

# **University of Massachusetts Boston**

## **An Analysis of the One Year Retention of the University of Massachusetts Boston Fall 2000 First Time Full Time Freshman Cohort**



**Office of Institutional Research and Policy Studies  
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## Notes

This study on which this report is based is a project of the Office of Institutional Research and Policy Studies (OIRP) at UMass Boston. It will present an executive summary followed by a more detailed report in several sections. It is the first in what is envisioned as a series of reports on the retention and persistence to graduation of the first time full time freshman cohort that entered UMass Boston in the fall 2000 semester. Much more work remains to be done on the available data. Other data have yet to be analyzed or, in some cases, accessed.

Most of the tables and charts have been produced in Excel®. Tables that report statistical significance are in a modified Stata for Windows® Version 7 format. In general, bar charts represent values observed in the data. Line charts represent predicted values. The predicted values are derived from bivariate logit model regressions. Unless specifically stated otherwise, all charts and tables refer to data for the fall 2000 first time full time freshman cohort.

Data Specialist Fernando Colina acquired most of the demographic and entrance data from the UMass Boston data files. The survey was administered by the Center for Survey Research at UMass Boston and results were provided in Excel® format.

Total numbers of students that are reported in individual charts or tables will vary occasionally because of missing or invalid data.

# **An Analysis of the One Year Retention of the UMass Boston Fall 2000 First Time Full Time Freshman Cohort**

## **Executive Summary**

This is the first of a series of reports on the retention and persistence rates of the 595 students who made up the UMass Boston fall 2000 first time full time freshman cohort. Of these 595 students 411 returned to UMass Boston in the fall of 2001 for a one year retention rate of 69.1%. This report focuses on entrance and demographic variables and responses to a telephone survey of both retained and non-retained students conducted by the Center for Survey Research. The study has identified a number of issues and concerns, summarized briefly below and discussed more fully in the report.

### **Race/Ethnicity and Gender**

- Men are significantly less likely to be retained than are women
- Asian/Pacific Islanders are significantly more likely to be retained than are non-Asian/Pacific Islanders
- White non-Hispanics are significantly less likely to be retained than are those who are not identified as White non-Hispanics.
- Hispanics, Black non-Hispanics, international students and those who refused to provide racial/ethnic information have retention rates that statistically, are within the normal range of that for the overall group.

The entire cohort of full time first time freshmen is considerably more diverse than our usual racial/ethnic categories might lead us to assume.

- Among the 595 students, there are citizens of over 60 countries, and these non-U.S. citizens are significantly more likely to be retained than are U.S. citizens.
- About 42% of all students reported speaking a language other than English at home.

Appendices I and II have details on the citizenship and language status of the survey respondents beginning on page 53 with a listing of languages spoken by racial/ethnic

group on page 59. A more complete discussion of demographic variables begins on page 9 of the report.

### **SAT Scores**

- There was no relationship between retention and math SAT scores.
- There is a strong inverse relationship between verbal SAT scores and retention.
  - Retention rates decline as verbal SAT scores rise.

A more complete discussion of the relationship between SAT scores and retention begins on page 17. For details on the correlation of SAT scores and other key variables see Appendix V on page 80.

### **Directions for Student Potential**

- Students who enter UMass Boston through the DSP program are retained at a significantly higher rate (78.2%) than are other students (66.2%).
  - Ninety-two of the 211 first time full time freshmen who identified themselves as something other than White non-Hispanic entered through the DSP program
- Within racial/ethnic group there is a statistically significant relationship for Hispanic student retention based on DSP participation (79%) vs. non-DSP (44%).

A more complete discussion about DSP begins on page 20 of the report.

### **College within UMass Boston**

The College of Management and the College of Nursing and Health Sciences continue to have higher retention rates than the College of Arts and Sciences or the College of Public and Community Service. A more complete discussion begins on page 21 of the report.

### **Non-retained Students Currently Attending Other Colleges or Universities**

- 55.4% of non-retained students surveyed reported being enrolled at another institution for fall 2001.
  - 39% of those at 2 year institutions
  - 61 % of those at 4 year institutions
  - 20% of the students at four year institutions are at other UMass campuses
- Thus, if this pattern could be generalized for all non-returning students, the first year retention rate in higher education for UMass Boston would increase from 69.1% as follows:
  - Retained or transferred to any other institution rate is **86.2%**
  - Retained or transferred to another four year institution rate is **79.5%**

Discussion begins on page 46 of the report.

### **Likelihood of Return to UMass Boston in the Future As Reported by Non-returning Students**

Non-returning students were asked how likely they were to return to UMass Boston. The answers differed considerably based on their current attendance at another institution. Of those who are not currently enrolled at any other college, **73%** stated that they are somewhat likely or very likely to return. Overall, **50%** stated that they are somewhat likely or very likely to return. A more complete discussion begins on page 48.

### **Intention to Graduate at First Enrollment**

Both returning and non-returning students were asked if they were planning to get a degree here or not when they first enrolled at UMass Boston. About 32% said that they were not. This was stable across almost all comparison groups including retained vs. not retained, by gender, by college, and by race/ethnicity except for Asian Pacific Islanders who were less likely to be intending to get a degree when they first enrolled (46% were not) than were non-Asian/Pacific Islanders. A more detailed discussion begins on page 46 of the report.

### **Reasons for Enrolling at UMass Boston**

Students who reported that they enrolled to get credits for transfer, or because they didn't get into their 1st choice were less likely to be retained. A more detailed discussion begins on page 26 of the report.

### **Reasons for Not Returning to UMass Boston**

The respondents were offered a list of 18 potential reasons and asked to select all that applied. They were also asked what their most important reason was for not returning.

Housing and dormitory issues were near the top of both the frequency list and the most important list. About 32% reported that wanting to live in a dorm was a reason for not returning. About 14% cited wanting to live in a dorm or another housing related issue as the most important reason for not returning. A more detailed discussion begins on page 38 of the report.

### **Experiences While at UMass Boston**

Students were also asked about their relationships and experiences at UMass Boston.

- Retained students rated their relationships with other students more highly than did the non-returning students
- Retained students rated their relationships with faculty more highly than did the non-returning students, although the majority of students in both groups were satisfied with the amount of contact with faculty outside of class
- Retained students rated a number of services more highly than did non-returning students

A more detailed discussion of experiences while at UMass Boston begins on page 34.

A copy of the survey instrument is included as *Appendix IV: The Final CSR Freshman Retention Survey Instrument* beginning on page 64.

# An Analysis of the One Year Retention of the Fall 2000 First Time Full Time Freshman Cohort

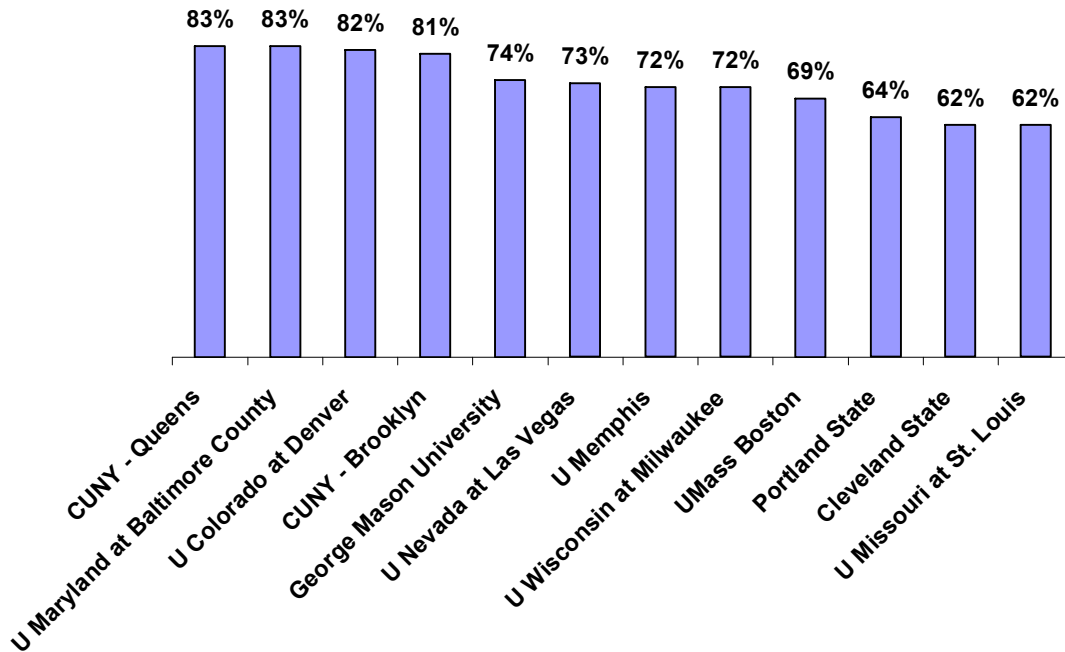
## Part 1: Introduction

### Section 1: General Background

Early in the fall 2001 semester, the Office of Institutional Research and Policy Studies (OIRP) began a study of the retention of first time full time freshmen who had entered the University of Massachusetts Boston (UMB) in the fall semester of 2000. There were 595 students in this cohort, 411 of whom returned in fall 2001 for a one year retention rate of about 69%.

The study was developed because of concerns regarding the UMass Boston retention rates. While public urban universities tend to have lower retention rates than their flagship counterparts, UMass Boston's rates were at the lower end of those of our peer institutions. Details of retention rates at our 2000-2001 peer institutions are presented in Chart 1, which follows. The peer institution set has changed since fall 2000.

**Chart 1: 2000 - 2001 Retention Rates at Peer Institutions**



This is the third in a series of studies related to retention that have been conducted at UMass Boston over the years. In 1983, the Center for Survey Research presented a report entitled *Freshman Experiences at the University of Massachusetts at Boston* that was authored by Dr. Karen Seashore Louis, Dr. Mary Ellen Colten, and Getachew Demeke. This was a mid-year study of freshmen who had entered UMass Boston in the fall of 1982. Both returning and non-returning students were contacted early in the spring semester and asked specifically about their experiences during their first semester. The focus of the report is on the experiences and satisfaction with services during the students first semester at UMass Boston.

The second report was produced by Jennifer Wilton of the Office of Institutional Research in 1999. It is entitled *Retention and Persistence of Undergraduate Entering Cohorts 1984-1996*. It tracks retention and persistence of all undergraduate entrants, whether full or part time, freshmen or transfer, and spring or fall semester entrant.

The current report focuses exclusively on the 595 first time full time freshmen who entered in the fall 2000 semester. The federally mandated reports of retention and persistence rates are for this group alone. While UMass Boston admitted 3,152 new undergraduate students in the academic year beginning in fall 2000, it is these few first time full time freshmen who entered in the fall on whom much of our reporting is based, and the statistics that we report regarding their progress are factored into university ratings reported in such publications as *America's Best Colleges* by U.S. News and World Report.

Although these first time freshmen are generally considered to be traditional students, our most recent National Survey of Student Engagement (NSSE) study in spring 2000 indicated that even our first year students<sup>1</sup> are quite different from those at other four year institutions nationally, other four year urban institutions, and even from those at the other UMass campuses in age, family responsibilities, the number of hours spent working for pay off campus, and on a variety of other measures of behavior. In the survey part of the current study, we used some of the NSSE questions about family and work

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<sup>1</sup> The National Survey of Student Engagement surveys first year students and seniors. First year students are defined as those who were in residence in the fall semester and will not have accumulated 30 or more credits by the beginning of the spring semester. In the 2000 administration of the survey, about 20% of first year student respondents reported that they had started college somewhere else.

responsibilities in order to test for differences between retained and non-retained students on these measures that are related to the potential for academic and social integration at the university. In the retention literature, academic and social integration are theorized to influence retention (Tinto 1975, 1993).

## **Section 2: Data and Methodology**

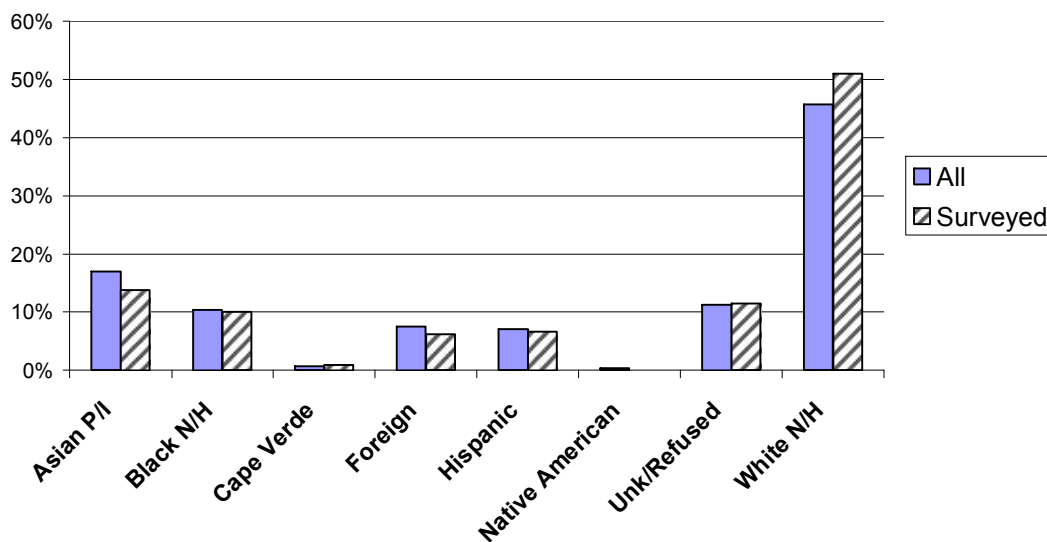
The data used for this analysis are drawn from two primary sources. Official UMass Boston admissions and enrollment data were accessed for all 595 of the fall 2000 first time full time freshmen, and a telephone survey of both returning and non-returning students in that cohort was conducted by the Center for Survey Research (CSR).

As the Office of Institutional Research and Policy Studies (OIRP) was developing a survey instrument, the Director of the CSR, Dr. Mary Ellen Colten offered to review it, and to assist us if it was possible for them to do so while fulfilling their current commitments. As an outgrowth of this, CSR received a contract from the university to develop a final survey instrument and to conduct a telephone survey to begin in late November 2001.

By the beginning of October, we knew that 411 of the 595 first time full time freshmen from fall 2000 had returned. We decided to attempt to survey all of the 184 non-returning students and a randomly drawn sample of 200 of the 411 returning students. After pre-testing the instrument with both groups, CSR prepared the final survey instrument. A copy of it is included as *Appendix IV: The Final CSR Freshman Retention Survey Instrument* which begins on page 64. CSR received responses from 75 of the 184 non-returning students (41%) and from 135 of the 411 returning students (33%). Overall, 35% of the total cohort responded to the survey.

Compared to their proportion of the cohort, men were slightly overrepresented as respondents to the survey, probably because they were overrepresented in the non-returning group that we attempted to fully survey. The racial/ethnic mix of the respondents was roughly equivalent to that of the overall group, with Asian/Pacific Islanders and international students slightly underrepresented, and White non-Hispanics slightly overrepresented. The details of the racial/ethnic composition of the cohort as a whole and of the survey respondents are presented in Chart 2, on the following page.

**Chart 2: Comparison of the Percentage of Students Within Racial/Ethnicity Categories for All First Time Full Time Freshmen and for Those Who Responded to the Survey**



This report will primarily deal with descriptive statistics concerning a limited number of variables. For a number of these variables, comparison of means tests will be run, and in some cases, simple bivariate logistic regression models will be used and reported. The use of the bivariate logistic regression models is intended to make the strength of certain relationships more accessible for the reader. They are not meant to be accepted as final models.

The reason for a concentration on these bivariate relationships is that more work needs to be done to access and analyze more variables for the specification of a more complete model and to deal with the high degree of correlation among a number of variables such as race/ethnicity, whether English is spoken at home, participation in the DSP program, verbal and math SAT scores, etc. For details on the correlation of several key variables, please see Appendix V on page 80.

The statistical analysis is done with Stata for Windows® Version 7.

## Part 2: Analysis of Entering Cohort Retention Rates And Variables Available from UMass Boston Databases

### Section 1: Analysis of the Relationships between Entering Cohort Retention Rates and Demographic Variables

The gender and racial/ethnic characteristics reported by the cohort were examined alone and in combination. The race/ethnicity and gender reported on the student records of each member of the cohort are reported in Table 1, which follows.

