

Selected Lessons from NSSE about Student Engagement

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Thank you very much for your generous introduction and for inviting to visit with you this morning. As I suspect you might infer from the introduction I have the opportunity to share my views in lots of places, but being asked to address my colleagues on my own campus is the most important invitation I could ever receive. So, thanks to the program team for inviting me, and thanks to you for your attendance this morning.

I believe I am very fortunate because I am able to study institutions of higher education and college students, something that I pursued as a graduate student, and something that I have been doing since I finished my formal education 30 years ago. This is all I have ever wanted to do, and I feel very fortunate to be in a place where my interests are consistent with the university's academic program

I have been engaged for nearly two years with a team of about 25 colleagues looking at factors and conditions that seem to make for highly quality educational experiences at 20 institutions of higher education, a project called Documenting Effective Educational Practices or DEEP. Many of these folks involved in the project are extraordinary scholars, nationally recognized experts, and others with a real passion for the undergraduate experience. Among these

investigators are Art Chickering, Darryl Smith, Adriana Kezar, Elaine El-Khawas, Elizabeth Whitt, Charles Schroeder, Barbara Cambridge to identify just a few of them. George Kuh has been our project director and he serves as the principal investigator of the project. In teams of anywhere from four to seven people we have visited institutions of higher education that have higher than predicted graduation rates as well as higher than predicted scores on the NSSE, for both first year students and seniors. Some of these institutions would be of no surprise to you---the University of Michigan, Macalaster College, Wabash College, and Evergreen State College. Others are less well known----the University of Maine at Farmington, Cal State Monterrey Bay, Ursinus College, Fayetteville State, The University of Texas-El Paso and others. We visited all these places once, wrote a lengthy report – most ran around 40 single spaced pages, went back for a return visit to check our results with insiders and interview more faculty and students, and then we produced a final report for the campuses. Now we are engaged in trying to identify themes across sites, a complex task. We anticipate having a number of reports and papers ready for release over the next two years or so. So, that's the context for my remarks today.

My plan is to divide this speech into several parts today. First, I want to spend a moment or two on how theory informs the concept of student engagement. This will not be lengthy, but I think it is important to give this activity a theoretical framework. Then, I want to spend a little bit of time on

making changes in institutions of higher education. Again, this will not be lengthy. Then what I want to do is spend the bulk of our time talking about some of the findings from our work, and trying to make the case that these might have some applicability to our circumstances here at Iowa State, and at other institution interested in enriching the undergraduate learning experience.

Using Theory to Inform Engagement

Much of the inquiry related to adding to the robustness of the student learning experience began with C. Robert Pace, now emeritus professor at UCLA and Alexander Astin, also emeritus at UCLA. Pace's work had to do with the establishment of the College Student Experiences Questionnaire (CSEQ) and Astin was a member of the team that wrote *Involvement in Learning* (1984) along with our colleague J. Herman Blake. Astin later wrote *Achieving Educational Excellence* (1985) in which he made the case for using a talent development lens to view the student higher education experience. He criticized the general approach of trying to evaluate quality in higher education as the accumulation of resources (size of budgets, volumes in the library, SAT scores of entering first year students) and instead argued that what institutions of higher education should do is to understand the students who enroll in them, and provide the very best experiences possible, ultimately using student growth and development as the measure of success. One of our respondents in the NSSE visits had a way of explaining this when she said, in effect, "We teach who comes."

Astin asserted the following, “Students learn by being involved” (p. 133). He also wrote, “The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement” (p. 136). So, when we looked at our NSSE schools, one of the things that guided our thinking was the extent to which students are engaged in their educational experiences. What we found, of course, was that the vast majority of the students were, as was manifested in NSSE scores at the institutions we visited.

About the same time Astin was writing about talent development, Vince Tinto at Syracuse was studying the factors and conditions that seemed to enhance student persistence to graduation. He found that integration, now referred to as engagement, was directly related to persistence to graduation from college. In 1998 Tinto wrote the following:

We also know that academic and social integration influence persistence in separate ways for different students and that the two interact in ways to also foster persistence. Individuals are more likely to persist when they are either academically or socially integrated and even more likely to persist when both forms of integration occur (p. 168).

