

**Academic Quality Improvement Process  
Learning Space Enhancement Action Project**

**Recommendation Report**

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**(revised 11 December 2007)**

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## EXECUTIVE SUMMARY

The AQIP Learning Space Enhancement (LSE) Action Project Committee was charged with establishing a University-level, regular process to maintain, renew, and upgrade learning spaces. Our recommendations are summarized below.

1. The process will initially include only classrooms scheduled through the Office of Student Records and Registration. Our vision is that the process for centrally-scheduled classrooms will serve as a prototype for the stewardship of other campus learning spaces in the future.
2. The process will take place annually with data collection occurring in the spring, prioritization in the fall, planning and bidding in the spring (along with data collection for the following year) and renewal and upgrade work in the summer. The first year of the process (2007-08) will require an abridged process: data collection and prioritization in the fall 2007; planning/bidding in spring 2008 (along with data collection for the following year); renewal and upgrade work in summer 2008.
3. The ultimate responsibility for this process will reside with the Provost.
4. A standing committee called the Learning Space Enhancement (LSE) Committee will be formed to carry out the process on an annual basis. It will identify needs, set priorities, and make recommendations for renewal and upgrade projects. The committee will have representatives from across campus that serve 3 year staggered terms and will report to the Provost. The LSE Committee should be established before the start of the 2007-08 academic year.
5. The budget for maintenance, renewal and upgrade activities will be part of the Provost Office's budget. The maintenance portion will be allocated directly to Facilities, Educational Technology Services, and Information Technology. Renewal and upgrade allocations will be on a project-by-project basis based on recommendations of the LSE committee.
6. An annual budget allocation for LSE activities in the range of \$800,000 to \$1.5 million is consistent with the patterns discovered during benchmarking. For the 2007-08 budget, a \$250,000 amount is requested for LSE renewal and upgrade projects. This budget request is complementary to the \$460,000 amount requested by the CIO's Classroom Technology Committee in Spring 2007.
7. The General Fund will be the primary source of funding. While other sources of funding will play a role, funding from the General Fund acknowledges that the quality of learning spaces is integral to the educational mission of the University.
8. The LSE Committee will develop and use multiple methods to identify needs, including: user surveys, department meetings, classroom audits, web suggestion box, input from Facilities and Registrar's office. The LSE Committee will develop guiding principles for setting priorities.
9. The LSE Committee will develop communication mechanisms for: (a) collecting input from the campus community on needs and (b) informing the campus community about the process and status of projects.
10. As part of its annual process, the LSE Committee will assess the effectiveness of the process and make changes to it as necessary.

## Introduction

“Learning spaces” are defined as any campus spaces that support the learning objectives of the University academic mission. Learning spaces include:

- classrooms
- seminar rooms
- conference rooms
- building lounges
- library
- offices
- learning centers
- commons areas

Learning spaces, if nurtured, will enhance teaching and learning at Michigan Tech. Attractive, up-to-date learning spaces also project a positive image of a quality Michigan Tech education.

The AQIP Learning Space Enhancement Action Project Committee was charged with establishing a University-level, regular process to maintain, renew, and upgrade learning spaces. The process would identify campus needs, set priorities, and make funding recommendations. The process would address individual learning spaces as opposed to entire buildings. During this inaugural year of the project, the committee placed an emphasis on centrally-scheduled classrooms. Our vision is that the process for centrally-scheduled classrooms will serve as a prototype for the stewardship of other campus learning spaces in the future.

We have defined maintenance, renewal, and upgrade as follows:

**Maintenance:** To follow regular schedules and procedures for preventative maintenance and general housekeeping of learning spaces and related technology.

**Renewal:** To replace or repair ceilings, walls, flooring, etc. to provide a pleasing environment.

**Upgrade:** To provide appropriate technology, teaching/learning tools, furniture, and environmental features (e.g. lighting, floor coverings, acoustical elements, etc.) to create improved opportunities for learning. Upgrade includes training of instructors on how to use improved spaces to meet teaching and learning objectives.

