



News

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From the President



Dennis Jones
NCHEMS President

Thanks to the generosity of the philanthropic community, particularly the Ford Foundation, NCHEMS has received planning grants to address two of the “infrastructure” problems—I hate the word but don’t have a better alternative in this case—impeding higher education policy analysis and policymaking at the state level. The first of the problems is the gap in information resources needed to support well-advised policymaking. The second is the dwindling supply of policy analysts, young folks who can push us old-timers out of the way when the time comes.

There are three kinds of information gaps that we have identified, two of which were made very clear to us in the course of our work with the National Center for Public Policy and Higher Education in the development of *Measuring Up 2000*. The first of these is the absence of fundamental data—data that either are completely missing or not available at

the appropriate (state level) unit of analysis. Data about student learning and civic engagement fall squarely in this category. Overcoming these deficiencies means going back to square one—dealing with definitional issues, devising data acquisition strategies, and finding ways to get those strategies implemented.

The second category is one in which we have the necessary data building blocks but don’t have good procedures for converting data into meaningful information. Our inability to develop a sound—and understandable—measure of the cost-effectiveness of a state’s investment in higher education for inclusion in *Measuring Up 2000* highlighted this problem for us.

The third is the circumstances in which we have both data and well-established conversion procedures but where the capacity to continue producing information that has proven useful is disappearing. The decision by Kent Halstead to discontinue production of his information sets and the death of Hal Hovey will leave major gaps in information resources unless action is taken to remedy the situation.

The Ford Foundation grant will not directly overcome any of these problems, but it will allow us to work with policy analysts and funders to lay out a plan for making progress.

The second grant allows us to tackle an even knottier problem, the absence of a sufficient cadre of well-grounded policy analysts prepared to help provide solutions to the increasingly complicated issues facing state officials responsible for higher education policymaking. We

make no pretense that NCHEMS should assume responsibility for solving this problem, but we can be a catalyst for action.

We have chosen to play that catalytic role by focusing on the underlying knowledge base rather than on any education or training function. On one level we will be proposing a conceptual framework for organizing what we know about higher education policy and inviting scholars in the field to utilize this schema as they pursue their own academic interests. In the long run, the intent is that a more coherent and integrated body of knowledge will become available to students pursuing graduate work in higher education policy.

On another level, we will be suggesting this same conceptual schema be used to organize information about “best practices” that can be shared with current practitioners in the fields of policy analysis and policymaking. In both instances, NCHEMS will be seeking out, and working with, a set of collaborators who share our interests in improved policymaking.

Both of these projects offer us the opportunity—and the challenge—to step back from what we do on a daily basis and contemplate some of the issues fundamental to our work. For this we are enormously grateful to our benefactors.

The papers resulting from this work will be available on the NCHEMS Website (www.nchems.org)—the information infrastructure paper in June and the second toward the end of the year.

Beyond the Administrative Core: Creating Web-Based Student Services for Online Learners

The rapid growth of online courses and programs in higher education has created a growing demand for online student services. Higher education's interest in online education is fueled by the increasing sophistication of telecommunications and widespread use of computers, shifting student demographics, needs of time- and place-bound learners, and the press to reduce instructional costs. Indeed, a recent National Center for Education Statistics study shows that between 1995 and 1998, the percentage of higher education institutions offering distance education courses increased from 33 to 44 percent. At the same time, distance education enrollments nationwide almost doubled, and most of these were online instruction. By 2003, it is estimated that 60% of learners in higher education will access content electronically.

To date, most institutions entering the online arena have focused their attention on instruction, with student services largely forgotten. This is unfortunate in light of mounting evidence that student success, regardless of location, depends on access to these services. In February 2000, the U.S. Department of Education awarded the Western Cooperative for Educational Telecommunications (WCET) a Learning Anytime Anywhere Partnership (LAAP) grant. Kansas State University, Kapiolani Community College (HI), and Regis University (CO) are institutional partners in the grant, and SCT, a major developer of higher education administrative and student records software, is a corporate partner. The grant's purpose is to develop online student services modules that are not now available commercially and to create a set of guidelines for other institutions to use as they develop their own "home-grown" online student services.