Tinto added, “in most cases, academic integration seems to be the more important form of involvement” (p. 168).

One other analysis is worthy of our attention. Ernie Pascarella of the University of Iowa and Pat Terenzini of Penn State did a meta analysis of 2000+ studies of the college student experience, and they concluded the following:

Thus, the major implication of our reviews for individual campuses and their faculty and administrators is to shape the education and interpersonal experiences and settings of their campus in ways that will promote learning and achievement of the institution's educational goals and to induce students to become fully involved in those activities, to exploit those settings and opportunities to the fullest (1991, p. 648).

This we have a substantial theoretical framework that the educational experiences of students are enhanced when students are engaged actively and deeply (breadth and depth) in their educational experiences. At times our environments, programs, and experiences do not provide the breadth and depth that these researchers call for. So, let me spend a couple of moments talking a bit about how to bring about change in this direction.

Making Changes in Post Secondary Institutions

These are not easy institutions to change. They are conservative in their nature. They are decentralized, and members of the community have different goals for their institutions and, as importantly, their work. Members of the faculty, in addition to their affiliation to their institution also have allegiances to their disciplines and their colleagues at other institutions, they serve multiple publics, and their success is not always easy to measure. In this environment, then, how does change come about? Again, a few authors have promising suggestions for us.

Karl Weick introduced the concept of small wins in 1984 and this idea is still germane to us 15 years later. Let me explain what this is about:

Growing Up on Lake Michigan Story

So, if we plan to make changes in the various units we are responsible for, or plan to introduce new initiatives, it would be well to remember Weick's advice. Similar to that is the advice of Pascarella and Terenzini (1991). They indicated:

"In short, rather than seeking single large levers to pull in order to promote change on a large scale, it may well be more effective to pull more small levers more often" (p. 655).

Finally, Richard Chait, at a conference for department chairs a couple of years (2002) ago recommended that academic leaders "place small but significant bets" on initiatives that have great potential for working. Small but significant bets is an approach that makes excellent sense because this is a way to change institutions, perhaps not in a dramatic way, over time.

What Works According to NSSE?

My plan for the balance of our time together is to identify some practices that we found to be particularly attractive, and we think effective, based on our work. I should add that these various initiatives, activities and ways of thinking, do not operate in a vacuum. Rather they are complementary and reinforce each other.

Rigor. Let me start by offering a word or two about the concept of academic rigor. This was defined in different ways. Let me give you some examples:

Macalaster

University of Maine Farmington

Miami University

TESC---integration of academic disciplines

Longwood College---Personal development through in and out of class experience

The people we interviewed from these institutions asserted, correctly I think, that they offer a rigorous educational experience. Their students study different amounts of time each week, according to NSSE results, but the faculty and other educational leaders have given careful thought to what makes for a rigorous educational experience, in their institutional context, and that appears to be what happens. Simply piling on lots of additional homework is not necessarily the answer to providing a rigorous experience, but keeping students highly engaged in a variety of educational experiences, week in and week out, seems to be the key to developing a rigorous educational experience.

Challenge and Support. These institutions combined the concepts of academic challenge and support, which have been credited to the work of Nevitt Sanford, more than 40 years ago. Just being tough is not enough. At the institutions I visited, there was plenty of challenge, but at the same time support

was available, through such mechanisms and programs as writing centers, math labs, peer tutoring, and creative ways of offering programs. The academic administrator who asserted that “We teach who comes here” had this just right. This meant that she and her college did not apologize for the students who enrolled, but that the institution did everything possible to help students be successful. Not all were, of course, but given the students who enrolled, at this institution the students graduated at higher rates than was the case at peer institutions.

Classroom Experiences. We found some interesting approaches to classroom experiences that I want to share with you. In classes that were mixed by class, typically the professor taught to a high level, and support was provided for underclass students to make sure they had every opportunity to be successful.

