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## Transforming the Environment for Learning: A Crisis of Quality

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*This chapter addresses academic leaders and summarizes research findings on the conditions needed to produce learning and student development in higher education at the level required by society, and our relative success in doing this. It attempts to make clear the urgency for change that exists in the way in which we conduct our educational affairs. It describes the causes of less-than-optimal learning, outlines 10 key elements for effectively managing learning in complex institutions, presents eight steps required to lead a successful transformation in an institution or unit, and provides resources with detailed information and guidance.*

### FOCUSING ON LEARNING: OUR CORE MISSION

**A**mong other missions a college or university may have, as a *school* its learning mission is paramount. Schools exist to develop people; producing learning is their *raison d'être*. For at least two decades businesspeople, political leaders, and experts in human development have been asking us to produce graduates who are skilled in higher-order cognition, such as critical thinking and complex problem solving; behave in a principled ethical fashion; can accept and work harmoniously and productively with people unlike themselves; have the ability to adapt to diverse and changing situations; and take responsibility, work hard, and show initiative (e.g., Carnevale, Gainer, & Meltzer, 1990; Van Horn, 1995).

Modern colleges and universities are complex organizations. Producing these essential outcomes is not a simple matter. This discussion will focus on four key organizational components that contribute powerfully to learning and student development: curriculum, instruction, campus climate, and academic

advising. The contribution each can and should make to learning and development and the research evidence concerning its current capacity to do this well in most institutions are examined. (A more extensive review of this research, together with citations to specific sources, appears in *Redesigning Higher Education: Producing Dramatic Gains in Student Learning* [Gardiner, 1996]; see Resources below.)

## CURRICULUM

Curricula should provide students with balanced learning plans composed of diverse experiences such as courses, projects, student organizations, employment, and travel that will effect their learning and development in an orderly fashion appropriate to each person's developmental stage, prerequisite knowledge and skills, and future needs. A student's general education curriculum, together with a disciplinary major field curriculum, are ordinarily intended to contribute heavily to his or her development. If learning is the goal, these curricula must provide a carefully planned developmental map of relevant learning experiences appropriate to each person's needs.

Students are dependent on their curricular plans to guide them through the college experience. A set of specific intended learning outcomes—what graduates should know and be able to do—for each curriculum is a *sine qua non* of good practice. These statements of intended outcomes direct curricular design and implementation, assessment of each student's learning, and evaluation of curricular effectiveness. An examination of curricula, however, reveals that most lack, and thus cannot be not aligned with, intended outcomes. In addition, well over 90% of general education curricula and most major field curricula use a distribution format that provides only minimal guidance to students. These curricula require students merely to choose from lists of approved courses and accumulate a requisite number of credit hours to be authorized to graduate. The standard is fulfillment of a specified number of hours of seat time rather than demonstrating specific, important knowledge, skills, and values—the intended learning outcomes. This situation is consistent with the conclusions of an Association of American Colleges report that “there is a notable absence of structure and coherence in college and university curricula” (Zemsky, 1989, p. 7) and other reports from the Association of American Colleges (1985) and the Association of American Colleges and Universities (2002).

Research has established, at least for general education curricula, that most of these resemble each other closely. In addition, they may have relatively little impact on the outcomes achieved by students regardless of the specific

courses, breadth of courses available, or degree of freedom to choose among them (Astin, 1993). On the other hand, a core curriculum where students take courses in common does positively affect learning outcomes, satisfaction with a student's college experience, and persistence on campus. Therefore, students' approach to a curriculum and how a faculty utilizes the curriculum for educational purposes may be more significant in producing learning than the curriculum's formal features. Other research also has failed to support the developmental power of distributional curricula (Jones & Ratcliff, 1990).