NCHEMS has been involved, in one way or another, in distance education for the last five years and WCET's LAAP grant is one of many that we have evaluated. We approach such project evaluations with two assumptions:

1. Distance delivered—particularly online—instruction and services will become a major function of most higher education institutions in the future; and

2. Student services and academic affairs should work together in fostering the development of college students.

In conducting these evaluations, we have uncovered obstacles common to all institutions leading us to observe that opportunities and problems regarding online student services transcend institutional type. The following issues emerged at each institution and will likely confront other institutions as they, too, rethink providing student services in association with online delivery.

- Inconsistent or unclear definitions of student services
- Complex and outdated organizational structures
- Inadequate administrative policies related to student services

These are not isolated problems. Rather, when one concern is addressed, it has a corresponding effect on other issues. Thus, it is important to think about how unclear definitions, for example, will affect institutional policies and structures.

Inconsistent or Unclear Definitions of Student Services

Consistent use of clear definitions is a key to avoiding misunderstandings because definitions of student services vary within and across institutions. Internally consistent definitions are critical to describe activities and functions of institutional units more precisely. One useful approach is to agree upon a working definition, which allows preliminary work to progress. At the end of a specified time period, the working definition can be modified as needed, incorporating insights and refinements that arise from the initial work. Such public definitions provide a common basis from which all interested parties can work, as well as an anchor point to draw discussions and activities back to agreed-upon terms.

Complex and Outdated Organizational Structures

Online student services generally involve at least three units within higher education institutions—student services, distance education, and information technology. All three influence the development of online student services:

- **Student services units** understand the historical context and the current state of institutional, state, and federal policies affecting students and governing institutional transactions with students. Student services administrators are also trained to provide specialized student services, like financial aid or date rape counseling.
- **Distance education units** are “home” for many students whose sole interaction with student services is online. Personnel in distance education offices understand the optimal methods for interacting with students at a distance.
- **Information technology units** host and provide technical support for online student services. They help students use the technology by a) optimizing person-Webpage interaction, b) creating a common look and feel to Web pages, and c) reconciling data contained in one software application with another.

A particular dynamic often results from the fact that online student services are rooted in these three different units. First, each area feels a certain amount of responsibility and ownership for online student services. Second, expertise from each area is critical to the successful development and implementation of online student services. Third, since all three areas contribute to the development of online student services, no single office has clear authority for them. Thus it is critical to delineate early on which department is ultimately responsible for coordinating and maintaining the effort.

During our site visits, we uncovered further complexities because, in reality, these “three” institutional functions are often spread across multiple institutional units and levels. Confusion sometimes arises because even if a centralized office exists for these functions—student services, distance education, information technology—similar activities or parts of functions are provided by the library, academic departments, or even by individuals based on historical legacy and personal choice. These activities are often uncoordinated, resulting in considerable duplication of effort.

Furthermore, we found that a number of specific organizational issues for online student services arise from this triple responsibility.

- Institutions will need to choose which student services to provide online to all students, regardless of location, and which, if any, may be unique to distance learners. The theoretical foundations for student services are essentially the same, whether delivered in person or online. It will be necessary to determine which student services, when put online, will provide economies of scale because students can access basic information on the Web (such as course sequencing and prerequisites). This will allow staff to answer more in-depth questions face-to-face. The long-range consequences for structure and staffing must be considered when student services are offered online.
- The place where distance education resides organizationally within the institution will influence its ability to integrate online student services with existing on-campus and distance education courses, programs, and services. Historically, distance education has operated separately from other academic functions and, as a consequence, most distance-learning units do not interface with regular institutional student information systems. As a result they often create their own student information systems to suit their needs. Unfortunately, reconciling data elements of the two systems is difficult because 1) they were not developed using parallel structures or data element definitions; and 2) distance learning opportunities are not often based on traditional academic term lengths. In addition, as institutions reconcile their institutional databases with either state or system-level databases, more problems can surface. There will always be a tension between developing a local student data system optimized to serve the institution and its students and conforming to system- or state-mandated data systems.

Inadequate Administrative Policies Related to Student Services

Two types of policies are critical to developing online student services—those that influence unit behavior and those that influence student behavior. Institutional policies governing units are often inconsistent in their intent, and are not structured to encourage collaboration or cooperation among units, or are absent. Sharing resources and expertise intra-institutionally, especially in a context of tight budgets, is difficult to encourage unless cost savings result from working together. When policies reinforce protecting “turf,” rapprochement is unlikely. Obsolete and misaligned policies often result in little coordination and wasteful duplication of effort. For example, we found that at one institution, many

disparate units—including the media center, library, individual departments and Webmaster—were creating content for the Website, but no one was responsible for what is posted on it. A result is that no one actually monitors whether data and pages are updated, have the same look—and feel—as other pages, or even contain accurate information.

