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- Sussman, M. (1991). *Evaluating the experience of students and faculty in enterprise: An analysis of the cohort in the 1990-91 academic year*. Prepared for LaGuardia Community College Office for Academic Affairs.
- Tarule, J. (1990). Connected and collaborative learning: Toward a theory of contextual epistemology. Paper delivered at the Colloquium on Human Development, University of Massachusetts at Amherst.
- Tinto, V., Goodsell-Love, A., & Russo, P. (1993). *Building Learning Communities for New College Students*. State College, PA: Report: National Center on Postsecondary Teaching, Learning, and Assessment, Penn State University.
- Treisman, U. (1986). A study of the mathematics performance of black students at the University of California (Doctoral dissertation, University of California, Berkeley). *Dissertation Abstracts International*, 47, 1641A.
- Trimbur, J. (1989). Consensus and difference in collaborative learning. *College English*, 51(6), 602-616.
- Vygotsky, L. S. (1962). *Thought and action* (E. Hanfmann & N. Vakar, Eds. & Trans.). Cambridge, MA: Harvard University Press.
- Wales, C., & Stager, R. A. (1978). *The guided design approach*. Englewood Cliffs, NJ: Educational Technology Publications, Instructional Design Library.
- Wiener, H. S. (1986). Collaborative learning in the classroom. *College English*, 48(1), 52-61.

Assessing Student Involvement in Learning

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Assessing how students benefit from postsecondary education can be done in many ways. One approach, which has received insufficient attention, is the assessment of student involvement in learning. Pascarella and Terenzini (1991), using Tinto's theory of student attrition, find that various forms of involvement have substantial effects on student retention and development. Astin's (1975) study of college dropouts concludes that virtually every significant effect of college could be related to student involvement. Yet most assessment efforts have been directed toward cognitive outcomes or toward indicators of student satisfaction. Focusing on student involvement in order to determine the impact of the college experience rests on the simple notion that students learn what they are involved in.

Student involvement refers to the intellectual and interpersonal activities that students choose to engage in as a part of their higher education experience. In the classroom, involvement has been linked to the concept of active learning, defined by Bonwell and Eison (1991) as "anything that involves students in doing things and thinking about what they are doing." Outside the classroom, involvement includes the variety of ways students direct their efforts in developing interpersonal and intellectual skills. It includes developing skills in such areas as study, informal discussion, time organization, establishing relationships, and academic and career planning.

What are some indicators of student involvement in learning? Highly involved students reply “often” or “very often” to items such as the following (items are taken from four scales of “Student Perceptions of Student Life,” Center for Instructional Development, 1994, Syracuse University, p. 13):

- Participated in class discussions. Met with other students to work on class-related projects or assignments. Talked with instructors regarding course-related issues. (academic involvement, in class)
- Talked informally with faculty outside of class time. Sought advice regarding what courses would be most appropriate in academic plans. (academic involvement, out of class)
- Discussed important issues with students holding viewpoints different from your own. Discussed career plans and ambitions with university staff or faculty. (personal social involvement)
- Attended speeches or presentations on topics of interest to you. Helped to organize an activity or event. (cultural social involvement)

Assessing student involvement in learning can provide information that enhances the range of interactions, events, and programs that facilitate learning. In this chapter, we refer to research literature that supports this approach, and we describe assessment practices that maintain ownership by faculty, staff, and administrators. Most of our examples come from our own institution. Syracuse University is a large, private research university that has developed an assessment agenda to help faculty and administrators decide how different programs enable student involvement in campus life.

Importance of Student Involvement in Learning

Why has the assessment of student involvement in learning received so little attention? For one thing, the concept of involve-

ment may not be well understood. From their interviews with faculty, Stark and her collaborators found that for many faculty "involvement appeared to be synonymous with listening, paying attention, or being alert rather than signifying engagement with the material being learned" (1988, p. 95). This limited understanding of involvement persists in the face of national studies such as *Involvement in Learning* (Study Group, 1984), which encouraged faculty to use more active modes of learning. Other studies, including *Campus Life: In Search of Community* (Boyer, 1990), suggest that we need to view student life from the perspective of involvement in community. They recommend that we strengthen community through involving all members of the community: counselors, chaplains, residence hall staff, deans, and "faculty who care about students and engage them in active learning" (p. 12). This vision of community requires that faculty and staff encourage students to be creative and get involved in learning across all facets of campus life.

Assessing student involvement can draw together faculty and administrators across a range of academic and nonacademic programs. Too often, faculty focus almost solely on academic performance and ignore student interpersonal needs and the ways that interpersonal needs connect to intellectual and academic needs. Student affairs administrators, on the other hand, attempt to strengthen the quality of out-of-class life and fail to create opportunities for communicating with faculty about how students perform academically.

Collaborative and cooperative learning actively involve students in improving their learning and building their community membership. Collaborative learning recognizes that both academic and interpersonal involvement are essential to student learning and development. Tinto (1993) cites many examples of institutions where students with common academic interests enroll in a common set of courses as a means of "encouraging the formation of self-sustaining student communities that have an academic focus" (Tinto, 1993, p. 168).