**Table 1: Race/Ethnicity and Gender**

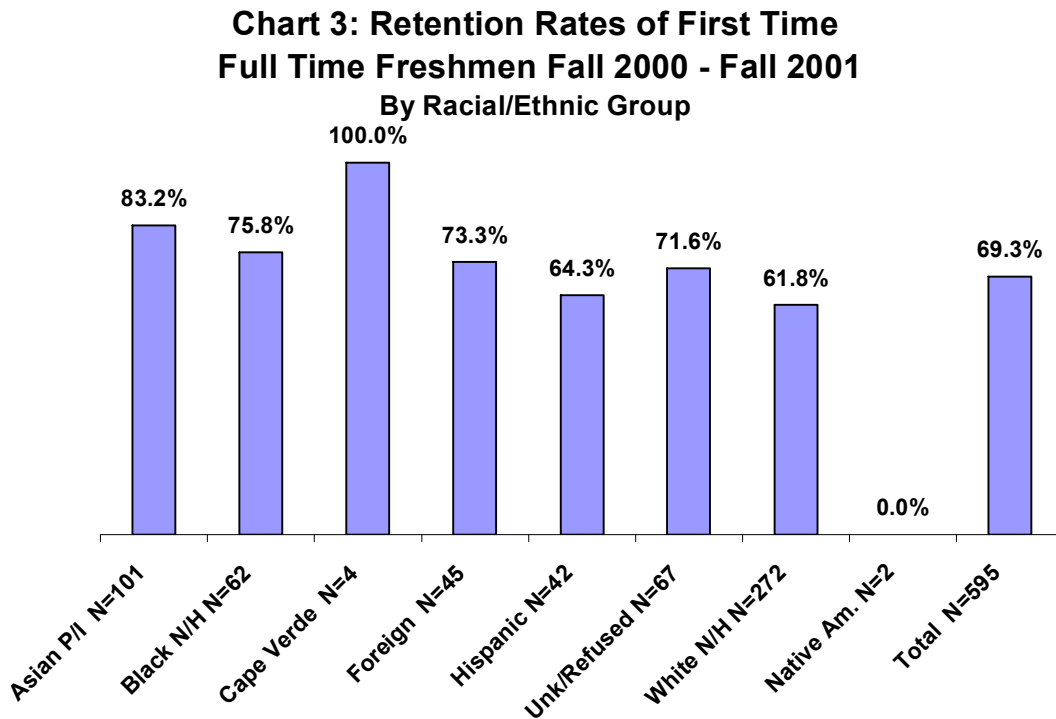
<b>Race/Ethnicity</b>	<b>Women</b>	<b>Men</b>	<b>Total</b>	<b>Racial/Ethnic Group as a Percentage of the Total Group</b>
Asian P/I	53	48	101	17.0%
Black N/H	41	21	62	10.4%
Cape Verde	4	0	4	0.7%
Foreign	24	21	45	7.6%
Hispanic	25	17	42	7.1%
Native American	1	1	2	0.3%
Unknown/Refused	32	35	67	11.3%
White N/H	146	126	272	45.7%
<b>Total</b>	<b>326</b>	<b>269</b>	<b>595</b>	<b>100.0%</b>

#### Section 1.1: Gender Alone

Men made up about 45.2% of the fall 2000 entering cohort of first time full time freshmen. This is not markedly higher than the 42.6% of the total matriculated undergraduate headcount men represent (Statistical Portrait Fall 2000, p. 19). Of the 269 men who entered in fall 2000, 173 (64.3%) returned in the fall of 2000. For women, the retention rate was much better; 238 of the 326 women (73%) who entered in fall 2000 returned to UMB in fall 2001. A comparison of means test on the difference of about 8.7% returned a T-statistic with an absolute value of about 2.3, which is statistically significant at above the 95% level.

### Section 1.2: Race/Ethnicity Alone

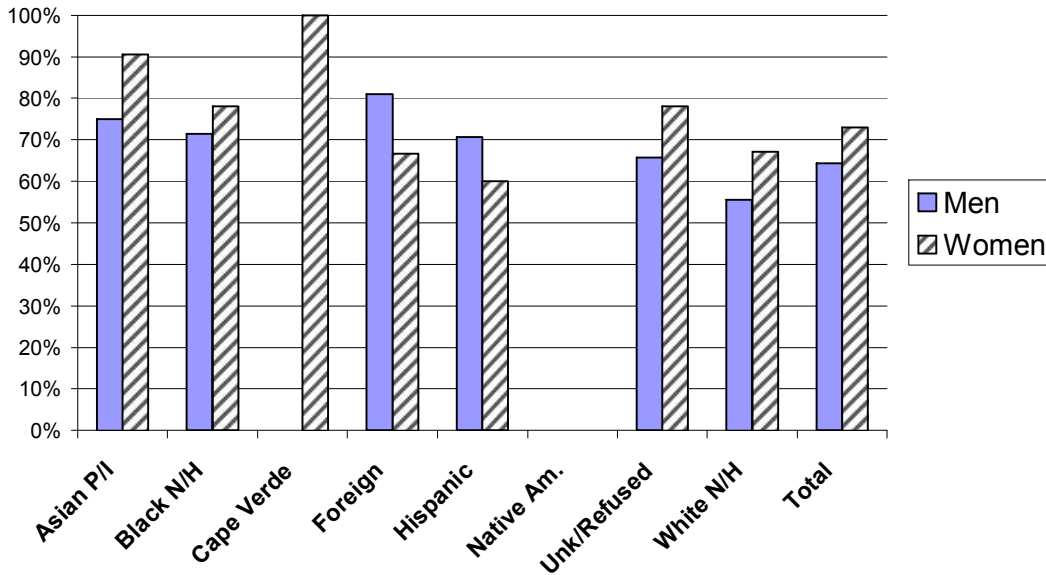
There was also variation in the retention rate by racial/ethnic group. Both the Native American and the Cape Verdean groups were very small with no variation in either group; the Cape Verdean group had all 4 members return, and both of the Native Americans failed to return. Among the other groups, the Asian/Pacific Islanders returned at a rate that was significantly higher than either the overall group mean or the non-Asian/Pacific Islander group. The White non-Hispanic group returned at rate that was significantly lower than both the overall group mean and the mean for those not within the White non-Hispanic group. While there is some variation for the other groups, it is not statistically significant in tests against the overall group mean or the members of the cohort who are not part of the group. Details of the retention rates for the current study cohort are presented in Chart 3 which follows.



### Section 1.3: Race/Ethnicity and Gender Combined

Most of the strength of the gender association can be found in just two of the racial/ethnic groups. For the Asian/Pacific Islanders and the White non-Hispanics, women were significantly more likely to be retained than were men. There are no statistically significant differences in the other groups. Aside from the Native Americans, the lowest retention rate by race/ethnicity and gender was for White non-Hispanic males, only about 56% of whom returned for fall 2001. The retention rate for all others but White non-Hispanic males was about 73%. The difference of about 17% was statistically significant at the highest level. Details of retention rates by race/ethnicity and gender are presented in Chart 4, which follows.

**Chart 4: Comparison of Retention Rates for Fall 2000  
First Time Full Time Freshmen  
By Racial/Ethnic Group and Gender**



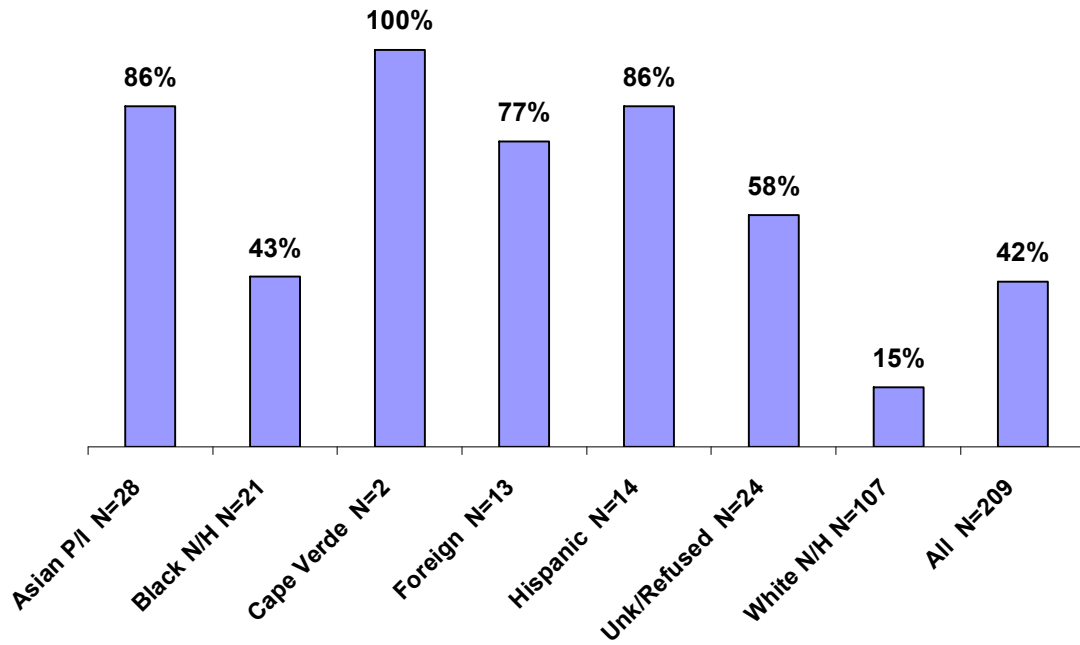
#### **Section 1.4: The Diversity within the Racial/Ethnic Categories**

While we report these racial/ethnic categories as if they were homogeneous, we found that for the most part, they are not. There is much cultural diversity within the groups. Except for the Cape Verdean and Native American groups, UMass Boston records showed that there was a tremendous amount of variation within the groups by citizenship status. Citizens of countries other than the United States made up more than 50% of the Asian/Pacific Islanders, more than 25% of Black non-Hispanics, more than 28% of Hispanics, more than 10% of the White non-Hispanics, and almost 30% of those who had refused to supply racial/ethnic information. This does not overlap those who are here as international students (reported as foreign). Overall, the 595 students in the cohort claimed citizenship in more than 60 countries. Non-U.S. citizens made up about 30% of the cohort as a whole. These non-U.S. citizens were retained at a 77% rate, while U.S. citizens were retained at a 60% rate. The difference is statistically significant at the 95% level. Details of the citizenship by racial/ethnic group background are presented in *Appendix I: Citizenship by Racial/Ethnic Group for Fall 2000 First Time Full Time Freshmen* on page 53.

Further evidence of the cultural diversity within the racial/ethnic categories required for federal and state reporting came from the language questions asked of all returning and non-returning students. The students were asked whether they usually spoke a language other than English at home or with family. Those who responded that they did speak a language other than English at home or with family were then asked which language. Overall, about 42% of respondents reported speaking a language other than English at home. The percentages of each racial/ethnic group reporting a language other than English at home are presented in Chart 5 on the following page. Full details concerning the languages spoken at home by the respondents are presented in *Appendix II: Languages Spoken at Home* which begins on page 56.

The racial/ethnic category of “unknown” indicates a refusal by the student to supply the information (unk/refused). It has often been assumed that it is primarily made up of White non-Hispanic students. However, both the citizenship and the languages spoken at home by this group challenge that assumption.

**Chart 5: Percent of Survey Respondents Who Speak a Language Other than English at Home or with Family By Race/Ethnicity**

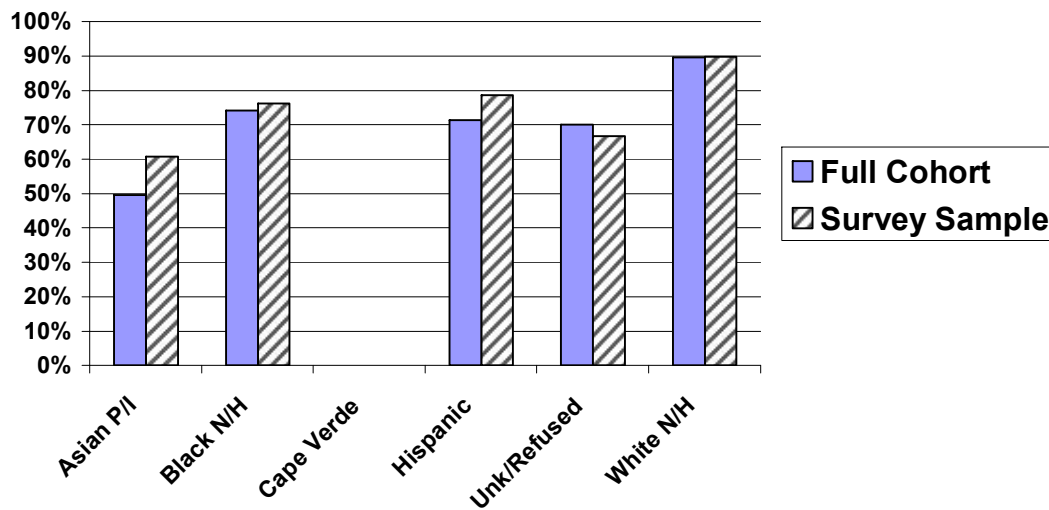


This diversity is important because it affects assumptions we may make about culture and native language status based simply upon standard racial/ethnic categories. Programs that are designed to increase retention should take this cultural and linguistic diversity into account.

There was a fairly high Pearson’s correlation coefficient of about .47 between U.S. citizenship and speaking English at home. In order to check that the survey did not have a bias regarding citizenship that might have an impact on the language question, we compared U.S. citizenship status by racial/ethnic group for the cohort as a whole with that of for the survey sample. Neither Native Americans nor foreign/international students were included in the comparison. We found that only Asian/Pacific Islanders had a percentage of U.S. citizens in the sample that was significantly different from the percentage in the cohort as a whole. There were no other statistically significant

differences in U.S. citizenship between the cohort and the survey sample. Details of the U.S. citizenship status by racial/ethnic group are reported in Chart 6 which follows.

**Chart 6: US Citizenship in the Full Cohort  
And in the Survey Sample as a Percentage  
Of Racial/Ethnic Category**



A discussion of the impact of entrance variables such as SAT scores, participation in the Directions for Student Potential program, and college within UMass Boston, including the interaction between demographic and entrance variables begins in Section 2 on the following page.

## **Section 2: Analysis of the Relationships between Entering Cohort Retention Rates and Various Entry Variables**

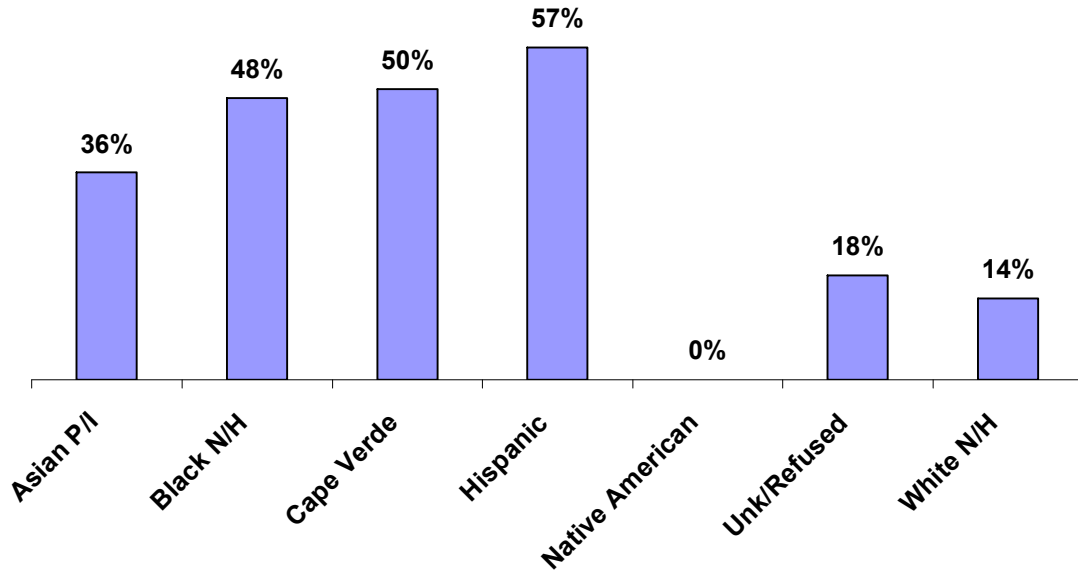
### **Section 2.1: Directions for Students Potential**

Directions for Student Potential (DSP) provides a pre-matriculation summer program for a selected group of students who lack the traditional credentials for admission to a four year college, but who show promise of benefiting from a university education. It offers intensive workshops in reading, writing, English language, mathematics and study skills. Those students who successfully complete the program are admitted to the College of Arts and Sciences in the Fall (source: Edith Shillue, Director, Directions for Student Potential). Students who have completed the DSP program are retained at a rate that is significantly higher than that of non-participants. The difference of almost 12% is significant at the 99% level.