Serious consideration must also be given to whether online student services should be built using the full-cost-recovery model typically used for traditional continuing and distance education courses and units. This model made sense when these units were auxiliary institutional units, but they no longer do so as distance education becomes mainstreamed. The question institutions must address is whether online student services will remain stand-alone enterprises or will eventually be integrated with existing on-campus student service units. New policies should encourage behaviors from individuals and institutional units that are directed toward supporting and meeting an integrated set of institutional goals and objectives.

We also found examples of inconsistent policies governing students at each institution. Multiple exceptions exist to every rule, making it particularly difficult to craft a cohesive approach to online student services. For example, one institution's policy sets fees for online students a level greater than in-state, on-campus fees but lower than out-of-state, on-campus fees. The result is that in-state students are discouraged from taking online courses but out-of-state students are encouraged to do so. Students do not care why these policies exist, but they are frustrated when they are blocked from enrolling for no clear reason or are charged differentially for what they perceive to be the same set of services. These exceptions cannot exist if the goal is to make a student's introduction to and interaction with the system (the campus or institution) as simple and straightforward as possible. Policies must be consistent and clearly articulated.

Finally, we discovered that a common problem faced by institutions is the tendency for students to seek out student services only when they need them, often never knowing that additional services exist. Proactively linking students with targeted student services (e.g., sending notices about registration or degree-check timelines) might be a more effective means of ensuring that students in need utilize the student services that are available.

Suggestions

Based on our evaluation work, we offer the following suggestions to institutions attempting to develop online student services.

Solicit Student and Online Instructor Input. Students' perception of what they need can be very different from university staff's or faculty's perception of this need and how it should be met. Although students are not aware of everything they might require, they remain good judges of whether current offerings actually meet their needs. Additionally, once a system is developed it must be refined using feedback from a variety of real students. To supplement input from students, contributions from online instructors—another user group—is key. Instructors can be surveyed about the types of questions students bring them. These questions can then be further subdivided into those that instructors feel they are supposed to address, those they are able to address, and those they cannot address.

Up-front thinking, inventorying, and planning is critical to re-engineer student services for online delivery.

Record Students' Experience. Institutional audits are very useful to determine exactly how students interact with student services. Direct and "official" use should first be mapped out according to institutional organizational charts, and written policies and procedures. But actual student, faculty, and staff behavior should be observed and noted as well.

Front-Load the Work. Up-front thinking, inventorying, and planning is critical to re-engineer student services for online delivery. At least a year of close scrutiny is necessary to delineate the hodge-podge of services that have developed over time and why they have proliferated as they have. The resulting inventory will not only help alleviate decades of service duplication, but will also help identify gaps in existing services and suggest new or hybrid services that are now needed. Developing online student services cannot be viewed as a one-time activity that once completed will remain unchanged. Instead, implementing them effectively will require a large initial investment of time, a modicum of diligent attention to continually provide accurate, correct, and timely information, and continuing support for customized and interactive services.

Automate Basic Processes. A major payoff of online student services derives from the automation of rudimentary processes such as answering basic informational questions. Staff time is then available to attend more to the needs of students who either come into the office

or who contact the office via phone or email in need of more one-on-one specialized attention.

Collect Data. Student services offices might want to keep logs of frequently asked questions and how many students come in or call asking about subspecialty areas in each office. These logs would be useful as a first cut for determining what basic information could be posted to the Web and made interactive in order to free staff time. These logs will have utility after basic information and processes are routinized for online delivery to compare how student services professionals have redistributed their time as well as whether the quality of interactions with students have changed. Data should be captured now to use for comparison purposes after student services are brought online. Simultaneously, a feedback system needs to be created to monitor the quality and quantity of online student services and whether some services are best delivered in person, online, or via some other technology. Additionally, since the migration of student services to an online format is an opportunity to re-engineer, measures should be taken to document the effectiveness of the new versus the old system.

Create System Flags. The online environment also makes it possible to build “flags” or warning systems into the system. For instance, when students are struggling academically, an email can be generated and sent automatically to both students and their academic advisors. Or, when students fail to appear for finals, emails might be sent to the appropriate staff for follow-up and intervention.

