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ABSTRACT

This study examined factors in the undergraduate classroom experience that students associate with vitality in the classroom. The study used measures reflecting concepts from the literature on the fit between student and institution, including academic and social integration, student effort and involvement, encouragement of family and friends, financial need and ability to pay, race and campus climate, and goal clarity. Multivariate regression analysis was used to evaluate responses (n=496) to an undergraduate outcomes survey conducted in 1994. The study found the most beneficial classroom experiences were reported by upper division students who perceived a campus climate of racial harmony and tolerance and reported the highest levels of academic integration in the form of faculty concern for students and the students' own academic effort and involvement. (Contains 43 references.) (DB)

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The Undergraduate Classroom Experience: Factors Associated with its Vitality

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ABSTRACT

Since the classroom experience is central to the purpose of educational institutions, we need to examine those factors that exert positive and negative influences upon it. The data in our study contain measures that reflect an array of concepts from the student-institution fit literature, including academic and social integration, student effort and involvement, encouragement of family and friends, financial need and ability to pay, race and campus climate, and goal clarity. The most beneficial classroom experiences are reported by upper division students who perceive a campus climate of racial harmony and tolerance, and who report the highest levels of academic integration in the form of faculty concern for students and the student's own academic effort and involvement.

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The Undergraduate Classroom Experience: Factors Associated with its Vitality

The Research and Policy Problem

The undergraduate classroom represents the formal structure in collegiate organizations where learning officially takes place. Nevertheless, the literature on outcomes assessment rarely focuses on the vitality of this experience explicitly. The Pascarella and Terenzini "Moby Book" (1991) presents and discusses the existing array of theories and models of student change, and while several models note the importance of faculty and student interaction, explicit attention to the classroom is either absent or not at all prominent in the discussion. Indeed, most of the empirical studies that provide support for the models by Tinto, by Bean, and by Cabrera and their associates, focus as much on advising and study habits and faculty-student interaction *outside* the classroom, as they do on the dynamics *within* the classroom.

In using these models to examine a variety of desirable student outcomes, Volkwein and his research colleagues in several studies have found that the classroom experience is the single most important influence explaining student growth and satisfaction (Volkwein et al., 1986; Volkwein, 1991; Volkwein & Carbone 1994; Volkwein & Lorang, 1996). Terenzini's NCTLA model (1995) is the first to explicitly identify classroom experiences as having a prominent role in producing learning outcomes. In their recent studies at the NCTLA, Pascarella and Terenzini and their research colleagues have now begun to incorporate measures of course learning, instructor effectiveness, and other academic experiences into their examination of learning outcomes (Terenzini et al., 1995, 1996; Pascarella et al. 1996). At least two of these studies (Terenzini et al., 1995; Pascarella et al. 1996) have found that the CSEQ measures of instructor organization, skill, clarity, and support have exerted heavily significant influences on student outcomes.

Given the importance of the classroom experience, both conceptually and empirically, the purpose of this study is to examine the factors in the undergraduate experience that appear to be the most strongly associated with vitality in the classroom, as reported by students.

Conceptual Theoretical Framework

There are at least three major assertions regarding the nature of adjustment to college. The most traditional view is that academic preparedness for college and clear goals are the main factors accounting for differences in persistence behavior, academic performance, and other educational outcomes (Feldman & Newcomb, 1969). A second group of alternative yet complementary perspectives fall under the general description of student-institution fit models (Pascarella & Terenzini, 1991). Perhaps the most widely researched of these models claims that student persistence and growth depends on the degree of successful integration into the academic and social structures of the institution (Spady 1970, 1971). Tinto has advanced this model and elaborated on it with the additional claim that successful adjustment to college involves severing ties with family and past communities in order to successfully integrate the student into the new academic community (1987, 1994). Another complementary perspective to the student-institution fit model focuses on the importance of student involvement and effort (Astin 1984, Pace 1984). Others argue that support from friends and family are important enhancements to college

adjustment (Bean 1980; Bean and Metzner 1985; Nora 1987; Nora et al. 1990). Yet another branch of this literature emphasizes the importance of financial variables and the student's ability to pay (Cabrera et al. 1990; St. John, 1994).

