Development of a
Responsive
Decision Making Structure

Dwight Fischer
Director of Administrative Information Services

Keene State College, MS 5014
229 Main Street, Keene, New Hampshire 03435

603-358-2313 • dfischer@keene.edu

Founded in 1909, Keene State College is a coeducational residential college with an enrollment of approximately 3,500 full-time undergraduate students and 1,000 part-time and graduate students. Part of University System of New Hampshire, Keene State College awards associate’s, bachelor’s, and master’s degrees.

Abstract

Higher education is undergoing radical and profound changes in the way it is doing business. Much of the change is driven by an increasing dependence on rapidly changing information technology. Because of constrained resources and a lack of in-house expertise, colleges and universities are developing partnerships with information technology vendors. Consequently, their organizations are required to make more time-sensitive decisions that have a wide impact on how they’ve traditionally conducted business. As a result, traditional means of decision-making in higher education must give way to more responsive, adaptive and agile processes.

This paper begins with an overview of the organizational culture of higher education. It builds a case in support of a decentralized decision-making structure around the implementation of a new student information system at Keene State College. New information systems force an organization to reassess its method of making decisions; first during the selection and implementation of the systems and later in an environment in which information is distributed. Information flow may be structured such that it provides those closest to the issues with the data necessary to make objective, quality decisions. It also requires a commitment by leadership to support an empowered team structure.

The author is Dwight Fischer, Director of Administrative Information Services at Keene State College. He led the selection and implementation projects for the new student information system during the past three years. Fischer holds an MSE in counseling from the University of Wisconsin and an executive MBA from the Whittemore School of Business and Economics from the University of New Hampshire.
Development of a Responsive Decision Making Structure
Dwight Fischer, Director of AIS, Keene State College

Decision Making within the History & Culture of Higher Education

When developing a new decision-making process, it is important to understand the history and culture of an organization. Until recently, most institutions of higher education adhered to a traditional decision-making process that was highly decentralized among academic departments. Characterized as a 'professional bureaucracy,' this structure is highly complex and has numerous rules and policies. However, the processes are formalized within the departments rather than imposed by the organization. While the structure is well suited to areas requiring high degrees of specialties, it fosters competition and acrimony among departments competing for limited resources. It also poses a significant hindrance to the organization’s overall effectiveness. Unlike competitive industries, a professional bureaucracy fosters loyalty first to the individual, then to the department, and lastly to the organization.

Decisions impacting multiple departments are delegated to committees. In order to receive approval for recommendations made by committees, wide-ranging acceptance is often required. Too often the voice of a vocal minority (a.k.a. the squeaky wheel) will derail the work of an entire committee. It is also an extremely time consuming process. As a result, the structure receives harsh criticism from within and outside higher education. It is a system incapable of responding to a rapidly changing environment. Furthermore, attaining the ultimate support of an increasingly preoccupied faculty becomes more and more impractical. The academic community is exceptionally skilled in the process of debate, yet it is inept at coming to conclusions, much less making definitive, timely decisions.

And why not? If we look at the history of higher education, just 30 years ago many small and medium-sized colleges were run by groups of administrators and the faculty. Institutions had fewer administrative requirements and responsibilities. Curricula were less complex, student support structures were just beginning to develop, federal aid to higher education was relatively new and government reporting standards were nearly non-existent. There were fewer students with fewer expectations.

Administrators looked to academic deans to develop policies and make decisions for the organizations. It was a simplified bureaucracy that was entirely appropriate at the time. While not to belittle the decisions they faced at the time, it is fair to say they were less complex than the decisions of today. There were fewer faculty unions, no information technology, no demands for accountability, no major threats to their existence, and no Money Magazine annual rankings!