There is evidence that some vocationally focused programs, in contrast with liberal arts programs, can actually retard or even decrease, sometimes significantly, development of valuable outcomes (Altemeyer, 1988; McNeel, 1994; Self & Baldwin, 1994; Self, Olivarez, & Baldwin, 1994). A study of university students showed that after pre-college learning was removed statistically from their post-college "general learned abilities" as measured by the Graduate Record Exam, neither high- nor low-scoring students demonstrated high-level gains from their work at the university (Jones & Ratcliff, 1990). Fife (1991) states that "the curriculum is no longer achieving its intended purpose" (p. xiii).

## INSTRUCTION

Our students' learning in their courses forms the core of their intellectual experience in college. Their courses are intended to introduce them to new ideas and help them develop mature, complex, and powerful ways of thinking about the world, such as critical thinking and principled ethical reasoning. These complex skills and the dispositions to engage in them that society requires necessitate intentionally planning and explicitly teaching for them, providing sustained practice with corrective feedback throughout a course. This is necessary across the entire curriculum, general education and major field alike.

### **Intellectual Experiences in Class**

What is the level of our students' intellectual experiences in their courses? In spite of what their teachers may think, study after study over the years has shown that in a large percentage of their classes, students experience a focus on low-level cognition such as facts and concepts rather than critical thinking and disciplinary problem solving (Ellner & Barnes, 1983). Information is what we tend to transmit to our students in lectures, and this is also what we tend to require them to reproduce or recognize on assessments. Therefore, memorizing information is what they think is most important and what they try to do.

**Active Involvement in Class**

A requisite for effective learning is sustained active engagement with what is being studied: societally important issues, disciplinary content, and problems requiring critical thinking or other types of higher-order cognition. However, many studies reveal that more often than not faculty lecture to their classes, dominating their students' attention and providing relatively little opportunity for them to assume an active rather than passive, note-taking role (Ellner & Barnes, 1983). In many classes few students say anything or have the opportunity to work with peers on disciplinarily important issues. The amount of student talk in class can occupy less than 1% of time available. Extended lectures are also problematic given students' limited 10- to 20-minute attention span. Research has shown that for about 50% of the time in their lectures, students are off task, thinking about things other than the class (Bonwell & Eison, 1991). The result is that relatively little of lecture content can be recalled even immediately after a class, with rapid diminution of memory thereafter (McLeish, 1968).

Most students, when asked, seem to have difficulty remembering much from many of their previous courses. The media regularly report studies showing that college students lack knowledge of basic facts concerning American history and government and geography, and simple abilities in practical day-to-day matters such as using transportation schedules and making supermarket calculations.

A problem stemming from inadequate learning in college is the persistence of misconceptions concerning basic concepts, even in their own major fields of study, and the lack of ability to solve problems. Studies of students in physics, biology, and anthropology courses in leading private and public universities and selective private institutions show a low level of comprehension of basic disciplinary concepts such as force, momentum, and organic evolution (e.g., Fuerst, 1984; Hake, 1998; Mazur, 1997; Zimmerman, 1986).

**Out-of-Class Learning**

Most of what students learn they have to learn outside of formal classes. Classes are far too short to permit the extensive cognition and practice required for synaptic remapping of the brain. Although students' quality of effort and level of engagement have been established as key factors in learning, studies consistently show that most students do far less work outside of their classes than the average of two hours or more per hour spent in class expected by their teachers for adequate learning. Yet this low level of effort and the learning it produces in most cases does not result in failure or dismissal from

the institution. One reason may be the well-known low cognitive demand of many or most teacher-made assessments. Most students can achieve passing scores using a *surface learning approach* that focuses on memorizing isolated facts that are soon forgotten. (A *deep approach* seeks understanding and meaning and permits deep cognitive processing that engages all important regions of the brain. It thus can result in thorough comprehension and long-term retention of new knowledge and the ability to use it.) Teacher-made tests in most cases are also of unknown validity and reliability, two technical requirements necessary to ensure the credibility and usefulness of assessment results.

