10

Making Students Matter

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> Learning remains the reason we exist. . . . If public universities are to prosper in the future, they must become great student universities as well as great centers of research . . .
>
> —Kellogg Commission, *Returning to Our Roots: Toward a Coherent Campus Culture*

The Challenges

It is one thing to assert that public universities should be student centered. It is quite another doing it. The challenges are substantial.

First, many public universities enroll tens of thousands of students. The numbers of part-time, temporary instructors are at an all-time high, in part to make up for the 10% decline since the mid-1980s in full-time faculty (Johnstone, 2005). As a result, students at large institutions can be essentially anonymous, unknown by their teachers and their peers. Also, public universities usually have multiple missions, in order to respond to the variety of educational, social, and economic interests of the taxpayers who support them. To ensure access to higher education by historically underserved groups, many of these institutions admit students with a wide range of abilities; a nontrivial number come from educationally disadvantaged backgrounds. In part, this focus on access is why public universities are represented disproportionately among four-year institutions with the lowest graduation rates (Carey, 2004). Finally, public universities typically are expected to be engines of economic productivity, which makes it tricky to appropriately balance undergraduate education, graduate training, research, and service to the state, region, and nation.

Taken together, these factors and others make it difficult to create learning environments where students feel supported and encouraged and to put in place other features long associated with student learning, such as small classes and frequent interactions with faculty members (Astin, 1993; Pascarella & Terenzini, 2005).

Is the Kellogg Commission's vision achievable? That is, can public universities be centers of research and student-friendly? Some institutions have been able to beat the odds, so to speak, and create conditions for teaching and learning that enable more of their students to survive and thrive in college than might have otherwise. Who are they? What did they do? And what steps might other institutions take to become more student-friendly and learning centered? This chapter offers some answers, drawing on findings from the National Survey of Student Engagement (NSSE) and the Documenting Effective Educational Practices study, otherwise known as Project DEEP.

To set the stage, I first summarize selected findings about student engagement in general and those that distinguish public and private colleges and universities. Student engagement in effective educational practices is empirically linked to desired outcomes of college and is an earmark of a student-centered university. Then I briefly describe the conditions common to the 11 high-performing public institutions in the DEEP project. Finally, I offer recommendations for enhancing student learning and improving educational effectiveness.

Student Engagement: A Key Component to Student Success

After synthesizing the results of thousands of research studies related to student development, Pascarella and Terenzini (2005) unequivocally conclude:

> If, as it appears, individual effort or engagement is the critical determinant of the impact of college, then it is important to focus on the ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage *student engagement*. (p. 602)

Student engagement represents two components. The first is the amount of time and effort students put into their studies, and into other activities that lead to the experiences and outcomes that constitute student success. The second is the ways the institution allocates and organizes its resources, learning opportunities, and services to induce students to participate in and benefit from such activities.

Certain institutional practices are linked with high levels of student engagement (Astin, 1991; Chickering & Reisser, 1993; Kuh, Schuh, Whitt, & Associates, 1991; Pascarella, 2001; Pascarella & Terenzini, 1991). Perhaps the best-known set of indicators is the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987). If faculty and administrators more consistently used these and other promising practices—inclusive, supportive, and affirming institutional environments—students would ostensibly put forth more effort. That is, they would write more papers, read more books, meet more frequently with faculty and peers, and use information technology appropriately, all of which would increase the chances for such desired outcomes as student satisfaction, persistence, and gains in critical thinking, problem solving, effective communication, and responsible citizenship.

The National Survey of Student Engagement was developed to assess systematically the degree to which students participate in educational effective practices (Kuh, 2001, 2003; NSSE, 2000; 2004). Established with a grant from the Pew Charitable Trusts, user fees have supported NSSE since 2003, with more than 500 four-year colleges and universities participating annually.

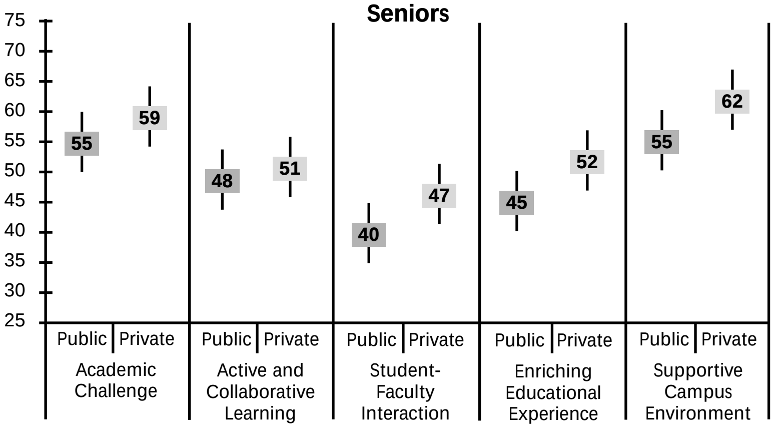
To make student engagement concepts and results accessible to faculty, staff, governing board members, policymakers, and others, an early strategic decision divided the student behaviors and institutional conditions represented on the survey into five clusters of effective educational practices (see Appendix A). This division provides a common language and framework for understanding what matters to student learning and success. Commonly referred to as benchmarks, the five clusters are

1) Academic challenge
2) Active and collaborative learning
3) Student-faculty interaction
4) Enriching educational experiences
5) Supportive campus environments

With responses from almost 900,000 first-year and senior students from close to 1,000 different institutions, we can make three definitive statements about the character and impact of student engagement on student success.

First, as Figure 10.1 shows, students at public colleges and universities are generally less engaged in effective educational practices than their counterparts at private institutions (Kuh, 2003; NSSE, 2004).

Figure 10.1
First-Year and Senior Scores on Clusters of Effective Educational Practices by Public and Private Institutions

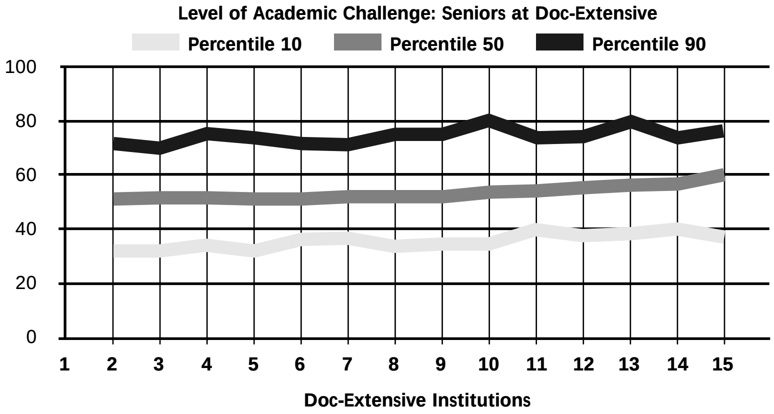


In part, private institutions are advantaged because of their generally smaller size and residential focus. As a result, classes are smaller and students interact more frequently with professors and peers and typically become more involved in the life of the institution. However, although smaller is generally better in terms of student engagement, the highest-scoring public universities are as engaging as many small private colleges (Kuh, 2003; Kuh & Hu, 2001; NSSE, 2001). This result, too, can be seen from Figure 10.1 by looking at the upper end of the public institution distributions, which generally equal or exceed the average performance of privates.