Then came the higher education boom of the seventies and eighties. The baby boomers came of age, the Civil Rights Act of 1966 spurred significant amounts of federal aid to higher education, and school enrollments burgeoned. To meet the increasing business demands brought on by this growth, the number of administrative positions increased and the range of faculty decision-making was gradually encroached upon. While faculty still retain a high degree of autonomy and authority over curricula, complex business decisions require an increasing degree of administrative oversight.

Requirements of Decision Making Today

The initial surge in enrollment is over. Yet while today’s campuses are preparing for the next period of growth, there is greater demand by the public, legislatures, and consumers for increased accountability, particularly given the steady increases in tuition and fees. Furthermore, like most businesses, higher education must do more with less.

The trend of the nineties is quickly becoming characterized as the era of partnerships. State university systems are developing greater standardization of courses so that students may transfer within a system without losing credits. More and more student services that were created out of the expansion era of the 70’s and 80’s are being outsourced to private industries that provide the services more efficiently and at less cost to the student.

The explosion of information technology is gradually reshaping the entire notion of how we deliver education. While it is difficult to envision that information technology will replace the institution of higher education, it clearly is having a significant impact in both the classroom and business processes.
Information technology offers the promise of improved and more efficient business practices. Yet its increasing complexity requires more and more from campus technology staffs. Most campuses are ill prepared to meet the demands of rapidly changing information technology. First, there are often too few people in the technology support services. Second, technical staff salaries in higher education usually fall below market rates. Third, many public systems have hiring freezes. Given these factors and the growing information technology market for higher education, colleges and universities are purchasing information systems that come bundled with technology services and support. Vendors incorporate ‘best practices’ from their growing lists of clients, thus steering clients to migrate their business practices to a more standardized approach.

Consequently, the organizational structure for decision-making is evolving. What began in the domain of faculty has gradually shifted to administrators. Private industry plays an increasingly influential role in how we conduct our business. Furthermore, as we grow more interdependent on external organizations, we are forced to make significant decisions faster than ever before. There simply isn’t time for campuswide consensus or a tolerance for the derailing voice of a minority. Decisions build the basis for further decisions, and contracts and financial commitments are at stake.

For better or worse, the autonomous campus is endangered.

Which brings us back to the central theme of the paper: how one organization—Keene State College—adjusted its traditional decision-making processes to implement and sustain a new information system.

Case Study: Background

In the summer of 1995, Keene State College began the process of selecting a new student information system. Replacing a flat file legacy system, this was the first step in developing a distributed network of information systems. The administration assigned a team of system users to conduct a needs analysis, develop an RFP and select a new student information system for the campus.

The decision-making process established during the selection of the new student system set the tone for the implementation project. With a history of departmental insularity and distrust, many of the people involved believed the selection process was a perfunctory exercise created to validate a foregone conclusion. The University of New Hampshire (the flagship institution) had already migrated to a new relational student database system from SCT. With seed money from the University System, there were many who felt strongly that Keene State should follow suit. However, Keene State College President Stanley Yarosewick emphasized that he had no preconceived notions, and that he genuinely sought the recommendation of the selection committee.

Project leaders, with the help of an experienced consultant, established the selection criterion which would form the basis of their recommendation: “to select a student information system that would best meet the needs of Keene State College and the students we serve.” During the next year, a needs analysis was written that subsequently formed the basis of an RFP. After five vendors responded, the selection team narrowed the choices to two: SCT and Datatel. In the end, the committee recommended Datatel. Despite continued pressure to go with SCT’s student system, President Yarosewick approved the recommendation of the committee and a contract was signed with Datatel. It was a defining action that gave the team members a strong message: the participatory process was indeed valid. It also signaled that they had a profound responsibility to be fully engaged in making decisions.