However, there are other factors at work. The DSP program has no international students in it, and the race/ethnicity of its graduates is different than for the overall group. Overall, a large percentage of the first time freshman of each group traditionally characterized as “minority” enters UMass Boston through the DSP program. White non-Hispanics (who have the lowest retention rate) have the lowest DSP participation rate of any group but the Native American, neither of whom participated in DSP. Details of the percentage of DSP students within each racial/ethnic group are presented in Chart 7, on the following page.

Significance of difference tests were run on the relationship between retention and DSP status within each racial/ethnic group. The results of those tests are presented Table 2, on the following page. Results are not presented for Cape Verdeans, Native Americans, or foreign/international students because of a lack of participation in the program or of variation in retention. Only the Hispanic DSP students have a retention rate that is significantly different than the non-DSP students within the group. However, the overall numbers in some of the groups are small. What is remarkable is that for each racial/ethnic group, DSP students were retained at higher rates, even if the differences were not statistically significant.

**Chart 7: Directions for Student Potential Program Participation  
By Percentage of Racial/Ethnic Group Participating  
Fall 2000 First Time Full Time Freshman Cohort**



**Table 2: Significance Test Results of Retention Rates within Racial/Ethnic Group  
By DSP Status**

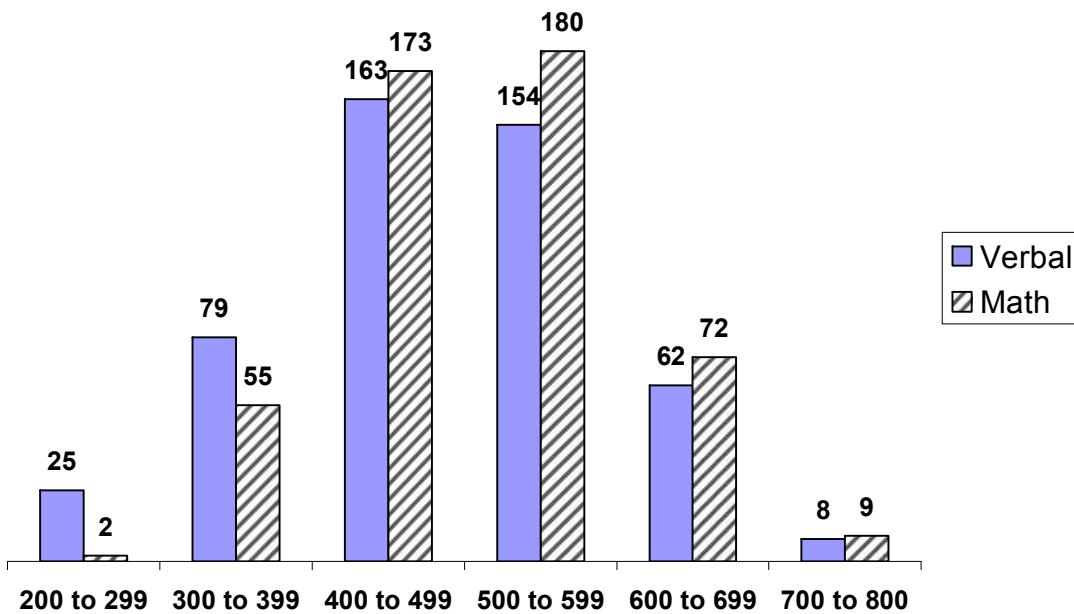
Group	Number of DSP Students	Retention Rate	Number of non-DSP Students	Retention Rate	Difference	Significance Level
Asian P/I	36	86.1%	65	81.5%	4.6%	None
Black N/H	30	80.0%	32	71.9%	8.1%	None
Hispanic	24	79.2%	18	44.4%	34.7%	>99%
Unk/Refused	12	83.3%	55	69.1%	14.2%	None
White N/H	38	65.8%	234	61.1%	4.7%	None

There is also a strong relationship between DSP participation and Verbal SAT score. DSP students had markedly lower mean Verbal SAT scores than the non-DSP students. The difference of over 132 points was significant at the highest level. A detailed discussion of SAT scores and the one year retention of this cohort begins on the following page.

### Section 2.2: SAT Scores

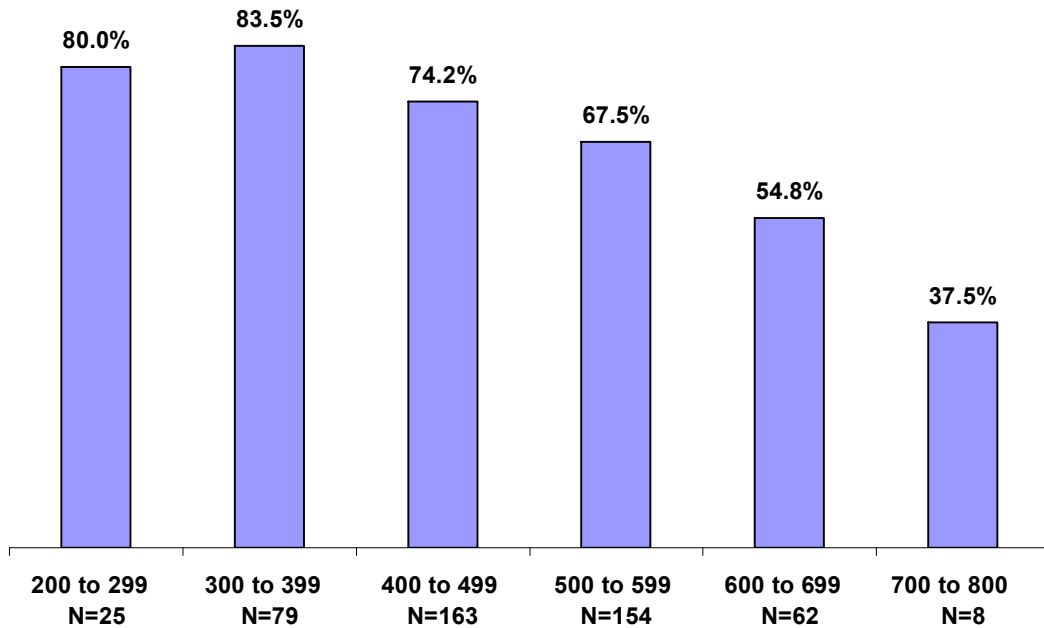
Among all 595 first time full time freshmen, including those who entered through the DSP program, we have SAT scores for 491. The mean Verbal SAT score was 476.7 and the mean Math SAT was 506.4. Information about the distribution of Math and Verbal SATs is presented in Chart 8, which follows.

**Chart 8: Verbal and Math SAT Scores**  
By Number of Students Scoring within Range



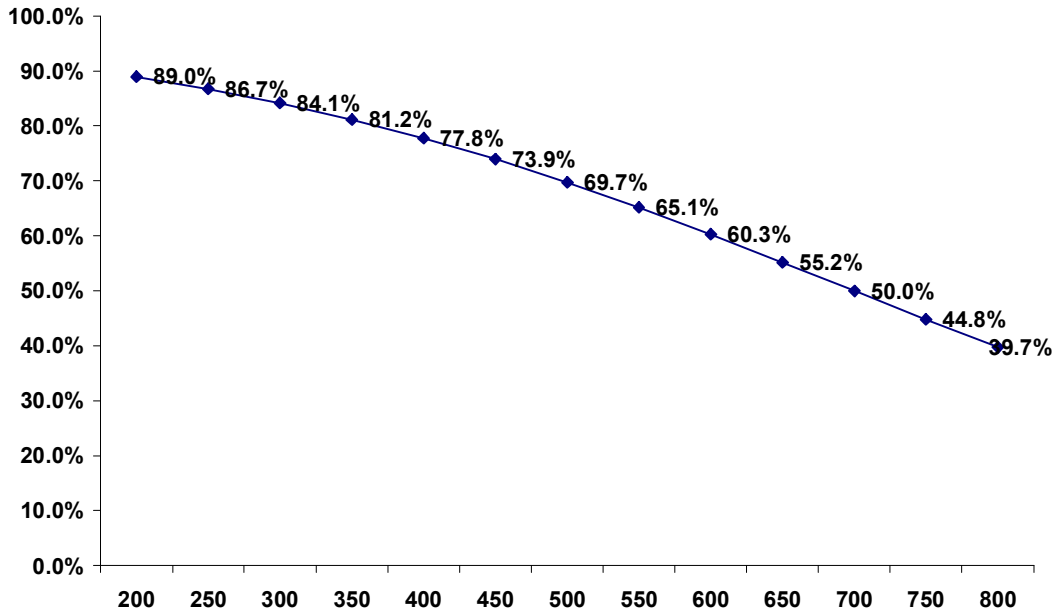
Several tests of significance were run to examine the relationship between the Math SAT scores and retention. No statistically significant relationship was found. However, when the same tests were run for the Verbal SAT scores, a very strong relationship was found. A simple significance of difference test was run on Verbal SAT score by retention status. The results showed that retained students had a mean score of about 463, while non-retained students had a mean of about 510. The difference of 47 points was significant at the highest level. The observed retention rates by Verbal SAT range are presented in Chart 9, on the following page.

**Chart 9: Observed Retention Rate  
By Verbal SAT Range**



A simple bivariate logit regression was then run, with the dummy variable for retention as the dependent variable and the Verbal SAT score as the independent variable. The results were statistically significant at the highest level. When predicted values were obtained from the regression results, we can see that, on average, every 50 points that the Verbal Sat score rises, the probability that the student will be retained drops by an average of 4 percentage points, and that the rate of decline accelerates as the Verbal SAT score rises. Details are presented in Chart 10, on the following page.

**Chart 10: Predicted Retention Rate  
By Verbal SAT Score**



Part of this relationship may be based on race/ethnicity. There are marked differences in Verbal SAT score by race/ethnicity, and as already noted, differences in retention rates by race/ethnicity. Details are presented in Table 3, which follows.

**Table 3: Significance of Verbal SAT Differences by Racial/Ethnic Group**

Race/Ethnicity	Mean Verbal Score	Difference from Overall Mean	Statistical Significance Level	Group Comparison* Mean	Difference	Statistical Significance Level
Asian P/I	426	-51	>99%	488	-62	>99%
Black N/H	423	-54	>99%	483	-60	>99%
Cape Verde	380	-97	>95%	478	-98	>95%
Foreign	393	-84	>99%	480	-88	>99%
Hispanic	425	-52	>99%	481	-88	>99%
Unk/Refused	480	3	None	476	4	None
White N/H	523	46	>99%	435	89	>99%

\* The group comparison mean is the mean for everyone not in the group. For the Asian P/I group, for example, all those who are not Asian/Pacific Islanders.

One confounding factor may be language status. Those who spoke a language other than English at home had significantly lower Verbal SAT scores that were, on

average, about 93 points lower than those who spoke English at home. However, the retention rate for these students, while about 9.5% higher was not significantly different at even the 95% level. The lack of statistical significance may be because of the small numbers available for analysis. When U.S. citizenship is used as a proxy for language so that we could analyze the entire cohort, we found that U.S. citizens had mean SAT scores that were over 120 points higher than the non-citizens, and that the non-citizens were over 18% more likely to be retained. Both of these differences were significant at the highest level.

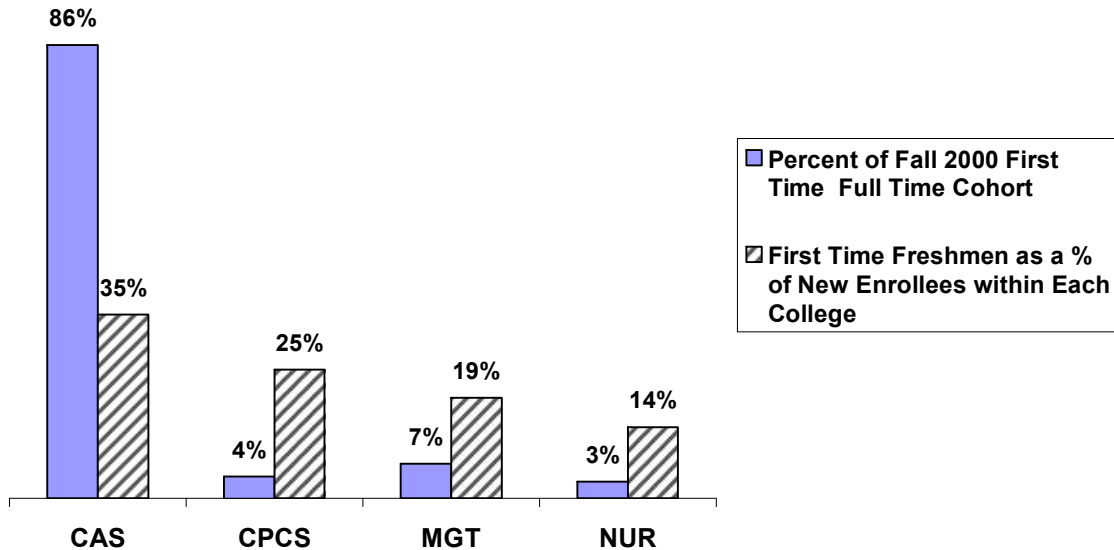
Another possible confounding factor that was examined was participation in the Directions for Student Potential program. DSP students had significantly lower verbal and mathematics SAT scores and significantly higher retention rates. However, Verbal SAT score was not significantly related to retention when the DSP students were examined alone, and the predicted impact of Verbal SAT scores on retention for the non-DSP students only was virtually identical to the values displayed previously in Chart 10 (page19) in level of significance, strength, and direction.

Regardless of the confounding factors, this negative relationship between Verbal SAT scores and retention is in direct contradiction to what has been observed in other studies (Aitken 1982, Tinto 1993).

### Section 2.3: Entry College within UMass Boston

Most of the first time full time freshmen entering UMass Boston were enrolled in the College of Arts and Sciences (CAS). Contributing to this is that both the College of Nursing and Health Sciences (NUR) and the College of Management (MGT) may require certain of their applicants to enter UMB through CAS, complete coursework there, and (if the work is of sufficient quality) do an internal transfer into their colleges. The College of Public and Community Service (CPCS) has typically focused on older, non-traditional students who have some previous college experience. The Graduate College of Education does not directly enroll any undergraduate students. The College of Nursing enrollment is reported in two tracks; College of Nursing and Human Performance and Fitness. Only 4 of the new students were in Human Performance and Fitness. For the purposes of this study, they will be combined with the other College of Nursing students in a single College of Nursing group. Details of each college's representation within the cohort, and of the proportion of each college's new enrollees that were first time freshmen in fall 2000 are reported in Chart 11, which follows.

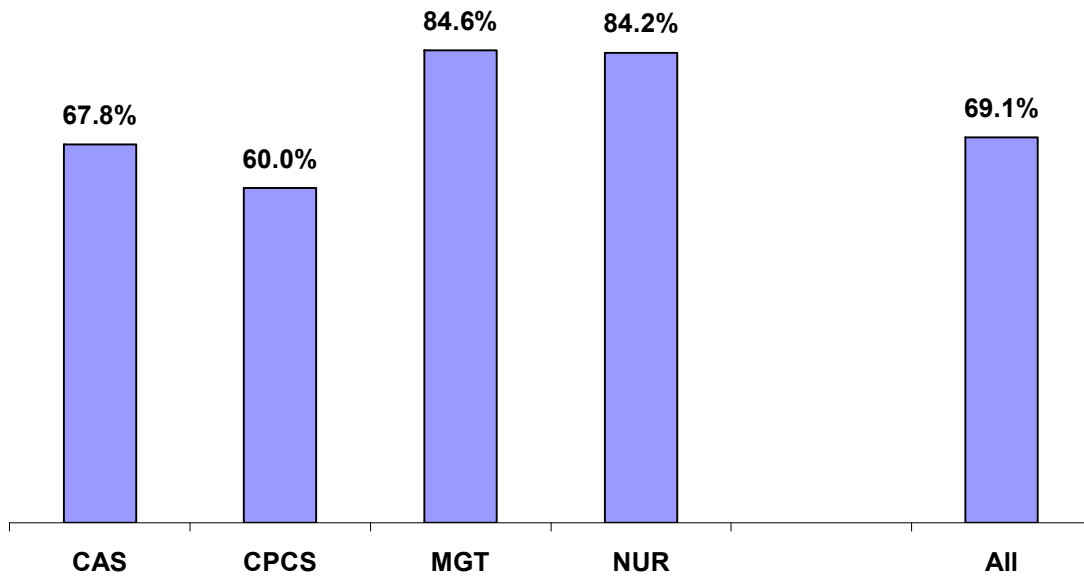
**Chart 11: College Enrollment and Entry Status**



The percentage of first time freshmen used in Chart 11 is for both full and part time students. The source of the enrollment data is the UMass Boston Statistical Portrait Fall 2000.

