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Aligning Faculty Activities

FEATURED TOPIC

Faculty can and do shape student performance by what they themselves value and do

THAT FACULTY MATTER TO STUDENT LEARNING is a widely accepted article of faith with substantial empirical support. Indeed, based on their review of several thousand studies of college student development, Pascarella and Terenzini (1991, 611) concluded that “there can be little doubt about the need for faculty members’ acceptance of their roles and responsibilities for student learning and for their active involvement in students’ lives.” But as times

change, so do student characteristics and aspirations as well as the demands on institutions and faculty, all of which presumably influence the nature and frequency of student-faculty contact, inside and outside the classroom. A particularly worrisome national trend is hiring part-time instructors—many of whom teach at two or more universities in the same academic term—in lieu of full-time faculty members with continuing contracts (Benjamin 2001). As a result, it’s conceivable that face-to-face exchanges between students and faculty outside the classroom will decline because part-time faculty spend less time on campus and often do not have a designated space to meet with students after class. Relatively little is known about the effects of these and other trends and policies on student learning.

For two additional reasons, the time is right to examine the activities of faculty members and how their expectations for student performance influence what students do during college and

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Indiana University

& Student Behavior

Realizing the Promise of *Greater Expectations*



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the benefits students derive from the collegiate experience. The first is that efforts of the Association of American Colleges and Universities (AAC&U) and other groups are redefining the goals and expected outcomes of liberal education. The second is that there is mounting evidence connecting student engagement and success, broadly defined.

AAC&U's *Greater Expectations* (2002, 10) report declares that to meet the complex demands and challenges facing them, students need "an invigorated liberal education that expands horizons while nourishing the mind... [an experience that] will prove personally empowering, intellectually challenging, beneficial to civic society, and eminently useful." The "intentional learner" AAC&U envisions knows how to communicate effectively and how to frame quantitative and qualitative problems that cut across science, social relations, and technology. In addition, intentional learners understand that global and

cross-cultural communities are inextricably intertwined. Finally, they exercise their full share of responsibility for building a morally healthy and just society.

To realize the vision of an "invigorated liberal education" colleges and universities will have to focus on the processes most likely to bring about these desired outcomes. Certain of these processes are well documented. They take the form of empirically derived "principles of good practice" (Chickering and Gamson 1987; Educational Commission of the States 1995), such as offering a coherent, academically rigorous curriculum, employing active and collaborative pedagogies that engage learners with their peers around common intellectual work, creating opportunities for student-faculty interaction, and providing prompt feedback. Other educationally effective activities include challenging writing assignments such as reflective essays and problem-based papers, oral presentations, undergraduate research experiences, assignments

that require students to work in teams in and out of the classroom, presenting diverse perspectives in the classroom, and service learning, to name a few. Charles Blaich and his colleagues (2004) at the Center of Inquiry in the Liberal Arts at Wabash College argue that these processes are at the core of what constitutes “liberal arts education,” a set of practices that lead to the outcomes associated with liberal education and general education (AAC&U 2002; Schneider 2004).

Many of these effective educational practices are represented on the National Survey of Student Engagement (NSSE), an annual survey of first-year and about-to-graduate senior students attending four-year colleges and universities. For example, NSSE asks students to report how much reading and writing they do, how often they get prompt feedback from faculty and revise papers, whether they have done community service, studied abroad, or worked on research with a faculty member, as well as the nature, frequency, and quality of interactions with faculty members and peers including those from different backgrounds. Since 2000, more than 850 different four-year colleges and universities have used NSSE (Kuh 2003). These institutions account for about two-thirds of full-time equivalent undergraduate enrollment at four-year institutions.

To learn more about the extent to which faculty expectations and priorities shape student performance, the Faculty Survey of Student Engagement (FSSE) was developed. The questions on FSSE mirror many of those on the student engagement survey and ask faculty to indicate how often their students take part in various activities, how faculty organize class time and use different pedagogical practices, the importance faculty place on various areas of learning and development, and the nature and frequency of faculty-student interactions. Thus, we can combine NSSE and FSSE findings to compare what faculty members expect and require students to do with student reports of their engagement in effective educational practices, which is a proxy for desired outcomes of college. We can also determine the extent to which faculty activities and student experiences are aligned with learning goals consistent with liberal education.