Thus began the implementation project. It brought together staff members from the offices of admissions, advising, bursar, continuing education, financial aid, registrar and residential life to learn the new system, prepare their data for conversion, integrate their processes and, ultimately, make decisions together. The decisions they were to make not only impacted their departments, but many of the network policies and practices of the campus. Their decisions were also driven by an implementation schedule and by Datatel’s product development timeline.
Developing a Structure for Decision-Making

Developing a successful decision-making structure is, in theory, a simple process. It requires the following components:

- strong support and commitment from leadership
- articulation of project objectives in relation to organizational mission
- formation of teams with appropriate reassignments of key staff
- delineation of decision-making authority among the teams
- development of a communication strategy
- commitment by the people involved to ‘own’ and support decisions made in support of organizational goals

The challenge lies in implementing the process.

Leadership Initiative and Commitment

In his second year in office, President Yarosewick identified 10 goals that would be cornerstones of his administration. One of those goals was to integrate the wealth of data on campus and acquire new information technologies that would allow greater access to end users. President Yarosewick created a new, full-time project manager position and appointed a group of ad hoc teams to lead the campus through the implementation of the Datatel system. After a campus meeting between Datatel representatives and student information system managers and staff, the teams recommended a 12-month implementation schedule. Based on the aggressive implementation schedule, it was clear that a new model for decentralized decision management was necessary.

The implementation of a new information system provided Keene State College with a unique opportunity to develop a new decision-making structure. The implementation alone required an extraordinary number of executive, managerial and operative decisions to be made quickly and in succession. The driving force was the implementation schedule.

President Yarosewick understood that the critical element of success was his ongoing support for the project. While the project manager reported directly to the vice president for finance and planning, the project’s chief sponsor, he was also accountable to the president’s cabinet. The project manager attended cabinet meetings, had access to the President’s assistant, and worked closely with the college relations office.

Project Objectives

The implementation project became known as Project Access.

It was clear from the outset that in order to be successful with the implementation project, Keene State College needed to develop clear goals and objectives upon which all—administrators, directors, data managers and end users—could agree. Working with a consultant, the project managers arranged two planning retreats early in the fall of 1996.
Planning Retreat One

The objectives of the first retreat were to clarify mission of the college, articulate common goals for the implementation project, and form teams to accomplish the tasks. The president, his three vice presidents, the directors of admissions, advising, bursar, continuing education, financial aid, registrar, residential life, and the project manager and his staff of data managers all participated.

Through the course of this 2-day retreat, there was consensus that the new student information system would be developed to

- increase access to accurate information.
- improve services to students.
- implement a ‘one stop’ service model.

Once objectives were identified, Project Access teams were formed and assigned specific areas of responsibility and decision-making authority.

The President’s Cabinet, functioning prior to the project, was responsible for overall policy decisions, staffing reassignments, organizational changes, cost parameters, and the project schedule. The cabinet also responded to recommendations from the project teams.

The Implementation Leadership Team (I-Team) was responsible for the coordination and management of project teams. Led by the project manager and his assistant, this team assumed the role of ‘vision keepers,’ managing the process to assure that the project goals and outcomes were met. The team was made up of upper-middle managers; the directors of admissions, business operations, campus technology, and college relations. The I-Team responded to recommendations from Core, Tech and Training Teams, and coordinated recommendations and decisions for presentation to the president’s cabinet.

The Core Team was designed to define existing and desired data elements, develop security levels, query and access policies, coordinate and develop shared codes, map the conversions and migration of legacy data to the new system, document procedures, and recommend campus-wide policies and procedures for accessing data. Members of the Core Team included the bursar, registrar, director of financial aid and the director of advising, along with key data managers from those and other departments.

The Tech Team was responsible for system administration, hardware and software installation, account management, database management, legacy system transition, Web interface, data conversion, back-ups and disaster recovery planning.

The Training Team coordinated end user training on the new system. In addition to a focus on the technical skills required in the use of the system, the Training Team emphasized the legal and ethical aspects of using the student information. This team also assisted with the scheduling of ‘town meetings’ that were designed to provide open information sessions for campus.