In her study, Wilton noted that both College of Management and College of Nursing students were significantly more likely to be retained when compared to College of Arts and Sciences students (1999, page 18). This continues to be the case. The details of the fall 2000 cohort retention rates by college are presented in Chart 12 which follows.

**Chart 12: Retention Rate by College**



The details of the significance of differences in retention rates by college are presented in Table 4, which follows.

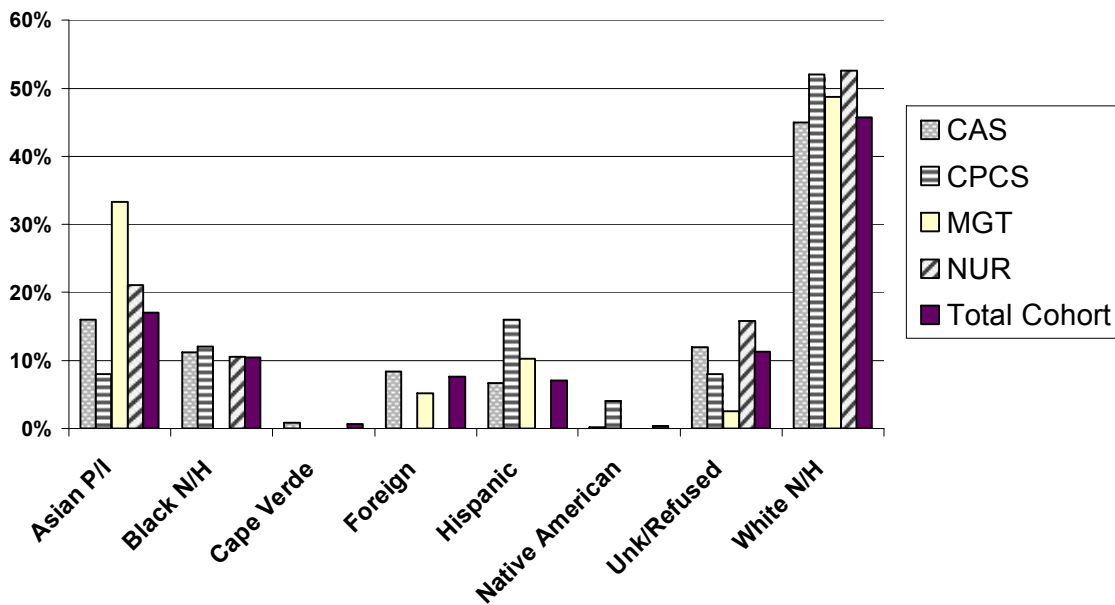
**Table 4: Significance of Means Tests by College**

College	Retention Rate	Difference from Overall Mean	Significance Level	Comparison Group Mean	Difference	Significance Level
CAS	67.8%	-1.3%	None	77.1%	-9.3%	95%
CPCS	60.0%	-9.1%	None	69.5%	-9.5%	None
MGT	84.6%	15.5%	99%	68.0%	16.6%	95%
NUR	84.2%	15.1%	95%	68.6%	15.6%	None

\* The comparison group mean is the mean for everyone not in the group. For the CAS group, for example, it is all those who are not in CAS.

However, the student populations of the various colleges within UMass Boston differ from each other on a number of characteristics. There are significant differences across the colleges by gender and race/ethnicity. The details of college affiliation by race/ethnicity are presented in Chart 13, which follows. The dark “Total Cohort” bar marks the percentage of the cohort that each group makes up. When the bars representing the various colleges are taller than the “Total Cohort” bar, it means that the group is represented within the college at a higher rate than within the total cohort. When the bars representing the various colleges are shorter than the “Total Cohort” bar, it means that the group is represented within the college at a lower rate than within the total cohort.

**Chart 13: Fall 2000 First Time Full Time Freshman Enrollment by UMB College and Race/Ethnicity**



The significant over-representation of Asian/Pacific Islanders affects the College of Management retention rate. If the Asian/Pacific Islanders are excluded, the College of Management retention rate would decline by almost 4%.

Further, in this case, college may act as a proxy for career maturity, that is attending either the College of Nursing or the College of Management may indicate that the student has made a commitment to a specific career path that is attainable by

attending these colleges. This commitment to a career path may have positive effects on retention within those colleges (Perry et al, 1999). The College of Arts and Sciences and the College of Public and Community Service offer majors that may have the same effect, but we have not yet analyzed individual majors.

An analysis of the data available from both returning and non-returning students from the fall 2000 entering first time full time freshman cohort who responded to the CSR telephone survey will begin in Part 3 on the following page. In many cases, the survey responses will be also analyzed in conjunction with both demographic and entrance variables that have already been discussed.

## **Part 3: An Analysis of the Survey Results**

### **Section 1: Description of the Survey**

The survey was broken into two main sections. Both returning and non-returning students were asked a number of questions about their experiences while at UMass Boston. They included questions regarding living accommodations, work hours both on and off campus, family responsibilities, and other areas that might provide information about external influences that might influence retention. Both groups of students were also asked questions about relationships with other students, participation in co-curricular events, attendance at campus social functions, and other areas that might provide information about social integration into the UMass Boston community.

Both groups of students were also asked questions about study behavior, interaction with faculty, quality of courses, and other factors that might provide insight into their academic integration at UMass Boston. Both groups of students were also asked about their general experiences at the university and about their satisfaction with various university services. Both groups of students were also asked questions that would address their desire to complete their college degree at UMass Boston and their general level of institutional commitment. Finally, both groups of students were asked whether they usually spoke English or some other language at home or with family. Those students who usually spoke a language other than English at home were asked what that language was, and about their facility with both written and spoken English.

The subset of non-returning students was asked an additional set of questions about their reasons for not returning, about their current enrollment at another institution, about the likelihood that they would return to UMass Boston in the future, and about what UMass Boston might do to get them to re-enroll.

## **Section 2: Expectations and Experiences Prior to First Enrolling at UMass Boston**

### **Section 2.1: Reasons for Attending UMass Boston**

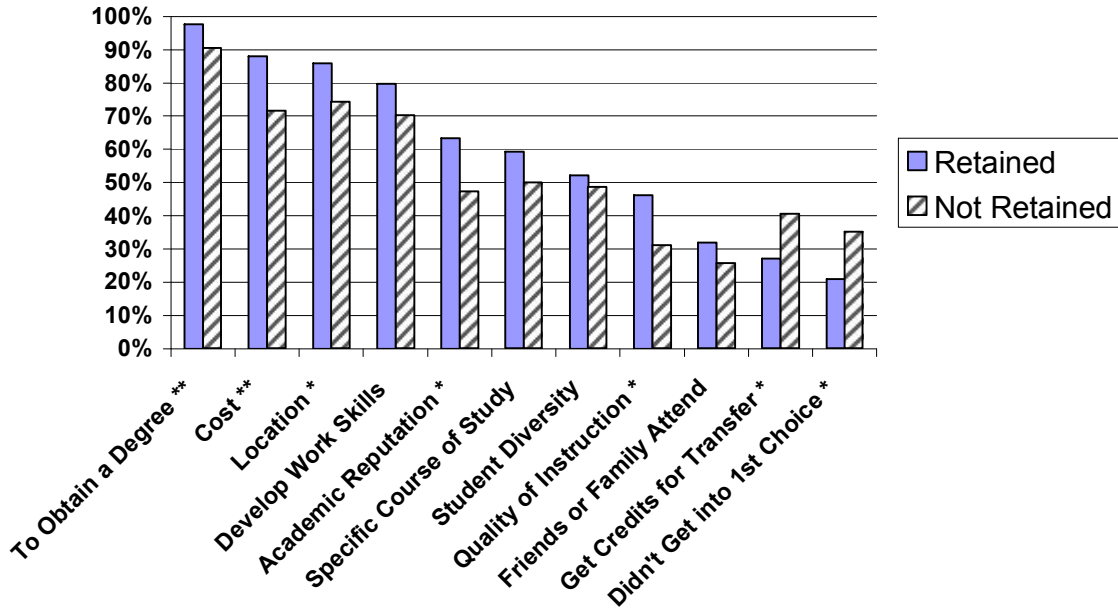
The survey asked all of the students about eleven specific possible reasons they may have had when they made the decision to attend UMass Boston. Each reason was offered as a separate question with a “yes” or a “no” response requested. They were to select each reason that applied to them. The wording of the introduction to the section was “I’d like you to think back about why you might have decided to attend UMass Boston. For each of the following, please tell me if it was one of your reasons for coming”. The reasons offered were:

1. To Obtain a Degree
2. Cost
3. Location
4. Develop Work Skills
5. Academic Reputation
6. Specific Course of Study
7. Student Diversity
8. Quality of Instruction
9. Get Credits for Transfer
10. Friends or Family Attend UMB
11. Didn't Get into 1st Choice

Nine of the 11 reasons are generally positive with regards to retention; that is they provide a reason for the student to come to and to stay at UMass Boston. However, two of the reasons are decidedly negative in terms of potential retention. Both “Get Credits for Transfer” and “Didn’t get into 1<sup>st</sup> Choice” demonstrate a lack of commitment to attending UMass Boston. Institutional commitment has been found to be a key variable in a number of previous retention studies (Bean, 1979; Brower, 1992; Cabrera et al, 1993). Indeed, it is a key factor in both Tinto’s model of student integration, and in Bean’s model of student attrition (Bean, 1979; Tinto, 1975 & 1993).

The percentages of respondents selecting each reason for attending UMass Boston are presented in Chart 14, on the following page.

**Chart 14: Comparison of Percentage of Respondents  
Selecting Various Reasons for Attending UMass Boston  
By Retention Status**



The differences in response rates between non-returning and returning students is statistically significant at: \* = the 95% level, \*\*= the 99% confidence levels.

For several of the questions/reasons suggested, there was a marked difference in retention rates based upon the responses to those questions. A “Yes” answer to several of the variables was positively associated with retention, while for several others, a “Yes” answer was negatively associated with retention. The reasons for attending UMass Boston that were negatively associated with retention will be discussed first. That discussion begins on the next page. The details of the retention rates and significance of the differences by question are reported in Table 5, also on the following page.

**Table 5: Significance of Differences between Retention Rates by Reason Responses**

<b>Reason</b>	<b>Was a Reason</b>	<b>Not a Reason</b>	<b>Difference</b>	<b>Significance</b>
Didn't Get into 1st Choice	52%	69%	-17%	95%
Get Credits for Transfer	55%	69%	-14%	95%
To Obtain a Degree	66%	30%	36%	95%
Cost	69%	43%	26%	99%
Location	68%	50%	18%	95%
Academic Reputation	71%	56%	15%	95%
Quality of Instruction	73%	58%	15%	95%
Develop Work Skills	67%	55%	12%	Not Significant
Specific Course of Study	68%	60%	8%	Not Significant
Friends or Family Attend	69%	63%	7%	Not Significant
Student Diversity	66%	63%	3%	Not Significant

\* Percentages have been rounded

### **Section 2.11: Reasons Negatively Associated with Retention**

The two “negative” reasons of “Get Credits for Transfer” and “Didn’t Get into 1<sup>st</sup> Choice” have exactly the effect one would expect. Those who expressed them were significantly more likely to leave UMB than those students who did not. An answer of “Yes” to either of these questions is evidence of a lack of institutional commitment. The real impact seems to come in the combination of the two. If the students were rejected by their first choice and came with the plan to get credits for transfer, then we retained them at only a 45% rate. Of the 17 non-returning students who selected both reasons, 10 reported that they were currently attending other institutions, and 9 of the 10 were at four year schools. The rate of attendance at another institution was not significantly different for these students, but the higher rate of attendance at four year institutions was significant at above the 95% level. Eight of the 17 had also wanted to live in a dorm, and 5 of those 8 were enrolled at four year schools that have dorms. There was no statistically significant difference in the mean Verbal SAT scores of the students who chose one or both of these reasons and students who did not select one or both of these negative reasons. The details of the relationships between selecting these negative reasons and retention are reported in Table 6 on the following page.

**Table 6: Impact of Selecting “Negative” Reasons on Retention Rates**

<b>Negative Reason</b>	<b>N Size</b>	<b>Retention Rate</b>	<b>Difference from Overall Mean</b>	<b>Statistical Significance Level</b>
Neither Selected	118	70.3%	5.7%	Not significant
Get Credits for Transfer Only	34	61.8%	-2.8%	Not significant
Not 1 <sup>st</sup> Choice Only	23	60.9%	-3.7%	Not significant
Both Selected	31	45.2%	<b>-19.4%</b>	95%

## **Section 2.12: Reasons Positively Associated with Retention**

### **Section 2.121: To Obtain a Degree**

More than 95% of the students who responded reported that obtaining a degree was one of their reasons for coming to UMass Boston. There were 10 students who reported that this was not a reason for coming. Only 3 of them returned for the second year. This 30% retention rate was over 36 percentage points less than that of the students for whom getting a degree was a factor. Even with such a small number, the difference in retention rate was statistically significant. A comparison of means test returned a T-statistic with an absolute value of 2.36 which was significant at the 99% level. Of the 7 who did not return, only 2 (28%) were enrolled at another institution. More than 58% of the non-returning students who had identified getting a degree as a reason reported being enrolled at another institution. While this difference is not statistically significant ( $\text{prob.} > |T| \approx 93\%$  in a one tail test) it bears reporting.

### **Section 2.122: Cost**

Over 80% of the respondents cited cost as a reason for attending UMass Boston. Of the 37 students in the survey who reported that cost wasn't a factor, only 16 (43.2%) returned. This rate was 26 percentage points lower than the 69.2% retention rate for those for whom cost was a factor. Even with the small numbers, the difference was statistically significant at above the 99% level. Only 10 of the 21 non-returning students

were enrolled at other institutions, which was not significantly different from the other non-returning students.

### Section 2.123: Location

About 80% of the respondents identified location as a reason for attending UMass Boston. Of the 38 who didn't, only 19 (50%) were retained. The difference of about 17 percentage points versus those for whom location was a reason was significant at the 95% level. However, what exactly the respondents understood location to mean is open to question. Ten of the 19 non-returning students enrolled at other institutions, and all of them were located in eastern Massachusetts.

### Section 2.124: Academic Reputation

About 57% of the respondents cited academic reputation as a reason for attending UMass Boston. Of the 88 who did not, only 49 (55.7%) returned. The gap in retention rates of over 15% between these students and those who cited academic reputation was significant at the 95% level. Of the 39 who did not return, 25 enrolled at another institution. This was about 18 points higher than the other institution enrollment rates of those who did not select academic reputation as a reason for attending UMass Boston. While this difference is not statistically significant at the 95% level, in Table 7 we can see that we would expect to find a difference that large by chance alone only slightly more than 5% of the time in a one tailed test.

**Table 7: Significance Test Results of Other Institution Enrollment**

<b>Academic Reputation As a Reason?</b>	<b>N Size</b>	<b>Other Institution Enrollment Rate</b>	<b>95% Confidence Interval</b>
<b>No</b>	39	64.1%	48.3% to 79.9%
<b>Yes</b>	35	45.7%	28.4% to 63.1%
<b>Difference</b>		<b>18.4%</b>	

Ha: diff > 0  
 |T| = 1.5946  
 P > T = 5.76%

The students who selected academic reputation appear to have been more committed to UMass Boston as an institution. This level of commitment shows in the

retention rate. Those who did not choose UMass Boston because of academic reputation were settling for UMass. When this response was compared to the responses to other questions, they were found to be more likely to have been refused admission to their first choice, more likely to have UMass Boston as a third or lower choice, more likely to be here to get credits for transfer, and were significantly less likely to be planning to get a UMass Boston degree when they entered than were students who selected UMass Boston at least partly for its academic reputation.

### **Section 2.125: Quality of Instruction**

About 41% of the respondents cited quality of instruction as a reason for attending UMass Boston. Of the 122 who did not, only 71 (58.2%) returned. The gap in retention rates of about 14% between these students and those who cited quality of instruction as a reason for attending UMass Boston was significant at the 95% level. Of the 51 students who did not select quality of instruction as a reason for enrolling, 30 enrolled at another institution.

### **Section 2.13: Reasons Not Statistically Associated with Retention**

For the other four reasons for attending UMB, the responses were not statistically associated with retention at the 95% level or higher. However, two of these were reasonably close. The reasons, along with the associated T-statistic on the difference in retention, and the probability of finding a T-statistic that large by chance alone for a one-tailed test are reported in Table 8, which follows.