Nest Levels of Services. “Nesting” levels of student services, such as linking an introductory information level to a more advanced interactive tool, also reduces duplicative effort. Also, nesting the services offered at the university-, college-, and department-level is possible. Hyperlinks can be used to connect broader university-level services with narrower, more focused services provided at the college—and departmental—level.

Create a Common Look and Feel. Institutional Websites should have the following characteristics: 1) a common look and feel; 2) easy to navigate and use; 3) a “human and humane” touch; 4) adequate security geared to the level of self-disclosure required by the service; 5) accurate, correct, and timely information, with step-by-step instructions and checklists; and 6) reliable technical support and appropriate hyperlinks.

Train, Train, Train. Regardless of the online student services developed, administrators must plan and allocate money to the development of training materials

for staff and students participating in training on the new systems.

CONCLUSION

While our work evaluating various LAAP grants has led us to conclude that there is no single formula for putting student services online, it is important that such efforts be characterized by up-front planning, integration, and intentionality.

Resources

The Website for the Western Cooperative for Educational Telecommunications LAAP project, “Beyond the Administrative Core: Creating Web-based Student Services for Online Learners”: <www.wiche.edu/telecom/projects/laap/index.htm>.

The Guide to Developing Online Student Services by Barbara Krauth and Jennifer Carbajal includes links to good examples of various online student services. It can be found at <www.wiche.edu/telecom/resources/publications/guide/guide.htm>.

Putting Principles into Practice: Promoting Effective Support Services for Students in Distance Learning Programs by Peter J. Dirr [Online]. Boulder, CO: Western Interstate Commission for Higher Education, Western Cooperative for Educational Telecommunications. December 1999. Available at: <www.wiche.edu/telecom/projects/studentsservices/survey%20report.pdf>.

NCHEMS Membership

All institutions, state agencies of higher education, and systems offices are eligible for NCHEMS membership. Each campus in a system must join in order to realize the membership benefits.

For detailed information and membership forms, go to the NCHEMS Website (see below).

Directory

<i>General Information</i>	(303) 497-0301
<i>Information Services</i>	(303) 497-0319
<i>Publications</i>	(303) 497-0390
<i>Seminars/Institute</i>	(303) 497-0345
<i>Fax</i>	(303) 497-0338
<i>Website:</i>	www.nchems.org

Information Technology Review

As technology becomes an increasingly important component of all facets of an institution's operations, its effective and affordable functioning has become a matter of strategic concern to college and university decision-makers. Issues of hardware, software, networks, staffing, and organizational and reporting relationships are no longer questions that can be assigned to the technical experts for resolution. They are now matters that require the active engagement of senior administrators. They don't have to make all the decisions, but they do have to set the ground rules.

To assist institutional executives in these areas, NCHEMS has offered Information Technology Review (ITR) services to numerous colleges and universities over the past several years. The services are performed primarily by Chuck Thomas and assisted by other staff at NCHEMS.



Chuck Thomas

Chuck was a staff member at NCHEMS when the organization was first formed. The founding Executive Director of CAUSE (now EDUCAUSE) from 1971 to 1986, he served as vice president of a major software firm and is now an NCHEMS Senior Consultant. He is also President of the Consortium for Higher Education Software Services (CHESS).

ITR services are designed to provide decisionmakers with:

- A critical review of internal operations, suggesting areas for improvement, and/or
- An unbiased perspective on key investment decisions—major acquisitions of hardware or software, the hiring of a CIO, etc.

Much of the advice arising from ITR activities has focused on internal organizational matters for IT functions—reporting relationships and the advisory mechanisms required to ensure that IT decisions are treated as strategic/policy decisions and that priorities are established in such a way that expectations are kept realistic within the constraints of available resources. Other activities have included:

- Assisting in the search process for CIOs
- Helping to prepare the RFPs for major IT investments
- Reviewing proposals for hardware and software
- Recommending changes to staffing patterns

Chuck sums up the approach as follows: “Many consultants tell you what you want to hear. We tell you what you need to hear.” These reviews tend to be short-term in nature and the costs, in the words of a recent client, are “remarkably reasonable.”

For further information, contact Chuck Thomas at 312-951-1876 or crt@northwestern.edu.