Each team selected a leader. Individuals other than directors led the Core, Tech and Training teams.
Planning Retreat Two

During the second 2-day retreat, the teams further refined their areas of responsibility, decision-making authority and communication strategies. A Project Access Approach Document was created as a result of this planning session. It articulated the goals, the teams, the decision-making structure, policy issues and a communication plan. The Approach Document was then printed for each Project Access member and made available on the Web. It became the blueprint for the project. (see www.keene.edu/kscoffices/access/approach.html)

During the project planning retreats, there was also acknowledgment of some critical underlying assumptions:

- The demand of the implementation project would require a shift of personnel and responsibilities.
- Expectations of the departments involved would need to be realistic given the intense scope of the project.
- There was to be a shared ownership of the new information system.
- Empowered teams would make recommendations or decisions within the parameters of their assignments.
- Adherence to the project schedule would require expedient decisions.
- Effective communication was necessary to record decisions and keep the teams and campus apprised of Project progress.
- Creativity and innovation were valued in the process.

Another critical step taken by President Yarosewick was to reorganize the administrative structure for the implementation project. First, he realigned three of the primary student information offices—bursar, financial aid and registrar—under the vice president for finance and planning. Previously they reported to different vice presidents, in different divisions, with different management styles. The realignment was intended to bring the offices together under a unified management approach for the duration of the project. Second, President Yarosewick reassigned the data managers from these departments to the project manager. This latter move was taken to provide broader, coordinated support to the integrated functions rather than maintain a department-specific expertise.

Decision-Making

Project Access teams agreed that a commitment to consensus decision-making was crucial to its success. It was acknowledged, however, that consensus is not appropriate in all situations. Also, it should not become a barrier to expediency. Given that a project implementation schedule demands decisions to be made within a specified timeframe, it has to be understood who (or what team) is responsible for making what decisions—and by when. Consensus is the preferred option, but a lack of consensus does not halt the process. It means that the alternative is either a majority rule or an individual’s call.

Nonetheless, few decisions surrounding the processes of information flow can be made without impacting other departments and college policies. Furthermore, consensus may be applied at varying levels, sometimes within a team, among project teams, or campuswide. Therefore, a judicious use of consensus is warranted.
The teams reviewed the process of assessing when consensus decision-making is appropriate. The following guidelines were agreed to:

- When a number of people and processes would be affected by the decision
- When a number of people need to actively support and engage in actions to implement the decision
- When a decision will impact on and require the support from several functions or departments

There are times when consensus simply cannot be achieved. Consequently, those with decision-making authority will have to exert it. To avoid this, it is important to frame issues in a manner that allows multiple perspectives and assumptions to be aired. Opposing viewpoints should be encouraged. The process, which requires strong facilitation skills, should be directed to seek common ground and attempt to frame the decision options given all the information available at the time.

Consensus is achieved when all members have ‘had their say’ and feel that they have been heard. Members should be able to say they either agree with the decision, or can at least live with it. Consensus does not mean 100% agreement. It does mean that everyone can agree to the benefits of the solution and its viability. Furthermore, everyone agrees to support the decision with words and actions.

This last point is critical—and the most difficult to achieve. In a professional bureaucracy, where loyalty to a department often takes priority over commitment to organizational goals, individuals may go through the motions of consensus and subsequently undermine support—passively or overtly—to the ultimate decision. To counter this behavior, the project teams achieved consensus to the consensus process (pardon the tautology), high level administrators agreed to support team decision-making, and all decisions were communicated broadly and posted to the Web.

Again, consensus is not necessary for all decisions. Overuse of consensus will bog down the decision-making process by creating unmanageable expectations. Where decisions do not meet the criteria needed for consensus, teams were given the authority to decide.

**Communication Strategy**

It is well documented that the success of a multifaceted and complex implementation project is dependent on a strong communication plan. This topic received significant attention during the second planning retreat for Project Access.