Focusing on student involvement helps us understand how students spend their time. Recent reports indicate that the time students spend in study is insufficient. In a national survey of incoming freshmen conducted in 1989 (cited in Erickson and Strommer, 1991), less than half of the students said they had spent six or more hours per week studying and doing homework during the previous year in high school, and only 10 percent reported they frequently did extra reading or work for a course. Most freshmen indicate they study about two hours a night or about one hour outside class for each hour in class (Erickson and Strommer, 1991). These authors suggest that "If we want students to study more on a more regular schedule and in more productive ways, we need to reconsider the assignments we give and create others more suited to those goals" (p. 123).

Thus at our university, we encourage the following kinds of student involvement:

- Finding an appropriate balance between academic and social activities
- Spending a sufficient amount of time in study, and managing time effectively
- Attending class regularly
- Approaching learning actively (particularly for lecture classes) while in class and while studying
- Working with peers in study and other learning activities

Students tell us that they appreciate faculty and peers who stimulate involvement. (Most of the following comments come from focus-group discussions by first-year students.)

I had COM 107 (Introduction to Communications) last semester and we handed [the professor] a card with all our information on

it, and the next day he knew all our names. It was like the greatest feeling! He took time out and made an effort to learn our names. At times, it's going to be impossible for a professor to have a smaller class, but when he takes time out to make sure that you know that he cares that you are individuals, that shows a lot of effort on his part.

Our Freshman Forum advisor was great. It has been really wonderful to have a faculty member you could go one-on-one with. And I'll have him for the next four years or so, and that makes it a little more personal.

We went to GOLD (a student leadership program) retreat last weekend and it was one of the best weekends I've had since I've been here. It was great! I know so many more people, and we've gotten very close. It was definitely worthwhile, and the camp was very nice.

There's a lot of influence from your peers and friends. There's people who don't want to study, and you'll see their friends come out and scream at them to get to work. I have friends who will wake their friends to make sure they get to class. I think they're afraid of their friends not doing well and failing out. I've been yelled at a couple of times.

I went to an all-black high school and lived in a predominantly black neighborhood. To me coming here was a big thing because I was exposed to all these different people from different places. Listening to all these different things, I think it's a good thing for me. I get the feeling that a lot of people coming here don't feel the same way.

The last person quoted above indicated during a follow-up conversation that "there's just not much for us multicultural blacks to do." She has gotten to know students in both the African-American community and the European-American community,

but she has some difficulty crossing easily between the two groups. Students in each group have their own insecurities that prevent them from mixing as much as she does. This woman left the university because she could not resolve how to interact and learn from a range of people and still receive approval and acceptance from her African-American friends.

These comments point to the breadth of involvements that students need. They also suggest that involvement in learning within the classroom needs to be complemented with nonclassroom experiences that enable students to develop intellectually and interpersonally during their college years.

Research on student motivation offers other reasons to focus on student involvement. McKeachie (1994) cites research showing that students who fear failure improve their performance when they can attribute their failure to lack of effort or to not setting reasonable standards rather than to lack of ability. For students who work hard yet still do not do well, he notes that attributing failure to ineffective strategies actually improves motivation for success. Pace (1983) suggests assessing "quality of effort" as the way to get at both quantitative and qualitative issues of student involvement.

Philosophers have called for a deeper understanding of participation and involvement. Parker Palmer puts it this way: "Knowing and learning are communal acts. They require many eyes and ears, many observations and experiences. They require a continual cycle of discussion, disagreement, and consensus over what has been seen and what it all means" (1987, p. 24).

Finally, focusing on student involvement can suggest changes and improvements that are nonthreatening. They do not threaten faculty because the selection of content of academic courses and curriculum is left in the hands of individual faculty. They do not threaten administrators because responsibility for nonacademic programs is left with administrators who have the appropriate expertise. Instead, all are asked to work together to determine if their efforts truly engage students in learning.

Conceptual Base for Student Involvement in Learning

Our conceptual base for assessing student involvement in learning rests on three major sources: Tinto's (1987, 1993) theory of student attrition from college, Astin's (1985) theory of student involvement, and Pace's (1990) definitions and measures of the "quality of student effort."

Retention as an Indicator of Involvement

Vincent Tinto's (1987, 1993) theory of student attrition describes a longitudinal model in which students' preentry attributes (background, skills, abilities, and prior education) and their initial academic goals and commitments to a given institution interact with campus experiences in the academic and social systems. Each student's experiences, as indicated by their academic and social involvements, continually modify their goals and institutional commitments.

Integrative academic and social experiences reinforce retention at an institution. Astin (1985) and Pascarella and Terenzini (1991), using Tinto's theory, find that various forms of involvement have substantial effects on student retention and development. Astin's (1975) study of college dropouts concludes that virtually every significant effect of college could be related to student involvement.