Second, student engagement varies more *within* than *between* institutions, institutional types, or sectors (Kuh, 2003). To illustrate, Figure 10.2 depicts the academic challenge benchmark scores of seniors at 15 different public universities, ranging from the lowest-scoring school on this benchmark to the highest scoring. The figure shows only the middle 80% of students at each institution so that outliers do not skew the display. The difference in mean scores between the lowest- and highest-scoring schools is only about 10 points, or 10% of the 100-point scale. However, the variation in student engagement within each institution is much greater. The pattern represented here is similar for all five NSSE benchmarks and across all institutional types.

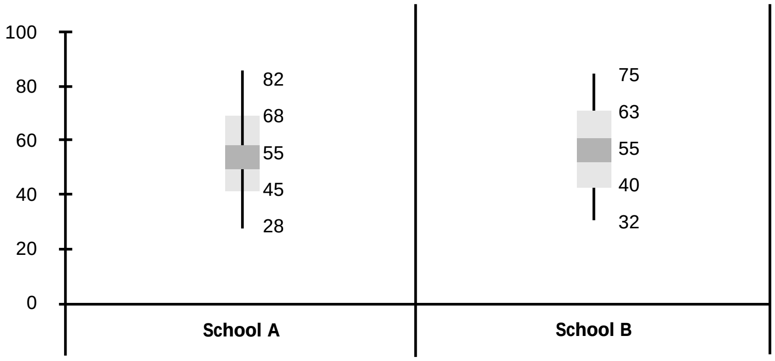
Figure 10.3 provides another instructive view of this phenomenon, comparing the academic challenge benchmark scores for first-year students for two institutions expressed in percentiles. The average institu-

Figure 10.2
Level of Academic Challenge



tional scores are essentially the same. But School B has an attenuated range of student scores compared with School A. So, while some students at School A are more engaged, a comparable number appear not to be very engaged at all. At School B, more students cluster close to the average. At which university, then, are the odds better that a given student will have a reasonably engaging college experience?

Figure 10.3
Academic Challenge Distributions at Two Public Universities



These displays indicate that every institution has a sizeable proportion of students who devote relatively little effort to their studies and other important aspects of undergraduate education, such as participating in cocurricular activities, volunteerism, and meaningful interactions with faculty and peers. Disproportionately represented among underengaged students are men, part-time students, commuters, and students who work 15 or more hours per week off campus (Kuh, 2003). More efforts are needed to identify early in their college experience students within these broad categories and others whose past behaviors and expectations for college indicate that they are likely to fit into this group.

Are low levels of academic effort by large numbers of students inevitable? Conversely, can public universities fashion policies, programs, and practices that encourage students to participate more frequently in educationally purposeful activities so they can more fully realize their potential? Can campuses shape their cultures to encourage a critical mass of faculty and staff to work toward student success as an institutional value and priority? The findings from Project DEEP offer some hope and glimpses of how to do so.

Lessons From High-Performing Colleges and Universities

The Documenting Effective Educational Practices (DEEP) project sought to discover and describe what strong-performing four-year colleges and universities do to foster student success, broadly defined to encompass reasonable levels of student engagement, satisfaction, and educational attainment. The two primary criteria for selecting the 20 schools in the study were higher-than-predicted scores on NSSE and higher-than-predicted six-year graduation rates determined by regression models accounting for relevant student and institutional characteristics. A 24-member research team reviewed countless documents, interviewed more than 2,700 people on these campuses, and observed many classes, studios, and labs in action. The findings are reported in detail in *Student Success in College: Creating Conditions That Matter* (Kuh, Kinzie, Schuh, Whitt, & Associates, 2005).

Conditions Common to Institutions in Project DEEP

This section briefly describes the six factors and conditions more or less common to the DEEP institutions and illustrates with examples from the 11 public colleges and universities of the 20 in the study. The six conditions are

- “Living” mission and “lived” educational philosophy
- Unshakable focus on student learning

- Environments adapted for educational enrichment
- Clearly marked pathways to student success
- Improvement-oriented ethos
- Shared responsibility for educational quality and student success

Although I discuss the six conditions separately, they are not mutually exclusive. In practice, they overlap and link in complementary ways to promote student success.

"Living" Mission and "Lived" Educational Philosophy

A college's mission is a public declaration of its educational purposes and values, intended to guide all aspects of institutional life, including the policies and practices that foster student success. Large public universities usually have broad, expansive mission statements that promise something to almost everyone, as is expected by the taxpayers who support them.

Every institution has two missions. One is its *espoused* or written mission. The second—its *enacted* mission or what the school does in terms of programs and practices—matters much more to student success because it reflects what students actually experience. A university might, for example, claim a commitment to "educating the whole student" but in fact provide little encouragement or support for student involvement in intellectual or social activities outside the classroom. At strong-performing universities, the enacted mission overlaps significantly with the espoused mission. As a result, students, professors, and staff members have a fairly clear idea of what they are trying to accomplish. For example, the missions of California State University-Monterey Bay, Winston-Salem State University, and the University of Texas–El Paso emphasize that every person has the potential to learn. These institutions along with most of the other DEEP schools are dedicated to expanding educational opportunity for students who by traditional measures are not expected to succeed in higher education. These universities value diversity and high-quality undergraduate teaching. They promote social responsibility by encouraging students to give back to their communities. Moreover, their missions are "living" in that they are enacted by open admissions, an emphasis on undergraduate teaching, first-year transition and orientation courses that help students acquire study skills and self-confidence, and rewards for meaningful student-faculty interaction.

Over time, a college develops a "way of doing business"—those tacit understandings about what is important about students and their education. Ideally, this operating philosophy is a values-oriented compass, keeping the institution on track as it makes decisions about resources, curriculum, and educational opportunities. Although they differ in many respects, Miami University and Fayetteville State University both emphasize status distinctions. Fayetteville State teaches students early on to revere faculty members as aspirational figures and role models because of their achievements. The sought-after social and academic distance between faculty members and students works with other features of the campus culture to spur students to greater academic efforts. This approach contrasts starkly with the egalitarian ethic that pervades The Evergreen State College and the University of Maine–Farmington. Despite these very different orientations, all these institutions have been able to create engaging learning conditions for their students.

