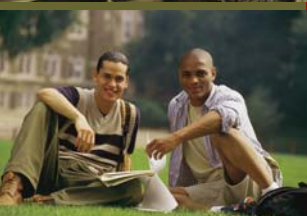


College Board Pilot Study

on student retention



Student Survey Results: University of Vermont Institutional Report

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The following document is a summary of data collected from the Student Survey of the College Board Pilot Study on Student Retention. It provides information on data collected from first-time full-time first-year students at the University of Vermont (UVM) in late spring 2006. The purpose of this report is to present back to UVM as a participating institution. The report is structured so as to give more information than a simple frequency report and to highlight key findings for policy makers.

The first page in this summary provides demographic information about the survey respondents — information you can use to assess the similarity of the sample population to your first-year student body and thus to contextualize the results summarized in the report. Also provided on this first page are results from two analyses related to student persistence. The first display shows results on students' expressed intent to

persist, broken out by respondents' perceptions of the campus climate. In it we see, unsurprisingly, that students who indicated an intent to persist also reported more positive perceptions about the openness of the university climate. The second display shows results of a logistic regression, with persistence to the fall of 2007 as the dichotomous outcome variable. The dependent variables, chosen for inclusion based on previous research and actionable results, were entered in two blocks: (a) demographic variables and (b) student perception/institutional variables. The widely respected theoretical work of Tinto and Bean guided much of our design of the survey. In addition, we included many programmatic variables that institutions would be able to control, such as participation in learning communities or first-year experience programs. In the regression for UVM, we used a number of factors and have provided further information on them in the appendix.

Students' diversity experiences at institutions, shown in research to differ by race, are another key concern of this report. Universities often have a specific interest in retaining students of color. This interest is likely even stronger at schools like UVM, where students of color make up a relatively small proportion of the student body. The second page of this report shows survey results on three items related to the climate for diversity on campus.

A central theme in student retention literature is the role of social and academic integration, a process shaped chiefly by students' interactions with mentors and peers on campus. The third page of this report examines four types of these substantive interactions broken out both by major (for interaction with faculty) and gender (for interaction with peers). Students at UVM reported higher levels of advice, support, and academic assistance from their peers than from their faculty, while results on feedback on academic work were the reverse. Women had more interactions than men in most categories, and the levels of interaction were very similar across majors.

The final page of the report examines factors that may interfere with persistence: students' working off campus and financial concerns. Very few students surveyed at UVM spent significant time working off campus while in school. Those who did hold off-campus jobs did not differ greatly from others in the time they spent preparing for classes. Finally, while

most UVM respondents reported being certain about their ability to pay for their college education, one in five still had some uncertainty about this.

We anticipate that UVM will be able to use this report to gain a deeper understanding of how campus policies and practices affect student experiences related to persistence. At UVM, students' general perceptions of academic and social environment on campus are associated with decisions about persistence. At the same time, it is clear from survey results that White students and students of color had different experiences of the campus climate for diversity. Implications of these findings may suggest prioritizing efforts at curricular transformation and devoting further energy to studying the climate for racial diversity on campus. Likewise, UVM students' reports of high levels of interactions with faculty and with each other suggest that existing programs designed to foster such interactions—UVM's first-year seminars, for example, which also show broad participation—may warrant continued or increased support. Individual institutional goals may lead UVM to draw its own conclusions regarding students' self-reported time spent preparing for class.

University of Vermont

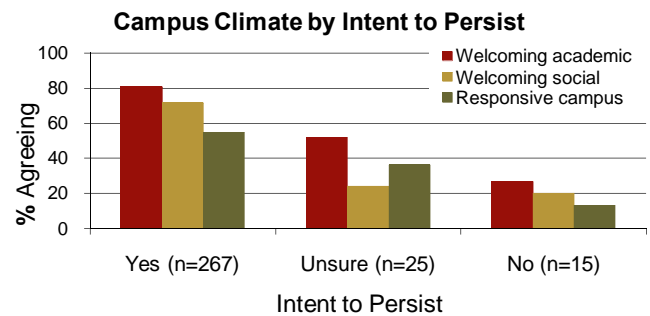
Survey Response and Demographics

The response rate for the pilot survey at UVM was 22 percent. With the exception of gender, the student sample characteristics generally reflected the overall student population at this institution. Males were underrepresented among respondents relative to their representation in the first-year class (27% versus 46%), a pattern that survey methodology literature suggests is common. Students identified as African American and Asian or Asian American responded at greater rates than others. However, as shown in the table, the proportions of respondents by race and ethnicity were representative, overall, of UVM's student population.