A third set of assertions rest on the role that perceptions of prejudice and discrimination play in student adjustment. Exposure to a campus climate of prejudice and discrimination has gained increased attention as the main factor accounting for the differences in persistence rates between minorities and non-minorities (e.g. Fleming, 1984; Hurtado, 1992, 1994; Hurtado, Carter & Spuler, 1996; Smedley, Myers & Harrel, 1993). Many authors argue that intolerance towards minority students establishes a climate of racial prejudice and discrimination that permeates both academic and social interactions, and thus figures prominently in explaining their maladjustment with the institution (Hurtado, 1992, 1994; Hurtado, Carter & Spuler, 1996; Loo & Rolison, 1986; Murguía, Padilla, & Pavel, 1991). The resulting low involvement with the different campus communities impinges on the minority student's cognitive and affective development as well as persistence (Fleming, 1984; Loo & Rolison, 1986; Smith, 1989, 1992; Tracey and Sedlacek 1984,1985,1987; Suen, 1983; Loo and Rolison 1986). Not all studies have supported these claims (Arbona and Novy 1991; Nettles, Thoeny and Gosman 1986; Cabrera and Nora 1994), and there is at least preliminary evidence that perceptions of prejudice and racial disharmony affect White and minority students alike (Nora & Cabrera, 1996).

Since the classroom experience is central to the purpose of educational institutions, we need to examine those factors that exert positive and negative influences upon it. The data in our study contain measures that reflect an array of concepts from the student-institution fit literature, including academic and social integration, student effort and involvement, encouragement of family and friends, financial need and ability to pay, race and campus climate, and goal clarity.

Methodology

The study is conducted at a research university with a matriculated undergraduate population of about 10,000 students. The study uses multivariate regression analysis to examine responses to the Spring 1994 undergraduate outcomes survey. This survey is part of the University's on-going assessment program and is administered every three years. It contains over 180 items of information in four categories:

1. Background information about age, class year, sex, ethnicity, employment, admissions status, type of enrollment, major, financial aid, and residence.
2. Student plans, goals, and reasons for attendance.
3. Levels of Student satisfaction with an array of campus services and facilities, as well as with various aspects of the institution's academic, administrative, and social environments or climates.
4. A variety of cognitive and non-cognitive experiences and outcomes, including classroom experiences, faculty contact, course taking patterns, graduation plans, anticipated loan indebtedness, Grade Point Average (GPA), and self-reported growth.

The regression analysis for this study is conducted on 496 representative undergraduates who responded to the 1994 outcomes survey by completing at least 90% of the survey questions. The 496 are

Table 1. Descriptive Statistics and Marginal Distributions
(N = 496)

Variables & Multi-item Scales	Count	Cell %	Mean	S.D.	Alpha
Demographics (dummy vars.)					
Ethnic Minority (non-White)	137	27.6			
Male	298	60.1			
Class Year (dummy vars.)					
Upper Division	345	69.6			
Lower Division	151	30.4			
Academic Integration:					
Faculty Contact (1 item)			3.01	1.30	
Faculty Concern (2 items)			3.38	.88	.74
Involvement/Effort (2 items)			3.68	.98	.76
Social Integration					
Peer Relations (2 items)			4.01	1.01	.87
Goal Commitment					
Goal Clarity (3 items)			3.93	.93	.72
Campus Climate					
Harmony/Tolerance (5 items)			2.81	.66	.67
Perceptions of Prejudice (2 items)			2.72	.97	.89
Encouragement					
Friends (1 item)			3.70	1.23	
Family (1 item)			4.13	1.08	
Economic Factors					
Financial Difficulty (1 item)			2.90	1.32	
Financial Need (3 items)			2.46	1.68	.81
Work Study (dummy var.)	200	40.3			
<i>Classroom Experiences</i> (7 items)			3.69	.70	.86

representative with respect to age, gender, and admissions-status. Seniors and ethnic minorities were over-sampled to ensure their generous representation in the database, since these are the populations of greatest interest. While not every undergraduate field of study is present in the sample, the 15 largest majors are represented in approximate proportion to their numbers in the undergraduate student body. Table 1 lists the variables that are assembled for the regression model.

Dependent Variable

This research focuses on the classroom experiences reported by respondents to the university's outcomes survey. The dependent variable is a scale of classroom experiences developed by Terenzini and his colleagues (1980, 1982, 1984, 1987) [$\alpha=.73$], and enhanced by Volkwein and his colleagues (1991, 1994, 1996) [$\alpha=.89$]. This is a seven-item scale on which students report the extent to which they have classes in which they are intellectually challenged, learn something new, are given stimulating assignments, etc. [Students respond on a five-point scale: 1=rarely/never, 2=less than half the time, 3=about half the time, 4=more than half the time, 5=almost always.]

Independent Variables

The constructs and variables used in the analysis are shown in Table 1 and are drawn directly from the student-institution fit literature in general, and from the Cabrera and Tinto Models in particular. The specific measures listed in the table for academic integration, social integration, campus climate, encouragement, finances, and goal commitment are borrowed not only from Cabrera's work (1992, 1993), but also from studies by Pascarella and Terenzini, 1982; Terenzini, et al., 1982, 1984; Nora 1987; Nora, et al. 1990; Volkwein, et al., 1986; Volkwein 1991; Volkwein & Carbone, 1994; and Volkwein & Lorang, 1996. The alpha reliabilities for the various multi-item scales used in these studies are recalculated for this population; and as shown in Table 1, many exceed .80 and all but one are above .70.