Unshakable Focus on Student Learning

DEEP schools stitched carefully into policies and practices an emphasis on holistic student development. They select faculty and staff members for their commitment to student success and effective educational practices. These institutions exhibit a "cool passion" (Chickering, 1981) for talent development and make time for students. Engaging pedagogies are mainstream, not relegated to the periphery. As with other aspects of high-performing institutions, these characteristics are carefully cultivated and much energy goes into preserving them.

For example, the provost at the University of Kansas made a persuasive case for why good teaching matters at his research-extensive university. Over time, his message became a widely recognized mantra echoed by other campus officials, students, and professors alike. The sea change that occurred at Kansas to emphasize undergraduate instruction included assigning experienced, highly skilled teachers to lower-division and introductory courses whenever possible, and reinforced this emphasis by multiple awards made annually to recognize outstanding teaching. Professors in each academic unit serve as faculty ambassadors to advocate the faculty needs and concerns to the Center for Teaching Excellence and lead discussions on instructional issues with their colleagues. In addition, the University of Kansas keeps course enrollments low in a high percentage of undergraduate courses; 80% of undergraduate classes have 30 or fewer students, and 93% have 50 or fewer students.

The dean of arts and sciences at the University of Michigan championed new learning initiatives with help from a special commission and several reports over a six-year period. The university invested $3 million to develop new interdisciplinary courses and the provost used a $10 million discretionary fund to support innovative initiatives directed toward improving undergraduate education.

Environments Adapted for Educational Enrichment

Despite being located in vastly different settings, students, professors, and administrators at all 20 DEEP schools believe their location and campus setting are advantages for student learning. Indeed, the students we talked with across all the institutions were enthusiastic about their school, routinely volunteering that their college was “special,” that “there is no other place like it.” For example, students at the University of Maine-Farmington thought that their rural Maine campus offered opportunities for learning and cocurricular leadership that did not exist anyplace else, as did students at Alverno College in Milwaukee, Wisconsin.

To a large extent, DEEP schools make themselves “special” because they are “place conscious” (Gruenwald, 2003). Physical properties, such as Jayhawk Boulevard at Kansas and the coherent brick architecture at Miami University in Ohio and Winston-Salem State University, landscaping, and campus design mix with memories of activities and events to build loyalty and connection among students, professors, and staff members. As a result, physical properties and emotion become inextricably intertwined to form an almost palpable sense of place, one that has profound. if not always clearly understood meanings.

The four-story George W. Johnson Center at George Mason University is figuratively and literally the heart of the campus. Designed to promote learning and integrate curricular and extracurricular pursuits of diverse groups, students, faculty, and staff pass through its doors throughout the day and into the evening to use services ranging from the Student Technology Assistance and Resource Center, the coffee and jazz café, retail outlets, the Center for Teaching Excellence, and facilities (including lockers) for commuter students. The feeling is energetic, cosmopolitan, and communal, an international bazaar with bright flags hanging from pillars, and students in native dress—North American to North African—eating, studying, or just “hanging” together.

The University of Texas–El Paso (UTEP) campus is distinctive in part by its Bhutanese architecture, which signals its aspiration to bring the world into its classrooms and playing fields. Equally important, by supporting six community health clinics, UTEP demonstrates its commitment to serving populations in the El Paso community that have been denied access to education by working closely with its neighbors. Its “Mothers and Daughters” and “Fathers and Sons” programs are part of a longstanding relationship between its College of Education and area public school districts, involving sixth-graders in activities designed to inspire them to seek college degrees.

Clearly Marked Pathways to Student Success

Many students do not have a clear, coherent image in their mind of what they need to do to succeed in college. It is as if they are completing a puzzle without the picture on the box top to guide them. This is particularly true for students who are the first in their families to attend college. To address this issue, DEEP schools do two things very well. First, they teach students what the institution values, what successful students do in their context, and how to take advantage of institutional resources for their learning. Second, they make available what students need *when* they need it, and have responsive early warning systems and safety nets in place to support teaching, learning, and student success.

Fayetteville State, UTEP, University of Maine–Farmington, and Winston-Salem State attract large numbers of students who—because of inadequate academic preparation and lack of knowledge about college—need explicit directions to use institutional resources and support services profitably. These institutions *require* students to take part in certain programs and activities, such as summer advising, orientation, and fall welcome week, and follow up with advising and other events that mark student progress over the course of the first year.

Some DEEP schools use a tag-team approach to challenge and support students, offering academic and other services in an integrated package to reduce the possibility that a student will fall through the cracks. Fayetteville State brought advising and learning assistance programs together. The University of Michigan expanded the number of living-learning programs to touch more students in meaningful ways with integrated student support and academic initiatives, such as the Community Scholars program and its WISE (Women in Science and Engineering) residential program. Winston-Salem State’s First Year College houses under one roof most academic support offices and programs. All new students and transfer students with fewer than 30 credit hours must enroll in one of three new-student adjustment courses, with certain sections designated for students interested in specific majors. Faculty members teaching these sections also serve as students’ academic advisors and mentors for the first academic year.

Miami University’s Choice Matters initiative is a comprehensive, campus-wide effort to channel students' behavior toward desirable activities and reflect systematically on what they learn from their experiences, inside and outside the classroom. A variety of linked programs make up the initiative—first-year seminars, community living options that emphasize leadership and service, cultural, intellectual and arts events, and integrated core courses taught by full-time faculty.

Improvement-Oriented Ethos

DEEP schools seem to be in a perpetual learning mode—monitoring where they are, what they are doing, where they want to go, and how to maintain momentum toward positive change. Supporting this orientation toward improvement is a can-do ethic, making them emblematic of the learning organizations described by Peter Senge (Senge et al., 1999) and the firms studied by Jim Collins (2001) that went from good to great.

The University of Michigan launched a series of major studies of undergraduate experiences in the mid-1980s. The efforts produced some better-integrated undergraduate education programs, including the First-Year Seminar Program, the Undergraduate Research Opportunity Program, and the Sweetland Writing Center. These reports, the most recent of which was in 2002, are candid appraisals of the state of undergraduate education at the university and include innovative and responsive recommendations for improving undergraduate education.

Fayetteville State's commitment to student access and success went to a new level under the leadership of former Chancellor Willis McLeod between 1995 and 2003. Concerned about first- to second-year retention rates well below peer institutions', McLeod's 2003 position paper "Linking Retention and Academic Performance: The Freshman Year Initiative" challenged Fayetteville faculty and staff to develop a complementary set of effective policies and practices. They include the Bronco Cohort made up of students from educationally disadvantaged backgrounds, who are tutored by strong-performing upper-division students, called Chancellor's Scholars. This Creating Higher Expectations for Educational Readiness (CHEER) program helps students acquire the academic skills and social confidence they need to succeed in college, and the campus-wide Early Alert System represent only two of many programs that make the campus special.