Response Overview			
	Population	Respondents	Response rate
Female	54%	73%	19%
Male	46%	27%	8%
Asian	2%	3%	21%
African American	1%	1%	29%
Latino/a	2%	1%	10%
White	92%	91%	14%
Other	3%	3%	11%
Overall	N=2232	N=497	22%

Campus Climate

The chart to the right represents attitudes toward campus climate separated into three groups: (a) those who reported an intent to persist at UVM, (b) those who reported being "unsure" of whether they would return, and (c) those who indicated they did not intend to return. It is important to note first that those who intended to persist (267 students, or 87%) are by far the largest group of respondents at UVM. In contrast, only a small number of students (15 students, or 4.9%) indicated they would not return to campus the following fall. In addition, the chart shows each group's general ratings of how "welcoming" they found the academic and social environments on campus to be and how responsive to the needs of students they viewed UVM to be. In each of the student categories, the proportion who reported favorable perceptions of specific measures of campus climate is shown. A notable difference in the proportion of positive responses is clear: Those who indicated an intent to return rated UVM as welcoming and responsive in greater proportion than those



who reported they did not intend to return. Across all three groups (persisters, nonpersisters, and those who were unsure), students rated UVM's "academic climate" as welcoming at the greatest rate. Given these results, one can conclude that student perception of campus climate may play a role in students' decisions to stay at or to leave this campus.

Logistic Regression Results: Persistence

Variables related to a student's persistence were examined in this regression. The large percentage of students who persisted, while excellent for UVM, made the regression equation difficult to estimate. Despite this, the overall fit for the model was good, significant at the 0.001 level. The model also accurately predicted 83 percent of nonpersisters and 77 percent of persisters. In addition to the variables in the table to the right, the model also controlled for gender, race, certainty of funding (a proxy for SES), and combined SAT/ACT score. Of these, SAT/ACT was significant at the 0.05 level. Within the model, a general climate factor was both a significant and powerful predictor; students' odds of persistence were much higher when they found the climate welcoming. They were also significantly higher if they believed they were receiving quality advising. Absences from class approached significance (p=0.131), suggesting its potential importance in student persistence. Perhaps some students who are intending to drop out have already begun to stop attending their classes before the semester is over. Clearly the climate is the most important contributor to student persistence. This is consonant with both the literature, which

Partial Regression Results		
Variables ¹	Odds ratio	Sig.
General climate+	2.43	****
Faculty interaction+	1.51	
Diversity perception+	1.36	
Registration problems	1.31	
Learning community	0.72	
First-year seminar	0.86	
Quality advising	1.41	*
Class absences	0.31	

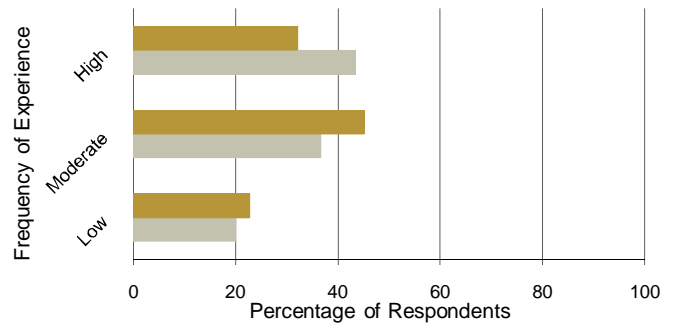
¹For additional information about regression, variables, and factors, see Appendix.
 + Represents a factor
 *p<.10, **p<.05, ***p<.01, ****p<.001

suggests that students who feel comfortable in their collegiate environment are more likely to continue there, and with the campus climate findings above. As detailed above, the climate at UVM is perceived very positively overall.

