Using Regional Cooperation and Technology to Achieve Cost Savings: The Midwestern Higher Education Commission

by David Murphy and Jeff Williams

The Midwestern Higher Education Commission (MHEC) was established to advance higher education in the Midwest through interstate cooperation. This article describes four of the commission’s most successful initiatives, all of which are related to technology and have resulted in significant cost savings for MHEC members.

Regional cooperation is not a foreign concept to higher education. For many years, multi-state compact organizations have served higher education in the northeast, southern, and western regions of the United States with student exchange programs, policy conferences, and information exchange initiatives. As the newest compact, established in 1991, the Midwestern Higher Education Commission (MHEC) elected to focus upon cooperative initiatives that enhance productivity, reduce administrative costs, and improve the quality of education.

MHEC seeks to promote interstate cooperation and resource sharing in higher education in ways that are mutually beneficial to member colleges and universities. Program priorities include encouraging student access and affordability, reducing administrative costs, supporting public policy analysis and information exchange, strengthening the quality of existing academic programs and services, and promoting innovation in delivering higher education. Commission members, as of February 1997, included Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin.

MHEC activities are carried out by four full-time staff and four part-time consultants, who support ten operating committees and twelve program initiatives (see sidebar, page 37, for details). To augment our small staff, the commission relies on the direct, “grass-roots” involvement of institutional representatives on each program committee. These program committees (continued on page 36)

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involve over 250 college and university representatives from all sectors of higher education in the Midwest. Besides developing the ideas and frameworks, implementation strategies, and program oversight functions, these volunteers are also catalysts for regional cooperation. Their combined experience, talent, and dedication are at the heart of each MHEC initiative.

Institutional program participation is voluntary; institutions may choose to participate in none, one, or all of MHEC’s programs. In addition, every program is open to all public and private nonprofit colleges, universities, community colleges, technical institutions, and systems with 501(c)3 status and to state government agencies in the member states. The commission uses these policies to create a massive pool of potential participants and to leverage the best program benefits for institutions of any size.

Technology—both in terms of technology-based program initiatives and use of communications technology between members—is an integral component of four of MHEC’s most successful initiatives:

- The Academic Scheduling and Management Software (SAMS) program encouraged national vendors to produce a personal-computer-based scheduling program that did not exist on the market before the program began.
- Internet activities create unique vehicles for peer communications and facilitate the commission’s own committee operations.
- The Virtual Private Network leverages not only substantial cost savings to participating institutions but also indirectly benefits non-participating colleges and universities.
- The Interactive Video program assists colleges and universities to understand the vast array of available technologies and offers some of the lowest pricing available on interactive video equipment.

The SAMS program

The Academic Scheduling and Management Software program developed from a series of meetings of academic scheduling officers at a conference of the North Central Association of Colleges and Secondary Schools. During sessions discussing computer-aided course scheduling, attendees agreed that smaller institutions lacked the resources to purchase existing course scheduling systems. Cooperation, they believed, might help solve the problem. After MHEC joined the scheduling officers to discuss the scope of the problem and possible regional solutions, an ad hoc committee of institutional volunteers prepared and submitted an academic scheduling software proposal to the commission.

The committee conducted a region-wide survey on the capabilities and features of course-scheduling software. Only a quarter of the 264 institutions that responded reported using computers for course scheduling, citing high cost as the primary factor of low use. Although many sophisticated course scheduling programs existed, none were available for personal computers and many required annual licensing fees of several thousand dollars. The committee used the survey results to issue a Request for Proposals that identified twenty-five criteria concerning the software capabilities, requirements, and price levels sought by small- and medium-sized institutions. Each of the four semi-finalists received a copy of the survey’s results. Of these four semi-finalists, two had existing products and two had products under development—but none of the providers had a PC-based product available.

During mid-summer, one vendor, Applied Business Technologies (ABT), indicated that its development product was roughly half complete. At the fall selection meeting, however, ABT surprised the committee by unveiling a prototype system based on the results of MHEC’s survey. ABT had completely altered their product—in the middle of the development process—to conform more closely to the capabilities and features identified by MHEC. The committee, impressed by the prototype, decided to delay its final selection for a month if ABT agreed to demonstrate good progress toward a working system. One month later, the committee endorsed both ABT and Universal Algorithms, Inc. (UAI) as the vendors whose products, services, training commitments, and pricing best met the goals of the SAMS program.

The SAMS program offered two substantial benefits for Midwestern institutions. The results of the survey not only encouraged vendors to develop a PC-based course-scheduling program, but also brought it to market faster than would have otherwise been possible. In addition, the two selected vendors offered participating institutions the largest price discounts in either company’s history. In the first round of coordinated purchasing, sixty-seven institutions purchased software valued at $1.4 million through the program at substantial discounts—53 percent for UAI and 66 percent for ABT. UAI’s previous best discount was 40 percent, and was only available to systems of colleges and universities that all purchased the software at the same time; ABT’s discount on the PC-based program is only offered through the SAMS program.
As with other commission programs, the SAMS program resulted in benefits for both participating and non-participating institutions. Participating institutions, clearly, received substantial cost savings by purchasing the software through the program. And these participating institutions may also receive additional savings. One major research university expects to save $750,000 per year in reduced utility and maintenance costs by using the software to more efficiently schedule its classes. Non-participating institutions received indirect benefits: MHEC learned that several colleges and universities used the survey results and the RFP to guide their own scheduling software procurement and development projects. Based on these successes, the commission is offering the program for a second year.