Students held each other to high standards in small classes, so that they were well prepared for each class session. When we small classes are offered, there is no room for a student to hide. So, rather than the professor holding the students accountable, although ultimately that happens, the students held each other accountable for being prepared. I attended a senior integrated case seminar at Miami in the Business program. The class met for over an hour. The purpose was to analyze a business case from a variety of perspectives. As I recall, after randomly calling on a student to present the facts of the case, the professor said next to nothing for the next hour. He just took notes, but the

students analyzed the case. After class I asked a group of students how long they had taken to get ready for class. They indicated that they had prepared for a number of hours individually, then they worked together in a group, and that each of them held each other responsible to be ready for the case analysis.

Class Sizes. One striking example of managing class size was a plan we encountered at the University of Kansas. KU has encountered many of the same kinds of problems we have here in terms of managing enrollments while experiencing budget reductions. One of the things KU has done is to have some courses of 900 students, taught by faculty who manage to incorporate active and collaborative techniques for these large classes. The large classes allow KU to offer a number of small classes. This strategy is intentional, but the large classes are offered by faculty who excel in this environment, and students were complimentary about their experiences.

Service Learning. We encountered a number of very attractive service learning projects such as the Ginsberg Center at Michigan in our campus visits. Let me talk about two of them. At Miami University the architecture students were heavily involved in a project in Cincinnati. This project has been in process for several years and the students and their faculty adviser were particularly pleased with the results in terms of the contributions to the community, and what had been learned.

The other visit that was particularly meaningful was the service learning and volunteer efforts that are in place at Gonzaga. Most of the work on these

projects has been organized and coordinated by Gonzaga students. The mission of the University emphasizes the value of outreach projects and activities and the students took this seriously. The most obvious example of active and collaborative learning is Gonzaga's service learning initiative, which is a centerpiece of both the curriculum and cocurriculum. For example, professors infuse service learning projects into their seminars and courses. In 2003, approximately 40 professors, representing an eclectic array of academic departments, have implemented service learning pedagogy. Service learning advocates at the University expect these initiatives to expand during the next few years. On many college campuses, service learning is something students do in addition to their other curricular and co-curricular activities. For many Gonzaga student respondents, service learning is a way of life, not a co-curricular activity. They engage in these undertakings not because it "looks good on a resume," but because it is another way to put Jesuit ideals into practice. The Center for Community Action and Service Learning (CCASL) helps promote and connect students to service learning courses, and also coordinates service projects. Many upper class students serve as staff in this Center to manage the complex service learning initiatives. A unique feature of Gonzaga's service learning initiative is the varying levels of involvement for students. Participation ranges from students attending a discrete service learning event, to students working at CCASL and managing a campus-wide or Spokane service initiatives. These options, according to students, allow them to integrate service into their daily

routines. Although students do not appear to be overly fixated on careerism, service learning experiences provide students invaluable life and career experiences. Our team concluded that were it not for the efforts of the students in providing the infrastructure for these efforts, they would not have occurred.

Faculty Support of Out of Class Experiences. With only a few exceptions, faculty at the institutions we visited were very supportive of the out of class experiences of students, and they encouraged student participation in activities, clubs and other experiences than provided a link between classroom experiences and the applications of such learning in practical situations. In the case of Evergreen State College, NSSE scores on student and faculty interaction outside of the classroom were a bit lower than anticipated, so we investigated this phenomenon on our visits. What we found was that students and faculty really did not differentiate between what occurred in class and what occurred outside of the formal classroom. So, the difference seemed to be artificial to them, and it took our questions for them to realize that such differences do occur.

I should add that often faculty support of out of class experiences was tied directly to their goals and objectives in their faculty roles. Prior to coming to Michigan, students are informed about opportunities for student-faculty interaction.

- First-year student orientation emphasizes the importance of student initiative in getting to know faculty.
- Faculty model excellence in academic work.

- Early contact between faculty and students through small classes and research opportunities promotes student engagement in academics.
- Faculty members participate in special programs sponsored by student groups.
- Students and faculty join together in University-sponsored campus-wide discussions of “timely” topics, such as the nation’s response to the attacks of September 11, 2001.
- Departments sponsor field trips by small groups of faculty and students.
- Some faculty members periodically visit student study groups in order to answer questions. Faculty members know where to go because the study groups are held in designated Learning Centers on campus.
- The WISE program maintains a list of women faculty who are willing to commit time to interacting with the program’s (women) students.
- Faculty work together with students to develop campus policies.
- U-M sponsors programs to encourage students and faculty to eat meals together.
- Through the University’s Global Intercultural Experience Program, groups of 6-10 students and faculty travel together for 3-4 weeks during the summer, the trip is preceded by an intense seminar experience on campus to focus students on intercultural ideas.