Diversity Experiences on Campus

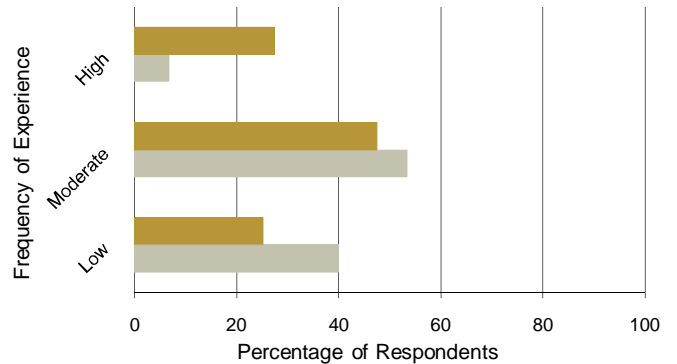
The number of students of color responding (n=30) on the UVM campus was about one-tenth that of the White respondents (n=277). Compared with students of color, a smaller proportion of White UVM students reported having frequent course experiences that enhanced their understanding of the history, culture, or social concerns of people from diverse backgrounds. While White student responses varied along a normal curve on this question, students of color responded with more high ratings than low on this measure. This pattern may result from differences in course-taking or in experience or consciousness surrounding multicultural diversity on campus. White students may be less likely to take courses focused on this content, for example.

How often have you had experiences in class that enhanced your understanding of the history, culture, or social concerns of people from diverse backgrounds?



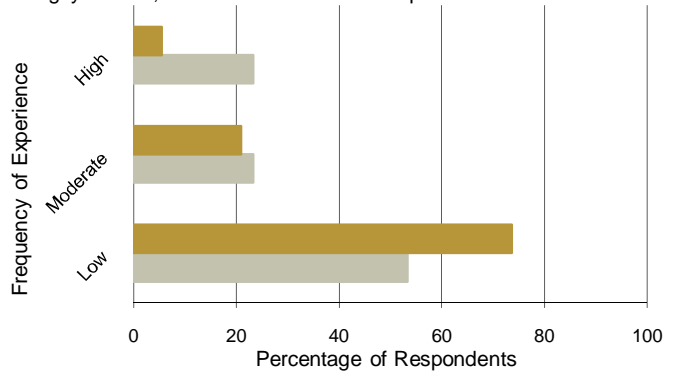
Almost half of all UVM respondents, regardless of race, reported noticing the influence of diverse perspectives in campus décor with moderate frequency. If we look more closely, however, differences in responses across race emerge. For example, a relatively large percentage of White students (27%) reported noticing multicultural perspectives reflected in the physical surroundings on campus with high frequency. In contrast, over 90 percent of students of color indicated noticing the influence of diverse perspectives with moderate or low frequency. Forty percent of students of color responding reported noticing multicultural perspectives either infrequently or never.

How often have you noticed the influence of multicultural and diverse perspectives in campus artwork, sculpture, or décor?



The third chart on this page shows students' responses to an item asking how often they had observed racist, anti-gay/lesbian, or sexist behavior on campus. Although overall most students reported a low frequency of these incidents, White students generally reported noticing fewer incidents of discrimination on campus than students of color; more than one-fifth (23%) of students of color who responded reported observing these incidents with a high level of frequency. Qualitative follow-up with White students and students of color at UVM may be warranted to explore the meaning of these results.

How often have you observed racist, anti-gay/lesbian, or sexist behavior on campus?