### **Grades**

Although grades are the main means by which we signify the level of learning to our students, their parents, and other stakeholders, for almost a century researchers have criticized grades as an ineffectual means for representing learning. Single letters cannot communicate much information about the various kinds of complex cognitive, affective, and motor learning we want our students to achieve. End users of grades usually have no idea what information was used to determine a grade. For example, how much of the grade represents learning, rather than, say, attendance or participation in class activities? Or what type of cognitive achievement does it signify: number of facts memorized or level of critical thinking skill demonstrated? Added to the defects of grades as devices for describing knowledge and skills developed is their potential contamination by the very high percentage of college students who admit to various types of cheating as reported by numerous researchers.

### **CAMPUS CLIMATE**

Climate is the emotional feel of a campus, department, or course. Do students feel welcome, intellectually stimulated to a high level, and emotionally and socially supported, or do they experience their institution as cold, indifferent to them, or even hostile and rejecting? Research strongly supports the importance of each person's social and emotional integration into a campus community. The quality of campus psychological climate correlates not only with student learning, but with persistence on campus and satisfaction with their college experience. Given the vast cultural diversity of college students and their needs, together with the special needs of the overwhelming majority of students who live off campus and thus miss out on the significant potential intellectual and social benefits from residence life, clearly, the campus climate needs to be managed deliberately and carefully if it is to become a valuable tool for supporting learning among all of our students.

Research also demonstrates that many students experience their college or university as an unsupportive environment (Astin, 1993; Boyer, 1989). Many students from noncollege or ethnic minority backgrounds find our campuses strange and threatening places. Women and members of ethnic and sexual minority groups often suffer severe indignities from their peers and, at times, even members of the faculty. Entirely aside from our significant ethical responsibility to ensure our students are treated well and have their worth affirmed when in our care, condoning an alienating or abusive environment undermines their learning, our core mission.

### ACADEMIC ADVISING

Given the broad cultural diversity of our students, their commonly inadequate academic preparation for higher education, the loose organization of our curricula, their parents' frequent inability to guide them when making important academic decisions, and an unfamiliar and sometimes threatening campus climate, the quality of the academic advising they receive is of paramount importance. We must ensure they adapt successfully to college, learn at a high level, enjoy their college experience, and accomplish the developmental changes society requires. Appropriately, modern academic advising is developmental rather than prescriptive (Gordon, Habley, & Associates, 2000). Each person develops a relationship with a faculty academic advisor who gets to know the student and helps him or her develop a learning plan based on his or her individual values and life goals.

Only students can learn for themselves. A high level of student effort is necessary to carry this out. Therefore, student motivation to learn is at the root of accomplishing our education mission. Yet students often seem far less animated by a love of learning and thirst for knowledge and self-development than complying with bureaucratic regulations—registration rituals, curricular graduation requirements, and course policies—after all, this has been the experience of many of them throughout their K–12 years. If learning is the intended outcome, we need a systematic process for resocializing our students as they enter the institution, to reignite their childhood love of learning. An institution serious about learning will invest significant resources and effort in modern developmental academic advising relationships to guide development, monitor attitude and effort, and ensure that significant learning is occurring for each person.

The research consistently shows, however, that the academic advising received by most college students—of that minority of students who receive *any* advising—is of an insufficient amount and quality (Habley & Crockett,

1988). All too often academic advising is more clerical or bureaucratic than developmental, having to do with picking courses from lists to fulfill graduation requirements, and most students spend little time with their advisors. They end up advising themselves, depending on lists of requirements to fulfill and student scuttlebutt.

Research shows high-quality academic advising has a positive impact on students' learning, social and vocational development, and satisfaction with college and therefore persistence on campus (Saunders & Ervin, 1984). Persistence and satisfied alumni, and their lifelong financial contributions, are not insubstantial benefits to an institution in times of scarcity.

### **THE ROLES OF INSTITUTIONAL MANAGEMENT AND LEADERSHIP IN PRODUCING HIGH-QUALITY LEARNING**

Management and leadership are two distinct concepts; both are essential in higher education. As currently practiced, both are criticized as often being insufficiently sophisticated to produce the high-quality learning society requires. Management can be thought of as dealing with first-order change: routine technical problems that are well understood and for whose solution accepted methods exist (Heifetz, 1994; Waters, Marzano, & McNulty, 2003). Examples are scheduling classes, registering students, and keeping track of grades. Leadership, on the other hand, deals with second-order change: problems where solutions are not well understood and that require adaptation to new realities through changes in people's values, beliefs, and behavior. "Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen despite the obstacles" (Kotter, 1996, p. 25). Our example here is significantly improving an institution's capacity to produce the high-quality learning that our society requires.

