The time is past for leaders in higher education to recognize and respond to the emerging realities of the information age. The new sociotechnological context for working and learning (even for “playing”) calls for new ways of conceptualizing the learning and decision-making environments of colleges and universities today. Change at such a fundamental level is transformative and disruptive but also ultimately essential if the powerful and socially positive—though not necessarily profitable—values of higher education are to persist in the information age.

Carole Barone, Vice President of EDUCAUSE, is responsible for the National Learning Infrastructure Initiative (NLI) and other teaching and learning programs.
Adapting to New Learning Styles

Students who have grown up “digital” expect to be involved in active, social learning situations in which they participate in the creation of knowledge rather than passively absorbing information. In addition, information is becoming increasingly fragmented, with “pieces” scattered about the Internet. Rather than being selected and compiled into a collection by a librarian, the information stored and accessed on the Web must be located, evaluated, and assembled into new knowledge by students, who have grown up in the information age are comfortable with this active role in knowledge construction. As a result, an exploding number of faculty members need assistance in revamping their teaching modalities to reflect the needs of all students who will require “evolving the traditional campus from a solely physical place to a hub of learning that blends virtual learning opportunities with the social living and learning experience of a physical campus.” Learning in this “blended environment” can occur either on- or off-campus, providing students with greater flexibility and eliminating time as a barrier to learning. Distributed learning also extends the opportunities for interaction between faculty and student.5

Leaders must take direct responsibility for translating the emerging reality into institutional terms.

In the past, leaders of traditional campuses may have dismissed discussions of distributed learning and academic transformation as being applicable only to those institutions with adult learners or distance learners as their primary target markets or to those in the growing-for-profit sector of higher education. To continue to do so is to risk failing the traditional student. Meeting the needs of all students will require “evolving the traditional campus from a solely physical place to a hub of learning that blends virtual learning opportunities with the social living and learning experience of a physical campus.” Learning in this “blended environment” can occur either on- or off-campus, providing students with greater flexibility and eliminating time as a barrier to learning. Distributed learning also extends the opportunities for interaction between faculty and student.5

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The Twelve Campus Conditions for Transformation

**Choices** — Identifying a strategic direction and selecting a path to get there based on a clear sense of institutional mission

**Commitment** — Allocating resources and aligning policy to enable the institution to adjust its course and to follow the path selected

**Courage** — Providing visible and focused leadership from the very highest level of administration

**Communication** — Building a climate of trust by including the entire campus community in the transformation process through a carefully conceived and well-executed strategy for consultation (conversation and critical discussion) and for dissemination of information about extant and emerging services, plans, decisions, etc.

**Cooperation** — Collaborating across functions and throughout levels and constituencies to achieve a consistent and integrated set of support services for teaching and learning

**Community** — Complementing the community of support nurtured through cross-functional collaboration with an equally cohesive community of faculty across disciplines and creating an engaged community of learners

**Curriculum** — Reconceptualizing the curriculum to reflect its distributed, interdisciplinary, and outcomes-oriented nature

**Consistency** — Reflecting institutional commitment to transformation through consistent action and acknowledging the importance of standards, both within the technology industry and within the institution; aligning organizational rhetoric to support and reinforce transformative behavior

**Capacity/Competency** — Developing the teaching and learning capacity of the institution (e.g., curriculum and faculty) to serve student achievement and outcomes (Council for Higher Education Accreditation, “The Competency Standards Project: Another Approach to Accreditation Review,” August 2000, p. 3) and using intelligent assessment to drive transformation by defining and evaluating institutional success in terms of student achievement and outcomes

**Complexity/Confusion** — Overcoming the confusion associated with coping with transformation by adapting to the inherent complexity of the decision-making process through adoption of more agile and responsive governance processes

**Culture/Context** — Understanding the culture, values, and sensitivities of a given campus climate

**Creativity** — Developing strategies and tactics that harmonize with the campus culture and context and recognizing that this is a creative, not merely a political, process

Together, all twelve conditions describe the context for an interrelated, inclusive decision-making process that shares ownership of issues involving technological infrastructure.

ability of the institution to thrive in the sociotechnological context of the information age. The twelve conditions take on strategic relevance because they set the stage for the alignment of policy and practice with institutional goals. Together, all twelve conditions describe the context for an interrelated, inclusive decision-making process that shares ownership of issues involving technological infrastructure.

1. The institution must be ready to make technical choices based on a clear sense of institutional mission. Infrastructure decisions need to be linked to overall institutional goals and strategy. Although technologists must participate in the deliberations surrounding such choices, integrating technology into the institutional mission cannot be left, as it has so often been until now, to the technologists alone. Moreover, failing to consider the consequences that technical decisions have for institutional direction is a decision in itself, a decision made at the very highest level of the institution.

2. Institutional leaders must indicate commitment to a strategic direction and to awareness of the role of technology in executing that strategy by allocating resources and aligning policy to enable the institution to adjust its course and to follow the path selected.

3. Such action requires courage—that is, visible and focused leadership—from the very highest levels of administration. Lip service is not commitment. Courageous and consistent action, in support of the rhetoric, is required. Unfortunately, leaders who exhibit such courage all too often fall victim to the political reaction to their perceived as-sertiveness. For this reason, the integration of all twelve conditions is critical.