Currently, Michigan Tech does not have a University-level regular process for learning space enhancement (LSE). As a result, a number of learning spaces have been allowed to deteriorate to the point that they interfere with rather than enhance learning. Enhancements are undertaken on an ad-hoc basis depending on the availability of resources from fundraising and other sources. This leads to inconsistencies in the quality of the learning spaces across campus and discourages a spirit of shared ownership.

Our committee contacted more than 30 universities to benchmark their LSE processes and, where possible, the funding level for LSE activities. We then identified all of the elements (or dimensions) that need to be included in such a process. Based on the best practices in the benchmarking study and our own brainstorming, we generated a list of concepts for each element. We then discussed pros and cons of each concept before arriving at a recommendation.

The remainder of the report describes our recommendations for each process element. The elements are as follows:

- Which rooms
- Timetable
- Ultimate responsibility
- Advisory body
- Budget process
- Budget amount and assumptions
- Funding source
- How to identify and prioritize needs
- Communication plan
- Process assessment

### **Which Rooms**

We recommend that the process initially include only classrooms scheduled through the Office of Student Records and Registration. As the process shows itself to be effective, it can be adapted to include other spaces such as the SDC, Rosza, Library, undergraduate laboratories, MUB, hallways. The funding mechanism for these additional spaces may involve cost share from the unit or department.

### **Timetable**

We recommend an ongoing process with annual deliverables. The current ad-hoc processes do not ensure consistent quality in MTU's learning spaces. They are reactive rather than proactive. As a result, the quality of our learning spaces does not positively distinguish MTU from its peers. While the recommended process is annual, it may also be relevant for new building construction or major renovations. The best time of year to carry out renewal and upgrade projects is in the summer. Therefore, the process would start in the spring of the preceding year with the collection of project requests. Review and prioritization would take place in the fall, planning and bidding in the spring, and the renewal/upgrade work in the summer.

	2007 Summer	2007 Fall	2008 Spring	2008 Summer	2008 Fall	2009 Spring	2009 Summer
Form LSE Committee	////						
Identify needs		////	■				
Prioritize and recommend		////			■		
Plan and acquire bids			////			■	
Complete renewal and upgrade work				////			■

//// Startup (Year 1)  
■ Steady-state

**Ultimate Responsibility**

We recommend that the Provost have ultimate responsibility for this activity. That means that the activity will be funded through the Provost’s office and that the Provost ensures that the process is effective and takes place on an annual basis. The Provost has ultimate responsibility for academics and has the authority to make Learning Space Enhancement a priority among many competing priorities.

At most of the schools we benchmarked, the Provost (or equivalent) had ultimate responsibility for this process, usually with strong involvement from the Registrar, Facilities, and faculty members.

**Advisory Body**

We recommend the formation of a standing committee called the Learning Space Enhancement (LSE) Committee that reports to the Provost. It will have members serving 3 year staggered terms so that a historical perspective is maintained. We recommend 1 representative from each of the following: Office of Student Records and Registration; Facilities; Office of the CIO; Educational Technology Services; Center for Teaching, Learning and Faculty Development; USG; GSC; as well as one faculty representative from each of the colleges/schools (to be selected by any mechanism the college/school chooses). The committee Chair will be mutually agreed upon by the LSE Committee and the Provost. The LSE committee should be established before the start of the 2007-08 academic year.

**Budget Process**

The Learning Space Enhancement (LSE) process that we are recommending impacts a wide variety of university constituents. Most of the work required to actually do (rather than talk about) LSE will be carried out by Facilities, Educational Technology Services, and Information Technology. However, the LSE process we are recommending is a collaborative one spanning the university and for which the Provost is ultimately responsible. Therefore, we recommend

that the budget for the *renewal* and *upgrade* components of the LSE process be part of the Provost office budget. We recommend that the *maintenance* component of LSE be part of the respective budgets for Facilities, Educational Technology Services, and Information Technology.

### **Budget Amount and Assumptions**

We recommend an annual budget allocation of \$800,000 to \$1.5 million as a target amount for LSE maintenance, renewal, and upgrade activities at MTU. Benchmarking suggests that established LSE processes utilize this amount of annual funding and enable universities to improve the condition of existing learning spaces.