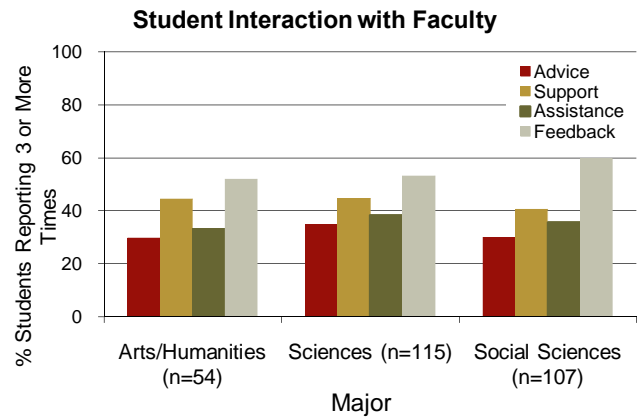


In each of these analyses it appears that students of color may be more attuned to diversity issues than White students. They may be more likely to notice and report each of these experiences in the classroom, on campus, or in interactions with their peers.

■ White students (n=277)
 ■ Students of color (n=30)

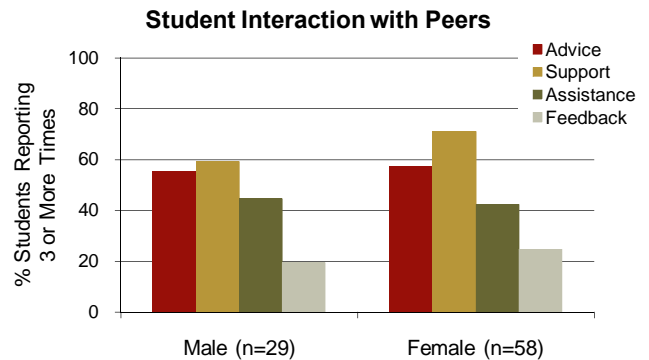
Student Interaction with Faculty

The chart to the right shows the percentage of students within each listed area of major who reported three instances or more per term of four different types of interaction with faculty. These interactions included receiving (a) advice, (b) support or encouragement, (c) assistance to improve academic performance, and (d) prompt feedback. The results indicate that between 30 percent and 60 percent of all responding students were involved in these kind of exchanges with faculty at least three times per term. Of these types of interactions with faculty, students of all majors reported receiving prompt feedback most frequently. Across all three categories of major, the smallest proportion of students reported frequently receiving advice from faculty. There were few noticeable differences among the majors, and none of these were statistically significant. It may be useful to note, however, that UVM social science majors reported receiving frequent feedback at the greatest rate (59.8%) and yet indicated frequent support from faculty at the lowest rate (40.6%).



Student Interaction with Peers

The survey asked students about their interaction with other students using categories similar to those used with faculty. Results likewise showed a high level of interaction, with as many as 77.6 percent of responding students receiving frequent support and encouragement from peers. Examining these results in further detail shows that women reported more frequent interaction with peers than did men in all categories except in receiving assistance to improve academic performance.



As may be expected on a residential campus, there is a generally high level of interaction between students at UVM. This may be considered a positive result for the institution since higher education theory and research both point to substantive exchanges with peers as a central component of what is termed "social integration" in Tinto's theory of student departure. Results suggest that UVM's current practices and policies designed to encourage substantive interaction among peers, particularly with regard to academics, are likely successful and should be continued.

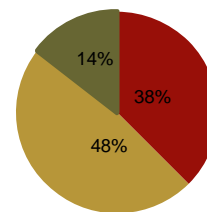
Class Preparation and Work Off Campus

The pie charts at right document how survey respondents combined off-campus jobs with course work and studies while at UVM. For this display, UVM respondents were divided into three groups: (1) those who did not work off campus (n=256), (2) those who worked 1 to 10 hours per week off campus (n=31), and (3) those who worked 11 or more hours per week (n=18). Each pie chart represents the number of hours per week that each group spent preparing for class. It is interesting to note that, regardless of the number of hours worked per week, a similar proportion of approximately half the respondents estimated their weekly class-preparation time at 11 to 20 hours per week. Relatively few students in any of the three categories of hours worked per week reported spending more than 20 hours per week preparing for class.