A common theme at Michigan is that the richness of a student's educational experience (including the extent of student-faculty interaction outside the classroom) is contingent upon student initiative. As one student put it, Michigan provides "a very good quality of education, should you pursue it." Administrators had similar words: "The burden is on the student. You've gotta find a home," and "[The NSSE scores reflect] the students who are proactive about their education." One administrator went so far as to say, "It's easy not to be engaged" with faculty, noting that student-faculty interactions were "much more variable beyond the classroom." Attempts to inform incoming students about how to become involved with faculty are thus an important part of the recruiting process. Applicants receive a compact disc describing the University experience, including opportunities for research with faculty or other kinds of faculty interactions.

At Miami University we learned of many student experiences that provided wonderful practical applications of the formal learning. This is especially true in the Business College. Perhaps the most sophisticated example is Laws, Hall and Associates, a student-operated advertising firm that takes on clients each year and develops an advertising campaign for them. We learned of an advertising campaign that Laws, Hall had conducted in Great Britain for a client that produced wonderful student learning, and benefits for the client.

Capstone Projects. In our visits we encountered many institutions where students did capstone projects in their senior year. Sometimes this was the

development of a portfolio, sometimes this was a senior thesis, sometimes this was a senior research project. At UMF the senior capstone experience took the form of portfolios that were developed by senior education students who presented their portfolios to an audience.

At Ursinus College students in all majors are required to complete a capstone project. In some majors courses or seminars are available through which students complete their experience while others require that students complete their project as an independent researcher.

Cal State Monterey Bay has a similar approach. Projects not only represent a significant academic endeavor for students but many are infused with other values of the institution, including community service, social justice, environmental responsibility and diversity. Projects range from oral presentations to films and videos, from research presentations to online teaching and learning, and from original poetry to computer visualizations. Given CSUMB's student body, many papers reflect diversity and multicultural topics, such as "An Evaluation of the Salinas Community Food Security Collaborative Leadership Strategies," "A Celluloid History of Blacks in America," and "Counseling Mexican American High School Students."

Internships. Because of its location, 18 miles from Washington DC in Northern Virginia, George Mason University is well positioned to take advantage of the resources of the nation's capital. Mason encourages students to participate in internships, service learning and cultural and political activities in

the District. It has a special organization called The Century Club, a nonprofit organization comprised of business, professional, and governmental organizations dedicated to fostering program-related partnerships between George Mason and the metropolitan area business community. Among the activities this partnership has spawned are job and internship fairs, resume and interviewing workshops and networking opportunities.

Similar to George Mason's attractive location close to the District of Columbia, KU takes advantage of its proximate location to metropolitan Kansas City. Internships are available in Kansas City for students, as well as other places as far away as Alaska.

The point here is not that these institutions have internships. Most colleges and universities do. But, they have done a careful assessment of their location and have developed practical experiences for students that make the best use of the geographic location. In effect, then, any place can be a good place for a college, if careful thought is given to analyzing the assets of the physical place of the institution.

Faculty Availability. Now I want to move into a delicate subject, that of the availability of faculty. I don't want to distract us today and get into promotion and tenure requirements and what's the most important in terms of how faculty spend their time. What I can tell you from our visits is that students routinely reported, regardless of institutional type, that they thought that faculty were interested in them, concerned about their learning, available to work with them.

In short, students reported that they thought they mattered. This was manifested in all kinds of ways, from hanging around faculty office areas, to dropping in after class to visit with faculty, sometimes to talk about the material that had been covered in class, to other topics. How did students come to conclusion that they mattered? At UMF students talked about co-presenting papers with faculty at professional meetings in Boston, and for some students this was the first time they had left the state. Others, such as students at Evergreen, described the Friday Night with Faculty program, where faculty led talks in the residence halls or taught origami or how to play bridge. At Michigan, this takes the form of the University Mentorship Program, a mentorship program that matches four first year students with an older students and a faculty member, all of whom share the academic interests.