We recommend that the initial emphasis for renewal and upgrade activities is directed at centrally-scheduled classrooms. We recommend the following planning assumptions for budget planning purposes:

- Approximately 70 classrooms are currently centrally-scheduled by the Registrar's Office.
- Learning spaces should be renewed at least once every 3 years.
- Learning spaces should be upgraded at least once every 14 years.
- Learning spaces should be continually maintained to prevent unusual deterioration or emergency replacement situations.
- The number of renewals and upgrades per year is a projection of a steady-state budgeting requirement. Due to the current state of MTU learning spaces (e.g., centrally-scheduled classrooms), initial projects may need to focus on upgrades rather than renewals for the short-term future.
- Renewal and upgrade cost estimates will be continuously re-visited and evaluated as part of the overall learning space enhancement process.

For the 2007-08 budget, we requested a \$250,000 allocation for learning space enhancement projects. This budget request is complementary to the \$460,000 amount requested by the CIO's Classroom Technology Committee. Our rationale is that the Provost (and the 2007-08 Learning Space Enhancement Committee) will need a budget allocation to accomplish goals related to the University's Academic Quality Improvement Process and the University's Strategic Plan. Appendix A provides the budget request memorandum developed for the initial year of the LSE process (2007-08).

### **Funding Source**

We recommend that the General Fund be the primary source of funding for Learning Space Enhancement. The quality of learning spaces is integral to the educational mission and funding from the General Fund would acknowledge that. A hybrid source of student fee matched by General Fund dollars is acceptable but not preferred. Grant writing and Fundraising cannot be overlooked as important sources, but they cannot be the primary sources. We recommend that an endowment for learning space enhancement be part of the capital campaign.

## **How to Identify and Prioritize Needs**

We recommend that multiple methods of identifying needs be used, especially in the initial years of the annual process. We suggest that the LSE Committee consider the following:

- Annual surveys of classroom users
- Department meetings
- Classroom audits by the LSE Committee
- Web-based “suggestion box”
- Input from Facilities on maintenance needs
- Input from Registrar on usage statistics

The LSE Committee will develop guiding principles for funding priorities. We recommend that maintenance and renewal actions for recently upgraded spaces have a high funding priority. Well maintained classrooms will require less frequent renewal, and timely renewals will mitigate the cost of major renovations and upgrades.

The need identification and prioritization process will take sustainability issues into consideration. Attention will be given to energy efficiency, environmental issues (e.g., human-friendly solvents, markers), and material selection such that sustainable practices are utilized in maintenance, renewal, and upgrade of learning spaces at MTU.

## **Communication Plan**

We recommend that the LSE Committee set up mechanisms for: (1) collecting input from the campus community on needs and (2) informing the campus community about the enhancement process and status of projects. A variety of mechanisms should be used including a web site, departmental and school meetings, and surveys.

We recommend that the web site include the following information:

- Process timetable and members of the LSE Committee
- How to provide input to the Learning Space Enhancement Process, including a “suggestion box” on the web site
- Capability and condition of classrooms
- Status of renewal and upgrade projects

We recommend that school and department meetings as well as USG and GSC meetings be used for presenting information and soliciting requests. We recommend an annual presentation to the Senate and/or an annual open forum. We recommend that the LSE Committee regularly communicate with other MTU committees involving learning spaces (for example, Senate Distance Learning Committee or new construction project committees).

The current course evaluation form that students fill out has a question about learning space effectiveness. We recommend that responses to that question (or a revised question) be used in this process. Additional survey information needs to be collected from learning space users.

The number of surveys will likely decrease after an initial period of data collection, but we recommend that some ongoing embedded mechanism for data collection be put in place—such as a short questionnaire that gets filled out by faculty as grades are submitted.

### Process Assessment

We recommend that the LSE Committee assess the LSE process on an annual basis. The success of the process will be evaluated using the following metrics:

- Ratings of learning space effectiveness (from course evaluation form question and other surveys)
- Number of renewal and upgrade projects completed each year
- Department and School satisfaction with this process

As a result of this assessment, the LSE Committee may choose to change its membership (adding or subtracting representatives) or the scope of learning spaces addressed. The committee will also review its annual budget request.