Shared Responsibility for Educational Quality and Student Success

Educators are everywhere on DEEP campuses—in the residence halls, food service, and playing fields as well as in classrooms, laboratories, and studios. Moreover, professors, staff members, and students at DEEP institutions enjoy mutual respect and share an affinity for their school's mission and culture. Collectively, they hold one another accountable and expect students to take responsibility for their academic work and social life and that of their peers. Indeed, students themselves went out of their way to get other students involved in their productive activities. Equally important, every day individuals make thousands of small gestures that create and sustain a caring community for students.

Miami's First-Year Experience and aforementioned Choice Matters initiatives are the product of what one administrator described as "an amazing collaboration" between the academic and student affairs divisions and their leaders. One faculty member observed, "It demonstrates a fundamental commitment to undergraduates, and an appreciation for the broad spectrum of their learning experiences." Miami also benefits by its staff members in student life, who understand that their best work complements the academic mission of the university. As a result, collaboration with academic affairs is a high priority and a guiding operating principle.

Longwood University President Patti Cormier introduced the institution's "Citizen Leader for the Common Good" that now permeates the Farmville, Virginia, campus. A cornerstone of the initiative was a sustained change agenda to ensure that classroom experiences "challenge the theoretical against the practical." One result was that academic and student affairs redoubled their collaborative efforts. Several structural links bridge the usual organizational boundaries between academics and student affairs. For example, the vice president of student affairs reports directly to the provost and serves on the tenure committee, ensuring that out-of-class experiences of students are represented by student affairs during meetings of the academic deans. This connection, in turn, has resulted in a higher degree of faculty involvement in student affairs programs.

Shared governance is a point of pride at Kansas, one reason that collaboration and cooperation flourish there. For example, a faculty member is always the president of the 50-member University Council; the vice president—always a student—runs meetings when the faculty chair is absent. About three-fifths of the Writing Center tutors are undergrads and the credit-bearing "Tutoring and Teaching Writing" course has legitimized peer tutoring as a vehicle for sharing responsibility for student learning.

Recommendations and Implications

The findings from Project DEEP suggest that public universities can heed the Kellogg Commission's clarion call and "put student learning first." This section offers a series of recommendations that flow from the DEEP results. These and other ideas are discussed more fully in *Student Success in College: Creating Conditions That Matter* (Kuh, Kinzie, et al., 2005) and in a series of policy and practice briefs that are targeted to various groups—campus leaders, governing board members, department chairs, and the like (NSSE, 2005a).

No one of these recommendations by itself will likely make a substantial difference in terms of student learning and success. To have a demonstrable impact on the nature and quality of student learning, it is necessary to do many different things better and more frequently so that one or more initiatives touch substantial numbers of students in meaningful ways. This approach works much better than investing vast amounts of resources, time, and energy in one large, complicated initiative (Collins, 2001; Kuh et al., 1991; Pascarella & Terenzini, 2005).

In addition, two meta principles must guide improvement efforts: alignment and sustainability. First, institutions must *align* their policies, programs, and practices with student academic preparation and needs as well as with institutional resources and personnel in ways that complement the institution's mission, values, and culture. Second, enough resources and energy must be available to *sustain* improvement efforts beyond a first or second cycle. This will require difficult choices between continuing to support productive activities and discontinuing those that are less effective or no longer viable so that new ideas can be weighed and implemented in a timely fashion. Thus some persons or groups regularly monitor the efficacy of current initiatives and review proposed new efforts to determine their complementarity and potential for enhancing student success.

Feature Student Success in the Institution's Living Mission

One of my favorite cartoons shows a herd of bison all headed in the same direction with the caption, "As if we all know where we're going . . ." The message is plain to faculty and staff: Improvement efforts often stumble because little attention is given to whether everyone is on the same page on how proposed activities complement the institution's mission and values and students' academic preparation, ability, and interests. Common language is essential, so that people with different mental maps can more readily understand how their individual actions contribute to the big picture of institutional effectiveness. With this in mind, what can campus leaders do?

Senior leaders must publicly and repeatedly champion undergraduate education. DEEP presidents made it a point to remind people frequently of their institution's aspirations and high expectations for students. Provosts vigorously advocated on behalf of the undergraduate program. In multiple settings—annual state-of-the campus reports, governing board meetings, convocations, faculty meetings, and so on—presidents and provosts underscored the institution's commitment to high-quality undergraduate education and its centrality to the institution's mission.

Balance the institution's multiple missions. Senior academic leaders at DEEP universities such as Kansas, Michigan, George Mason, and UTEP effectively explained why balancing the research and teaching missions of the institution was crucial to maintaining high-quality undergraduate programs and support services while also illustrating how the research mission enriches the undergraduate experience. They understand that striking an appropriate balance between teaching and scholarship is a perennial challenge, never completely resolved.

Emphasize Talent Development in the Institution's Operating Philosophy

A steady, unwavering focus on students and their learning must permeate the entire institution—from senior administrators to faculty, professional staff, and support personnel.

Know your students. Institutional researchers and assessment personnel frequently examine students' needs and interests and typically share the results widely with people who can use the information to make a difference. Who are today's students? Where do they come from? What are their preferred learning styles and their talents? When and where are they likely to need help? Needs assessments do not guarantee learning and student success, but it is hard to improve without collecting assessment data.

Balance academic challenge with adequate support. When talking about the institution's vision and values, presidents, academic deans, and senior faculty members remind everyone that academic excellence is not a form of educational Darwinism. They tirelessly advocate on behalf of responsive, learner-centered support services, such as peer tutoring, special labs for writing and mathematics, and-if necessary and appropriate given the audiences—intrusive academic advising. High-performing institutions also provide lots of feedback to students along with redundant early warning systems, safety nets, and other forms of assistance.

Use pedagogical approaches that complement students' learning styles. Just as not all faculty members excel at everything, neither do all students. But nearly all students have the capacity to learn almost anything a college teaches. Many more students would thrive if colleges and universities used different combinations of teaching approaches and learning conditions. For example, there is some evidence that students who are concrete learners benefit more from active and collaborative learning approaches (Schroeder, 1993; Tagg, 2003). Students who score relatively low on standardized tests appear to benefit more in terms of learning outcomes from high-quality personal relationships, a supportive campus environment, and experiences with diversity, whereas students who score especially high on these tests may benefit less from active and collaborative learning (Carini, Kuh, & Klein, 2006).

Cultivate an Ethic of Positive Restlessness

To improve, organizations must create and nurture agreement on what is worth achieving and set in motion the internal processes by which people progressively learn how to do what they need to do in order to achieve what is worthwhile (Elmore, 2000, cited in Fullan, 2001). This is true of DEEP institutions, which are characteristically never quite satisfied with their performance. Rather, they constantly look for ways to improve the student experience and to encourage innovation by faculty and staff. Such examinations are sometimes formal, such as program reviews and accreditation self-studies. Because of their large scale and structural complexity, public universities would benefit from the following in order to encourage and support improvement efforts.