A variation on this theme is the use of the Undergraduate Student Research Assistant. This approach is prevalent at many of our institutions, but that are particularly noteworthy are the programs at Michigan and Miami. At Miami I sat down with a group of faculty members and students and they explained how the program was started, and how new students became involved. In effect, upper class students recruit underclass students to join research teams. Faculty reported that the students were extremely valuable partners in the research process. This struck me as a wonderful opportunity for students to get involved in very serious academic inquiry almost from the moment they set foot on campus. Michigan has a similar program, the

Undergraduate Research Opportunity Program. In the most recent reporting year, 900 students and 600 faculty members participated.

I think the important learning point from these examples is that the nature of the availability of faculty varied from institution to institution. TESC is an undergraduate teaching-oriented institution for the most part. Michigan is about as good as it gets in terms of conducting research and scholarship. But, the institutions have determined, within the bounds of their mission and the context of their place, what works in putting students in contact with faculty, so that they know that they matter, that someone cares about them, and that someone is available when things don't go as well as they hoped.

Front Loading Resources. Let me say a word or two about front loading resources. This is fancy language for putting resources into first year students. These, as you all know, are the students who are the most at risk. Some students wonder if they belong in college. Others wonder if they are the right spot. The literature indicates that they have two major concerns: Will they make it academically and will they have any friends (Kuh, Douglas, Lund & Ramin-Gyurnek, 1994)? Many of these institutions in our visits had determined that they needed to front load resources.

KU has a Freshman Summer Institute for some new students who spend four weeks on campus in June or July and actually receive four hours of credit for their work. Wofford College assigns a common reading for incoming first year students. The year of our visit, students were assigned to read Charles

Johnson's *Middle Passage* prior to their arrival on campus. Students were asked to write a short essay connecting their lives to that of the main character in the novel. Eight of the "most interesting responses" (the brochure's terms) were then published along with photos of the student authors in a glossy booklet that was distributed to all first year students. The author came to the campus, spoke at convocation, and met with the students who wrote the selected essays.

Fayetteville State has a two-semester Freshman Seminar course to assist students in their transition to College. Ursinus College has a special bridge program for students from groups historically under represented in higher education. No particular program will work everywhere. But what is clear is that thought has been given to assisting in the transition to college.

Students Teaching Students. One of the recurring themes we encountered in the way of undergraduate programs is that at many of our institutions students teach and learn from each other. At Evergreen this means that lots of students work in small groups. Sometimes this means that students tutor each other, as is the case at KU in the Writing Center where 60% of the tutors are undergraduates. At Michigan this means that students form study groups to discuss readings for class and work collaboratively on projects. At Wheaton College undergraduate teaching interns lead classroom discussions. The point is that the institutions have developed ways to take advantage of the strengths that many undergraduate students bring, and often that means that they teach each other.

Learning Communities

Given the focus of this conference, I would like to spend a moment or two talking about learning communities. Macalaster and TESC might see themselves as learning communities of the whole. Other institutions have more specific programs. I want to talk about one in particular.

At UTEP, course clustering represents students enrolled in two or more of the same courses to create a learning community. UTEP first employed course clustering to assist its science, engineering, and math (SEM) students with the transition into college. The program for entering students, Circles of Learning for Entering Students (CircLES), which pairs several courses and co-enrolls students, was designed to provide students the opportunity to make friends, form study groups, work closely with faculty and connect ideas across courses. The success of this initiative led to the creation of course clustering, or learning communities, in other academic disciplines and programs. Learning communities are now coordinated through the office of University Studies, which is the academic unit of University College. A variety of learning community models exist at UTEP including the simplest form, a first-year seminar linked with English or math, or a cluster for provisionally admitted students in the START program, to interest-specific clusters in law and education. In Fall 2003, there were more than 70 learning communities offered in science, engineering, anthropology, art, English, history, pre-law, ESOL, sociology, psychology, and math and English. The practice of clustering during