**Table 8: Reasons Not Associated with Retention at the 95% or Higher Level**

<b>Reason</b>	<b> T </b>	<b>Probability&gt; T </b>
To Develop Work Skills	1.5604	<b>6.01%</b>
Specific Course of Study	1.2885	<b>9.95%</b>
Friends or Family Attend UMB	0.9323	17.61%
Student Diversity	0.4938	31.10%

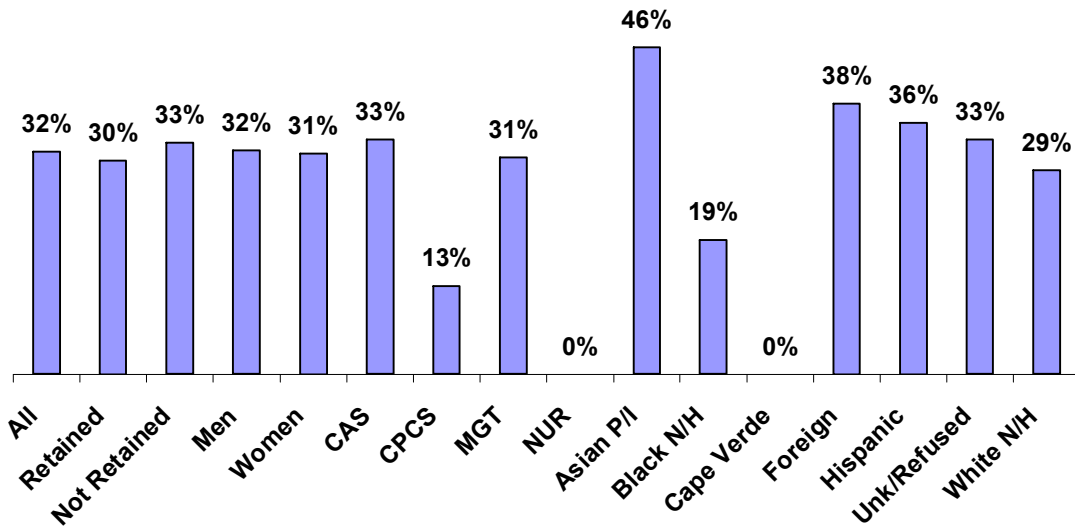
## **Section 2.2: Intention to Get a Degree at UMass Boston when First Enrolled**

All of the respondents were asked if when they first enrolled at UMass Boston, they intended to obtain a degree here or not. About 32% of the respondents said that they were not. There was remarkably little variation in the mean of the responses to this question across a number of categories. Significance of difference tests were run for men compared to women, retained to not retained, each college to the rate for every one not of that college, and each racial/ethnic group to everyone not of that group. While Black non-Hispanics, College of Public and Community Service, and College of Nursing students had higher observed levels of stating that they were planning to get a degree at UMB, the differences were not statistically significant.

The only difference of statistical significance is for Asian Pacific/Islanders, about 46% of whom were not planning to get a degree from UMB when they entered, compared to about 29% of the non-Asian Pacific/Islanders. Given that the Asian/Pacific Island group is the one most likely to be retained for the first year, we can expect that their attrition will be rapidly accelerated as they approach upper division standing. Wilton noted that Asian/Pacific Island students had a higher one year retention rate than students in other racial/ethnic categories, but that their persistence rates began to sharply decline after the fourth semester. She hypothesized that they drop out for different reasons than do other students and called for more research on the subject. Wilton also cited anecdotal evidence from faculty and staff that this represented transfer out behavior that was planned prior to first entry at UMB as part of a plan to transfer to and receive a degree from a more prestigious institution (1999, page 24).

Details of the current study survey responses about plans to complete a degree at UMass Boston when first enrolling are presented in Chart 15, on the following page.

**Chart 15: Percent of Survey Respondents Who Were Not Planning to Complete a Degree at UMass Boston When They First Enrolled by Various Categories**



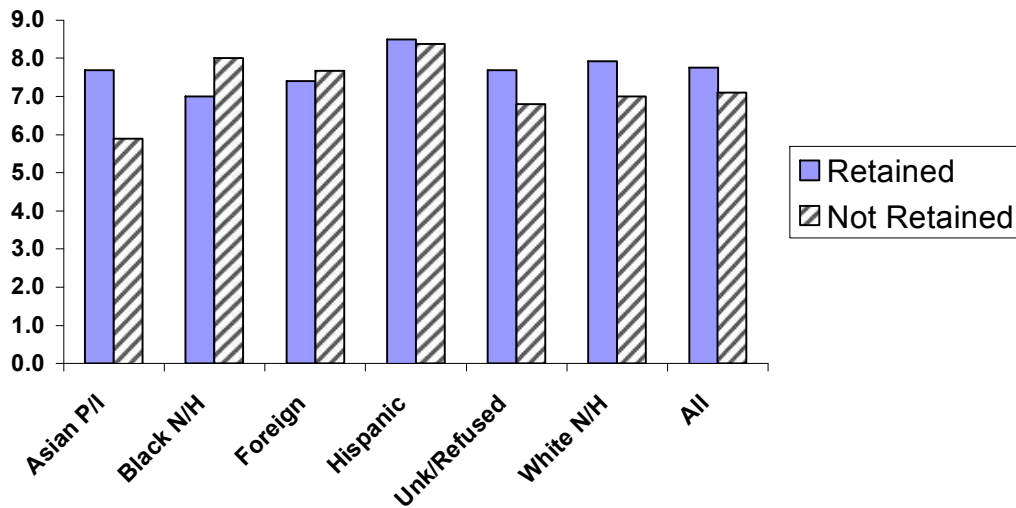
An incoming plan to transfer to another institution does not seem to be affecting retention yet, because the percentage of students reporting that they were not planning to get a degree was essentially the same for both the retained and non-retained groups. If those students who were retained but were not planning to get a degree from UMass Boston when they first arrived act on that plan by transferring out in the future, it will have a significant impact on the six year graduation rate for this cohort which will be reported in 2006.

### Section 3: Experiences at UMass Boston

#### Section 3.1 Relationships with Other Students

The weakness of a student's relationships with other students is one factor of social integration that can lead to a feeling of social isolation that, under Tinto's model of student integration, can lead to higher rates of student attrition (1975, 1993). The survey asked students to rate their experiences with other students on a scale where 0 was very unfriendly and unsupportive and 10 was very friendly and supportive. In general, we found that there were differences in the ratings of experiences with other students by retention status. The results are presented in Chart 16, which follows. For the group as a whole, the retained students mean rating of relationships with other students was 7.8, while non-retained students rated them as 7.1. Asian/Pacific Islanders had the largest gap in ratings between retained and non-retained students. Black non-Hispanics who were not retained rated their relationships with other students more highly than those who returned. Overall, the strength of relationships with other students, one factor of social integration, does not appear to be a major factor in the retention rate of this cohort.

**Chart 16: Mean Ratings of Relationships with Other Students By Racial/Ethnic Group**

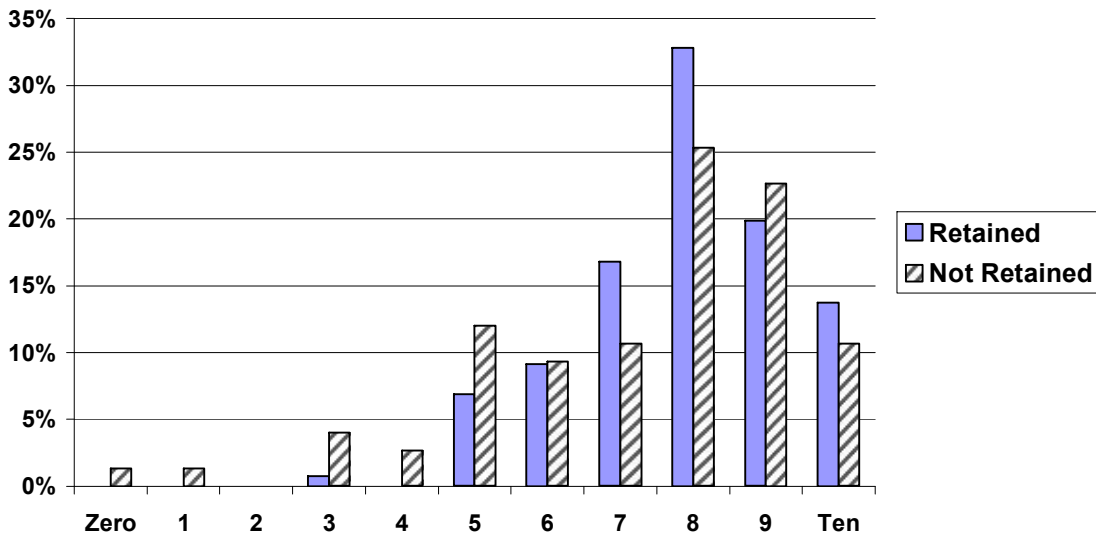


(Scale 0 = Unfriendly and Unsupportive to 10 = Friendly and Supportive)

### Section 3.2: Relationships with Faculty

Students were asked to rate their relationships with faculty on a scale where 0 was very unhelpful and unavailable and 10 was very helpful and available. While differences are observable, the majority of both groups rated their relationship an 8 or better. The non-retained students selected 8 or higher about 58% of the time, and the retained students selected 8 or better about 66% of the time. The real difference is seen at the lower end of the scale where only 8% of returning students rated the faculty at a 5 or lower, but 21% of the non-returning students rated them this low. For this question, the patterns of the responses may be more informative than the mean ratings. Details are presented in Chart 17, below.

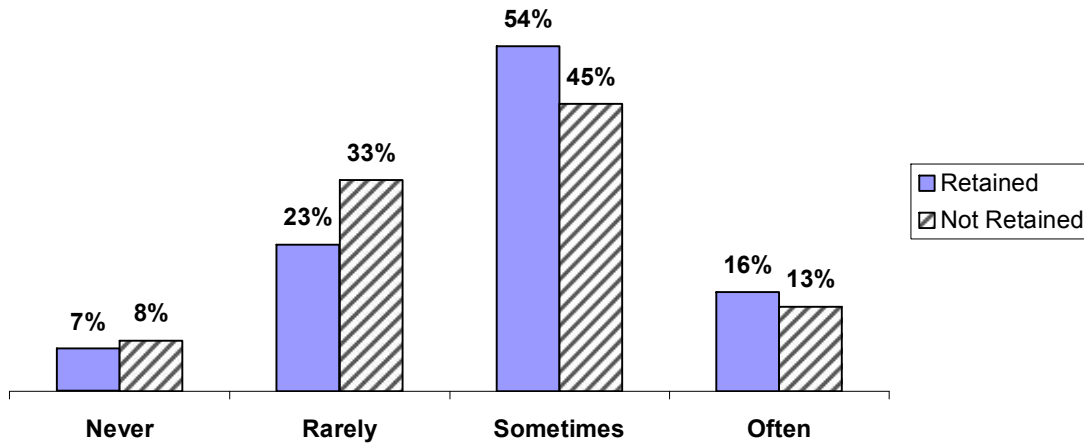
**Chart 17: Percentage of Students Selecting Each Rating Value for Relationships with Faculty By Retention Status**



(Scale 0 = Very Unhelpful and Unavailable to 10 = Very Helpful and Available)

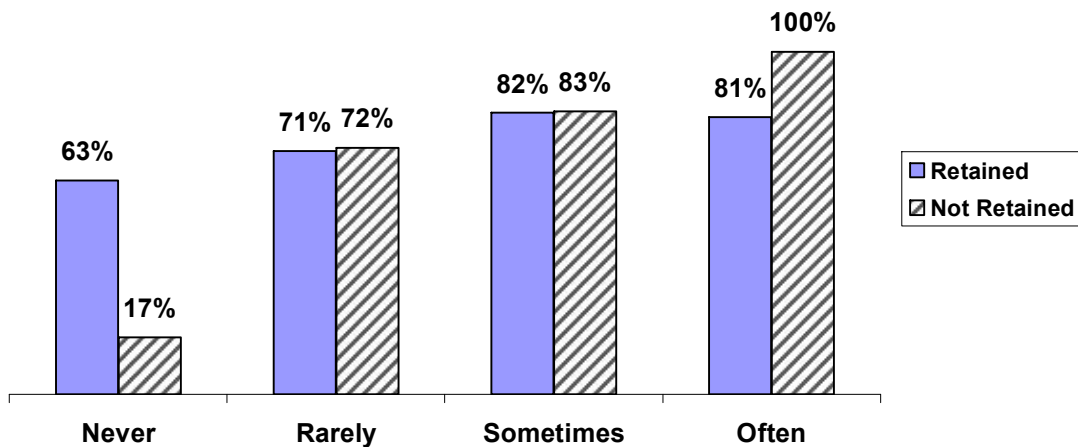
Students were also asked how often they met with faculty outside of class. About 70% of the retained students reported that they met with faculty “Sometimes” or “Often”, while only about 58% of the non-returning students reported these levels of contact. Details are reported in Chart 18 on the following page.

**Chart 18: Percent of Respondents Reporting Various Levels of Contact with Faculty Outside of Class By Retention Status**



Students were asked if their level of contact with faculty was “enough”. Those students who were not retained and who reported never having contact with faculty outside of class were the least likely to say that it was enough contact, and reported a mean rating of 3 on the 0 to 10 scale described above for their relationships with faculty. There were only six students in this group. More detailed results are reported in Chart 19, which follows.

**Chart 19: Percentage of Respondents Reporting Enough Contact with Faculty Outside of Class By Level of Contact and Retention Status**

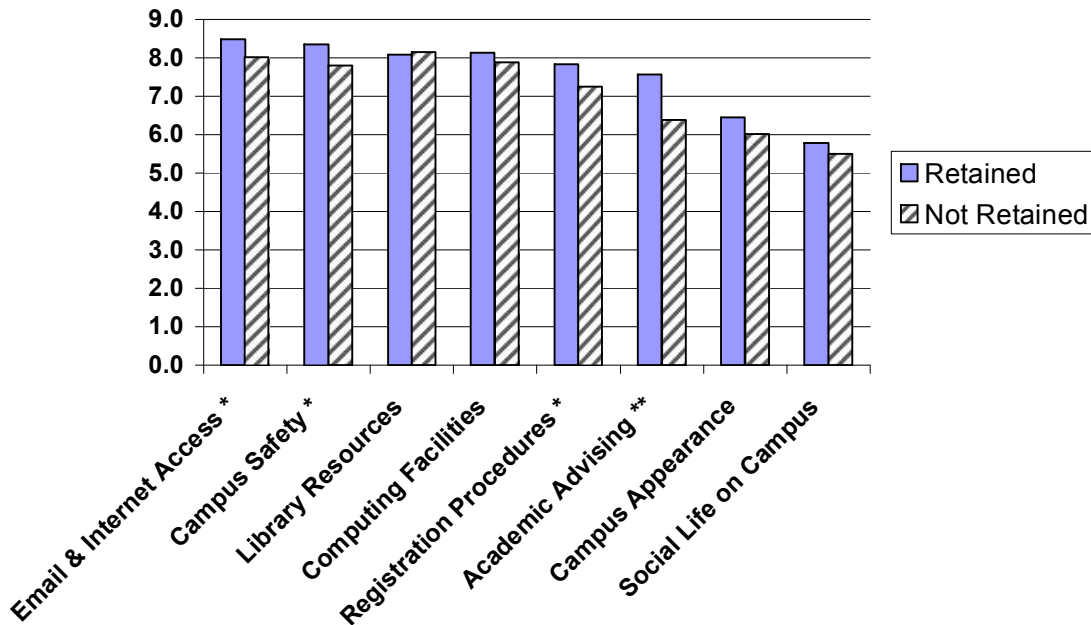


### Section 3.3: Experiences with Campus Resources

All students in the survey sample were asked to rate their satisfaction with campus resources and several other factors by using a scale of 0 to 10 where zero is the worst possible and 10 is the best possible. We then used significance of difference tests to look at the mean responses by whether the student was retained or not.

The largest difference between the retained and non-retained groups was for Academic Advising. On average, non-returning students rated Academic Advising as a 6.4 compared to a 7.6 for the returning students. The difference of about 1.2 points was significant at the 99% level. Surprisingly, the ratings of Email & Internet Access, Campus Safety, and Registration Procedures were the only other areas where there was a statistically significant difference between the mean ratings of the two groups. Details of the ratings are reported in Chart 20 which follows.