Focus on a real problem. Getting people to act is more likely if the target of the effort is an issue that many believe is important. Most colleges and universities have no shortage of areas where they can improve: persistence rates, underengaged students, a lackluster first-year experience, fragmented general education offerings, tired pedagogical practices, incoherent sequencing of major field courses, insufficient opportunities for students to connect their learning to real-world issues and challenges, and capstone experiences, to name a few.

Use plain language to rally support. It is a noisy world. Everyone on campus—students, professors, and staff members—is bombarded daily with jargon-laded messages from a variety of sources about what they should attend to. A key to mobilizing interest and commitment for improvement is explaining why a particular "problem" needs to be addressed in language that everybody can understand and then consistently repeating this message in different forums over months and even years. Senior administrators at UTEP adopted the mantra "talent is everywhere, opportunity is not" to remind people—professors, staff members, and students alike—of the institution's commitment to helping all students succeed.

Use data to inform decision-making. What is measured gets attention. High-performing colleges and universities publicly report on their performance and build feedback loops into the curriculum and other educational policies and programs. Typically, DEEP schools pointed to a combination of external and internal conditions to draw attention to the need to do things differently. Fayetteville State, UTEP, and Winston-Salem State responded to changing demographics and state mandates to graduate more students. Michigan responded to calls by national reports in the 1980s to improve undergraduate education. California State University–Monterey Bay used an accreditation visit as a mobilizing event. At George Mason University, University of Michigan, and University of Kansas, retention and assessment committees brought together staff, faculty, and students from various units into working groups to ensure that policies developed were sound.

Put someone in charge. There is an old adage that when everyone is responsible for something, no one is accountable for it. Some individual or group must coordinate and monitor the status and impact of institutional student success initiatives and see that the change efforts bleed down into academic departments and front-line student support programs and services. This could be faculty or staff members with a reputation for getting things done, as was the case with the vice president for student affairs at Longwood University and the provost at the University of Kansas. Sometimes newcomers can be asked to lead the way—a new academic dean or student life officer with fresh ideas for better integrating students' in-class and out-of-class experiences. Those put in charge are not necessarily expected to bring about the changes themselves, but to monitor, prod, and support others who also are working on the issues. Other key resources can be teaching and learning center staff and members of campus policy bodies. Think about using a campaign strategy to drive data, planning, and action to the unit level in order to focus faculty and staff energy on activities that would promote student success (Hirschhorn & May, 2000).

Put Money Where It Will Make a Difference in Student Engagement

It's often said that to discover what an organization values, follow the money. At the same time, the evidence from DEEP schools suggests that *how* financial resources, faculty and staff time, and facilities are combined to create powerful, affirming learning environments matters more than the amount of resources (Gansemer-Topf, Saunders, Schuh, & Shelley, 2004; National Center for Higher Education Management Systems, 2004).

Invest in activities that contribute to student success. DEEP presidents and provosts generally made it a priority to fund promising initiatives, often with small, token amounts of money. Sometimes it was seed money to jump-start learning communities; in another instance it was a base budget allocation to augment the number of undergraduate research opportunities with faculty members. Michigan devoted millions of dollars over a decade to various activities, building them into the base budget. Miami committed significant resources to enhance the intellectual vitality on campus through funding summer research fellowships for students and creating a minority opportunity center. Discretionary dollars are in short supply at the University of Maine–Farmington, where most students are from modest means and are the first in their family to go to college. Many need to work to afford to stay in school. To encourage working on campus (which is correlated with persistence), the president created the Student Employment Initiative. Now more than half of students work on campus, performing many vital services, and the persistence rate is increasing.

Invest in teaching and learning centers. These units symbolize DEEP schools' commitment to instructional excellence. Moreover, with strong leadership and a modicum of financial support, many are hotbeds of pedagogical innovation and coordinate awards for excellent teaching and mini-grants for improving teaching and learning. Instructional support staff members also consult with professors about alternative approaches to assessing student learning and help to boost faculty morale by supporting, among other things, faculty learning communities, such as those at Miami University.

Consider a budgeting model that privileges student learning processes and outcomes. Consider adopting a process that allocates resources and rewards units that demonstrably contribute to student learning, persistence, and graduation. This may stimulate a college or university to audit annually and align the budget to determine whether resources are being used wisely to attain the institution's mission and educational purposes in ways consistent with its values and students' needs.

Feature Diversity, Inside and Outside the Classroom

Students who report more frequent experiences with diversity also participate more in other effective educational practices and benefit more in desired ways from college (Hurtado, Dey, Gurin, & Gurin, 2003; Kuh & Umbach, 2005)

Use a multifaceted, aggressive approach to diversify the student body, faculty, and staff. Institutions become more diverse in two ways. The most common is when demographics in the surrounding area change. The second is by determining what diversity means in the institutional context and intentionally recruiting and supporting students, faculty, and staff from historically underrepresented populations to address diversity goals. Rather than allowing admissions and hiring pools to emerge naturally, DEEP institutions engage in proactive activities to diversify their members. Targeted goals for recruitment have been common. These colleges and universities aggressively pursued qualified candidates from institutions known to produce scholars of color. Provosts were especially active in recruiting new faculty and staff from historically underrepresented groups by working with faculty on setting annual hiring goals and contacting key Ph.D.-producing institutions.

Ensure that diverse perspectives are represented in the curriculum. DEEP schools illustrate that developmentally powerful experiences with diversity transcend institutional type. Structural diversity, or the percentage of students from historically underserved populations present in the student body, may not be as important to desired outcomes as exposure to different ways of thinking, either in the curriculum or through interactions with students from different backgrounds (Hurtado et al., 2003; Kuh & Umbach, 2005).

Seek Out, Socialize, and Reward Competent People

As with other aspects of institutional performance, student success is ultimately about the right people doing the right things.

Align the reward system with the institutional mission, values, and priorities. Institutions have multiple ways to reward people, ranging from annual performance reviews and salary adjustments to public ceremonies that recognize excellence in teaching, research, and service. Because rewards and recognitions reinforce what is important at the institution, the reward system should be as transparent as is practical and operate in a manner consistent with what the institution through its leaders espouses to be important and valued.

Recruit faculty and staff who are committed to student learning. DEEP provosts and academic deans played a pivotal role, making certain the right people were in the hiring pool. They unapologetically and enthusiastically emphasized the importance of high-quality undergraduate education while probing the commitment of potential faculty members to this cause. Some DEEP schools such as the University of Maine–Farmington feature an extended campus visit (three days) so that both the potential hire and the institution can learn about each other in a variety of social and professional situations.