### **MANAGING LEARNING: 10 KEY ELEMENTS**

Consider 1) the diverse and complex types of knowledge, skills, and other specific outcomes our students must acquire, 2) the difficult developmental transformations they need to undergo so they can become effective and committed critical thinkers and problem solvers, and 3) the diversity of our populations of students and academic staff members. Clearly, leaving this potpourri of processes to chance and players to their own devices, as we now so often do, has to give us the wholly unimpressive outcomes that research suggests we now produce compared to what society requires and what the state of the educator's art can now achieve. Why would we assume a faculty that

lacks almost any effective communication among its members about its educational work, as is so often the case, could produce any desired outcome reliably, particularly those that require high levels of planning, coordination, and monitoring? Learning in our complex organizations must be deliberately and expertly managed. Our success in fostering high-level learning in all of our students across an institution or unit requires using the findings of research and developed best practices. The task is much too complex and societally too important for us to continue using the methods of the past and neglecting the professional literature in this business.

Because of the importance of specific prerequisite knowledge stored in long-term memory as a necessary foundation for further learning through neuronal networking (Zull, 2002), to be effective and cost-efficient, each student's sequence of learning must be carefully planned, implemented, and monitored, taking into consideration his or her current knowledge, skills, and level of development. Researchers and expert practitioners in higher education have identified and described key management functions and tools to address issues of organizational complexity that any college, university, or unit can use to help it produce learning at a high level (Gardiner, 1996).

- 1) Have well-constructed and inspiring mission statements at all levels in the organization, from institution to course, that are closely aligned with each other and provide clear guidance for decision-making, such as for developing statements of intended learning outcomes for all curricula.
- 2) Have well-constructed statements of *intended* outcomes for both curricula and their courses that are understood and routinely used by academic staff and students to focus attention, set high expectations for everyone, and are a basis for planning and improving academic programs.
- 3) Use systematic assessment research everywhere that is aligned with statements of intended outcomes so that everyone knows the *actual* outcomes (the results of learning), understands the processes that have produced them, and uses the results of assessment for decision-making and to continuously improve the quality of learning and to create a culture of evidence that permeates the organization.
- 4) Have coherent curricula that are closely aligned with their intended outcomes and that integrate all aspects of learning and student development.
- 5) Use instructional methods that are consistently aligned with their intended outcomes and that are at all points consistent with research on brain function and learning and are known to work.



- 6) Deliberately design and manage a campus climate that consistently supports learning, starting with the classroom.
- 7) Ensure that all students know how to take a deep approach to learning, have the skills of effective learning, and understand the amount of time required for deep, brain-changing learning and the importance of sustained hard effort, high standards, and taking responsibility for their own learning and development.
- 8) Have a high-quality developmental academic advising program that is a focal point of the institution's and its units' connections with their students and that plans and builds supporting relationships between individual faculty members and every student.
- 9) Ensure that every administrator and faculty and staff member is fully competent to perform the tasks he or she is responsible for as a manager of learning and leader of change, and participates in continuous, never-ending, high-quality professional development as appropriate to these tasks.
- 10) Compensate, promote, and otherwise reward all members of the staff appropriately for their contributions to the institution's learning mission.

How effectively are you managing your students' learning in your organization? You can use this list of 10 management elements as a checklist to help you take stock. What percentage of the 10 points are present, and how do you know? Where are the weak points? Each may indicate an opportunity for improving your organizational capacity to produce learning and a need for first-order change.