**Chart 20: Comparison of Mean Ratings of Campus Resources and Other Factors  
By Retention Status**



Scale: 0 = Worst Possible to 10 = Best possible

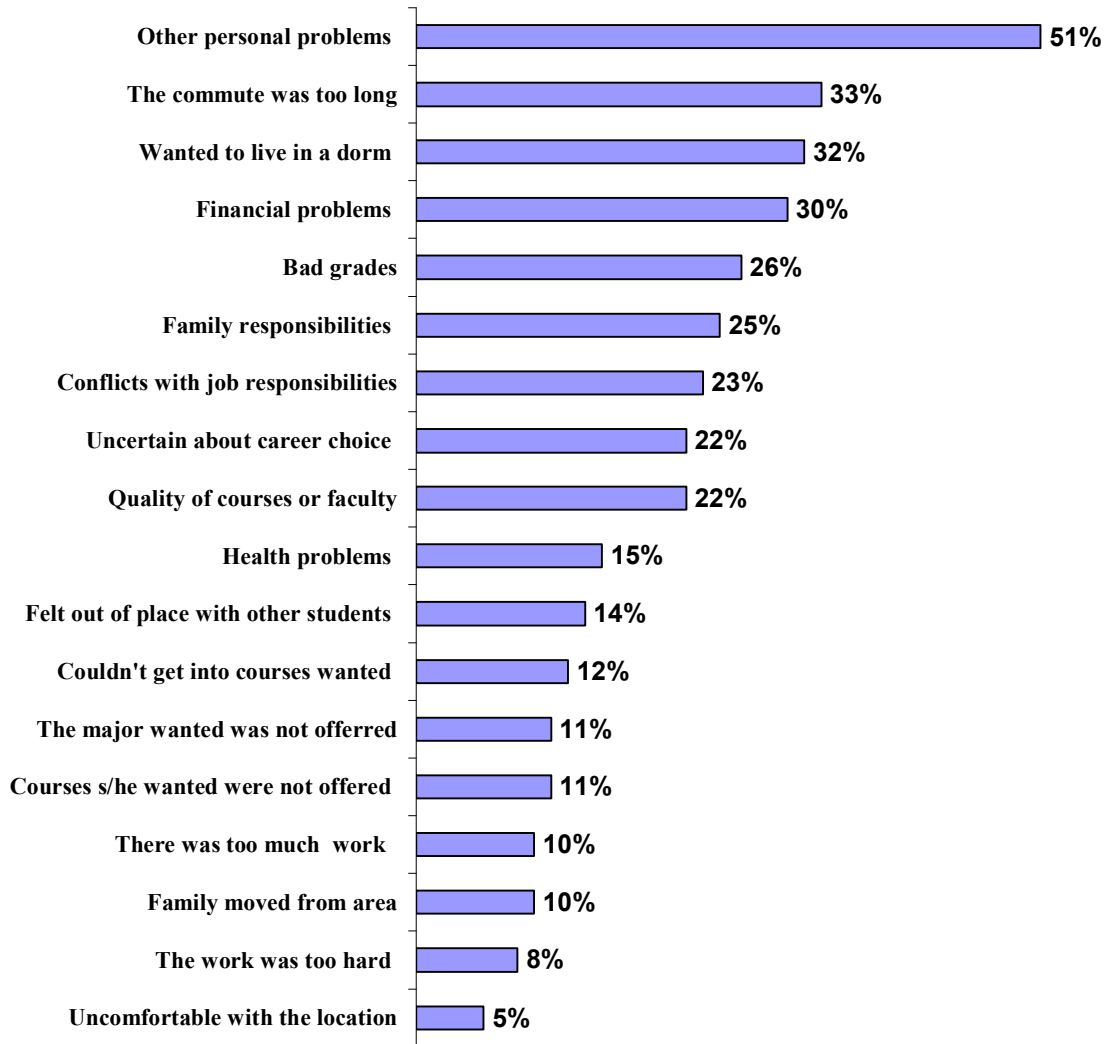
\* = The difference is significant at the 95% confidence level

\*\* = The difference is significant at the 99% confidence level

## Section 4: Reasons for Leaving UMass Boston

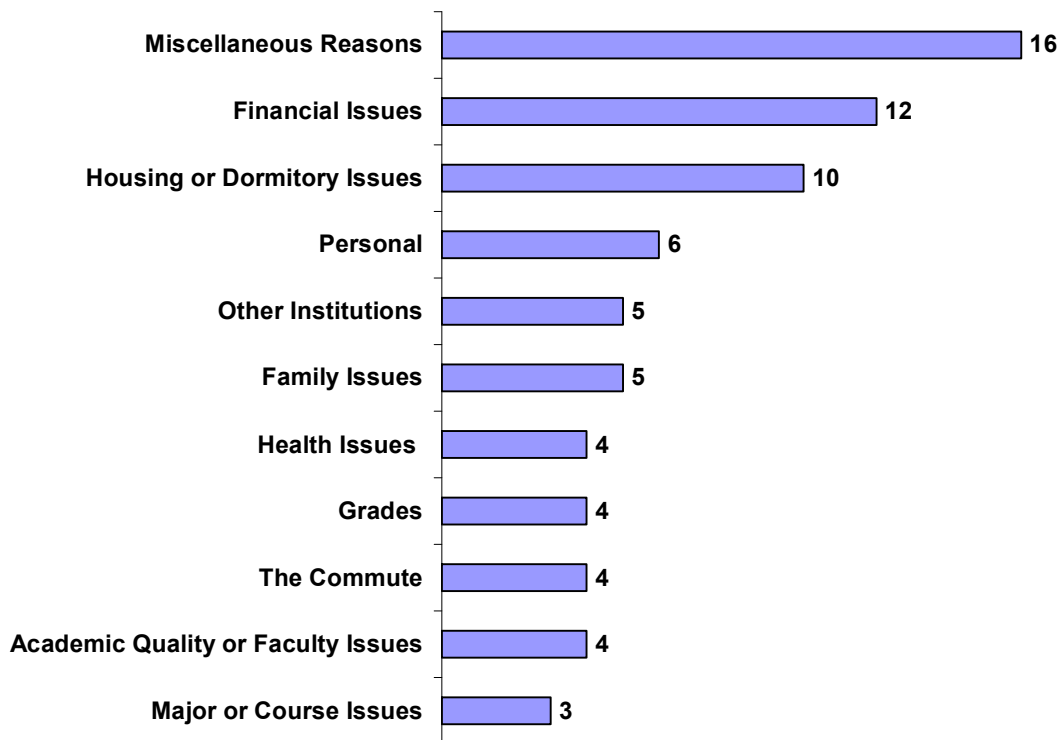
Non-returning students were asked about a number of possible reasons they may have had for leaving UMB. The wording of the introduction to the section was “Now I’m going to read some reasons why you might have decided to leave UMass Boston. For each, please tell me if it was one of your reasons for leaving”. The percentage of respondents who selected each specified possible reason is reported in Chart 21, which follows.

**Chart 21: Reasons for Leaving UMass Boston  
By Percent of Respondents Citing Each Reason**



After responding to the list, the student was asked what the most important reason he/she had for not returning was. The answers to this open ended question are reported exactly as they were recorded by CSR personnel in *Appendix III: The Most Important Reasons for Not Returning to UMass Boston* on page 61. However, most fall into identifiable general categories. The number of responses in each category is reported in Chart 22 which follows.

**Chart 22: Most Important Reason for Not Returning To UMass Boston  
By General Category  
(Total Number of Responses = 73)**

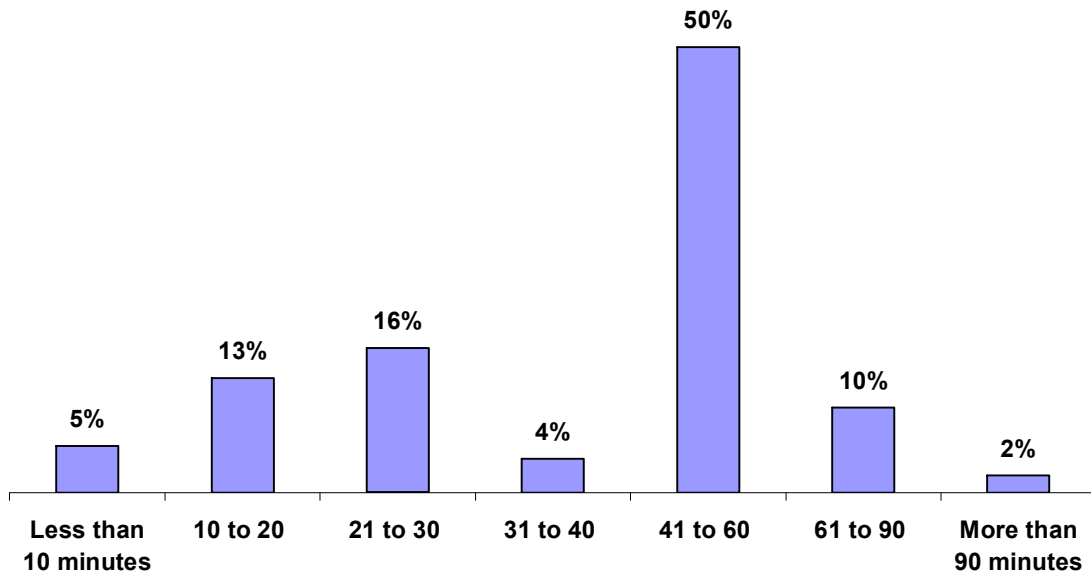


Miscellaneous reasons cover everything from “tired of the place, needed a break” to “moved and because the administration was awful and the academic advising was horrible and her parent (sic) adopted a baby”, and could occasionally have been registered in a number of categories. The financial problem category responses are often stated so that the problem is not necessarily related to the costs involved with attending UMass Boston. In one case, the respondent simply answered “Because I was in debt.”

### Section 4.1: The Commute

While the commute is the most cited specific reason for leaving after “other personal problems”, only 4 of the 73 respondents cited it as the most important reason. There are several other questions that address travel time to the University. One set asked all of the respondents about their travel time from home to UMass Boston in hours and minutes. The mean of the responses was just over 46 minutes with a range of 1 minute to 4 hours. Those who did not say that the commute contributed to their decision to leave reported a mean of just over 35 minutes in travel time to the university. For the group who cited the commute as a reason, the mean was just under 65 minutes. The difference was statistically significant at the highest level. Three of the 4 students who reported the commute as the most important reason did not have unusually long commutes, since they reported travel times one way of one hour. About 40% of all of the respondents reported their travel time as this long or longer. The fourth student reported travel time of 90 minutes, which was at about the 90<sup>th</sup> percentile for reported travel times. Details of travel time ranges are reported in Chart 23, which follows.

**Chart 23: Reported Travel Time from Home to UMass Boston  
By Percentage of All Respondents Reporting**



**Section 4.2: Housing and Dormitory Issues**

Housing and dormitory issues were near the top of both the general reason and the most important reason lists. Almost 14% of the respondents mentioned housing issues or wanting to live in a dorm specifically as the most important reason for not returning. Those who selected the commute as a reason were not significantly more likely to also select wanting to live in a dorm than those who did not select the commute as a reason. In fact, those who selected wanting to live in a dorm had a significantly shorter commute to UMass Boston than those who did not. The desire to live in a dorm is apparently not so much because of the convenience, but as a lifestyle choice. The details are presented in Table 9.

**Table 9: Significance Test Results of Travel Time by Wanting to Live in a Dorm**

<b>Want Dorm As a Reason?</b>	<b>N Size</b>	<b>Mean Travel Time From Home to UMB ( in minutes)</b>	<b>95% Confidence Interval</b>
<b>No</b>	49	49.3	42.0 to 56.5
<b>Yes</b>	23	36.1	25.6 to 46.6
<b>Difference</b>		<b>13.2 minutes</b>	
			<b>Ha: diff &gt; 0</b>
			<b> T  = 2.0927</b>
			<b>P &gt;  T  = 2.0%</b>

Students who were not retained were asked if they were enrolled at another college or university and if they were enrolled, at which one it was. There were significant differences in this other college enrollment by whether the student had cited wanting to live in a dorm as a reason for not returning to UMass Boston. Those who cited wanting to live in a dorm were 50% more likely to be enrolled at another institution than those who did not select the dorm as a reason, and within the group that enrolled at another institution, it was 50% more likely that the institution would be a four year school. This means that students who had cited wanted to live in a dorm were more likely to immediately enroll in another school, and that it was more likely that the school would be one that has dormitories. They were not asked if they lived in a dormitory at the new school. Details are reported in Table 10, on the following page.

**Table 10: Other College Attendance by Whether Wanting to Live in a Dorm Was Cited as a Reason for Leaving**

	<b>Not a Reason</b>	<b>Was a Reason</b>	<b>Difference</b>	<b>Significance</b>
Enrolled at Another College?	48.0%	73.9%	25.9%	>95%
If Enrolled is It a Four Year School?	50.0%	76.5%	26.5%	>95%

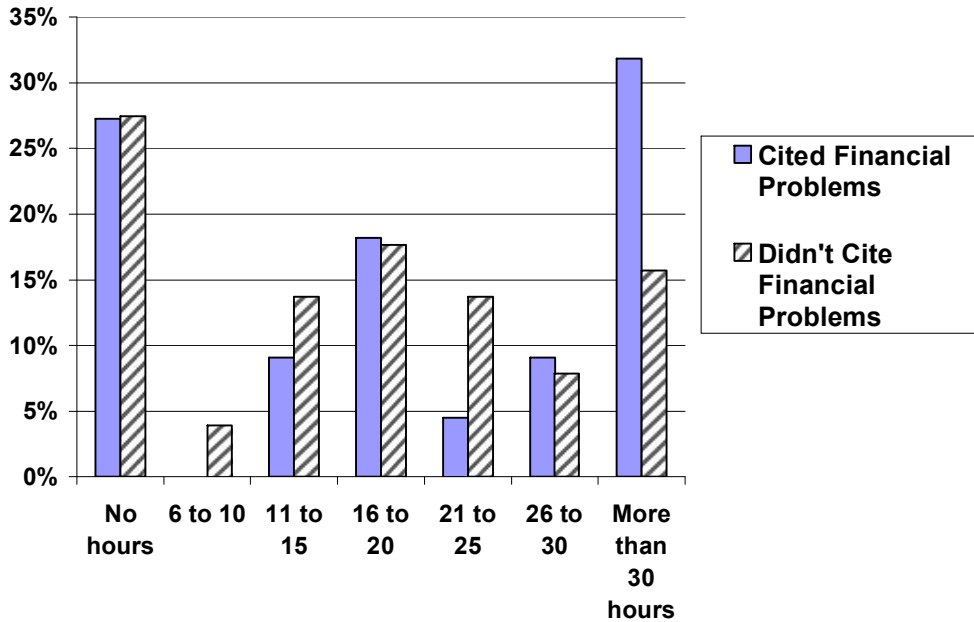
There was no statistically significant relationship between wanting to live in a dorm, the student’s current living arrangement, gender, or racial/ethnic group.

### **Section 4.3: Financial Issues & Job Conflicts**

Financial Reasons and Job Conflicts are listed as separate reasons, and as separate categories on the most important reasons list. However, the two areas are related. Half the students who cited financial reasons also cited job conflicts whereas only about 12% of the students who didn’t cite financial reasons cited job conflicts. The difference was statistically significant at the highest level. However, while differences in the time spent working off campus were observed, they were not significantly different for those who cited financial problems and for those who didn’t. This may be because of the small numbers involved. However, the differences in the observed rates of working more than 30 hours were particularly remarkable. Details of off-campus work hours by whether financial problems were a reason for not returning are presented in Chart 24, on the following page.

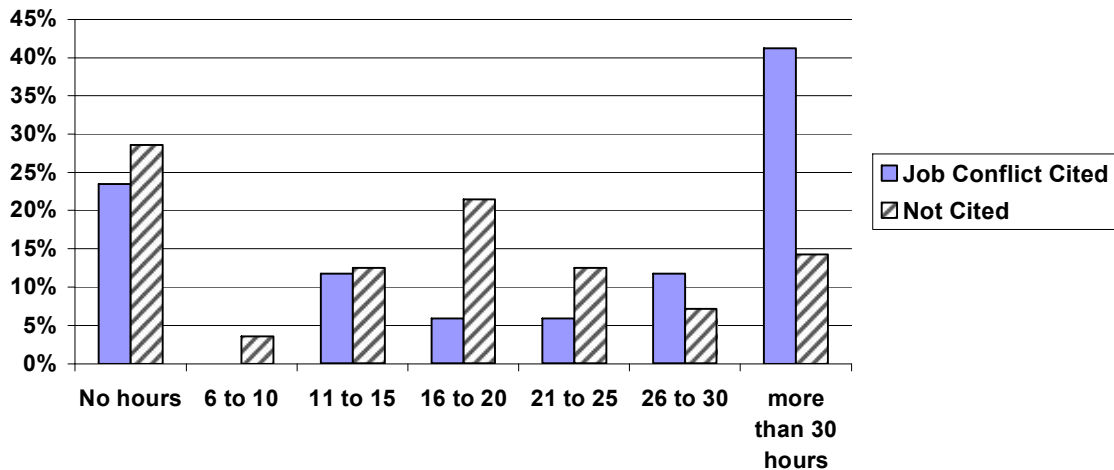
A similar pattern was observed for those who cited job conflicts as a reason for not returning. While the differences were not statistically significant, once again the percentage of student working more than 30 hours is remarkable. We have no explanation of why students who reported spending no hours working for pay off campus reported job conflicts as a reason for not returning. None of the students who reported job conflicts reported working any hours on campus.