the registration process also seems to provide opportunities for active and collaborative learning. Some of the students we talked with during our first site visit indicated that clustering helped them to form friendships, which eventually led to convenient formations of study groups and other group activities. A male engineering student commented that clustering was helpful because first-year students do not know many people. He added that as students progress from their lower division to upper division classes, they recognize and interact with their “cluster” cohorts. Another male student commented how clustering helps to ease the transition from high school to college. While this can be an intimidating experience for many, clustering provides consistent and structured opportunities for students “to see each other, form study groups, go to classes together, feel better, get to work more, and study more.” A female engineering student indicated that they try to register students in the same classes to create communities that will encourage them to grow together as they progress through their undergraduate careers. She noted that even though she is taking upper division classes, she still remembers students from her lower division classes, which makes it easier to form groups because she is more comfortable with those people.

Needless to say, it is a challenge to develop a class schedule that places a primarily commuter student population into learning communities. University College staff members attribute high student interest in registering for learning communities to the orientation presentation created by students. Student

orientation leaders present a convincing skit and multimedia presentation on the value of registering for a learning community. “We rely a lot on the orientation leaders to do the recruiting, they are much more effective at convincing new students that learning communities can help make college less scary,” explained a University College administrator. Since about 90% of UTEP students attend orientation, nearly all students have some familiarity with the learning community option.

A Culture of Evidence and Creative Restlessness. Finally, in the interest of time, I’d like to conclude with some observations on aspects of the culture that we encountered on many of our visits. That is, these institutions have a culture of evidence, meaning that part of their approach to addressing issues and problems is to collect, analyze and use data. The other is that no matter how well they seem to be doing, they are not satisfied with where they are and they want to improve. Let me use two examples. Macalaster College provides a wonderful educational experience for its students. This is an environment where top notch students, very able faculty, excellent facilities and a robust endowment create an incredible experience for students. Our preliminary report was very favorable. When we sat down with one senior officer, his immediate reaction was, “We appreciate all your kind words. Now, please tell us how we can get better.” He freely admitted that we in the Upper Midwest are modest, don’t like to dwell on our achievements and are adept at changing the conversation when praise is the primary focus of the exchange. But more importantly, this is a college that ranks

in the top 25 in the country by most accounts, but it is not content to rest on its laurels. Instead, it is serious about improving.

The University of Michigan is a top notch research university. Few would argue with that assertion. But Michigan is constantly looking for ways to improve. We characterized what we found at Michigan as a continuous quest for excellence as reflected by high achieving faculty, a unique intensity of effort, a strong sense of independence and freedom, and tremendous loyalty.

Conclusion

I do not want to create the impression that these institutions are perfect or without flaws. Of course they do not do everything perfectly. Their members would be among the first to admit that they are works in progress. But, I think these examples and illustrations provide an excellent point of departure or conversation starters as we consider various ways to improve the undergraduate experience for our students. We can learn from them, without question.

As I mentioned at the start of my talk, being invited to visit with colleagues on one's home campus is a wonderful opportunity, one I accepted immediately. I have enjoyed having this opportunity to share some of my work with you and want to thank you so much for your kind attention this morning.

References

- Astin, A. W. (1985). *Achieving educational excellence*. San Francisco: Jossey-Bass.
- Chait, R. (2002, February 7). *The paradox of leadership*. Speech delivered at the annual conference of Academic Chairpersons. Orlando, FL.
- Kuh, G. D., Douglas, K. B., Lund, J. P., & Ramin-Gyurnek, J. (1994). *Student learning outside the classroom*. ASHE-ERIC Report Eight. Washington, DC: George Washington University, School of Education and Human Development.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students*. San Francisco: Jossey-Bass.
- Sanford, N. (1962). Developmental status of the entering freshman. In N. Sanford (Ed.), *The American college*. New York: Wiley.
- Study Group of the Conditions of Excellence in American Higher Education. (1984). *Involvement in learning: Realizing the potential of American higher education*. Washington, DC: National Institute of Education.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence serious. *The Review of Higher Education*, 21, 167-177.
- Weick, K. E. (1984). Small wins. *American Psychologist*, 39 (1), 40-49.