Astin's Theory of Student Involvement

As Pascarella and Terenzini (1991) describe it, Alexander Astin proposed one of the earliest college impact models. They summarize Astin's description of a theory of student involvement that contains "elements of the Freudian notion of cathexis (the investment of psychological energy), as well [as] the learning theory concept of 'time-on-task'" (Pascarella and Terenzini, 1991, p. 50).

Astin (1975) describes an input-environment-outcome model. Input variables include family background, skills and abilities, prior

schooling, and academic goals (Tinto's preentry attributes). Environment variables include institutional experiences and what he calls "intermediate outcomes" of student involvement with these institutional experiences. (Intermediate outcomes include aspects of involvement that can be known only after a student has been in college for some time.) Outcome variables include grades, tests of cognitive and affective knowledge and skills, and retention.

Astin finds that learning, academic performance, and retention are positively associated with student involvement. Astin (1993) categorizes measures of student involvement into five areas: academic involvement, involvement with faculty, involvement with peers, involvement in work, and other forms of involvement. Academic involvement, for example, includes items about time allocation, courses taken, specific learning experiences, and specific pedagogical experiences. Involvement with faculty, on the other hand, includes items such as "being a guest in a professor's home, working on a professor's research project, assisting faculty in teaching a class, hours per week spent talking with faculty outside of class" (p. 383).

Although Pascarella and Terenzini (1991) question whether Astin's propositions truly constitute a theory, they agree that the institutional environment offers students opportunities for encounters with ideas and people, and students must actively seek these opportunities to become involved. The "individual plays a central role in determining the extent and nature of growth according to the quality of effort or involvement with the resources provided by the institution" (p. 51).

Astin (1978) suggests that conceiving student involvement as an intermediate outcome invites some causal questions for future research, such as, "Does interacting with faculty result in greater satisfaction with faculty, or are more satisfied students more likely to interact?" (p. 187). However, he points out that "the fact that these associations [between involvement and satisfaction] remain even after entering-freshmen characteristics are controlled suggests

strongly that the student's general satisfaction with the undergraduate experience can be enhanced by more direct involvement in various aspects of the college environment" (p. 187).

Judging the Quality of the Educational Process

Robert Pace argues that in thinking about the quality of programs we should give due attention to how students experience education. In measuring the quality of the experience, he postulates that "all learning and development requires an investment of time and effort by the student. Time is a frequency dimension. Effort is a quality dimension in the sense that some educational processes require more effort than others. It's fairly easy to look up a given reference in the library. It's more difficult, takes more effort, to develop a set of references for a report. . . . The activity requiring the greater effort is also potentially more educative" (Pace, 1984, p. 5). Pace suggests that having a high-quality experience depends on investing high-quality effort. Pace's conceptualization provides a vehicle for determining both how colleges and faculty are accountable for programs and resources and for how students are accountable for the "amount, scope, and quality of effort they invest in their own learning and development" (p. 6).

Pace (1983) built a framework for measuring students' "quality of effort" in various aspects of campus life using the College Student Experiences Questionnaire. Each scale contains approximately ten activities where students' responses ("never," "occasionally," "often," or "very often") reflect both frequency and quality of involvements in campus life. These scales include use of college facilities and use of opportunities for personal experiences and group association. The college facilities scales are: course learning, library, activities related to science-technology, cultural facilities, student union, athletic and recreation facilities, and dormitory or fraternity-sorority. The scales for personal experiences and group association are: experiences with faculty, experiences in writing,

clubs and organizations, personal experiences, student acquaintances, topics of conversation, and information in conversations. Each scale contains from six to ten items.

Pace (1990) argues that a dimension of quality underlies each set of activities. "Activities that reflect greater effort are ones that are more likely to have a greater influence on student learning and development" (p. 18). For example, the course-learning scale contains a range of questions, from those representing lower quality of effort such as "taking notes and underlining" to questions representing such higher-level cognitive activities as efforts "to explain and organize."

Assessment Programs Focusing on Student Involvement

When we follow Tinto, Astin, and Pace's conceptualizations, and when we use measures of student involvement or "quality of student effort," we are able to extend the range of assessment goals and activities used to judge the quality of educational processes and outcomes.

From an assessment point of view, Pace's way of defining and measuring student involvement is attractive. It produces scale scores for various areas of student involvement that can vary from one time to another and from one group to another. This increases the likelihood of finding how different academic and nonacademic programs or specific student characteristics influence student involvement. For example, in one research study Pace (1990) finds selective liberal arts colleges superior to other types of institutions (research, doctoral, general liberal arts, and comprehensive colleges and universities) on a number of involvement scales.

A much shorter questionnaire designed at our institution, the "Student Perceptions of Student Life Survey," used Pace's conceptualization. We found differences on four scales among various student populations and various academic and nonacademic programs. The questionnaire includes a range of involvement questions in

four scales: academic involvement, in class; academic involvement, out of class; personal-social involvement; and cultural-social involvement. (The response scale is "never," "occasionally," "often," and "very often.")