Emphasize student centeredness in faculty and staff orientation. New faculty members are formed into scholars during graduate school, where they are socialized to do some things and not others and to value certain ideas and views about the professoriate, teaching, and learning over others (Shulman, 2004). Newcomers need to be taught what the institution values and, in some instances, must be countersocialized. Such efforts must be ongoing, not relegated to only an hour during new faculty orientation. Newcomers at Kansas hear plainly from senior faculty that they will occasionally be asked to set aside personal priorities for the good of the campus, such as when general education requirements were revised.

Encourage Collaboration Across Functional Lines and Between the Campus and Community

High-performing organizations are marked by partnerships, cross-functional collaborations, and responsive units—what some authors call “loose-tight” organizational properties (Birnbaum, 1988; Peters & Waterman, 2004; Senge et al., 1999).

Encourage and reward cross-functional activities focused on student success. Faculty collaboration was a key ingredient at DEEP schools, especially with regard to curriculum revision. Innovations typically crossed the traditional organization boundaries, such as the collaborations between academic and student affairs on learning communities at UTEP, early-alert programs at FSU, and first-year initiatives at Miami. Moreover, they often spread horizontally to different areas, which further increased the chances that many students would be touched by the effort. Achieving this level of “spread,” the degree to which a good idea is adopted by different elements of an organization (Coburn, 2003), is essential to sustainability. For example, efforts aimed at enhancing undergraduate education at the University of Michigan involved administrative leaders in the president’s and provost’s office, and was championed by the board of regents, the division of student affairs, faculty members, and students. Moreover, the commitment to improving undergraduate programs became embedded in strategic planning activities and, subsequently, policy decisions.

Validate and link like-minded efforts. Most campuses have one or more initiatives under way that can be strengthened by weaving into them more frequent use of the effective educational practices represented on NSSE. Consider sharing student engagement data and the research undergirding effective educational practices with colleagues involved in programs such as the following:

- AASCU American Democracy Project
- AAC&U Greater Expectations activities
- General education reform task force
- Carnegie Campus Clusters/SOTL/CASTL
- Service-learning/Campus Compact programs
- Accreditation and reaffirmation steering committees
- Internationalization and diversity efforts
- Projects undertaken as part of Building Engagement and Attainment of Minority Students (BEAMS)

Tighten the philosophical and operational linkages between academic and student affairs. At DEEP schools, the fundamental mission of student affairs is to support the institution's academic mission. Unlike at many colleges and universities, there was no debate or confusion about this. A holistic philosophy of talent development permeated the campus, similar to the student development philosophy championed by student affairs professional associations. Student affairs professionals recognize their primary obligation is to support the institution's academic mission and view themselves as full partners in the enterprise, team-teaching with faculty members, participating in campus governance, and managing enriching educational opportunities for students such as peer tutoring and mentoring, first-year seminars, and learning communities. This philosophical commitment enables student and academic affairs to work together in such key areas as advising and career services as well as some curricular innovations.

Harness the expertise of other resources. Many librarians know a good deal about how students spend their time, what they think and talk about, and how they feel, yet they are an underused educational resource. Librarians at some DEEP schools contribute to first-year seminars and orientation to college courses, academic advising, student-faculty research activities, and capstone seminars. Information technology personnel play similar roles. High-performing institutions recognize and put to good use the talents of these and other members of the campus community.

Partner with the local community. DEEP colleges are well connected with their local communities. Advisory boards guide the development of internship opportunities, fundraising projects, reciprocal library programs, and community service and volunteer efforts by students, staff, and occasionally presidents and provosts. Among the longstanding, formal campus-community partnerships are the Century Club at George Mason and similar initiatives at Kansas. External affairs staff can help identify and coordinate such opportunities and point to community needs that campus resources can meet in mutually beneficial ways.

Lay Out Paths to Student Success

Students will be better prepared to manage successfully the many challenges that college presents if beforehand they have an idea of what to expect and when and how to deal with these issues. It is advisable to provide some of this information to students even before they start classes and then provide additional information, advice, and guidance at key points after they enroll, especially during the first weeks and months of college.

Draw a map for student success. What does being a successful student look like on your campus? Among the exemplars in this regard are Miami's Choice Matters initiative, Fayetteville State's University College, and California State University–Monterey Bay's Individualized Learning Plan that students develop in the transition course, update at various points in their studies, and review formally in a major-specific ProSeminar during their junior year. Michigan provides incoming students with a compact disc that describes to students how they can get involved with faculty on research projects and implores them to take the initiative in order to see faculty members outside of class.

Front-load resources to smooth the transition. DEEP schools recognized that newcomers need considerable structure and support to establish themselves academically and socially and to learn how to take advantage of the institution's resources for learning. For this reason, academic advising was a high priority. Preceptors, peer mentoring, and tutoring programs were common, with student affairs generally providing the space and infrastructure for such services and faculty members selecting and supervising peer mentors.

Teach newcomers about the campus culture. DEEP colleges recognize that beginning college students need affirmation, encouragement, and support as well as information about what to do to succeed. They make special efforts during summer orientation and registration, fall welcome week, and events throughout the early weeks of college to teach newcomers about campus traditions and rituals and provide other information about "how we do things here and what things really mean." A key aspect of this preparation is becoming familiar with the institution's distinctive vocabulary, or "terms of endearment" (Kuh et al., 1991) sometimes expressed as slang, abbreviations, and other shorthand forms. At many schools, this information and other socialization activities are often introduced during a college transition course tailored to meet the unique needs of the students on campus.

If an activity or experience is important to student success, consider requiring it. Strong-performing institutions typically have in place many high-quality programs and practices. Moreover, they make certain that one or more initiatives touch substantial numbers of students in meaningful ways, especially those students known to be at risk of leaving school prematurely. In some instances, when an activity is empirically demonstrated to have desired effects, it is required in some form for all or large numbers of students. New students at Winston-Salem must take an adjustment to college course emphasizing self-evaluation of their abilities and study skills. All undergraduates at Miami complete a capstone seminar. These are examples of the kinds of educationally effective activities that high-performing colleges and universities intentionally thread into the undergraduate experience in order to reach large numbers of their students.

Develop interventions for underengaged students. Focusing on students who are already engaged at relatively high levels—for example, those who are in the upper third of the engagement distribution—will probably produce only marginal differences in overall institutional performance. This is not to say such students should be ignored or that they would not reap some benefit. With limited time and resources, it may make sense for many schools to target interventions toward students who are in the lower third of the engagement distribution (Kuh, 2003; NSSE, 2003). This selection cannot simply be done by student category (younger and older, full-time, and part-time), because this assumes that students in these groups are more alike than they actually are (Kuh, 2003). Both the Beginning College Student Survey of Student Engagement and College Student Expectations Questionnaire are designed to measure what students expect to do during college. These tools can be used in combination with NSSE to determine whether students' expectations are reasonable, given the institution's mission and aspirations for student learning. They can also identify areas where the institution might address to raise or otherwise modify student expectations and experiences in educationally purposeful ways

(Kuh, Gonyea, & Williams, 2005; Miller, Kuh, Paine, & Associates, 2006).