Comparing student and faculty views

In the rest of this paper we offer a “first look” at FSSE and NSSE data side by side. Our intent

is to estimate the degree to which faculty members and students are doing the kinds of things that will result in the “invigorated liberal education” described by AAC&U. More specifically, we want to discover the relationships between faculty use of effective educational practices and student engagement in these activities. That is, to what extent do faculty members:

- Assign academically challenging activities (e.g., the percentage of students that faculty members say frequently work harder in their course than they usually do in order to meet the faculty member’s standards)?
- Design and facilitate active and collaborative learning activities (e.g., how often students work with their peers on projects in class)?
- Emphasize higher-order cognitive tasks in class assignments and discussions (e.g., the amount of emphasis faculty members place on synthesizing and applying concepts)?
- Present diverse perspectives in the classroom (e.g., how often class discussions or assignments include different views of race, religion, gender, political beliefs)?

And to what extent do students do these activities? That is:

- How much reading and writing do students do?
- How frequently do they report working with peers on problem solving or other collaborative activities?
- How much emphasis do their classes place on analyzing and synthesizing ideas as contrasted with memorization?
- How often do they encounter diverse perspectives in the classroom?

The answers to these and related questions reveal whether faculty priorities and activities are in sync with the skills and competencies we want students to develop in order to become intentional learners. In addition, the findings can serve as a baseline against which the progress of the *Greater Expectations* agenda can be measured.

With these ends in mind, we analyzed NSSE data from 20,226 senior students and 22,033 first-year students who completed the student survey in spring 2003 at the 137 schools where during the same period of time 14,336 faculty members completed the FSSE. Wherever possible, we controlled for potentially confounding variables.¹

A symbiotic relationship

The results of our analyses point to three tentative conclusions about faculty use of promising educational practices and student engagement in those practices.

1. *At institutions where faculty members emphasize certain educational practices, students typically engage in those practices to a greater degree than their peers attending other colleges and universities*

On balance, students do pretty much what their teachers expect and require them to do. For example, at institutions where faculty think writing is important, assign writing activities, and provide timely feedback to students on their writing, students tend to write more and also report that they make more progress in developing their writing skills. In addition, at campuses where faculty emphasize academically challenging activities, students view their college experience to be more academically challenging compared with their counterparts at other schools. That is, they study more, read more, and report that their coursework emphasizes higher-order mental tasks to a greater degree than students at other colleges and universities. This is also the case for active and collaborative learning; when faculty members value such activities students more frequently work together on projects in class. At institutions where faculty value experiences with diversity, students report more frequent conversations with other students whose background is different from their own. There is nothing mysterious or particularly profound about these relationships. That is, if faculty members at an institution tend to emphasize an activity, require students to do it, and hold them accountable, students at that institution tend to do it and gain expertise in the area.

2. *Good things go together.*

Decades of research studies on student development suggest that students who engage in a variety of educationally purposeful activities report gaining more from college compared with their peers who engage less frequently in such activities or who focus on only one or two areas (Pascarella and Terenzini 1991). This can be seen in Table 2, which shows that almost across the board, students at institutions where faculty emphasize a range of effective educational practices reported making more progress since starting college on various dimensions of student learning and personal development.

The integrative learning measure is of particular interest as it is composed of the six behaviors listed below, which are arguably essential to acquiring the skills and competencies needed to become an intentional learner. Engaging frequently in these activities can also be thought of as a proxy for deep learning (Entwistle and Entwistle 1991; Tagg 2003). Table 2 indicates that when faculty members emphasize the practices included on NSSE, students engage in more integrative learning activities.

