 2012

The Organization Structure subgroup of the Enhanced Learning (Blended and Online) Environment Task Force was charged with recommending how Michigan Tech should be organized in order to accomplish the task force vision of “One University Focused on Learning.”

Background. Currently, there are pockets of support and expertise on campus for enhanced learning that are not coordinated in any intentional way. The Center for Teaching, Learning and Faculty Development is the site of a variety of activities, including consultation with faculty about teaching, graduate student training, faculty orientation and campus workshops. The eLearning group is responsible for assisting faculty across campus with instructional design and educational media integration, and supports the pedagogical use of teaching technologies such as the learning management system. Other sources of expertise and support include expert faculty and graduate student practitioners, departmentally-funded instructional designers and resource centers such as the Humanities Digital Media Zone, librarians and library services, and undergraduates who often informally assist faculty with technology. User Services (ITSS) formally supports faculty and classroom technology; however, it does not foster instructional technology pedagogies or participate in instructional design.

Recommendations. To strengthen university focus on enhanced learning, plan and coordinate accomplish the vision of “One University Focused on Learning,” the task force makes three key recommendations:

1. Expand the scope of responsibility of the Center for Teaching, Learning and Faculty Development to include continuously improving the dissemination and implementation of blended and online learning.

2. Create a formal mechanism, the Enhanced Learning Council, to establish strategic direction and connect significant stakeholders with regard to teaching and learning resources, infrastructure needs, policies and guidelines.

3. Charge the Office of the Provost with assuring compliance with Higher Learning Commission rules for distance learning, and interfacing with appropriate university departments to provide a seamless support system for the online learner.
The Center for Teaching, Learning and Faculty Development (hereafter “the Center”) will lead Michigan Tech’s implementation of an enhanced learning environment that attracts national recognition. It must be an advocate with deans, chairs and faculty for blended and online learning, and work to continuously improve the dissemination and implementation of blended and online learning. This includes the following responsibilities:

- Significantly heighten campus awareness of Michigan Tech’s array of services, partners and opportunities for the development and delivery of online and blended teaching and learning.
- Invigorate the campus focus on teaching excellence and student-faculty relationships through pedagogical innovation and the use of blended learning tools, techniques and services,
- Facilitate strong relationships and communication with resource centers that support teaching/learning at the departmental or college level to develop a shared resource pool and coordinate efforts at all levels.
- Develop incentive-driven programs, particularly those that save faculty time, for professional development and educational excellence.
- Build and sustain a network of online and blended learning practitioners to foster collaboration and sharing of best practices.
- Develop and sustain robust training for online and blended learning, including the College Teaching course.
- Design and conduct assessments of blended and online learning to gauge campus-wide progress and contributions to university learning outcomes.
- Seek external and internal funding to provide incentives that will inspire and support innovative, institutional and/or discipline-specific approaches to enhanced learning and teaching excellence. Partner with faculty to support their proposals.
In order to accomplish this, the Center requires a group of eLearning professionals that will support a range of programs and offer time-saving services such as production of instructional materials. Specifically,

- the eLearning Group should report to the Center director, and
- a network of Faculty and Student Teaching Fellows should be compensated (through release time or stipends) to work with the Center and eLearning Group to support enhanced learning. Utilizing faculty and students will have a significant impact on the success of this initiative.

**Enhanced Learning Council**

Michigan Tech should create a formal mechanism—an Enhanced Learning Council—that coordinates the activities of key service providers (the Center, Van Pelt & Opie Library, Chief Technology Officer, and Media Technology/IT), establishes strategic direction, and connects significant stakeholders with regard to teaching and learning resources, infrastructure needs, policies and guidelines. Its goal is to improve effective and efficient utilization of university resources and reduce redundant services or programs. The Council should include the Center Director, the University Librarian, the Chief Technology Officer, the head of Media Technology (IT), and two faculty or staff significantly engaged in enhanced learning. This Council will:

- Engage in effective strategic planning for technology infrastructure and space utilization and design for enhanced teaching and learning.
- Establish a process for planning and recommending appropriate technological infrastructure and support services to Academic Affairs and the CIO.
- Provide timely evidence-based information to University decision-makers.
- Develop and recommend consistent policies and standards for online course material ownership and copyright retention and compliance in consultation with the Office of Research and University Senate.
- Enhance awareness of potential benefits and costs of new initiatives such as the Open Learning Initiative, Open Textbook Initiative, campus repositories, etc.