Focus on Culture Sooner Rather Than Later

Efforts to enhance student success often falter because too little attention is given to understanding the properties of the institution's culture that reinforce the status quo and perpetuate everyday actions (Kuh & Whitt, 1988). In many ways, all the suggestions mentioned to this point bear on culture and areas where norms, traditions, and beliefs need to be taken into account. Although it is not possible within the scope of this chapter to explicate the complexities involved, two first steps are essential.

Identify cultural properties that are obstacles to student success. Students at DEEP schools were advantaged because over time their school had created a culture where the norm is shared responsibility for student learning, governance, and a variety of other complementary processes. Cultivating such cultures demands focused leadership over an extended period of time and periodic systematic review of policies and practices; this would test prevailing assumptions about students' aspirations, motivations, and preferred learning styles, and the teaching approaches and institutional practices that contribute to desired outcomes. We have developed a self-guided template for this purpose, the *Inventory for Student Engagement and Success* (Kuh, Kinzie, et al., 2005).

Increase and enlist the participation of cultural practitioners in the change effort. Most people who work at a college or university sooner or later become culturally competent. That is, they learn how to get along, what words mean when used in different contexts, what's valued and what isn't, what acceptable behavior is, and so forth. But relatively few people become astute cultural practitioners, able to analyze the influence of norms, tacit beliefs, and other cultural properties to determine what needs to be addressed to effect change. To cultivate an ethic of positive restlessness that values student success, it is essential to address aspects of institutional culture including whether reward systems and the criteria for distributing resources will encourage or discourage people to work toward desired ends. That is, do these and other institutional policies and practices acknowledge student engagement, achievement, and success in a meaningful way?

A Final Word

In *Good to Great*, Jim Collins (2001) concludes that "the good-to-great transformations never happened in one fell swoop. There was no single defining action, no grand program, no one killer innovation, no solitary lucky break, no miracle moment" (p.186). So it will be to reculture public universities to be student centered.

The challenges are formidable. Changing collegiate cultures is hard work. Good ideas are important, but persistence, effort, and a willingness to stay the course are needed to bring them to fruition. More than ever, we need institutional leaders who champion and reward proven teaching approaches and support experiments to enhance the learning environment in ways consistent with their school's mission, values, and aspirations. Key actors must work on one or more initiatives for an extended period of time in order to establish them, demonstrate their efficacy, and sew them into daily practice and belief systems. At the same time, professors, staff members, and even students everywhere say they are overextended. Many people at DEEP institutions were teetering on the brink of overload much of the time. At one institution, faculty described their teaching load as "crushing." Thus one of the most important questions organizationally complex public universities must answer to improve student learning is not what are we going to do next, but what should we *stop doing* now so there is time and energy to invest in promising new initiatives.

Further complicating the task are the mixed messages that policymakers and others send institutions about the relative value of research and undergraduate teaching alongside other activities such as intercollegiate athletics. The inability of states to fund higher education at previous levels suggests the most promising option to deliver on the Kellogg Commission's petition for public universities to become "great student universities" is to pursue an improvement strategy that combines clearer mission differentiation and program elimination augmented by more consistent use of effective educational practices across the board.

Among the two-score DEEP schools were several large public universities. If these extraordinary institutions can beat the odds and blend strong teaching with research productivity, others can, too. Aspiring to anything less is a recipe for mediocrity.

Author Note

This chapter is based on the book *Student Success in College: Creating Conditions That Matter* (Kuh, Kinzie, Schuh, Whitt, & Associates, 2005), especially Chapters 2–7 and 14.

References

Astin, A. W. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education.* New York, NY: American Council on Education/Macmillan.

Astin, A. W. (1993). *What matters in college? Four critical years revisited.* San Francisco, CA: Jossey-Bass.

Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership.* San Francisco, CA: Jossey-Bass.

Carey, K. (2004). *A matter of degrees: Improving graduation rates in four-year colleges and universities.* Washington, DC: The Education Trust.

Carini, R. M., Kuh, G. D., & Klein, S. P. (2006, February). Student engagement and student learning: Testing the linkages. *Research in Higher Education*, *47*(1), 1–32.

Chickering, A. W. (1981). *The modern American college: Responding to the new realities of diverse students and a changing society.* San Francisco, CA: Jossey-Bass.

Chickering, A. W., & Gamson, Z. F. (1987, June). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, *39*(7), 3–7.

Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco, CA: Jossey-Bass.

Coburn, C. E. (2003, August/September). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher, 32*(6), 3–12.

Collins, J. C. (2001). *Good to Great: Why some companies make the leap . . . and others don't.* New York, NY: HarperCollins.

Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey Bass.

Gansemer-Topf, A., Saunders, K., Schuh, J. H., & Shelley, M. (2004). *A study of resource expenditures and allocation at DEEP colleges and universities: Is spending related to student engagement?* Ames, IA: Iowa State University, Educational Leadership and Policy Studies.

Gruenwald, D. A. (2003, Fall). Foundations of place: A multidisciplinary framework for place-conscious education. *American Educational Research Journal, 40*(3), 619–654.

Hirschhorn, L., & May, L. (2000, May/June). The campaign approach to change: Targeting the university's scarcest resources. *Change 32*(3), 30–37.

Hurtado, S., Dey, E. L., Gurin, P. Y., & Gurin, G. (2003). College environments, diversity, and student learning. In J. C. Smart (Ed.), *Higher* *education: Handbook of theory and research* (Vol. XVIII, pp. 145–189). Dordrecht, Netherlands: Kluwer.

Johnstone, D. B. (2005). Financing higher education: Who should pay? In P. G. Altbach, R. O. Berdahl, & P. J. Gumport (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (2nd ed., pp. 369–392). Baltimore, MD: Johns Hopkins University Press.

Kellogg Commission on the Future of State and Land-Grant Universities. (2000). *Returning to our roots: Toward a coherent campus culture.* Washington, DC: National Association of State Universities and Land-Grant Colleges.

Kuh, G. D. (2001). College students today: Why we can't leave serendipity to chance. In P. G. Altbach, P. J. Gumport, & D. B. Johnstone (Eds.), *In defense of American higher educatio*n (pp. 277–302). Baltimore, MD: Johns Hopkins University Press.

Kuh, G. D. (2003, March/April). What we're learning about student engagement from NSSE. *Change, 35*(2), 24–32.

Kuh, G. D., Gonyea, R. M., & Williams, J. M. (2005). What students expect from college and what they get. In T. E. Miller, B. E. Bender, J. H. Schuh & Associates, *Promoting reasonable expectations: Aligning student and institutional views of the college experience* (pp. 34–64). San Francisco, CA: Jossey-Bass.