Student responses to these items and to open-ended questions reveal strengths and weaknesses in programs. For example, African-American students showed higher levels of involvement than other groups of students in a number of academic and social areas. Although they represent only about 10 percent of the total population, African Americans have a very active subcommunity, and they take advantage of an academic support structure that apparently serves them well.

As an indicator of course and program effectiveness, student involvement appears to be less constrained than other forms of outcomes assessment. Precise measures of student learning and satisfaction are difficult to develop. Faculty are often dissatisfied with standardized achievement tests that assess what they believe to be the most important learning outcomes of their courses and curricula. While the strongest achievement measures look at general education knowledge and at skills such as writing and critical thinking, these measures are too far removed from what faculty are actually teaching. Measures of student satisfaction often show very little variation over time despite programmatic changes. Satisfaction measures may be significantly influenced by extraneous matters, such as coverage of issues in the student newspaper or how peers describe their reactions to various experiences, rather than by individual students' respective summations of the quality of their experiences. Measures of involvement, on the other hand, have strong content validity and are easy to administer and score.

Assessment of Student Involvement at the Course Level

Examining student involvement at the course level is a form of "classroom assessment." Classroom assessment consists of small-scale

assessments conducted continuously within courses to monitor student progress in class (Angelo and Cross, 1993). Classroom assessment techniques are not tests; they are intended to determine to what degree and in what manner students are acquiring knowledge or skills. Classroom assessments look at the intensity of student involvement and at the process of learning in order to provide feedback to teachers and students, rather than looking at particular content that has already been learned by students. In this way, assessment is formative rather than summative. Several examples of course-level assessments follow.

Course-Specific Surveys. John Olmsted of California State University at Fullerton uses in-class questionnaires to engage students more directly and actively in the learning process (see Angelo and Cross, 1993). The questionnaires ask how students intend to be involved in the course: how they will use office visits with him, what strategies they have in mind for the study of chemistry, what strategies they will employ to use tests as learning experiences, and what self-analysis they will undergo to determine which concepts were difficult for them and how they overcame those difficulties as they completed homework assignments. Olmsted concludes that this process turns students into active learners who consider how creative solutions might be employed to improve their learning.

Surveys Based on Seven Principles of Good Practice. Many faculty believe that most students define learning as going to class, taking notes, and reproducing newly acquired insights on a test. To help students broaden their perspectives, several faculty at Syracuse University have adapted *Seven Principles of Good Practice in Undergraduate Education* (Chickering and Gamson, 1991).

A professor of public affairs worked with our evaluation and research office to develop an inventory through which students report their involvement in the seven areas defined by the principles: student-faculty contact, cooperation among students, active

learning, prompt feedback, time-on-task, high expectations, and respect for diverse talents and ways of learning.

Here are examples of items:

- I list questions that I have from class or readings and follow them up by consulting with peers, my professor, or on my own.
- I identify areas where I am weak and seek extra help to strengthen them.
- I try to get clear information about my instructor's goals.

The inventory is intended to help students see how their involvement enables them to take responsibility for their education and to use faculty and other students as sources of support for their learning.

The professor of public affairs then illustrated the extent of involvement this activity encourages:

A student made an appointment to tell me that he was disappointed in the decision to grade only certain exercises in a paper instead of the whole paper. He told me he did not care about the grade but only the principle of the matter. I think from his demeanor that he was sincere.

Research by Oberst (1994) indicates that these principles, particularly the time-on-task principle, are associated with better academic performance.

Student Journals. Faculty in the School of Nursing at Syracuse use student journals on the premise that students' interpersonal skills are enhanced by the reflective self-assessment that journals require. A number of courses in the college require students to write in their journals at least weekly, although faculty report that most do so more frequently. Students are encouraged to analyze personal

experiences and to express feelings that cause them to feel a part of the nursing profession or estranged from it. Faculty view the journals as windows into students' lives through which they can determine the level of physical and emotional investment each student is willing to make in the program. By understanding this level of involvement, faculty can better assist students to reach their personal and academic goals. Journals are consistent with Pace's (1990) "quality of effort" concept, in which he suggests that activities reflecting greater effort from students are more likely to have a greater influence on learning and development. In universitywide surveys, nursing students consistently demonstrate comparatively higher levels not only of academic performance but also of satisfaction, sense of community, and involvement.

Midsemester Course Evaluations. Students in various courses are asked to evaluate at midsemester the utility and effectiveness of the course and instructor. These formative evaluations give students the opportunity to elaborate on their classroom experiences and to suggest ideas that they feel would enhance their involvement, as well as the involvement of future students in the course.

In a focus group, one communications instructor spoke of how she persuaded students to critique the class and think about what was most helpful to their learning. She listed ideas the students had suggested on a short survey. Then they discussed how they could work together to make the class better. "When we talked about organizing our thoughts and putting them down on paper," she reported, "one student would say, 'I spend a couple of hours writing a speech and I don't think it is a problem,' but another student would say, 'I spent eight hours writing a speech and I think it is a problem.'" In that way, the dialogue turned to levels of student involvement in their learning.