**Office of the Provost**

The Office of the Provost should work with the University Senate and College/School deans to establish consistent standards and guidelines for online courses, certificates and degree programs. The Office of the Provost should coordinate and monitor information on online degree programs to assure compliance with Higher Learning Commission accreditation. It should also interface as needed with the Registrar, Dean of Students Office, academic advisers, and other university departments to provide a seamless support system for the online learner.
Provost’s Task Force on Blended and Technology-Rich Teaching/Learning Environment and Support Systems

Notes on feedback from presentations on Nov. 16, 2011:

Deans Meeting

• Is it not the goal to improve both quality and faculty productivity?

Provost Feedback

1. Clarification on “enhanced” in the task force charge (Part 1: Articulate a clear vision and direction for enhanced teaching/learning environment and support systems at MTU)

“Enhanced” stands for “Blended and Technology-Rich” as expressed in the task force’s title.

It is clear that the taskforce kept this in mind because the vision statement and the goals articulate it very well.

“Enhanced” = innovative and ubiquitous teaching and learning environment—one that enhances and expands the education of residential students through blended learning and effectively extends the institution's reach and resources to non-residential students online.

2. Discussion of point D in the Introduction - “D. Increased demands on faculty time.”

This statement needs more deliberation. Qualifiers like “initially”, “cost of activation energy”, etc were brought up during the deans meeting. Everybody agrees that an initial investment, both in money and faculty time, is necessary. But at some point, the hope is that it frees up some faculty time not increases the demand on faculty time (“online cannot be more expensive than "normal" classroom instruction; supposedly, it's more efficient”).

For a more articulate discussion see Candace Thille and Joel Smith, Carnegie Mellon University, in their article for the American Council of Higher Education (ACE) Forum for the Future of Higher Education at http://www.acenet.edu/AM/Template.cfm?Section=Publications1&Template=/CM/ContentDisplay.cfm&ContentID=37938

Open Learning Initiative: Improving Productivity and Quality

Carnegie Mellon University has been employing a different approach to produce technologies (course development, evaluation, and improvement methodologies and specific web-based learning interventions) that simultaneously improve productivity and the quality of instruction. Using intelligent tutoring systems, virtual laboratories, simulations, and frequent opportunities for assessment and feedback, the university’s Open Learning Initiative (OLI) builds learning environments that enact the kind of dynamic, flexible, and
responsive instruction that fosters learning. Moreover, all student learning activities in OLI courses and labs are, with the student’s permission, digitally recorded in considerable detail to monitor student activity and capture data that informs further course revisions and improvements.

University Senate:

- How will student learning be assessed in a blended/online environment?
- What will it cost?
- Are benchmarks appropriate? Benchmarks are schools with more funding than Tech.
- Concerned about the demand on faculty time.
- What are the opportunities and pitfalls? Online information may mean “too much information” to process.

Undergraduate Student Government

- Should alert all students to this task force, perhaps do an email-survey
- Liked the benchmarks that demonstrated good practice at other good universities
  - We should aspire to be more like MIT
  - Liked the iPad application example – we’d like to have iPads
  - Increased learning opportunities
- Liked emphasis on coordination of how technologies would be used – get all faculty on the same page, need to educate faculty
- Intellectual property is a challenge – questions about what this means
- Like targeted online classes even for residential students – sometimes there is only one timeslot and scheduling conflicts make it hard to take the class you need
- Like blended learning (“online and in class”)
  - Able to pause a lecture, think about it, focus on listening not note taking
  - Want a scheduled class and online access
  - In high school had online lecture/information followed by discussion in class
- Do NOT want blended learning to mean double the work you do for each credit (expectations of time spent outside of class online plus in-class work)
- For this to work, would need better IT support for logistics
  - VPN is not very good currently
  - Want to be able to access all programs (e.g., Matlab) from anywhere – campus, home, etc.