### Conclusion

The Action Project committee believes that it *is* feasible to initiate and sustain a University-level, regular process for learning space enhancement at Michigan Tech. The process outlined in this report addresses goals related to the following campus initiatives:

1. University re-accreditation by the Higher Learning Commission through the Academic Quality Improvement Process (AQIP); and
2. University Strategic Plan
  - **Goal 1:** Attract and support a world-class and diverse faculty, staff, and student population.
    - **1.1** Provide an outstanding work environment and support opportunities for all members of the Michigan Tech community.
    - **1.3** Provide exceptional facilities and an aesthetically-pleasing environment
      - construct and renovate technologically and ecologically superior facilities
      - optimize the use of resources, laboratories, and equipment
  - **Goal 2:** Deliver a distinctive and rigorous discovery-based learning experience grounded in science, engineering, technology, sustainability, and the business of innovation.
    - **2.1** Provide dynamic experiential learning that integrates instruction, research and innovation in undergraduate and graduate programs.
      - expand the use of technology in campus and online learning.

The recommendations in this report provide a reasonable starting point for a University-level, regular process. After a year or two in action, and with the benefit of hindsight, the LSE Committee will surely find ways to improve the process.

**Appendix A**

To: Mary Durfee, Assistant Provost for Academic Improvement  
 From: Chelley Vician, Learning Space Enhancement Action Project Committee Chair  
 Date: 3 May 2007  
 Re: Request for Provost 2007-08 budget allocation  
 CC: D. Reed, Provost

Our committee requests a \$250,000 allocation in the 2007-08 MTU budget for learning space enhancement projects. Our budget request is complementary to the \$460,000 amount requested by the CIO's Classroom Technology Committee. Our rationale is that the Provost (and the 2007-08 Learning Space Enhancement Committee) will need a budget allocation to accomplish goals related to the University's Academic Quality Improvement Process and the University's Strategic Plan.

Learning space enhancement refers to maintenance, renewal, and upgrade activities to environmental features, technology, equipment, and furnishings within learning spaces. We recommend that the initial emphasis for renewal and upgrade activities is directed at centrally-scheduled classrooms. We use the following planning assumptions to structure our request:

- Approximately 70 classrooms are currently centrally-scheduled by the Registrar's Office.
- Learning spaces should be renewed at least once every 3 years.
- Learning spaces should be upgraded at least once every 14 years.
- Learning spaces should be continually maintained to prevent unusual deterioration or emergency replacement situations.
- The number of renewals and upgrades per year is a projection of a steady-state budgeting requirement. Due to the current state of MTU learning spaces (e.g., centrally-scheduled classrooms), initial projects may need to focus on upgrades rather than renewals for the short-term future.
- Renewal and upgrade cost estimates will be continuously re-visited and evaluated as part of the overall learning space enhancement process.

The total allocation is detailed as follows:

<b>Request description</b>	<b>Request \$\$ amount</b>
Learning Space Enhancement – ceilings, lighting, tables/seating, boards, painting, flooring/carpet, window treatments	
-- Maintenance of learning spaces	\$ 0
-- Renewal of learning spaces – 25 per year at \$5,000 each	125,000
-- Upgrade of learning spaces – 5 per year at \$25,000 each	125,000
<b>Subtotal: non-technology component</b>	<b>\$250,000</b>
Learning Space Enhancement – -- upgrade, renewal, maintenance of technologies (submitted by CIO Classroom Technology Committee)	460,000
<i>TOTAL COMBINED REQUEST (from AQIP and CIO committees)</i>	<u><i>\$710,000</i></u>

Our committee's request does not include annual operating dollars for maintenance of learning spaces or for faculty development/continuing education related to teaching & learning practices. Our forthcoming recommendation report will include suggestions for possible cooperative budgeting mechanisms in the future.

I would appreciate it if you would acknowledge receipt of this request. Please let me know if you have any questions.