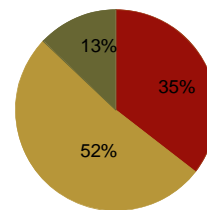
A close look at the results indicates that students who work 1 to 10 hours per week reported similar class-preparation time to students who did not work off campus. In comparison to those who worked fewer hours, a greater percentage of students who worked 11 hours per week or more reported spending over 20 hours per week preparing for class. This last result is somewhat counterintuitive and might be attributed at least in part to the fact that only eighteen respondents fall into the category of working 11 or more hours per week. Nevertheless it is possible that a relatively greater proportion of these students is highly organized or motivated enough to fit in more than 20 hours per week of study in addition to attending classes and working 11 or more hours per week.

Student Class Preparation Time by Number of Hours Worked Off Campus

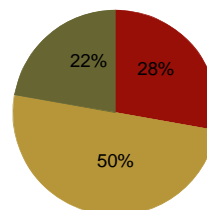
0 hours of work/week (n=256)



1-10 hours of work/week (n=31)



11+ hours of work/week (n=18)

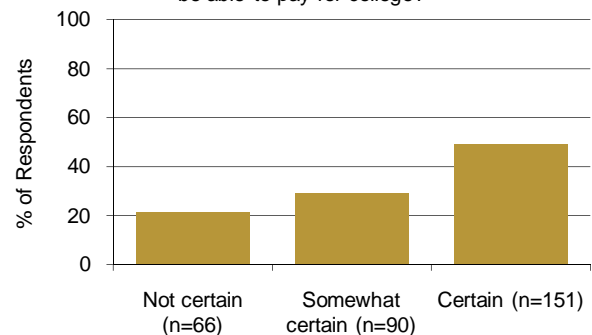


- <10 hours/week prep
- 11-20 hours/week prep
- >20 hours/week prep

Perceptions of Ability to Pay for College

When we asked students how certain they were of their own, or their family's, ability to pay for college, about 79 percent of UVM respondents reported they were at least somewhat certain that they would have sufficient funds. In comparison, 21 percent of students responding reported that they were uncertain. This means that for every five UVM respondents, one student is not certain about his or her ability to pay for college. While the students' level of financial certainty at UVM is high compared to other institutions in this pilot study, results suggest that additional support might be necessary for the substantial minority (21.5%) that remains uncertain.

How certain are you that you will be able to pay for college?



Appendix: Regression Tables and Factors

Complete Regression Results		
Variable	Odds ratio	Sig.
Female	1.68	
White	0.78	
Certainty of college funding	1.15	
Combined SAT	0.99	**
General climate+	2.43	****
Faculty interaction+	1.51	
Diversity perceptions+	1.36	
Registration problems	1.31	
Learning community participation	0.72	
First-year seminar participation	0.86	
Perception of quality advising	1.41	*
Absences from class	0.73	
+ Represents a factor		
*p<.10, **p<.05, ***p<.01, ****p<.001		

Student Perceptions of Campus Climate (α=.62)		
Factor name	Variables	Alpha (reliability of factor)
General climate	Perception of how welcoming the social environment;	0.87
	Perception of how welcoming the academic environment;	
	Developing a social network on campus;	
	Perception that the university is responsive to student needs.	
Faculty interaction	Received support or encouragement from faculty;	0.76
	Received academic assistance from faculty;	
	Received advice from faculty;	
	Received academic feedback from faculty.	
Diversity perceptions	Course experiences that enhanced understanding of the history, culture, or social concerns of people from diverse backgrounds;	0.73
	Course experiences that included contributions from students with diverse backgrounds and perspectives;	
	Noticing the influence of multicultural and diverse perspectives in campus surroundings.	

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The **College Board Pilot Study on Student Retention**, funded by the College Board, is part of the Project on Academic Success (PAS), which engages in practice- and policy-oriented research on student academic success, with particular emphasis on factors that influence persistence in and access to higher education. PAS is a project of the Indiana University Center for Postsecondary Research and receives technical assistance in survey administration from the Indiana University Center for Survey Research.