Graduate Student Government
• Need a place where you can get step-by-step instruction to learn how to use the technology/software effectively (Kevin Cassell has taught such courses); there should be a range of options from one-on-one instruction to class to online tutorials
• New faculty who are told to emphasize research need incentives for adopting technology for instruction
• Don’t eliminate labs, residential classes, etc. – different learning environments are needed for different things, building relationships with graduate faculty are very important, but supplement with video of lecture for review or understanding things that were difficult
• Online plus recitation is a good combination – talk about things you did not understand; online component can be a timesaver
• Do it soon! Don’t wait 15 years
• Good idea to have one central or coordinated place for this
• Bill Kennedy is teaching a class for graduate students that has examples, and this could be extended. (Talk with Jenn Winnikus who TAd for a distance learning course)
• Many courses are not offered here. It would be good if graduate students could take online courses offered by other universities on topics we do not cover here. This would also help student to build network and make contacts with researchers at other universities.
• Use discussion board for interaction
• Concerns about cost model – if it costs more, what do students get in return?
Purpose: This task force was convened in October, 2011, by the Provost to articulate a clear vision and direction for teaching/learning environment and support systems at Michigan Tech, as well as an organizational structure for realizing this vision through strong and coordinated leadership and effective, efficient, and integrated use of resources. As Michigan Tech endeavors to be a “high tech/high touch” university, this vision and leadership will be critical to creating a successful environment for blended and technology-rich teaching/learning that will serve students and faculty both on and off campus, expand educational delivery systems for distance learning, and provide Information Technology Services with the guidance it needs to acquire and support technology resources that serve teaching and learning.

Task Force Activities: The task force benchmarked teaching/learning environments at other universities, inventoried existing support systems at Michigan Tech, and developed a vision for blended and technology-rich teaching/learning at Michigan Tech. It then recommended an organizational structure to achieve the vision. A subteam is currently developing recommendations for the business model to support the vision.

Vision: One University Focused on All Students Learning

Michigan Tech strives to create an innovative and ubiquitous teaching and learning environment—one that enhances and expands the education of residential students through blended learning and effectively extends the institution’s reach and resources to non-residential students online. Thereby, Michigan Tech will be recognized as a higher education leader in creating and continually improving an enhanced learning environment taking advantage of technologies, tools and techniques aimed at improved student learning.

Challenges:

To successfully achieve these goals, three immediate challenges exist:

1. The roles and responsibilities of the provost, deans, department chairs, and the Center for Teaching and Learning must be clearly delineated,
2. Incentives for faculty and instructional staff, including promotion and merit salary, must be developed,
3. Intellectual property and copyright policies for online content must be developed campus-wide.
Organization Structure.

Background. Currently, there are pockets of support and expertise on campus for enhanced learning that are not coordinated in any intentional way. The Center for Teaching, Learning and Faculty Development is the site of a variety of activities, including consultation with faculty about teaching, graduate student training, faculty orientation and campus workshops. The eLearning group is responsible for assisting faculty across campus with instructional design and educational media integration, and supports the pedagogical use of teaching technologies such as the learning management system. Other sources of expertise and support include expert faculty and graduate student practitioners, departmentally-funded instructional designers and resource centers such as the Humanities Digital Media Zone, librarians and library services, and undergraduates who often informally assist faculty with technology. User Services (ITSS) formally supports faculty and classroom technology; however, it does not foster instructional technology pedagogies or participate in instructional design.