Results

The results of our analysis are shown in Table 2. The significant beta weights are attached to the variables reflecting faculty concern (.33), racial harmony (.15), student effort (.14), upper division status (.13), goal clarity (.08), and encouragement from friends (.07). The adjusted R-square exceeds .42 which is quite strong for a study measuring a student self-reported behavior. Thus, the most beneficial classroom experiences are reported by upper division students who perceive a campus climate of racial harmony and tolerance, and who report the highest levels of academic integration in the form of faculty concern for students and the student's own academic effort and involvement. Of significant, but secondary importance as influences on the classroom experience are the 3-item scale of goal clarity and the single item reflecting personal support from friends.

The prominent roles of faculty concern and student effort in the classroom experience are consistent with several branches of the student-institution fit literature. Indeed, a favorable classroom experience and faculty respect for students and student effort may all mutually reinforce each other. If so, this situation occurs more frequently in classes attended by juniors and seniors than by freshmen and sophomores.

Given the discussions in the literature, we expected to observe significant influences by the variables reflecting gender, financial need and ability to pay, and race and perceptions of prejudice. However, these variables are not influential with this population. We are not surprised by the non-significance of gender because other studies at this particular university have found few male-female

Table 2. Regression Analysis Results
(Dependent Variable = Classroom Experiences)

Variables & Scales	Beta	S.E.
<i>Demographics:</i>		
Ethnic Minority (non-White)	-.058	.0587
Male	.028	.0553
<i>Class year:</i>		
Upper Division	.130**	.0629
<i>Academic Integration:</i>		
Faculty Contact (outside class)	.018	.0218
Faculty Concern	.333**	.0308
Involvement/Effort	.139**	.0287
<i>Social Integration</i>		
Peer Relations	-.032	.0263
<i>Goal Commitment:</i>		
Goal Clarity	.079**	.0302
<i>Campus Climate:</i>		
Racial Harmony/Tolerance	.149**	.0424
Perception of Prejudice	-.018	.0281
<i>Encouragement:</i>		
Friends	.067**	.0234
Family	-.001	.0270
<i>Economic Factors:</i>		
Financial Difficulty	.020	.0280
Financial Need	-.009	.0235
Work Study	.010	.0553

* $p < .05$

** $p < .01$

$$F^{**} (15,6.0446) = 22.28; R^2 = .4437; R^2_{adjusted} = .4238$$

differences. We are surprised, however, that the economic variables do not intrude into the classroom and influence the quality of that experience. Apparently, these students do not take their financial problems into the classroom. The non-significance of race/ethnicity challenges some of the statements in the literature about the permeability of discrimination throughout all aspects of the undergraduate experience. We did not find it. Additionally, racial harmony in our study exerts greater *positive* influences on the classroom environment than perceptions of prejudice exert *negative* ones. This invites closer examination.

Thus, in this study we have explored a number of student variables that the literature suggests might influence the classroom experience. The most beneficial classroom experiences are reported by upper division students who perceive a campus climate of racial harmony, and who report the highest levels of academic integration in the form of faculty concern for students and the student's own academic effort and goal clarity. Such findings are entirely consistent with the mainstream of the student-institution fit literature.

This line of research is important because of the current national interest in the undergraduate experience and the instructional contributions that faculty make. Our dependent variable -- which we believe reflects classroom vitality -- is a scale of items that reflect the presence in the classroom of well-prepared, caring, and interesting instructors who give meaningful assignments, according to the students. Thus, our classroom scale emphasizes faculty *behaviors*, rather than faculty *characteristics*. Apparently these faculty behaviors not only stimulate student learning, but also overcome student differences in race, sex, financial need, and family background -- differences that under conditions of good teaching are left at the classroom door.

Future research on this topic should incorporate measures that reflect other aspects of the students and their classroom experiences, including test scores, transfer status, prior achievement, and academic major. In the meantime, additional analyses are planned with this dataset. The possibility of interaction effects cannot be ignored, and we plan to undertake other regressions holding some of our key variables in and out of the analysis. Also, structural equation modeling may reveal additional dynamics among these variables. We also plan to conduct a similar analysis using a multi-campus dataset.

This preliminary research suggests, however, that a wholistic assessment of the undergraduate classroom experience is significantly influenced by student perceptions about campus climate, especially those aspects of campus climate reflecting faculty concern for students, racial harmony, and student involvement. This is entirely consistent with a campus agenda that encourages faculty attentiveness, student conscientiousness, and tolerance among all members of the campus community.

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