Fieldwork Experiences. A junior-year theory course in dietetics is being improved by incorporating fieldwork experiences of seniors

who completed internships after taking the theory course. Four team leaders who are seniors receive an honorarium for collecting, synthesizing, and processing information from the fieldwork experiences of other seniors. To strengthen the integration of theory and practice in the course, team leaders work with course professors to revise textbook readings, assignments, lecture content, and exam questions. They also design questionnaires to obtain feedback from current dietetics class members. This creates a more student-responsive curriculum and builds tools that give instructors frequent feedback, thereby increasing students' involvement in the course. Seniors, both the team leaders and other seniors who are asked to examine the impact of their fieldwork experiences, get more invested in their curriculum. These seniors also model how students in the junior dietetics course might get more involved in their curriculum through student-designed classroom assessment.

Assessment of Student Involvement at the Academic Program Level

Assessment should also be carried out at the program and department levels (Tinto, 1993). At these levels, assessments enable faculty to inquire about the net effect of courses that make up programs or departments. When viewed as an intermediate outcome, student involvement provides a common metric for comparing the effects of individual courses and sets of courses.

Cumulative Student Portfolios. Sociology majors and minors develop a cumulative portfolio of their analytic and research accomplishments though the duration of program course work. The project is being piloted with seniors and will be the foundation of a longitudinal study to investigate the impact of the student portfolio on course development, student skills, and advising and graduate-placement processes within the college. As part of the portfolio, students write analytically about the involvements they

have had and about how they are developing as a result. Thus both students and faculty can judge which involvements appear to be most valuable in contributing to students' learning.

Diagnostic Testing. Diagnostic tests for foreign languages and writing place students into appropriate courses. A number of other programs, including economics, retailing, and mathematics, use diagnostic testing to determine whether students have the prerequisite skills to complete a course. Students judged incapable are offered a "quick tune-up" of remedial material to refresh their skills, or they are referred to prerequisite courses. Diagnostic testing and remediation focuses student involvement at the level most appropriate to their skills, producing a higher level of engagement in their learning. It also saves valuable class time from being diverted to reviews of prerequisites.

Midsemester Progress Reports. Midsemester progress reports provide first-year students with feedback about their learning and classroom participation. Students get a midterm picture of how instructors perceive their progress in four categories, each of which is critical to a good learning experience and indicative of personal involvement: attendance, participation, work submitted, and quizzes and exams. Instructors also assign a midsemester grade, if they choose.

The midsemester progress report is a valuable motivator for students to become more directed in their involvement and committed to their academic work. These reports also enable academic advisors to work with students who are having difficulty before it is too late. Students find the reports valuable. One said, "I'm glad there were categories, because it's important to know what areas you need to improve on in class instead of just an overall grade." Another appreciated the timeliness of the feedback: "I was used to progress reports in high school, and as a first-year student I think

this has made the transition smoother. It's nice to know grades before it's too late to change them."

Assessment of Student Involvement at the Institution Level

Faculty often hear students complain that their lives out of class interfere with their academic lives. Students who live in residence halls sometimes say they cannot study because of noise levels on their floors or general noise levels. Students who live in fraternity or sorority houses say they cannot study because of social gatherings or because of obligations during the rush period. Students may have problems with roommates, friends, and parents impeding their academic endeavors.

Assessing student involvement across programs and departments gives faculty ways to determine the impact of students' out-of-class life on their learning and personal development. These assessments are highly varied:

- Attrition and retention reports. Every year we look at cohort and fall-to-fall statistics for student retention at the institution level and at the school or college level, as well as by gender and ethnicity.
- First-year-student focus groups. Groups of eight to twelve students are conducted at least three times a year. They provide information about student involvement in areas such as "making academic and social connections," "being shaped by your campus experience," and "the influence of Greek life on academic involvement."
- Student Perceptions of Student Life Survey. This survey is sent annually to a 10 percent sample of all undergraduate students and to a 20–50 percent sample of underrepresented groups. Results document involvement, satisfaction, and commitment to various components of campus life. The survey is

administered again in April to the same students to examine changes in responses over the first year.

- Leavers study. Students who left the university after their first semester are interviewed to determine their reasons for leaving.
- Transfer study. Students who transfer from the institution are interviewed to determine their reasons for transferring.
- Graduate student perceptions of student life. This survey is conducted biannually.
- Quality of life in the residence hall. Students living in residence halls are surveyed annually.
- Additional studies focus on nonacademic activities such as Greek life, recreation programs, student orientation, and other special events.

What Assessment of Out-of-Class Life Tells Us. Such studies as those listed above have produced numerous suggestions regarding the first-year experience, many of which encourage opportunities for greater student involvement. A follow-up study of the Student Perceptions of Student Life Survey (Tinto and Froh, 1992) links student involvement to persistence. These assessments yield findings about the sense of community on campus, about commitment to teaching and learning, and about issues of gender and ethnicity.