### **STAFF DEVELOPMENT: FOUNDATION OF INSTITUTIONAL COMPETENCE**

Clearly, many students learn effectively and see their lives significantly changed through their experience on our campuses. This transformation occurs because of their own high motivation and effort to learn, together with the efforts of innumerable committed and hard-working members of the academic staff. The accumulated research available today and the perceptions of many astute observers both on and off campus, however, make equally clear the widespread lack of effectiveness and inefficiency—even dysfunction—of learning in many institutions and units for many of their students (Gardiner, 1996). Their test results and grades provide only an illusion of learning.

### **Our Investment in Staff Competence**

To what can be attributed the striking limitations of contemporary curriculum, instruction, and academic advising, and the problems associated with the unsupportive campus climates described earlier? There are many factors both internal and external to an institution that influence its effectiveness. Central to its competence in producing learning among its students, however, are the knowledge, skills, and dispositions of its academic staff. "If we know anything from research over a 30-year period about what affects student achievement, it's teacher quality" (Bradley, 1999, p. 51). In striking contrast to business enterprise, however, higher education continues its longstanding custom of investing little in the preparation of its teachers for their work as educators, not in graduate school and not as working professionals after they secure their faculty appointments. Where faculty and staff professional development programs exist, more often than not they are weak, participation in them is voluntary, and they are given only desultory moral and financial support by senior administrators. Consequently, they reach relatively few members of the staff. For those who do participate, their involvement is often episodic and disjointed rather than progressing systematically through coherent professional curricula relevant to their specific needs.

### **Critical Thinking: A Prime Example of the Problem**

Because of lack of preparation, teaching in higher education is all too often reduced to orally explaining in a traditional lecture what a *teacher* has learned rather than engaging *students* in activities that will cause learning by *their* brains. Critical thinking is one of the most societally important outcomes we can produce that should be at the center of most curricula. It is a complex concept and involves many discrete cognitive skills and affective dispositions, and requires the skilled use of specific intellectual criteria and standards. A study by Paul, Elder, and Bartell (1997) starkly illustrates the impact of lack of preparation for our complex work of brain development. These researchers studied 140 faculty members from education and liberal arts and science disciplines in 30 California public and private colleges and universities. Eighty-nine percent of these faculty members said critical thinking was "a primary objective of their instruction" (p. 18). "Most claimed that they permeated their instruction with an emphasis on critical thinking" (p. 22). Seventy-eight percent of them also said their "students lacked appropriate intellectual standards . . . to use in assessing their thinking" (p.18) but "that their department's graduates develop a good or high level of critical thinking ability while in their program" (p. 19).

However, only 20% of these teachers “said that their departments had a shared approach to critical thinking” (p. 19). “[O]nly 9% . . . were clearly teaching for critical thinking on a typical day in class” (p. 18). Relatively few (19%) “gave a clear explanation of what critical thinking is” or gave “any intellectual criteria or standards they required of students” (8%; p. 18). “Only 8% clearly differentiated between an assumption and an inference, and only 4% differentiated between an inference and an implication” (p. 19). “When asked how they conceptualized truth, a surprising 41% of those who responded . . . said that knowledge, truth and sound judgment are fundamentally a matter of personal preference or subjective taste” (p. 19).

The researchers concluded that “we can infer that comparatively few faculty have thought seriously about critical thinking” (p. 21). “Few . . . have had in-depth exposure to research on the concept. Most appear to have only a vague understanding of what critical thinking is and what is involved in bringing it successfully into instruction” (p. 31). The researchers concluded further that it is unlikely that the graduates of these programs would understand how to reason about complex issues in their disciplines or that “moral issues and problems require as much disciplined reasoning and clarity of definition as does reasoning in any other domain” (p. 32).

Today, the old assumption that disciplinary competence or skill as a researcher or scholar will translate into success as a teacher seems naïve. The profession of college educator requires knowledge of the research on learning and student development, curriculum design and assessment, instructional design and mental measurement, the wide array of instructional strategies now available that can produce durable learning, classroom management, developmental academic advising, management of staffs of graduate and undergraduate TAs and others, and leadership for change at various institutional levels.