Specific communication strategies were developed within and among project teams, for the campus, and with Datatel. Furthermore, there needed to be a centralized repository where policies, decisions, and team minutes were stored. Accordingly, project leaders identified e-mail, the Web intranet and the Campus News (KSC’s weekly newsletter) as the primary means of project communications.

**Meeting Agendas and Minutes**

Each team assigned a member to take minutes. In the Core and Implementation Leadership Teams, a staff member was given that duty as a regular assignment. Agendas were to be distributed to team members at least two days in advance. To provide consistency and reliability, an agreed upon format was developed for agendas and minutes.
Listserv, Web & Campus Newsletter

Project Access created an e-mail listserv for updates, discussions and distribution of minutes. The listserv was open to the campus community, yet all Project Access team members were required to subscribe. Once the minutes were distributed to the list, the KSC Webmaster posted them on the Project Access Web page (www.keene.edu/kscoffices/access/). The Project Access Web page was open to world view, yet team minutes were posted on the KSC intranet.

The campus community received weekly project updates in the Campus News. Written in lay terms, updates focused on the implementation schedule, the impact on services, and project accomplishments. An archive of Campus News updates was maintained on the Project Access Web page.

Campus News updates were often complemented by President Yarosewick's column. Amidst numerous and competing campus priorities, the President focused his column on a Project Access-related topic nearly once a month. He wrote of change, service to students, personnel reassignments and the need for developing an integrated model of technical support. One column stands out in terms of how the campus needed to balance inclusivity and expediency in making decisions:

"The paradox we face is that a changing environment requires decisions be made quickly, making consultation more difficult. In some instances, delaying decisions increases our costs. At the same time, our decisions have become more complex, requiring more input and more information from across the organization. Many decisions, such as the choice of Datatel for the new student information system, set in motion a larger change process, which creates new uncertainties and greater demands for information sharing."

President Stanley Yarosewick
Keene State College Campus News
October 30, 1996

Finally, the project established a strategy for communicating specifically with Datatel. Unless otherwise arranged, all communications to Datatel went through the Project Access manager and his counterpart at Datatel. This assured consistency and follow through. If the project manager could not get the appropriate response or action from Datatel, the vice president for finance and planning was brought in to communicate with high level executives at Datatel. This latter strategy was used sparingly, but effectively.

The Process Applied

It took Project Access teams a few months to adapt to the established processes. The project manager worked with team leaders to develop consistent practices and apply the communication strategies. Team members became accustomed to providing input to agendas that were distributed in advance. They also came to realize their obligation to participate and share information in meetings. Passivity and indifference to team decisions resulted in negative impacts on their processes and departments.
The major challenge to individual accountability to the teams was the traditional organizational hierarchy. Directors were used to their department autonomy and responding to authority. Too often it undermined the efforts of others to trust the teams responsibility and authority to make decisions.

Over time, however, the process matured. Team members began working together in new ways. Empowered teams began responding to the numerous and growing demands of the implementation project. Decisions were being made by the teams within their assigned authority. *The process was working!*

Nowhere was the process more exemplified than within the Core Team. Responsible for establishing shared codes in the new system, the Core Team made numerous decisions affecting their office procedures and the manner in which they would need to work together in the new system. Clearly these decisions had an impact on their offices, and they needed to come to conclusion in a timely manner. Yet the decisions did not need to include the I-Team or Cabinet. Furthermore, these decisions fell clearly within their authority as determined in the project planning retreats. What began as a rather skeptical group emerged as a viable, responsive team.

Eight months into the project, the teams were faced with their first major decision. It became increasingly apparent that the 12-month implementation schedule was impossible. From a technical perspective, the decision was clear. With the data conversion date three months away, the release of the Datatel system software was delayed. It was not even expected until the scheduled conversion date. Furthermore, the conversion programming had not begun. Pressure increased to abandon the scheduled ‘live’ date and develop a more realistic timeline. Yet what was obvious to the Core and Technical Teams was hotly disputed at the I-Team. Powerful administrators argued that the schedule should remain unchanged and that with steady pressure, the vendor would indeed come through. Unfortunately, these individuals were not close enough to the problem. They were also operating from more of a political and financial perspective.