Regarding the sense of community on campus:

- New students feel a strong need to establish relationships with peers, particularly at the beginning of their first year. Students stressed how important such relationships are to their succeeding academically and socially.
- Transfer students need more help in getting connected to the campus culture. They feel somewhat out of place in orientation efforts designed primarily for new first-year students.

- New students are idealistic about interacting with students from different cultures and backgrounds; they often find such interactions more difficult than they anticipated.

Faculty can respond to some of these issues by encouraging interaction among students within their classrooms on course-related topics.

Regarding commitment to teaching and learning:

- Students said that, on average, faculty need to work harder at making lectures more interesting and involving. Students recognize they need to contribute more of themselves by attending all classes and participating more actively.
- Even more important than having smaller classes is faculty showing that they want to get to know students as individuals. Students want more contact with faculty.
- Students in fraternities and sororities want faculty to recognize that they regard academics as important. They also realize that they need to facilitate more interaction between faculty and the members of their organizations.
- First-year students want more help in organizing their time.
- Students would like more involvement in the process of campus decision making.

Thus the campus community needs to find more ways for students and faculty to establish and strengthen informal relationships.

Regarding issues of gender and ethnicity:

- Women have gotten more involved in campus programs and have sought more help in improving their academic performance than men, except for in-class involvement, where men and women participate equally.
- African-American students have gotten more involved in campus life and have sought more help than other ethnic

groups, except for in-class involvement, where their effort has been similar to that of European Americans.

- Asian-Pacific students have preferred to work and study on their own, but they use personal and academic support services more often than European-American students.

These findings have influenced programs and services, particularly for first-year students. To cite examples, new resources have reduced class sizes in introductory courses, first-year student seminars are being led by faculty in all colleges in order to ensure more contact with faculty early in the student's academic career, midsemester progress reports are given to all first-year students, and early alert reports in residence-hall settings indicate how students are adjusting to nonclassroom life. With regard to class size, either large classes have been reduced to sections of no more than fifty students, or more sections for recitation/discussion have been added to ensure a maximum of twenty-five students per section.

The Compact. The University Compact gets to the very essence of student involvement, where integrative academic and social experiences combine to elicit institutional commitment (Tinto, 1987). The Compact also addresses the ideas of communal learning as envisioned by Palmer (1987) and encouraged by The Carnegie Foundation report, *Campus Life: In Search of Community* (Boyer, 1990), where student learning is seen as springing from involvements of all members of the community: students, faculty, administrators, and staff. The Compact was developed by students, staff, faculty, and administrators and consists of statements that participants agree can encourage a "strong learning environment."

The Compact has four themes: (1) supporting scholarly learning, (2) promoting a culturally and socially diverse climate that supports the development of each member of the community, (3) upholding the highest ideals of personal and academic honesty, and (4) maintaining a safe and healthy environment for each member of the community. Under the theme of supporting scholarly learn-

ing, for example, a document accompanying the Compact encourages self-assessment by all members of the learning community. It asks students to examine whether they "participate as constructive and active members in their classes," and it then asks faculty members to examine whether they "involve students as active participants in their own learning through class discussion and group activities." Administrators and staff are asked to examine whether they "facilitate the pursuit of scholarship by establishing a climate and a physical environment that supports this endeavor." The companion self-assessments identify subthemes of the four general areas. Through discussion and self-assessment, members of the community can periodically examine whether their involvements are consistent with the Compact and support a learning community.

In conclusion, this chapter has presented examples of using assessment of student involvement in learning as an intermediate and easily measurable outcome. Focusing on involvement enables students, faculty, and administrators to collaborate in determining the net effect of students' in-class and out-of-class involvements on their learning and development.

References

- Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers*. San Francisco: Jossey-Bass.
- Astin, A. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A. (1978). *Four critical years: Effects of college on beliefs, attitudes, and knowledge*. San Francisco: Jossey-Bass.
- Astin, A. (1985). *Achieving educational excellence: A critical assessment of priorities and practices in higher education*. San Francisco: Jossey-Bass.
- Astin, A. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. New York: Macmillan.
- Astin, A. (1993). *What matters in college: Four critical years revisited*. San Francisco: Jossey-Bass.
- Bonwell, C. C., and Eison, J. A. (1991). *Active learning: Creating excitement in the classroom*. ASHE-ERIC Higher Education Reports.
- Boyer, E. (1990). *Campus life: In search of community*. The Carnegie Foundation for the Advancement of Teaching.