Recommendations. To strengthen university focus on enhanced learning, plan and coordinate accomplish the vision of “One University Focused on Learning,” the task force makes three key recommendations:

1. Expand the scope of responsibility of the Center for Teaching, Learning and Faculty Development to include continuously improving the dissemination and implementation of blended and online learning.

2. Create a standing committee—the Enhanced Learning Council—reporting to the Provost, to establish strategic direction and connect significant stakeholders with regard to teaching and learning resources, infrastructure needs, policies and guidelines.

3. Charge the Office of the Provost with assuring compliance with Higher Learning Commission rules for distance learning, and interfacing with appropriate university departments to provide a seamless support system for the online learner.

Recommendation 1. Center for Teaching, Learning and Faculty Development

The Center for Teaching, Learning and Faculty Development (hereafter “the Center”) will lead Michigan Tech’s implementation of an enhanced learning environment that attracts national recognition. It must be an advocate with deans, chairs and faculty for blended and online learning, and work to continuously improve the dissemination and implementation of blended and online learning. This includes the following responsibilities:

- Significantly heighten campus awareness of Michigan Tech’s array of services, partners and opportunities for the development and delivery of online and blended teaching and learning.
- Invigorate the campus focus on teaching excellence and student-faculty relationships through pedagogical innovation and the use of blended learning tools, techniques and services,
• Facilitate strong relationships and communication with resource centers that support teaching/learning at the departmental or college level to develop a shared resource pool and coordinate efforts at all levels.
• Develop incentive-driven programs, particularly those that save faculty time, for professional development and educational excellence.
• Build and sustain a network of online and blended learning practitioners to foster collaboration and sharing of best practices.
• Develop and sustain robust training for online and blended learning, including the College Teaching course.
• Design and conduct assessments of blended and online learning to gauge campus-wide progress and contributions to university learning outcomes.
• Seek external and internal funding to provide incentives that will inspire and support innovative, institutional and/or discipline-specific approaches to enhanced learning and teaching excellence. Partner with faculty to support their proposals.

In order to accomplish this, the Center requires a group of eLearning professionals that will support a range of programs and offer time-saving services such as production of instructional materials. Specifically,

• the eLearning Group should report to the Center director, and
• a network of Faculty and Student Teaching Fellows should be compensated (through release time or stipends) to work with the Center and eLearning Group to support enhanced learning. Utilizing faculty and students will have a significant impact on the success of this initiative.

Recommendation 2. Enhanced Learning Council

Michigan Tech should create a formal mechanism—an Enhanced Learning Council—that coordinates the activities of key service providers (the Center, Van Pelt & Opie Library, Chief Technology Officer, and Media Technology/IT), establishes strategic direction, and connects significant stakeholders with regard to teaching and learning resources, infrastructure needs, policies and guidelines. Its goal is to improve effective and efficient utilization of university resources and reduce redundant services or programs. The Council should include the Center Director, the University Librarian, the Chief Technology Officer, the head of Media Technology (IT), and two faculty or staff significantly engaged in enhanced learning. This Council will:

• Engage in effective strategic planning for technology infrastructure and space utilization and design for enhanced teaching and learning.
• Establish a process for planning and recommending appropriate technological infrastructure and support services to Academic Affairs and the CIO.
• Provide timely evidence-based information to University decision-makers.
• Develop and recommend consistent policies and standards for online course material ownership and copyright retention and compliance in consultation with the Office of Research and University Senate.
• Enhance awareness of potential benefits and costs of new initiatives such as the Open Learning Initiative, Open Textbook Initiative, campus repositories, etc.
Recommendation 3. Office of the Provost

The Office of the Provost should work with the University Senate and College/School deans to establish consistent standards and guidelines for online courses, certificates and degree programs. The Office of the Provost should coordinate and monitor information on online degree programs to assure compliance with Higher Learning Commission accreditation. It should also interface as needed with the Registrar, Dean of Students Office, academic advisers, and other university departments to provide a seamless support system for the online learner.
SUMMARY: Provide leadership for continuously improving teaching and learning at Michigan Tech to achieve the vision of “One University Focused on Learning.”