Administrators from the level of department chair to president require this same knowledge, the type and amount of detail depending on their roles. They too typically receive little professional education for the demanding work of managing learning and leading change. Therefore, instituting a high-quality program of professional development for all academic staff to ensure their technical competence to teach, manage learning, and lead change throughout their careers is a key management responsibility and a sine qua non of any attempt to ensure effectiveness in a college or university. In Chapter 2 of this volume, Robert M. Diamond discusses staff development and academic support centers—change agencies—in detail.

### **Leadership for Change: A Process**

As we have seen, knowing in detail what your institution *should* be doing and *is* doing, and continuously improving the quality of the learning it produces, are essential to mission accomplishment. These are tasks of the management process—making sure things get done the right way. If all management tasks are accomplished at a high level in a professional fashion by everyone involved, most students will probably learn the right things at the right level and in the right sequence. Given what we have seen, however, the accumulated research suggests chances are excellent your institution has a long way to go to ensure best practice is pervasive throughout the organization and all of your students are learning well. How can you engineer the transformation—the second-order, adaptive change—that may be required for your institution or unit? This is a different level of organizational change than guiding improvements in management. This is about leadership, leadership for change. “Successful transformation is 70 to 90 percent leadership and only 10 to 30 percent management” (Kotter, 1996, p. 26). And leadership for change requires different knowledge, skills, and dispositions than effective management. “The literature is replete with examples of bright, powerful, well-intentioned leaders who fail in their leadership initiatives because they simply did not understand what they needed to know, how to proceed with implementation, or when they needed to use various practices and strategies” (Waters, Marzano, & McNulty, 2003, p. 13). Based on their meta-analysis of 30 years of research, these authors have identified 21 different leadership responsibilities and practices significantly correlated with students’ learning in their schools (see the Resources section at the end of the chapter).

Because of the need for transformation in so many, perhaps most, organizations, considerable research and thought have been devoted to understanding the characteristics of effective organizations and what steps must be taken to reform those that are dysfunctional or underperforming. Lick (2002) describes several comprehensive change models. Kotter (1996) provides a widely admired model of organizational transformation. He suggests there are eight steps or processes required for leading any successful organizational change. Each step addresses a leadership error commonly made during change efforts that can cause them to fail. The steps must be carried out in this order, no steps can be skipped, several or even all may be worked on simultaneously, but new ones begun only after the groundwork has been properly laid, and all must be constantly reinforced.

## **Steps 1 Through 4: Softening the Status Quo; Laying a Solid Foundation for Transformation**

*Step 1. Develop a sense of urgency for change.* Effecting change is difficult. The most important error when initiating change is permitting complacency to lull people and keep them from focusing sharply on what needs to happen. People are busy with their daily work, they think the quality of their work is pretty good, change is threatening, they can sense this will be a lot of extra work, some may believe the new ideas are profoundly in error, and who knows what the results will be anyway? Their attention must be sharply focused on the needed changes for the duration of the project, a difficult but essential step. No one leader can bring about change; the cooperation of many others is required. Kotter estimates that sustaining a major change effort requires a majority of the people and 75% of people in management roles to believe change must happen, and 15% to 25% percent of the people must be willing to work very hard.

Today in higher education complacency seems pervasive. Relatively few institutions have responded vigorously to two decades of appeals to reform or to engage in systematic assessment research to understand themselves. Public relations offices churn out a torrent of institutional self-congratulation. The first part of this chapter has been devoted to persuading you that fundamental change is required throughout higher education and that given the pervasive conditions of low performance revealed by research, there is a good chance your institution shares some of these same problems and you need to act to determine if that is so. You may be different, but do you have credible evidence of high-level learning of the right sort among all of your students?

Kotter identifies nine different factors that can contribute to complacency:

- There is no widely perceived crisis that threatens the institution and its members.
- The institution's physical surroundings communicate success. The buildings are beautiful, the landscaping elegant, the catered dinners sumptuous.
- Standards of performance are low. Intended learning outcomes are easy to achieve or, more likely, have never even been defined, or if they have, are unused for planning or evaluation. Graduation is based on seat time (accumulated credits) not demonstrated competence through challenging assessments. Faculty do their own thing in their classrooms with little supervision or specific integration of their courses into a coherent curricular whole.