Kuh, G. D., & Hu, S. (2001). Learning productivity at research universities. *Journal of Higher Education*, *72*(1), 1–28.

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005). *Assessing conditions to enhance educational effectiveness: The inventory for student engagement and success.* San Francisco, CA: Jossey-Bass.

Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J. & Associates (2005). *Student success in college: Creating conditions that matter.* San Francisco, CA: Jossey-Bass.

Kuh, G. D., Schuh, J. H., Whitt, E. J., & Associates. (1991). *Involving colleges: Successful approaches to fostering student learning and development outside the classroom.* San Francisco, CA: Jossey-Bass.

Kuh, G. D., & Umbach, P. D (2005, Winter). Experiencing diversity: What can we learn from liberal arts colleges? *Journal of Higher Education, 91*(1), 14–21.

Kuh, G. D., & Whitt, E. J. (1988). *The invisible tapestry: Culture in American colleges and universities* (ASHE-ERIC Higher Education Report, 17[1]). San Francisco, CA: Jossey-Bass.

McLeod, W. B. (2003). *Linking retention and academic performance: The freshman year initiative*. Retrieved August 25, 2006, from the Fayetteville State University, Office of the Chancellor web site: www.uncfsu.edu/chanoff/FYI01.HTM

Miller, M. T., Kuh, G. D., Paine, D., & Associates. (2006). *Taking student expectations seriously: A guide for campus applications.* Washington, DC: National Association of Student Personnel Administrators.

National Center for Higher Education Management Systems. (2004). *Do DEEP institutions spend more or differently than their peers?* Boulder, CO: Author.

National Survey of Student Engagement. (2000). *The NSSE 2000 report: National benchmarks of effective educational practice.* Bloomington, IN: Indiana University, Center for Postsecondary Research.

National Survey of Student Engagement. (2001). *Improving the college experience: National benchmarks for effective educational practice.* Bloomington, IN: Indiana University, Center for Postsecondary Research.

National Survey of Student Engagement. (2003). *Converting data into action: Expanding the boundaries of institutional improvement.* Bloomington, IN: Indiana University, Center for Postsecondary Research.

National Survey of Student Engagement. (2004). *Student engagement: Pathways to collegiate success.* Bloomington, IN: Indiana University, Center for Postsecondary Research.

National Survey of Student Engagement. (2005). *DEEP practice briefs.* Retrieved August 25, 2006, from the Indiana University, NSSE Institute web site: http://webdb.iu.edu/Nsse/?view=deep/briefs

Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research.* San Francisco, CA: Jossey-Bass.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (Vol. 2). San Francisco, CA: Jossey-Bass.

Peters, T. J., & Waterman, R. H., Jr. (2004). *In search of excellence: Lessons from America's best run companies.* New York, NY: HarperBusiness Essentials.

President's Commission on the Undergraduate Experience. (2002). *The second chapter of change: Renewing undergraduate education at the University of Michigan.* Retrieved August 25, 2006, from the University of Michigan, Office of the President web site: www.umich.edu/pres/undergrad/pdf/UndergradReportUM.pdf

Schroeder, C. C. (1993, September/October). New students: New learning styles. *Change, 25*(4), 21–26.

Senge, P. M., Kleiner, A., Roberts, C., Ross, R., Roth, G., & Smith, B. (1999). *The dance of change: The challenges of sustaining momentum in learning organizations.* New York, NY: Doubleday.

Shulman, L. S. (2004). *Teaching as community property: Essays on higher education.* San Francisco, CA: Jossey-Bass.

Tagg, J. (2003). *The learning paradigm college.* Bolton, MA: Anker.

Appendix A

Summary of the NSSE Clusters of Effective Educational Practice

Level of Academic Challenge

Challenging intellectual and creative work is central to student learning and collegiate quality. A number of questions from NSSE's instrument *The College Student Report*, correspond to three integral components of academic challenge. Several questions represent the nature and amount of assigned academic work, some reflect the complexity of cognitive tasks presented to students, and several others ask about the standards faculty members use to evaluate student performance. Specifically these questions are related to:

- Preparing for class (studying, reading, writing, rehearsing)
- Reading and writing
- Using higher-order thinking skills
- Working harder than students thought they could to meet an instructor's standards
- An institutional environment that emphasizes studying and academic work

Active and Collaborative Learning

Students learn more when they are intensely involved in their education and have opportunities to think about and apply what they are learning in different settings. And when students collaborate with others in solving problems or mastering difficult material they acquire valuable skills that prepare them to deal with the messy, unscripted problems they will encounter daily during and after college. Survey questions that contribute to this cluster include:

- Asking questions in class or contributing to class discussions
- Making class presentations
- Working with other students on projects during class
- Working with classmates outside of class to prepare class assignments

- Tutoring or teaching other students
- Participating in community-based projects as part of a regular course
- Discussing ideas from readings or classes with others

Student Interactions With Faculty Members

In general, the more contact students have with their teachers the better. Working with a professor on a research project or serving with faculty members on a college committee or community organization lets students see firsthand how experts identify and solve practical problems. Through such interactions teachers become role models, mentors, and guides for continuous, lifelong learning. Questions in this cluster include:

- Discussing grades or assignments with an instructor
- Talking about career plans with a faculty member or advisor
- Discussing ideas from readings or classes with faculty members outside of class
- Working with faculty members on activities other than coursework (committees, orientation, student-life activities, and so forth)
- Getting prompt feedback on academic performance
- Working with a faculty member on a research project

Enriching Educational Experiences

Educationally effective colleges and universities offer many different opportunities inside and outside the classroom that complement the goals of the academic program. One of the most important is exposure to diversity, from which students learn valuable things about themselves and gain an appreciation for other cultures. Technology is increasingly being used to facilitate the learning process and, when done appropriately, can increase collaboration between peers and instructors, which actively engages students in their learning. Other valuable educational experiences include internships, community service, and senior capstone courses that provide students with opportunities to synthesize, integrate, and apply their knowledge. As a result, learning is deeper, more meaningful, and ultimately more useful because what students know becomes a part of who they are. Questions from the survey representing these kinds of experiences include:

- Talking with students with different religious beliefs, political opinions, or values
- Talking with students of a different race or ethnicity
- An institutional climate that encourages contact among students from different economic, social, and racial or ethnic backgrounds

- Using electronic technology to discuss or complete assignments
- Participating in:
  - Internships or field experiences
  - Community service or volunteer work
  - Foreign language coursework
  - Study abroad
  - Independent study or self-designed major
  - Cocurricular activities
  - A culminating senior experience

Supportive Campus Environment

Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus. Survey questions contributing to this cluster describe a campus environment that:

- Helps students succeed academically
- Helps students cope with nonacademic responsibilities (work, family, etc.)
- Helps students thrive socially
- Promotes good relations between students and their peers
- Promotes good relations between students and faculty members
- Promotes good relations between students and administrative staff