- Center for Instructional Development (1994, May). Student perceptions of student life, Fall 1993. Report prepared for the Syracuse University Campus Study Executive Committee, Syracuse, NY.
- Chickering, A., & Gamson, Z. (Eds.). (1991). *Applying the seven principles of good practices in undergraduate education*. New Directions for Teaching and Learning, no. 47. San Francisco: Jossey-Bass.
- Erickson, B. L., & Strommer, D. W. (1991). *Teaching college freshmen*. San Francisco: Jossey-Bass.
- Light, R. (1990). *The Harvard assessment seminars: Explorations with students and faculty about teaching, learning, and student life*. Harvard University Graduate School of Education and Kennedy School of Government.
- McKeachie, W. J. (1994). *Teaching tips: Strategies, research, and theory for college and university teachers*. (9th ed.). Lexington, MA: D. C. Heath.
- Oberst, J. (1994). *Seven principles student inventory: An indicator of success?* Doctoral dissertation draft, Syracuse University.
- Pace, C. (1983). *College student experiences: A questionnaire* (2nd ed.). Los Angeles: University of California, Higher Education Research Institute.
- Pace, C. (1984). *Measuring the quality of college student experiences*. Los Angeles: University of California, Higher Education Research Institute.
- Pace, C. (1990). *The undergraduates: A report of their activities and progress in college in the 1980s*. Los Angeles: University of California, Center for the Study of Evaluation.
- Palmer, P. (1987, September/October). Community, conflict, and ways of knowing. *Change*, 20-25.
- Pascarella, E., & Terenzini, P. (1991). *How college affects students: Findings and insights from 20 years of research*. San Francisco: Jossey-Bass.
- Stark, J. S., Lowther, M. A., Ryan, M. P., Bomotti, S. S., Genton, M., Haven, C. L., & Martens, G. (1988). *Reflections on course planning: Faculty and students consider influences and goals*. Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning.
- Study Group on 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/U.S. Department of Education.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Tinto, V., & Froh, R. (1992, October). *Deconstructing social theory: Translating research on student persistence into policy*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Minneapolis.

Part Two

Teachers and Teaching

The theme of Part Two is our belief that our knowledge of students and learning mandates new ways of thinking about and practicing instruction. These new viewpoints see teaching in broader and more detailed frameworks. From this new perspective, the role of the faculty member involves more than the transfer of information. It is a role not at the center of the instructional package but in relation to a variety of roles and activities. In this framework, the teacher functions more as a manager who triages and then monitors a variety of instructional tasks that we know are positively associated with learning.

Some of the work in this new paradigm is different. It employs strategies and orientations that are alternatives to the conventional teaching role. But much of the work is the same. Teachers still plan and organize courses. They still design assignments and assess student performance on the assignments. But even these customary instructional tasks are thought about in new ways. What we propose, then, is not more or less work for faculty but work of a different kind—work, we believe, with a clearer sense of focus and

purpose. It is teaching considered principally in terms of its impact on students and learning.

The Theme in Variations: Chapter Summaries

Susan Millar, in Chapter Seven, provides a natural transition between Parts One and Two. We have detailed how students are changing and explored the implications of those changes as they link with new knowledge about learning. Millar begins simply and obviously: the changes in students require a new role for faculty.

The role she explores theoretically and illustrates with a case study is consistent with the theme of this and the previous part: students must be the centerpiece of our educational endeavors because they are the ones who do the learning. Millar addresses the radical change this shift implies for teachers. This is instruction on a whole new set of terms—terms that recognize, indeed encourage, student discovery and creation of knowledge. It involves a transfer of power and a classroom configured so that students have more of a say in its operation.

What makes Millar's chapter so convincing is the case she uses to show this new orientation in action. Many faculty see the social construction of knowledge, as the meaning-making of students is often described, as relevant only in the humanities and social sciences where terms and issues are more variable in their meaning and use. Millar's case describes efforts to construct discovery-based experiences for students beginning an engineering curriculum.

The chapter also illustrates that the case for a shift in focus from teachers and teaching to students and learning can be made in philosophical terms. There are reasons and justifications for the move based on the assumptions, principles, and premises of education. The move is more than one of political expediency.

Even in an instructional realm so transformed, many important details of good teaching remain intact. They become the objects of more concerted and focused effort. Take course planning, for

example. It has always been important. With learning as the relevant outcome, the design of learning experiences, the purpose and goals of instruction, and the structure and sequence of content all grow in scope and significance.

George Geis (Chapter Eight) assumes that courses already exist and that part of this new orientation to teaching is deciding whether or not they should be revised. He writes about the "life of a course" and sees the planning process as interactive and evolving.

This chapter does not break new ground, but it does offer a systematic, ordered approach to planning that is likely to result in courses being organized so that they provide students with the structure necessary for learning to occur. The chapter concludes by recommending student feedback as part of the replanning and revising process. Geis observes, "The more fully students participate in the instructional event, the greater the chances are of them becoming learners."

In some ways, the Geis chapter anticipates Part Three. He sees planning as something more than the individual activity of an isolated instructor. Courses must be viewed in sequence, in relationship to other courses that together make up a coherent curricular experience, both within a department and across the entire course-taking experience of a student. Courses must also be seen from the perspective of future employers. Do they give students the knowledge and skills that do in fact prepare them for the world of work?

Joseph Lowman addresses another "detail" of teaching from this larger context, assignments—but assignments that promote and integrate learning. Faculty have always designed and used assignments, but often their dual purpose has been ignored. Assignments are what faculty use to ascertain levels of student mastery so that grades can be generated; that purpose is real and legitimate. But equally important is the recognition of assignments as learning opportunities.