- People are concentrating on their own narrow, day-by-day tasks rather than on whether the institution or unit as a whole is effective in accomplishing its mission. Perhaps only the president has ultimate responsibility for the learning mission, and she is preoccupied with raising money and dealing with the state government.
- Formal internal planning and assessment are set up so goals are easy for everyone to achieve. Offer a new course, develop a new initiative, teach so many hours, get your grades in on time.
- Feedback on people's work is all based on the inadequate internal assessment systems with little input from external stakeholders. A new course gets offered or there are new initiatives, you taught your courses; everything is hunky dory. People do not have to confront angry parents, businesspeople who find your graduates cannot add, let alone think independently, or have a poor work ethic, or the governor or legislators who do have to deal with these complaints.
- Individual faculty and staff members who display initiative and who do collect data demonstrating problems are ignored—or even punished—and the data are suppressed, their reports becoming classic shelf documents.
- People deny the validity of and ignore the evidence that contradicts a rosy picture of the institution or unit. "We're not that bad."
- Senior administrators and faculty opinion leaders produce a steady stream of narcotic happy talk. "We are wonderful here; all of us are highly accomplished." "This is a truly distinguished institution, on the verge of joining the first rank of institutions in our sector. In fact, we're world class." Celebrations are held, awards are presented, medals are struck. "Although happy talk is sometimes insincere, it is often the product of an arrogant culture that, in turn, is the result of past success. . . . Big egos and arrogant cultures reinforce the nine sources of complacency" (Kotter, 1996, p. 41).

Although having copious, accurate, and relevant information from high-quality assessment research is essential, data and their interpretation are not enough to move most people to change. The specific causes of complacency must be identified and eliminated or significantly weakened. How many of these conditions are present in your institution or unit, and how do you know?

**Step 2. Construct a leadership team.** No single person can provide the force required to overcome the summed complacency, lethargy, and active resistance of an entire organization. A team of informed, committed, and credible members is required to guide implementation of the change effort. Composition of the team is critical to ensure high-quality decisions. The team should include the most senior administrators with their authority and power to implement change, people with essential technical expertise, and others who can communicate various perspectives from around the institution or unit on the issues the team will deal with. Members must be well regarded throughout the institution to enhance the credibility of the team's diagnoses and decisions. Mutual trust among members and their deep commitment to a shared team goal is essential. They must effectively communicate essential information to key decision-makers.

**Step 3. Create a vision and a strategy.** A vision describes the desired future state and why it is important to achieve it. The vision reduces numerous decisions into a single idea of the future; serves to energize everyone to action toward that end, helping overcome barriers of personal inconvenience and effort; and helps organize the efforts of large numbers of people toward the changes required. The strategy articulates the logic of the desired change and provides some initial information on how it can be achieved.

**Step 4. Communicate the vision for change to everyone.** Understanding the new strategic vision will be an intellectual challenge for everyone, and many will experience emotional stress when required to give up current ways of doing things. Understanding this is often difficult for the leadership team members who have been concentrating on the issues for a considerable time. Communicating with everyone else in the institution or unit requires close attention and often considerable time and effort.

### **Steps 5 Through 7: Introducing New Ways of Doing Things**

**Step 5. Empower everyone for action across the institution or unit.** Effecting a major transformation can be extremely difficult; everyone is needed. In many institutions, faculty and staff members do not feel as though they can have an impact on the institution. They may feel blocked by a lack of current, research-based knowledge and skill concerning learning, student development, or managing and leading, they may lack specific information about their students or the organization, or be hemmed in by rules, organizational structures, or by the behavior of senior administrators that is inconsistent with the strategic vision. They need to be empowered.