4. Building and nurturing a climate of trust to support strategic choice requires communication. However, communication in this context means much more than the dissemination of information. It means also the adoption of new techniques for including the stakeholders in discussions about the transformation process through a carefully conceived and well-executed strategy that artfully meshes education with consultation. Questions about direction needed to be posed to the campus community early, and they should be formulated to encourage critical comment.3

5. Clearly articulating the institutional goals for teaching and learning and then linking those goals to the components of the implementation strategy (e.g., changes in policy, new structural arrangements, infrastructure requirements) in the deliberations that occur at the president’s or chancellor’s table will set the stage for cooperation across functions, levels, and constituencies and throughout the institution. This degree of cooperation is necessary to produce a consistent and integrated set of support services for teaching and learning—for example, the collaboration of faculty leaders, the chief financial officer, the chief information officer, and the provost in reallocation funds to implement a course management system for Web-based learningware.

6. Community must be viewed differently, since it is created differently in a networked world. Students use the Internet to create electronic communities classroom-contained collaborative learning), and integration of the disciplines across the curriculum.

7. Consistency has not, until recently, been a required attribute of either an institution’s instructional support program or its leadership’s response to transition. Indeed, political survival on a campus often depends on a leader’s ability to avoid decisive commitment to any one direction, approach, or standard. An institution’s commitment to transformation will be reflected through its ability to establish consistent course support systems and practices that fulfill their need for social interaction and also serve as a source of information in the social learning context that many students value. To nurture an engaged community of learners, institutions must complement a community of support created through cross-functional cooperation with an equally robust community of faculty across disciplines. Community is thus enabled and supported by the network and, likewise, is essential to the ability of the technology to support the community itself.

8. Reconceptualizing the curriculum to reflect an interdisciplinary, outcomes-oriented, and transformation with an equally cohesive community of faculty across disciplines and creating an engaged community of learners.

9. The Twelve Campus Conditions for Transformation take the stage for the alignment of policy and practice with institutional goals. Together, all twelve conditions describe the context for an interrelated, inclusive decision-making process that shares ownership of issues involving technological infrastructure.

Source: NILI Focus Sessions 2000
and by its willingness to acknowledge the importance of standards, both within the technology industry and within the institution (e.g., the selection of a course management system for Web-based learning or the willingness to invest funds to participate in consortia such as the MERLOT repository). The absence of a consistent support framework of standards and systems is indicative of evasive leadership tactics and makes it questionable whether the institution will have the fiscal and personnel resources to scale and sustain its support for faculty to adapt to the information age.

9. Capacity and competency assume a reconceptualization of the curriculum to develop “the teaching and learning capacity of the institution (e.g., curriculum and faculty) to serve student achievement and outcomes” and to use intelligent assessment to drive transformation by defining and evaluating institutional success in terms of student achievement and outcomes. This implies a major shift in focus from assessing quality based on the inputs in the teaching and learning process (e.g., faculty achievements, student SAT scores) to determining quality based on student competencies and certifications. Obviously, major tensions will arise from the conflict in values inherent in such a shift. A spirit of cooperation and mutual ownership can help to diffuse such tension so that the academic community can critically consider the implications of this shift.

10. An exercise as simple as reviewing these twelve conditions quickly reveals the complexity and confusion that surround these issues. One method of adapting to the complexity and confusion is to adopt more agile and responsive governance processes. This is an important early step. Many of the current tensions, sensitivities, and frustrations have arisen from the incompatibility of extant governance conventions with the exigencies of decision-making in the new higher education context. Attempts to preserve traditional processes are as futile as trying to adapt minister around them. The key stakeholders need to begin to come to terms with the fact that norms and conventions developed in the context of the industrial age are losing their effectiveness in dealing with the time frames and complexities of decision-making in the information age.

11. Part of this process of coming to terms is fitting new procedures into the existing institutional culture and context. Making these deliberate and essential linkages requires an understanding of the culture, values, and sensitivities of a given campus climate and demands also creativity in developing strategies and tactics that harmonize with the community’s perception of itself. This is as much a creative as it is a political process; an understanding of social anthropology is also helpful here.

Those familiar with the ethos of our institutions of higher education realize that it would be foolish to underesti- mate the difficulty that will accompany the change implied in these twelve conditions. The values and prerogatives accorded to higher education not only distinguish colleges and universities from organizations, like IBM, that have successfully transformed themselves but also make such transformation more difficult and disruptive. Although higher education has successfully fought off external pressures to change in the past without altering its traditional practices, this will not be possible in the information age.

Consequently, these twelve conditions constitute far more than a checklist to determine the attitudes and awareness on a given campus in terms of its readiness for transformation. The core message of the twelve conditions is that technology must be employed within an overall sociotechnological system. Policy and practice regarding the role of technology must be conceived, and perceived, to fit within the institution’s culture, values, and style of operation.

In conceptualizing the place of technology in this way, the entire institution participates in, and owns, the transition enabled by technology instead of being threatened by, and hostile to, the change. Such a widespread engagement demands a new style of aware- and equally engaged leadership. Thus in selecting presidents and chancellors to lead higher education institutions in the information age, boards of trustees would be wise to consider candidates’ awareness of and attitude toward the Twelve Campus Conditions for Transformation. The changes needed in higher education today cannot occur in a leadership vacuum.

Notes


4. Higher education plays a key role in the work of the IBM Global Learning Consortium, Inc., to establish industry-wide standards for interoperability among hardware and software products for teaching and learning (see [http://www.nlil2.org/project.jsp]).

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