**Internet-based activities**

MHEC’s Internet activities began as a medium to assist external communications, encouraging higher education professionals to talk to each other and to talk to MHEC. The commission created our first listserv, MHEC-TEL, in January 1995, in response to requests from several telecommunications directors. These professionals believed that the annual or semi-annual conferences attended by their peers offered too little time for an ongoing exchange of information. They encouraged us to host an e-mail discussion service where they could regularly talk to their peers in the region without commercial pressure.

MHEC-TEL’s goal is to provide a forum where (1) higher education telecommunications professionals can share ideas, questions, comments, and announcements with peers across the Midwest; and (2) MHEC can solicit ideas and suggestions from telecommunications professionals about common institutional challenges, existing MHEC programs, and future cost-saving initiatives.

Membership on the listserv has been strong, averaging 300 members each month, with very little turnover. A controversial aspect of the activity has been the exclusion of commercial entities from participation. From the beginning, MHEC received e-mail from numerous commercial vendors who objected. When we polled listserv members on this question, a vast majority of the respondents reported favoring the status quo. MHEC-TEL remains closed to commercial entities, with exceptions granted to consulting firms hired by smaller colleges and universities that do not have telecommunications officers of their own.

Inspired by the success of the first listserv, the commission introduced two others: MHEC-RMI, a listserv for risk management professionals, and MHEC-ACS, a listserv for academic course scheduling professionals, each operating with goals and policies similar to those of MHEC-TEL. We also provide a Web server (http://www.umn.edu/mhec/) that offers general background information about MHEC and its commissioners and

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**About the Midwestern Higher Education Commission**

Each member state appoints five commissioners to MHEC’s governing body: the governor or the governor’s designee, a member of each chamber of the state legislature, and two at-large members, one of whom must come from post-secondary education. The full commission meets twice each year to review programs and approve the operating budget. A small, full-time staff located in Minneapolis, Minnesota, oversees MHEC’s daily operation and programming activities. Each year, MHEC and its commissioners sponsor a variety of programs to enhance higher education, including both ongoing activities and special projects. MHEC program initiatives include the following.

- The Academic Position Network (APN) is a joint initiative with the William C. Norris Institute. The program provides a searchable, Internet-based listing of position announcements in higher education (http://www.umn.edu/apn/).
- The Academic Scheduling and Management Software program provides low-cost academic scheduling and management software to participating institutions.
- The Midwestern Higher Education Policy Summit is a joint initiative of MHEC and the Midwestern Legislative Conference of the Council of State Governments, with the assistance of the American Council on Education, the Education Commission of the States, the State Higher Education Executive Officers Association, and the University of Minnesota’s Hubert Humphrey Institute of Public Affairs. The project is funded through a grant from the W.K. Kellogg Foundation. The workshop will bring together Midwestern legislators and higher education leaders to discuss the key issues facing Midwestern higher education, creative solutions, and regional strategies into the 21st century.
- The Minority Faculty Development Committee concluded a year-long study of minority faculty recruitment and retention. The committee researched the underrepresentation of minority faculty in Midwestern higher education, identified the factors that cause underrepresentation, and identified strategies that might be used to increase representation.
- The Regional Purchasing Initiative identifies targets of opportunity where institutional cooperation can be leveraged to achieve better pricing. Program committees are currently forming in the areas of computing resources, voluntary benefits, utilities and natural gas, and interactive coursework.
- MHEC’s Risk Management programs include both property and liability insurance offerings. The property program currently insures over $16 billion of property at fifty-one Midwestern institutions.
- The Student Exchange program allows students from Midwestern states enrolling in participating programs to receive discounted out-of-state tuition at many colleges and universities. Offered for the first time in 1994, more than 600 students have taken advantage of the program.
- MHEC’s Telecommunications Committee sponsors a Virtual Private Network for Midwestern institutions that includes reduced rates for voice, video, and data services, and an Interactive Video program for purchasing distance learning equipment at highly reduced prices.
committee members, as well as progress reports, announcements, and background information about each of our projects. The server was an indispensable aid in making the full text of the commission’s final report on interactive video available to the region and providing updated information about the regional information workshops sponsored by the SAMS program.

The commission also began using the Internet to facilitate our own internal operations. In most cases, our committee activities revolve around one- or two-day “fly-in” meetings at a central location. But when the commission broadened one of its committees to include a task force to review changes in the Academic Position Network (APN) program (see sidebar, page 37), more than sixty academic officers wanted to participate. While fly-in meetings work well for small groups, we decided that coordinating a fly-in meeting with more than sixty participants would prove daunting! Instead, we created a special listserv, MHEC-APN, and convened the task force in a series of “virtual meetings.”