Integrative learning activities:

- Worked on a paper or project that required integrating ideas or information from various sources
- Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments
- Put together ideas or concepts from different courses when completing assignments or during class discussions
- Discussed ideas from readings or classes with faculty members outside of classes

Table 1: Relationships Between Student Engagement and Faculty Expectations and Behavior

At Campuses Where Faculty Score Highly On:	Student Scores Tend to Be Higher On:			
	Academic Challenge	Active and Collab. Learning	Diversity Experiences	Student-Faculty Interaction
Emphasis on Academic Challenge	✓	✓	✓	
Active and Collaborative Practices	✓	✓	✓	✓
Emphasis on Diversity Experiences	✓	✓	✓	
Emphasis on Higher-Order Thinking	✓	✓	✓	
Importance of Enriching Ed. Exp.	✓	✓		✓



There are faculty members on almost every campus who value effective educational practices and use these practices more frequently

- Discussed ideas from readings or classes with others outside of classes (students, family members, coworkers, etc.)
- Synthesized and organized ideas, information, or experiences into new, more complex interpretations and relationships

Across the analyses, the sizes of the effects are generally modest, but taken together the pattern of the effects is compelling. The findings presented in Tables 1 and 2 along with our other analyses suggest that at the institutional level there is considerable synergy among faculty priorities and pedagogical approaches, student engagement in effective educational practices, and desired outcomes of college. For example, when faculty members use a variety of active and collaborative learning activities, students are more likely to be actively involved in a variety of educationally purposeful activities *and* they are more likely to report greater gains associated with these experiences. In addition, on campuses where faculty emphasize academically challenging activities, students are more likely to report more frequently participating in active and collaborative learning activities, experiencing diversity, and gaining a broad general education. Where faculty report emphasizing diversity experiences, students are more likely to report higher levels of academic challenge, greater participation in active and collaborative learning, and greater gains in personal/social development as well as general education. Perhaps the most promising findings are those related to active and collaborative learning. This pedagogical approach is positively and significantly related to *all* areas

of student engagement and *all* the measures of what students gain from their collegiate experience.

In general, faculty members at liberal arts colleges are more likely than their counterparts elsewhere to value and employ effective educational practices.

It's also the case that faculty at public institutions and selective colleges and universities place less emphasis on certain practices (such as diversity experiences) than their colleagues at other types of institutions. However, the differences between types of institutions in what faculty emphasize by way of educational practices are far smaller than those that exist *within* the faculty at any given institution. Thus, simply attending a certain type of college does not guarantee that a student will be exposed to effective educational practices, though it may increase or decrease the odds. More important to recognize is that there are faculty members on almost every campus who value effective educational practices and use these practices more frequently. Who are these faculty members?

3. *Certain types of faculty members are more likely than others to use effective educational practices.*

The plus signs (+) in Table 3 indicate that faculty of color and women are more likely than their counterparts to value and use effective educational practices. Also, full-time faculty are more likely than part-timers to emphasize academically challenging activities, to expose students to diverse perspectives in their classes, and to value a variety of enriching educational experiences such as community service and

Table 2: How Faculty Priorities Relate to Selected Student Self-Reported Outcomes

At Campuses Where Faculty Score Highly On:	Student Scores Tend to Be Higher On:			
	Integrative Learning	Gains in General Education	Gains in Practical Competence	Personal/Social Gains
Emphasis on Academic Challenge	✓	✓		
Active and Collaborative Practices	✓	✓	✓	✓
Emphasis on Diversity Experiences	✓	✓	✓	
Emphasis on Higher-Order Thinking	✓	✓		
Importance of Enriching Ed. Exp.	✓	✓	✓	✓

Table 3: Characteristics of Faculty Who Value and Use Effective Educational Practices

Faculty Characteristics	Emphasis on Student Engagement				
	Emphasis on Academic Challenge	Active and Collaborative Practices	Emphasis on Diversity Experiences	Emphasis on Higher-Order Thinking	Importance of Enriching Ed. Exp.
Faculty of Color	+	+	+	+	+
Women	+	+	+	+	+
Full-Time Faculty	+		+		+
Years Teaching		-			-

^{*}Except for Asian/Pacific Islander faculty

study abroad. Conversely, the negative signs (-) in the “active and collaborative learning” and “importance of enriching educational experiences” columns indicate that the more years a faculty member has taught, the less likely he or she is to use active and collaborative learning activities or think it’s important for students to take part in a learning community or complete an internship or have a culminating experience, such as a capstone seminar or senior paper.