**Chart 24: Percent of Respondents Reporting Ranges Of Hours Worked Off Campus By Whether Financial Problems Were a Reason for Not Returning**



Details of the hours worked off campus by whether job conflicts were cited as a reason for not returning are presented in Chart 25, which follows.

**Chart 25: Percent of Respondents Reporting Ranges Of Hours Worked Off Campus By Whether Job Conflicts Were a Reason for Not Returning**



### **Section 4.31 Hours Worked On Campus**

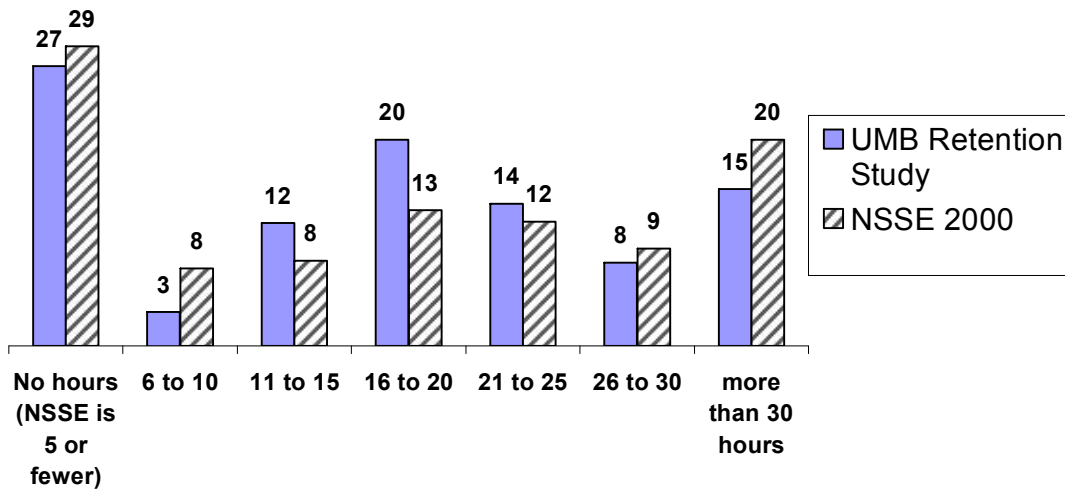
Questions concerning the number of hours worked on campus were asked of all students, but are not addressed in detail in this study. While 73% of respondents reported working off campus, only about 8% of respondents reported working at an on campus job, and 35% of those students also had an off campus job, usually with more hours than the on-campus job.

### **Section 4.32 Hours Worked Off Campus**

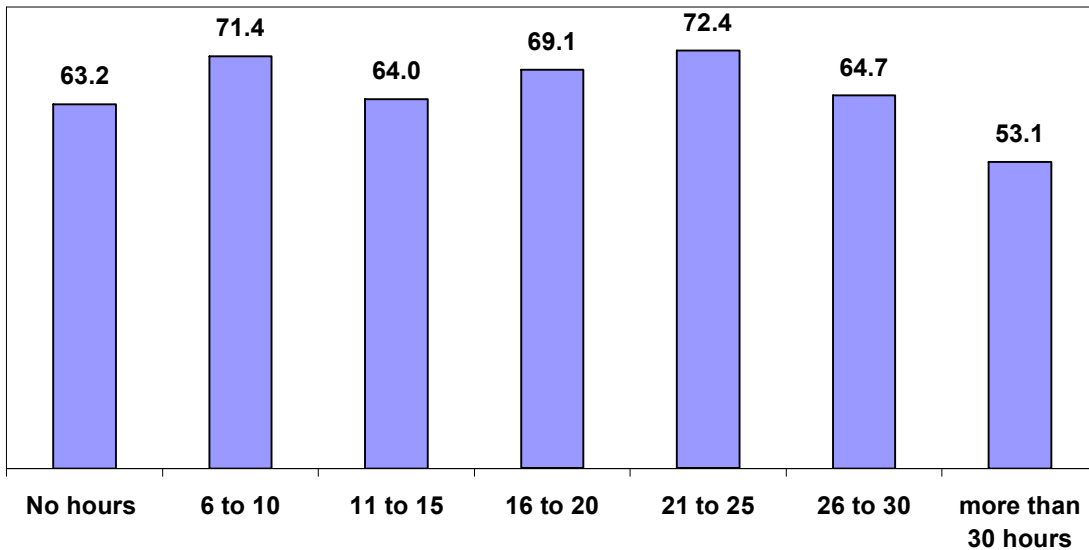
Because the number of students who reported high work hours (more than 20 per week) was so substantial (37%), we tried to substantiate the data by comparing it to that in another recent study. The pattern of the number of hours worked off campus reported in the retention survey were compared to the pattern of the number of hours worked off campus reported by first year students in the 2000 administration of the National Survey of Student Engagement (NSSE 2000). The categories used by NSSE 2000 and by CSR for the UMB survey differed slightly. The CSR retention survey asked a qualifying question about whether the students worked off campus. This was translated to 0 hours worked if the student did not work off campus. NSSE 2000 only offered an option of 5 or fewer hours which included 0 hours. Further, the NSSE 2000 first year students included about 20% who had transferred into UMB, but with low credits. Given that, the work patterns were remarkably similar between the fall 2000 first time full time freshmen and the NSSE 2000 first year students. Details are presented in Chart 26 on the following page.

We found that the number of hours worked off campus was not significantly related to retention. The largest difference was observed for those who worked off campus more than 30 hours per week compared to those who worked fewer than 30 hours per week. About 53% of the students who worked more than 30 hours were retained, while 66.7% of students who worked 30 or fewer hours per week were retained. This difference was not statistically significant even on a one-tailed test. The details are presented in Chart 27, which is also on the following page.

**Chart 26: Comparison of Responses to Number Of Hours Worked Off Campus by First Year Students**  
By Percent of Respondents



**Chart 27: Percent of Students Retained**  
By Number of Hours Worked Off Campus



## Section 5: Current Educational Behavior or Plans of Non-returning Students

### Section 5.1: Attendance at another College or University

One of the key questions asked of non-returning students was whether they were currently enrolled at another higher education institution, and if they were, which one it was. Forty-one of the 74 non-returning students (55.4%) reported that they were enrolled at another college or university in the fall 2001 semester. There were no statistically significant differences in the rate by race/ethnicity or gender. A number moved to two year institutions, but over 60% moved to another four year institution. About 20% of those who are enrolled at other institutions are enrolled at one of the UMass campuses. According to Bean's model of student attrition, one of the key factors that affects retention is the opportunity to transfer to another institution (1980). The greater Boston area provides ample opportunity for transfer, and the Massachusetts higher education system allows much opportunity to transfer to other state institutions where costs will either remain the same (other UMass campuses) or decline (state and community colleges). Details of which institutions the respondents reported attending are presented in Table 11, which follows.

**Table 11: Current College or University Enrollment Reported by Non-returning Students**

<b>Current Institution Name</b>	<b>Number of Students</b>	<b>Percent</b>
<b>Four Year Institutions</b>		
American University of Paris	1	2.4
Bentley	1	2.4
Boston University	2	4.9
Bridgewater State	2	4.9
Framingham State	2	4.9
Massachusetts College of Liberal Arts	1	2.4
Merrimack College	1	2.4
Northeastern	1	2.4
Suffolk	1	2.4
Temple	1	2.4
The College of New Jersey	1	2.4
UMass Amherst	<b>7</b>	<b>17.1</b>
UMass Lowell	<b>1</b>	<b>2.4</b>
Virginia Commonwealth University	1	2.4
Wheelock	1	2.4
Worcester State	1	2.4
<b>Subtotal Four Year Institutions</b>	<b>25</b>	<b>61.0</b>

**Table 11: Current College or University Enrollment Reported by Non-returning Students (cont.)**

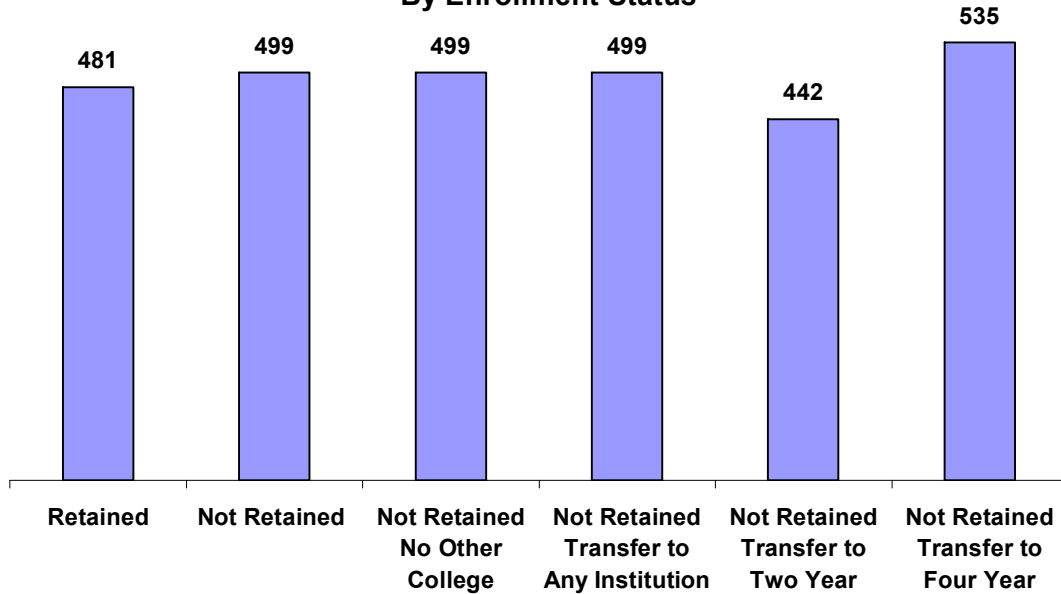
<b>Current Institution Name</b>	<b>Number of Students</b>	<b>Percent</b>
<b>Two Year Institutions</b>		
Bristol Community College	1	2.4
Bunker Hill Community College	4	9.8
CCV	1	2.4
Community College of RI	1	2.4
Johnson and Wales	1	2.4
Mass Bay Community College	1	2.4
Mass Comm	1	2.4
Massasoit	1	2.4
Middlesex Community College	3	7.3
Minuteman Technical School	1	2.4
Quincy College	1	2.4
<b>Subtotal Two Year Institutions</b>	<b>16</b>	<b>39.0</b>
<b>Total All Institutions</b>	<b>41</b>	<b>100.0</b>

This post-UMass Boston attendance at another institution is a significant issue. If we assume that about 55% of all non-returning students enrolled at another institution, this would give us a retained or transferred to another institution rate of about 86%.

About 61% of students who enrolled at another institution enrolled at a four year school. This is just over one third of all non-returning students who responded to the survey. This would mean that the UMass Boston retained or transferred to another four year institution rate would be about 79%.

Verbal SAT scores appear to be related to this other college attendance. Among the surveyed subset, the students who transferred to other four year institutions had mean verbal SAT scores that were over 55 points higher than of all other students who responded to the survey. This comparison group included those students who remained at UMB, those who did not remain and did not report being at another institution, and those who did not remain but transferred to a two year institution. This difference was significant at the 99% confidence level. The details of the verbal SAT scores within the surveyed group are presented in Chart 28 on the following page. For the group as a whole, including those students who did not respond to the survey, the mean verbal SAT score was 463 for retained students, and 510 for non-returning students.

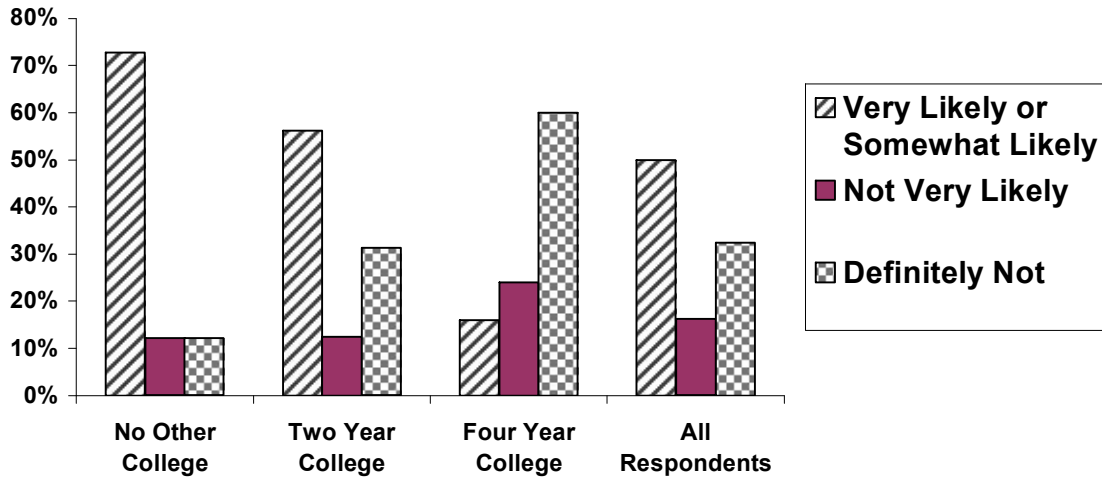
**Chart 28: Mean Verbal SAT Score of Survey Respondents Only By Enrollment Status**



**Section 5.2: Likelihood of Return to UMass Boston**

Enrollment at another institution does not necessarily mean that the student is lost to UMB forever. Non-returning students were asked how likely it was that they would return to UMass Boston. For the entire group, about 50% reported that they were somewhat likely or very likely to return to UMass Boston. While about 72% of those who reported that they were not currently attending another college or university reported that it was very likely or somewhat likely that they would return to UMass Boston, 56% of those who reported being enrolled at a two year school reported the same. Even 16% of the respondents who reported that they were currently attending another four year college or university reported that they were very likely or somewhat likely to return to UMass Boston. Details are reported in Chart 29 which is on the following page. The category of students who were attending another four year college was the only one in which more students reported that they would definitely not return than reported that they were very likely or somewhat likely to return to UMass Boston.

**Chart 29: Percentage of Responses\* to the Question "How Likely Is It That You Will Return To UMass Boston?"  
By Enrollment at another Institution**



\* Those who replied "Don't Know" are not reported.

This concludes the current discussion of *Part 3: An Analysis of the Survey Results*. Additional work remains to be done on the survey responses, and plans for that work will be discussed in *Part 4: Plans for Further Research* which begins on the following page.

## **Part 4: Plans for Further Research**

This report is the first in what is planned as a series of reports on the retention and persistence of this cohort of first time full time freshmen. It is intended to provide some information on the one year retention of the fall 2000 entering cohort of first time full time freshmen. While this group is important because our reports to the Integrated Postsecondary Data System (IPEDS) regarding one-year retention and four, five, and six year graduation rates are based upon their behavior, they are only a small fraction of the new students UMass Boston enrolled in AY 2000-2001. UMass Boston admitted and enrolled:

- 706 freshmen in fall 2000
- 1556 transfer students in fall 2000
- 115 freshmen in spring 2001
- 775 transfer students in spring 2001

Further, UMass Boston enrolled 582 new graduate students in fall 2000 and another 186 new graduate students in spring 2001. Of the 3152 new undergraduate students, only 595 or 18.9% were first time full time freshmen in the standard fall reporting cohort, and the 595 made up only about 15.2% of all new students enrolled in the academic year. Yet, it is these few students on whom much of our reporting is based, and the statistics that we report regarding their progress are factored into how the university is rated by many of the independent rating agencies.

For future reports, more will be done to examine the relationship between retention and other entrance variables. For example, we have not yet examined the English Placement Assessment (EPA) results, the impact of specific high school, high school GPA and class rank, parents' educational level etc. Further we need to do additional analysis of performance and behavioral variables while at UMass Boston such as major, GPA, level of classes taken, presence of any remedial classes, course load, ESL class participation, and most especially, on whether participation in the First Year Seminars had any impact on retention.

These areas will need to be integrated with some of the other variables that have already been examined in order to develop a multivariate model of retention for this

cohort, and much work remains to be done regarding the interaction of these variables. One concern is that our students are so diverse in so many ways that, given the relatively small numbers available for analysis, statistical significance may be difficult to attain. One possible avenue for development would be to access the information of a number of previous cohorts for the entrance, demographic, and performance variables that are readily available in the UMass computer systems, and to compare patterns observed in this cohort to those of previous cohorts. We also still need to access Massachusetts Board of Higher Education data available on their attendance at any other state schools, and to access National Student Clearinghouse data that would give us information on our students who transfer to most other educational institutions in the United States

It is also important to continue the study of this cohort as they progress through their careers. The six year graduation rates for the five most recent cohorts for whom they are available range from 25% to 30% with a mean of about 27%. If this pattern holds true, we can expect about 162 of the original 595 entrants to graduate from UMass Boston by spring 2006. That means that we will probably lose another 259 of the original 595 students in the next four years.