In Chapter Nine, Lowman treats a range of assignments. He writes about reading and writing assignments, problem solving, and

observational and hands-on assignments. The point he makes so clearly about each is that there are ways of designing and using these assignments that do help students to learn better. There is nothing about what Lowman proposes that cannot be used to generate grades, but his focus encourages faculty to explore the connection between assignments and learning.

Both Geis and Lowman show that all is not new under the teaching sun but that even what is familiar and comfortable to faculty needs to be explored in new and different ways when teaching effectiveness is tied to learning outcomes. Robert Menges and William Rando, on the other hand, do propose something new: an eclectic model of the process of seeking and using feedback to improve teaching and learning.

They note, in Chapter Ten, that faculty have always sought feedback but are rarely very systematic about the collection process. Moreover, acting on the collected feedback has been a problem. Faculty seem more inclined to focus on the feedback itself (its veracity, relevance, and what the institution might do with it) than on the changes it might call for.

Part of the reluctance to deal with feedback is that often it identifies or relates to some problematic aspect of instruction (as in the chapter's scenario of an instructor whose students, when they discuss, rarely incorporate ideas or information from the reading). Instructional problems are not something most faculty are disposed to consider thoughtfully or discuss with others.

However, in an environment where the prime concern is student learning, monitoring learning experiences is essential. You cannot tell, by observation alone, if a student is learning. Moreover, solicitation of and response to feedback about learning shift the emphasis, as we have already noted, making the focus of the improvement effort not the teaching, but the learning. It is much safer and easier for faculty to talk about improving student learning than about improving their teaching. Nonetheless, this chapter is true to the inseparability of teaching and learning. It is about

improving both, but it emphasizes that teaching gets better because faculty respond to the learning experiences of students.

Despite emphasizing challenges and problems (that is, the parts of given instructional activities such as reading assignments that might need to be "improved" because they are not working well), Chapter Ten is positive. There is a sense of mastery and control about the process it proposes. Instructional difficulties do not occur because faculty are inept or students are capricious; they occur because components of the activities don't fit the instructional circumstances in which they are used. So the faculty member must tinker, adapt, adjust, change, modify, and rethink the details. The process is actually rather intriguing, engaging, and challenging; when successfully completed, it brings a sense of satisfaction and accomplishment. In that light, the process doesn't seem all that difficult, and there certainly is little about it to make one defensive.

Geis and Lowman illustrate some of what it means for teachers to be "managers" of learning experiences and environments, while Menges and Rando show how it is that a teacher can "monitor" learning processes. Marilla Svinicki and colleagues round out Part Two with a chapter that moves away from details back to the larger context that opens this part. However, the topics in Chapter Eleven are quite different from those of Millar's Chapter Seven.

Teaching methods have long been the focus of a variety of research endeavors. As Svinicki and colleagues note, the quest has always been to find the "best" or most effective methods. These authors think the results point out the folly of the approach. Different methods seem to end up pretty much equal, but their comprehensive review identifies the circumstances and conditions under which most instructional methods do and don't work. This is the chapter that informs the managing and monitoring decisions identified in earlier chapters.

Besides its emphasis on methods of instruction, what also positions this chapter clearly in a section on teaching is its attention

to learning as the basis for decisions about instruction. The authors propose that we look specifically at research on learning and extrapolate instructional implications from it. Chapter Eleven is especially valuable in its willingness to bridge the gap between research and practice. Summaries of findings are followed with concrete suggestions for teachers interested in maximizing learning outcomes.

Like others in Part Two, this chapter demonstrates how closely and inseparably teaching and learning are tied together. To consider instructional methods independently of their effects on students is to rob them of credible purpose, and to consider learning independently of the roles and functions of the teacher is to render it significantly less effective.

- Advancing the Thesis

If undergraduate education is to be improved, teaching must be changed. This section spells out the details of some of those changes. Changes begin with a different orientation to teaching, new ways of thinking about teaching roles in light of changing students and greater commitments to their learning. Changes are realized by attending to the details of instruction—including those that are comfortably part of current faculty teaching activities. But the details are important, and more essential in this paradigm; they ought to be the objects of fixed and focused faculty attention. There is also a new role for monitoring the impact of instructional efforts: how does a teaching policy, practice, or behavior affect student learning? Here is a new way of looking at the research on instructional methods and learning: what does the research tell us directly about how we should be teaching?

Part Two demonstrates the diversity of the scholarship available to improve practice. It includes summaries and distillations of research and practice, and it uses case studies to illustrate implementation. It also makes clear the complexity of the teaching-

learning process, and in that way shows how the diversity of scholarship reflects the character of the phenomena in question.

Finally, this section also illustrates how a "scholarly" orientation to teaching improves practice. It demonstrates the attention to detail required by reflective practice. It shows how and why students can and should be involved in their own learning. The teacher still manages and monitors, but the students do the work of learning. They help faculty by monitoring and reporting their experiences.

Teaching on Solid Ground

Using Scholarship to Improve Practice



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