Implications

In *Field of Dreams*, a young farmer has a vision urging him to transform a section of a corn field into a baseball diamond. The phrase used to justify his folly, “If you build it, they will come,” is now part of the American lexicon. Something akin to this holds for student engagement. That is, if faculty members systematically use effective educational practices, students will engage in them and benefit in desired ways.

It is not surprising that students read and write more when they are required to do so, or that they more frequently work in small groups on problem solving activities when their faculty structure courses for this purpose. But in an era when many observers question the motivation of substantial numbers of undergraduates, it is reassuring to know that faculty can and do shape student performance by what they themselves value and do. Another reason to cheer the findings from this study is that effective educational practice is not limited to a certain type of institution or certain types of students. Indeed, the fact of the matter is that there are faculty members at every college and university who are using these practices with demonstrable positive effects on their students. One more

reason to be optimistic is that younger faculty members are more inclined to value and use effective educational practices. Perhaps their willingness to experiment with learner-centered pedagogies is in part due to the improved training of teaching assistants and the influence of initiatives such as the Carnegie Academy for the Scholarship of Teaching and Learning and others.

Information about faculty expectations and behavior and student performance can be used in a variety of ways. One can imagine using FSSE and NSSE results in accountability systems or as performance indicators, presuming appropriate safeguards are in place to honor the conditions under which the information was gathered and the results are interpreted correctly. Our view is that the most powerful uses of such information are for faculty development and institutional improvement. For example,

FACULTY SURVEY OF STUDENT ENGAGEMENT

The FSSE (Faculty Survey of Student Engagement) was designed to parallel the NSSE (National Survey of Student Engagement) survey of undergraduate students, *The College Student Report*. The faculty version focuses on:

- Faculty perceptions of how often their students engage in different activities
- The importance faculty place on various areas of learning and development
- The nature and frequency of faculty-student interactions
- How faculty members organize class time

taken together, FSSE and NSSE results sometimes point to “disorienting dilemmas,” situations in which familiar ways of responding do not work or are inappropriate. Such circumstances are more likely to motivate us to learn and change (Mezirow 1990). At the campus level, NSSE and FSSE findings can be used in faculty development activities to align course requirements and faculty activities with institutional or curricular learning goals and student expectations for performance. Over time, systematically infusing effective educational practices into the majority of courses will bring a campus to a “tipping point” wherein these practices are the norm (Gladwell 2000).

The combination of FSSE and NSSE data can also be used to identify institutions where high degrees of concordance exist between what faculty expect and do and how students perform. Other campuses could benefit from learning what these strong performing institutions do and the policies and cultural attributes that account for their performance. One such indicator appears to be making available to students a rich variety of enriching educational experiences such as participating in learning communities, service learning activities, capstone seminars, and internships.

Final thoughts

This paper provides a glimpse of an “invigorated liberal education” by looking at the relationships between faculty use of effective educational practices and student engagement in these activities. Of course, the behaviors and activities measured by NSSE and FSSE are not the only or perhaps even the best indicators of whether faculty members and their students are doing the kinds of things that will help students become intentional learners. A key next step is to discover how institutions or groups of faculty cultivate and reinforce the attitudes and behaviors associated with using effective educational practices. □

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NOTES

1. We measured faculty emphasis on student engagement using multiple sets of items from FSSE that represent faculty emphasis on academic challenge, active and collaborative practices, diversity experiences, and higher-order thinking as well as the importance faculty place on enriching educational experiences. We measured student engagement using multiple sets of items from NSSE that represent level of academic challenge, student-faculty interaction, active and collaborative learning, and diversity-related activities. Students' learning and intellectual development were represented by four scales: integrative learning, gains in general education, gains in personal and social development, and gains in practical competence. We used a series of hierarchical linear models (HLM) to explore the impact of average faculty scores on average student scores at the institutional level controlling for individual and institutional-level confounding variables. For more detailed information about the measures used or the analytic methods, please contact Thomas Nelson Laird (tflaird@indiana.edu).

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