APN task force members received one email message from MHEC each week during the fall of 1995. Each message included a short background paragraph about the topic of discussion, the series of questions that the commission and the Norris Institute presented to the steering committee, the steering committee’s recommendations, and a series of follow-up questions that emerged from the recommendations. The dedicated listserv enabled each task force member to respond to both the original question and to the comments and recommendations of other task force members. After traffic on MHEC-APN began averaging four messages per day, we switched to a “digest” format, where members received one message from MHEC each day containing all of the day’s messages in their entirety. The review process worked so well that we later used another dedicated listserv to review the second Request for Information (RFI) for the Interactive Video Program.

The Virtual Private Network

MHEC’s first program committee, the Telecommunications Committee, was established in 1992, charged with developing regional approaches to reduce telecommunications costs and improve access and services to Midwestern institutions. The committee identified two areas where regional cooperation could potentially enhance both communication and cost savings: creating a virtual private network and a regional interactive-video-equipment program.

The Virtual Private Network (VPN) program provides institutions with discounted prices on interactive video equipment. MHEC issued our first video RFI in 1993 and included criteria for technologically standards and facility specifications necessary to support distance learning. The intent was to provide “state-of-the-art” interactive video equipment, room-design packages, and systems integration services at highly discounted prices. The Telecommunications Committee conducted multiple meetings and an extensive series of hands-on tests to document the picture quality and interoperability of two finalists before making its endorsements: Norstan Communications, Inc., representing Compression Labs, Inc. (CLI) equipment, and British Telecommunications.

The program was an immediate success.
Weeks after we signed the agreement, a large research university purchased $167,000 of interactive video equipment for $128,000—a discount that was greater than either the university’s own discount or the state’s discount. Now at the end of its first three-year contract, the program has generated more than $23 million in equipment and service sales to over 100 colleges, universities, systems, and state governments in the Midwest. This volume represents a cost saving of more than $7 million from retail pricing offered by these vendors.

Besides cost savings, MHEC believes that another reason for this program’s success is the Final Report and Recommendations issued by the Telecommunications Committee. As the committee members knew from first-hand experience, the maze of cameras, monitors, sound systems, transmission equipment, wiring, and associated technical options can quickly escalate simple decisions into a complex array of choices and tradeoffs. MHEC worked diligently to combine in the report the best recommendations of telecommunications experts with a series of products and services with proven quality. To assist institutions, the commission created a template of three pre-defined room packages for small-group-seminar and videoconferencing facilities, moderately sized traditional instructional facilities, and larger class instruction. These templates do not represent fixed equipment groups for purchase under the MHEC program. Rather, the categories represent basic lists of equipment that might exist in other classrooms of the same size and purpose. With these templates, institutions have available a generic list of equipment as a basis of comparison when vendors submit equipment plans for specific rooms. By the end of 1996, more than 600 institutions had requested the Final Report and Recommendations.

The program’s demonstrated success encouraged MHEC to issue a second video RFI in May 1996 for a new three-year contract. The second offering of the program includes desktop video applications in addition to classroom-based interactive video equipment and services. The commission plans to announce final agreements with Canvas Communications (formerly British Telecommunications Visual Images), Norstan Communications, and Southwestern Bell to provide a full-range of products from BT, PictureTel, V-TEL, CLI (now owned by V-TEL), and Intel during the first quarter of 1997. The commission is extending the new program to all K-12 school districts in MHEC and NCREL member states as well.

Other initiatives

The commission constantly receives feedback and suggestions from our network of institutional volunteers for new program ideas. One example is the MHEC and NCREL alliance, extending the VPN and Interactive Video programs to K-12 education throughout the region. MHEC and NCREL are developing other strategies that will:

- promote educational cooperation in developing, testing, and using technology among higher education and K-12 faculties,
- support the transportation of information and education across state lines,
- expand access to educational technology information, equipment, and services, and
- accelerate the introduction and use of educational technologies within and among Midwestern schools, colleges, and universities.

The commission’s newest initiatives have arisen from regionwide chief financial officer roundtable discussions and MHEC’s Regional Purchasing and Risk Management committees. New program committees are being established to plan and develop four new initiatives, in the areas of computing resources (including hardware, software, and networking equipment), utilities and natural gas, interactive courseware, and voluntary benefits to enable employees to obtain, at their own cost, benefits not presently provided through their home institution.

Conclusion

The advancement of higher education through interstate cooperation is the top program priority of the Midwestern Higher Education Commission. Through the Academic Scheduling and Management Software program, the Internet listservs and information servers, the Virtual Private Network, and the Interactive Video program, MHEC uses regional cooperation and information technologies to create cost-savings opportunities and enhance the regional exchange of information. The substantial involvement of individual representatives from around the Midwest and MHEC’s commitment to including all sectors of higher education in every program offering makes each of these programs even more effective.

MHEC and its members have seen first-hand the opportunities and benefits resulting from interstate and inter-institutional collaboration. Midwestern higher education is robust with creative ideas, experienced professionals, and strong support for education. As long as the region works together, MHEC will continue creating new opportunities.