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

Invigorate the campus focus on teaching excellence and mutual responsibility of students and faculty for learning.

Enhance teaching effectiveness for new and experienced faculty and graduate teaching assistants through the College Teaching course, a robust and regular series of faculty teaching workshops, and individual and group consultations.

Facilitate strong relationships and communication with academic departments, academic support units, learning centers, and Student Affairs to support teaching/learning initiatives, develop a shared resource pool, and coordinate efforts across campus.

Support assessment of University Student Learning Goals by assisting faculty in developing and assessing course goals in support of program and university learning goals.

Develop a network of Faculty and Student Teaching Fellows to support teaching innovation and excellence.

Organize and maintain an Advisory Council to the Center.

Manage eLearning Services to provide a seamless support system for online learning.

Continuously improve the dissemination and use of enhanced (blended and online) learning tools, techniques and services to improve student engagement.

Significantly heighten on and off campus awareness of Michigan Tech’s array of services, partners and opportunities for the development and delivery of online and blended teaching and learning.

Develop and sustain robust training for online and blended learning.

Provide assistance in evaluating and implementing educational technologies that enhance student engagement and learning.

Build and sustain a network of blended and online learning practitioners to foster collaboration and sharing of best practices.

Develop incentive-driven programs, particularly those that save faculty time, for professional development and educational excellence.

Design and conduct assessments of blended and online learning to gauge campus-wide progress and contributions to university learning outcomes.

Manage the operations and budget of the Center.

Administer university teaching awards.

Assist with new faculty orientation and graduate teaching assistant program.

Seek external and internal funding to provide incentives that will inspire and support innovative, institutional and/or discipline-specific approaches to enhanced learning and teaching excellence; partner with faculty to support their proposals.

Standing Member of new Enhanced Learning Council.

Position and Center structure will be reviewed after 3 years.

SUPERVISORY RESPONSIBILITIES:

Administrative supervision is exercised over Center staff.

QUALIFICATION REQUIREMENTS: To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE:

REQUIRED:

Masters degree from an accredited university.

Significant university-level teaching experience appropriate for an appointment at the rank of lecturer, professor of practice, or Associate/Full Professor.

Successful experience with online and blended learning.
DIRECTOR – CENTER FOR TEACHING AND LEARNING

EDUCATION and/or EXPERIENCE:

REQUIRED:
Demonstrated commitment to teaching and learning.
Demonstrated commitment to pedagogical innovation and emerging learning environments, including online and blended learning.
Evidence of teaching excellence.
Demonstrated enthusiasm for working effectively, collaboratively and collegially with diverse faculty, students, and administrators.
Demonstrated ability to communicate effectively and confidently in writing, orally, through effective presentations and while engaged in one-to-one consultations with faculty and students.

DESIRABLE:
Successful grant writing record.
Ability to define problems, collect data, establish facts and draw valid conclusions.

OTHER SKILLS AND ABILITIES:

REQUIRED:
Demonstrated commitment to teaching and learning.
Experience with assessment of student learning.
Effective administrative and supervisory experience.

DESIRABLE:
Demonstrated commitment to pedagogical innovation and emerging learning environments, including online and blended learning.
Evidence of teaching excellence.
Demonstrated enthusiasm for working effectively, collaboratively and collegially with diverse faculty, students, and administrators.

The qualifications and specifications mentioned above are intended to indicate the kinds of tasks and levels of work difficulty that will be required of positions that will be given this title and shall not be construed as declaring what the specific duties and responsibilities of any particular position shall be. It is not intended to limit or in any way modify the right of any supervisor to assign, direct, and control the work of employees under his/her supervision. The use of a particular expression or illustration describing duties shall not be held to exclude other duties not mentioned that are of similar kind or level of difficulty. The position will be filled based on qualifications regardless of Race, Color, Disability, Religion, Sex, Sexual Orientation, National Origin, Height, Weight, Age, Veteran, or Marital Status. 12157 March 2012