*Step 6. Engineer short-term successes.* Ensure there are performance improvements demonstrating that current change activities will lead to positive results, and inform people about them. Solid evidence of the effectiveness of the new way, such as good assessment data and information on costs will lend credibility to the message. This step is important to let people judge the effectiveness of new methods versus costs, build morale to stay the course, effectively refute those who may attempt to undermine the change process, recognize change agents, keep everyone, including top administrators, focused on change, and help develop momentum.

*Step 7. Solidify improvements and engender additional change.* Ensure that celebration of short-term gains does not lead back to complacency and slow or stop progress. Additional changes can be added now that the change process has begun to prove its worth and political support is available. Various change-oriented projects already underway may be continued but require leadership from administrators and faculty and staff members throughout the institution or unit, not just at the top. At this point there may be an enhanced recognition of and desire to prune away unnecessary bureaucratic interdependencies among units.

### **Step 8: Institutionalizing the Transformation**

*Step 8. Embed innovations in the organization's culture.* Changes must be grounded in the institution's culture: its shared values, assumptions, and behavioral expectations. A vigorous change effort that has successfully brought research-based methods of learning to a campus may ultimately founder if it does not forthrightly confront a clash with an underlying culture that places relatively little value on students and their development and overwhelmingly favors the pursuit of prestige among academicians elsewhere through idiosyncratic faculty research activities. Such a clash may quickly undermine advances made and derail the change effort. The organization reverts to being focused on itself—its image—rather than its student customers. This process of connecting change with culture—changing the culture where necessary—occurs only after changes have produced credible results. Success depends on copious discussion, may require staff changes, and necessitates care when promoting people into new positions so old cultural values and expectations are not reintroduced.



## CONCLUSION

Based on numerous studies and the observations of countless members of the academy and its external stakeholders, the quality of learning in higher education is far lower than we might like to believe and that society requires and is technically possible today. Unless you have convincing evidence to the contrary, there is likely opportunity for significant improvement in learning on your campus and in your unit. Central to improvement is effective management of the organization and, specifically, management of learning. You and your staff can lead the change required to produce this improvement.

The professional literatures in education and management are clear about the kinds of changes that will be required. Methods now exist to help you determine specifically what is needed on your campus. You will need to accept the challenge of leadership, educate yourself and your staff concerning the knowledge and skills required to take the lead in the change effort, develop an inspiring vision of the future, take risks, and employ best practice for learning at all points. These actions can lead to increased, perhaps transformed, learning for your students and their impact on their families and society.

## RESOURCES

Diamond, R. M. (Ed.). (2002). *Field guide to academic leadership*. San Francisco, CA: Jossey-Bass.

A handbook for effective, research-based management of learning and leadership for change. Numerous experts discuss pressures for fundamental reform and requisites for sustainable change, leadership, mission, culture, and interpersonal relationships, academic aspects of managing learning, assessment and evaluation, and relating academic issues to finance, student affairs, technology, diversity, and issues related to specific administrative positions.

Diamond, R. M. (2005). The institutional change agency: The expanding role of academic support centers. *To improve the academy: Vol. 23. Resources for faculty, instructional, and organizational development* (pp. 24–37). Bolton, MA: Anker.

Comprehensively reviews forces for change that confront colleges and universities, and describes development of the institutional change agency that can provide high-quality support for the changes most academic institutions will have to make in their capacity to produce learning.

Gardiner, L. F. (1996). *Redesigning higher education: Producing dramatic gains in student learning* (ASHE-ERIC Higher Education Report, 23[7]). San Francisco, CA: Jossey-Bass.

A review and synthesis of numerous studies on student development in college and college effects on students. Focused specifically on curriculum, instruction, campus climate, and academic advising, it reveals limitations of commonly used academic practices in producing learning and summarizes recommendations of researchers to substantially improve learning. A resource to use to raise the level of urgency for change in an institution or unit.

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Reports results of a meta-analysis of 70 high-quality studies culled from 5,000 conducted over three decades on the relationship between leadership and student learning in schools. Identifies 21 key leadership responsibilities and practices. Available at <http://www.mcrel.org/topics/productDetail.asp?productID=144>.

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