The Core Team scheduled a meeting to discuss the implementation schedule. Since the president’s cabinet had the ultimate authority for adjustments to the implementation schedule, the best the Core Team could do was come to consensus on a recommendation. After a review of all the available information, the team agreed that a revised schedule was warranted. They sent a recommendation to the I-Team, which had to either reject or forward it to the president’s cabinet. Consensus was not achieved in the I-Team, yet the majority of team members agreed to support the recommendation. The cabinet ultimately concurred with the Core Team and instructed them to work with Datatel to develop a new and more realistic schedule.

A second major decision, again in regard to the implementation schedule, arose 5 months later. With a new implementation cutover date scheduled in October 1997, it became increasingly clear that the conversion programs being written by Datatel would not be completed by October. Standard practice requires two months of conversion testing prior to going ‘live,’ yet delivery of the programs had not occurred. Again, the situation was clear to those close to the processes, yet once again there was resistance by some. Furthermore, this second delay was compounded by an increasing frustration and lack of confidence in the vendor.

Project leaders approached this decision point differently. Rather than limit the discussion to team meetings, an open hearing was scheduled for *all* Project Access teams. Led by the project manager, the teams all heard the same information. Of the eleven conversion programs, none was completed and the ‘live’ date was just 10 days away. Furthermore, there was simply no time for testing. With all the information in front of them, and with everyone having an opportunity to speak to the issues, the group as a whole agreed to reenter discussions with Datatel to come up with a schedule that would ensure the success of the project. No one enjoyed it, and it was clear that not all agreed, but when it came time for consensus, no objections were aired. The Core and Technical Teams were then given the authority to develop a new schedule with Datatel.

The schedule was ultimately adjusted to phase in modules beginning in November. Significant pressure was levied on Datatel to put their full effort behind completing the conversion programs. Keene State eventually saw their one-year implementation turned to two, which in retrospect was the most sensible strategy in the first place.
Conclusions

The initial conversion of legacy data began in November 1997. Subsequently, admissions, bursar and financial aid began processing fall ’98 student applications in the new system. The remainder of the data was converted in March 1998. By July 1, 1998, all modules will be processing in the new system.

While the schedule delays were frustrating, they were unavoidable. The college was implementing a new version of the Datatel software and the company simply didn’t have the experience in converting new clients to this version. While there were times when anger and frustration were directed at the vendor, team members were reminded that Keene State was in a long-term partnership with Datatel. The interdependence of the two organizations required continued cooperation to achieve their ultimate success.

In the final months, the Project Access team structure evolved. The I-Team disbanded, since the strategic role they played dissipated and the emphasis shifted to the system management. The Training Team’s role was assumed by a new person hired by the college to coordinate employee technical training.

The Core Team, with increased authority and responsibility, became the management structure for the new student information system. Justifiably so. It is they who would have to make ongoing, integrated decisions regarding its use and operation. The Tech Team became members of a newly formed department for administrative information services. It was their new role to provide service, support and solutions for the information management needs of the college.

The Keene State College implementation project was not without flaws. However, it endured vendor delays, two schedule extensions, reorganizations, and a host of decisions that provided the foundation of subsequent decisions. Project Access also had an impact on academic policies and the use of computers on the network. (see Keene State College Computer and Network Use Policy, www.keene.edu/kscoffices/access/cnup.html) As could be expected, these factors spurred significant controversy and change.

However, three major factors contributed to the ultimate success of the project and its decision-making structure: 1) President Yarosewick’s commitment and enduring support, 2) the project planning retreats, and 3) the communication strategy.

Furthermore, and most importantly, Keene State College developed a responsive, agile, and adaptable decision-making structure that may be more typical in the successful workplace of the future. Already new teams are being formed to meet new technical challenges.