Of particular concern is the high proportion of students who reported that they were not planning to complete a degree at UMass Boston when they first enrolled here. Since there was no observable difference in responses between those who returned for the second year and those who did not, the impact of this intention has probably not been felt yet. A rational plan for those who were planning to transfer to another institution when they first enrolled here would be to acquire the first 60 credits or so at UMass Boston while taking advantage of state subsidized tuition, our expertise in ESL preparation, and our generally high quality education, and then to transfer to another school that was more specialized in the student's area of interest or was perceived to have some higher status as a degree granting institution.

One on one interviews with students who had these plans, or perhaps focus group research with several small groups of these students would be advised to find out why students would enter UMass Boston while not planning to get a degree here. This would serve several purposes. First, from students who had changed their minds and decided to complete a degree at UMass Boston, we could find out what worked so well that it

caused them to change their plans and become committed to the university. Secondly, from those who were continuing with their plans to transfer, we could find out whether it was for reasons over which UMass Boston might have some control such as class availability or size, library resources, computing resources, etc. If so, UMass Boston can use this information for self-improvement.

If however, the reasons are beyond the control of the university such as the wish to complete a major that is not offered here or the student wants to be able to have a dormitory living experience, then the university can see the student as a success because of the value of the education received here, rather than as a failure because the student did not complete the degree here.

**Appendix I: Citizenship by Racial/Ethnic Group**  
**For Fall 2000 First Time Full Time Freshmen**

Race/Ethnicity = Asian P/I

cit_alp	Freq.	Percent	Cum.
China	13	12.87	12.87
Hong Kong	7	6.93	19.80
India	4	3.96	23.76
Korea, South	2	1.98	25.74
Malaysia	1	0.99	26.73
New Zealand	1	0.99	27.72
Pakistan	1	0.99	28.71
Philippines	1	0.99	29.70
Sri Lanka	1	0.99	30.69
Taiwan	1	0.99	31.68
Thailand	1	0.99	32.67
United Kingdom	1	0.99	33.66
United States	50	49.50	83.17
Vietnam	17	16.83	100.00
Total	101	100.00	

Race/Ethnicity = Black N/H

cit_alp	Freq.	Percent	Cum.
Congo (Kinshasa)	2	3.23	3.23
Ethiopia	1	1.61	4.84
Ghana	1	1.61	6.45
Haiti	6	9.68	16.13
Jamaica	3	4.84	20.97
Japan	1	1.61	22.58
Nigeria	2	3.23	25.81
United States	46	74.19	100.00
Total	62	100.00	

Race/Ethnicity = Cape Verde

cit_alp	Freq.	Percent	Cum.
Cape Verde	4	100.00	100.00
Total	4	100.00	

Race/Ethnicity = Foreign

cit_alp	Freq.	Percent	Cum.
Bahrain	1	2.22	2.22
Bolivia	1	2.22	4.44
Brazil	1	2.22	6.67
China	3	6.67	13.33
Colombia	1	2.22	15.56
Dominica	1	2.22	17.78
France	1	2.22	20.00
Greece	1	2.22	22.22
Guinea-Bissau	1	2.22	24.44
Hong Kong	2	4.44	28.89
Hungary	1	2.22	31.11
India	2	4.44	35.56
Japan	5	11.11	46.67
Jordan	1	2.22	48.89
Korea, South	6	13.33	62.22
Lebanon	1	2.22	64.44
Mexico	1	2.22	66.67
Netherlands	1	2.22	68.89
Nigeria	1	2.22	71.11
Pakistan	2	4.44	75.56
Russia	1	2.22	77.78
Seychelles	1	2.22	80.00
Singapore	1	2.22	82.22
Spain	1	2.22	84.44
Taiwan	2	4.44	88.89
Tanzania	1	2.22	91.11
Trinidad and Tobago	1	2.22	93.33
Venezuela	3	6.67	100.00
Total	45	100.00	

Race/Ethnicity = Hispanic

cit_alp	Freq.	Percent	Cum.
Brazil	1	2.38	2.38
Colombia	2	4.76	7.14
Dominican Republic	4	9.52	16.67
El Salvador	3	7.14	23.81
Guatemala	1	2.38	26.19
United States	30	71.43	97.62
Vietnam	1	2.38	100.00
Total	42	100.00	

Race/Ethnicity = Native Am.

cit_alp	Freq.	Percent	Cum.
United States	2	100.00	100.00
Total	2	100.00	

Race/Ethnicity = Unk/Refused

cit_alp	Freq.	Percent	Cum.
Azerbaijan	2	2.99	2.99
Bosnia and Herzegovina	1	1.49	4.48
Brazil	1	1.49	5.97
Canada	2	2.99	8.96
Egypt	1	1.49	10.45
Ethiopia	1	1.49	11.94
Guyana	1	1.49	13.43
Haiti	2	2.99	16.42
Hong Kong	1	1.49	17.91
India	5	7.46	25.37
Portugal	1	1.49	26.87
Somalia	2	2.99	29.85
United States	47	70.15	100.00
Total	67	100.00	

Race/Ethnicity = White N/H

cit_alp	Freq.	Percent	Cum.
Albania	2	0.74	0.74
Azerbaijan	1	0.37	1.10
Bosnia and Herzegovina	2	0.74	1.84
Brazil	2	0.74	2.57
Bulgaria	1	0.37	2.94
Dominican Republic	1	0.37	3.31
Iran	2	0.74	4.04
Ireland	2	0.74	4.78
Israel	1	0.37	5.15
Morocco	2	0.74	5.88
Portugal	1	0.37	6.25
Romania	1	0.37	6.62
Russia	4	1.47	8.09
Saudi Arabia	1	0.37	8.46
Ukraine	4	1.47	9.93
United States	244	89.71	99.63
Yugoslavia	1	0.37	100.00
Total	272	100.00	

## Appendix II: Languages Spoken at Home

### Part 1 : Is English Spoken at Home? By Race/Ethnicity and U.S. Citizenship

---

**Race/Ethnicity = Asian P/I**

us_cit	eng_at_home		Total
	No	Yes	
0	8	3	11
	72.73	27.27	100.00
	33.33	75.00	39.29
1	16	1	17
	94.12	5.88	100.00
	66.67	25.00	60.71
Total	24	4	28
	85.71	14.29	100.00
	100.00	100.00	100.00

---

**Race/Ethnicity = Black N/H**

us_cit	eng_at_home		Total
	No	Yes	
0	4	1	5
	80.00	20.00	100.00
	44.44	8.33	23.81
1	5	11	16
	31.25	68.75	100.00
	55.56	91.67	76.19
Total	9	12	21
	42.86	57.14	100.00
	100.00	100.00	100.00

---

**Race/Ethnicity = Cape Verde**

us_cit	eng_at_home	
	No	Total
0	2	2
	100.00	100.00
	100.00	100.00
Total	2	2
	100.00	100.00
	100.00	100.00

---

**Race/Ethnicity = Foreign**

us_cit	eng_at_home		Total
	No	Yes	
0	10	3	13
	76.92	23.08	100.00
	100.00	100.00	100.00
Total	10	3	13
	76.92	23.08	100.00
	100.00	100.00	100.00

---

**Race/Ethnicity = Hispanic**

us_cit	eng_at_home		Total
	No	Yes	
0	3	0	3
	100.00	0.00	100.00
	25.00	0.00	21.43
1	9	2	11
	81.82	18.18	100.00
	75.00	100.00	78.57
Total	12	2	14
	85.71	14.29	100.00
	100.00	100.00	100.00

---

**Race/Ethnicity = Unk/Refused**

us_cit	eng_at_home		Total
	No	Yes	
0	7	1	8
	87.50	12.50	100.00
	50.00	10.00	33.33
1	7	9	16
	43.75	56.25	100.00
	50.00	90.00	66.67
Total	14	10	24
	58.33	41.67	100.00
	100.00	100.00	100.00

---

**Race/Ethnicity = White N/H**

us_cit	eng_at_home		Total
	No	Yes	
0	9	2	11
	81.82	18.18	100.00
	56.25	2.20	10.28
1	7	89	96
	7.29	92.71	100.00
	43.75	97.80	89.72
Total	16	91	107
	14.95	85.05	100.00
	100.00	100.00	100.00

**Part 2: Test of Significance of English Speaking at Home by Race/Ethnicity**

. tab Race/Ethnicity eng\_at\_home, row chi2

Race/Ethnic	eng_at_home		Total
	No	Yes	
Asian P/I	24	4	28
	85.71	14.29	100.00
Black N/H	9	12	21
	42.86	57.14	100.00
Cape Verde	2	0	2
	100.00	0.00	100.00
Foreign	10	3	13
	76.92	23.08	100.00
Hispanic	12	2	14
	85.71	14.29	100.00
Unk/Refused	14	10	24
	58.33	41.67	100.00
White N/H	16	91	107
	14.95	85.05	100.00
Total	87	122	209
	41.63	58.37	100.00

Pearson chi2(6) = 77.1659 Pr = 0.000

### Part 3: Languages Spoken at Home by Race/Ethnicity

---

#### Race/Ethnicity = Asian P/I

home_lang	Freq.	Percent	Cum.
Cantonese	5	20.83	20.83
Chinese	5	20.83	41.67
Hindi	1	4.17	45.83
Korean	1	4.17	50.00
Korean and Spanish	1	4.17	54.17
Malayalam	1	4.17	58.33
Urdu and Tushto	1	4.17	62.50
Vietnamese	9	37.50	100.00
<b>Total</b>	<b>24</b>	<b>100.00</b>	

---

#### Race/Ethnicity = Black N/H

home_lang	Freq.	Percent	Cum.
Akan	1	11.11	11.11
Creole	2	22.22	33.33
Creole French	2	22.22	55.56
Creole and Spanish	1	11.11	66.67
French/Haitian Creole	1	11.11	77.78
Ibo	1	11.11	88.89
Ido	1	11.11	100.00
<b>Total</b>	<b>9</b>	<b>100.00</b>	

---

#### Race/Ethnicity = Cape Verde

home_lang	Freq.	Percent	Cum.
Cape Verdean Creole	1	50.00	50.00
Creole	1	50.00	100.00
<b>Total</b>	<b>2</b>	<b>100.00</b>	

---

#### Race/Ethnicity = Foreign

home_lang	Freq.	Percent	Cum.
Arabic	2	20.00	20.00
Dutch	1	10.00	30.00
French	1	10.00	40.00
Korean	1	10.00	50.00
Russian	1	10.00	60.00
Spanish	2	20.00	80.00
Spanish and Chinese	1	10.00	90.00
Spanish and Italian	1	10.00	100.00
<b>Total</b>	<b>10</b>	<b>100.00</b>	

---

**Race/Ethnicity = Hispanic**

home_lang	Freq.	Percent	Cum.
Spanish	12	100.00	100.00
<b>Total</b>	<b>12</b>	<b>100.00</b>	

---

**Race/Ethnicity = Unk/Refused**

home_lang	Freq.	Percent	Cum.
Arabic	2	14.29	14.29
Arabic and French	1	7.14	21.43
Creole	3	21.43	42.86
Gujaragi	1	7.14	50.00
Hebrew	1	7.14	57.14
Portuguese	1	7.14	64.29
Portuguese and Spanish	1	7.14	71.43
Punjabi	2	14.29	85.71
Russian	1	7.14	92.86
Somalian	1	7.14	100.00
<b>Total</b>	<b>14</b>	<b>100.00</b>	

---

**Race/Ethnicity = White N/H**

home_lang	Freq.	Percent	Cum.
Albanian	3	18.75	18.75
Armenian	1	6.25	25.00
Bosnian	1	6.25	31.25
Farsi	1	6.25	37.50
Greek	1	6.25	43.75
Italian	3	18.75	62.50
Portuguese	1	6.25	68.75
Russian	3	18.75	87.50
Spanish	1	6.25	93.75
Thai	1	6.25	100.00
<b>Total</b>	<b>16</b>	<b>100.00</b>	

**Appendix III: Most Important Reasons for Not  
Returning To UMass Boston**  
(As Recorded by CSR Personnel)

<b>Category</b>		<b>Most Important Reason</b>
<b>Academic Quality or Faculty Issues</b>	1	the quality of the courses
	2	Ym concerns about the quality of instruction
	3	basically i did not fell i was recieving a good education i wasn't learning as much as in highschool
	4	The faculty was the problem
<b>Commute</b>	1	commute
	2	commute
	3	commute
	4	commute
<b>Family</b>	1	family problems couldn't study or register for fall semester
	2	family reasons
	3	family responsibilites
	4	family responsibilities
	5	responsibililty with family
<b>Financial</b>	1	cost
	2	finacial problems
	3	financial more or less
	4	financial problems
	5	financial problems
	6	Financial reasons
	7	financial was the reason for not returning
	8	the financial one
	9	the financial reason still not sure if i can return next semester, b c of that
	10	i should be coming back in the spring left for just one semester, it was financail
	11	money
	12	because I was in debt
<b>Grades</b>	1	got bad grades and wasn't able to go with the program
	2	got low grades
	3	grades
	4	my grades

<b>Health</b>	1	health
	2	health problems
	3	health reasons
	4	my health
<b>Housing &amp; Dormitory Issues</b>	1	housing
	2	housing
	3	lack of dormitories
	4	losing his apartment in boston
	5	wanting a dorm.
	6	Student wanted to leave home and live in a dorm
	7	the dormitory one
	8	the housing was inconvenient
	9	i wanted to live away at school
	10	the roommates he was living with were doing drugs
<b>Major or Course Issues</b>	1	her major wasn't offered
	2	the major was not offered
	3	choosing courses, he wanted to do criminal justice, but they required him to do other courses that he didn't want to take
<b>Other Institution</b>	1	i got accepted at a better program at umass amherst. My major is music and the music dept at UMass Boston doesn't have the resources to support the program
	2	I wanted to go to school that had more to offer to what you want to do
	3	interested in another school
	4	just found another school that she liked better
	5	planned to attend other university and did transfer to it
<b>Personal</b>	1	needed to for herself
	2	personal conflict with school
	3	personal problems
	4	personal reasons that he couldn't get to school on time
	5	personal...
	6	I gave birth to my beautiful son

**Miscellaneous**

- 1 interfering with work
- 2 it was too hard. english is my second language - had a hard time writing papers and doing assignments.
- 3 just that he had just come out of high school and he didn't want to be in school
- 4 just wanted to take a semester off to buy a car and got into an accident
- 5 lack of time to be able to concentrate and do my studies
- 6 late in applying
- 7 mostly unclear about what I wanted to do or become, opted to get a job and make money
- 8 moved and because the administration was awful and the academic advising was horrible and her parent adopted a baby
- 9 something not listed, the reputation
- 10 stubborn
- 11 they dropped the football team
- 12 tired of the place needed a break
- 13 did not like the way students were treated by some people
- 14 felt uncomfortable, slow on the uptake
- 15 hated it
- 16 he didn't like the location and the students

**Appendix IV: The Final CSR Freshman Retention Survey Instrument  
(With Encoding for the CASES System)**

**C759: Freshman Retention at UMass Boston  
Final Instrument  
November 20, 2001**

Let me tell you a little more about the study. We are working on this study with the Office of Institutional Research here at UMass Boston. The purpose of the interview is to learn about your experiences as a student during your (first year/time) at UMass.

**All information we collect will be kept confidential.**

Your name and phone number are **not** part of the interview information so you will **not** be identified in any way in the results. Only the study team will be seeing the actual surveys.

**Your participation in this survey is completely voluntary.** However, it is very important that everyone participate. It is important that your answers be accurate. Take your time and be sure to ask me if you are not sure what a question means or what kind of answer is wanted. If there is any question you would prefer not to answer, just tell me and I will go on to the next question. I need to mention that my supervisor may monitor some portion of this interview to ensure that all the interviews we collect are being done in exactly the same way.

-----  
EXPERIENCE AT UMASS - ALL SAMPLE  
-----

>A1< First, I have some questions about what happened when you first came to UMass Boston in the fall of 2000. At the beginning of the fall semester, UMass Boston offers orientation sessions to incoming students. Orientation sessions include a presentation and a chance to meet with representatives from various University departments. When you first enrolled at UMass Boston, did you attend an orientation session?

- <1> YES
- <5> NO
- <9> NA

>A2<

When you first enrolled at UMass Boston, did you meet with an academic advisor either at University Advising or in your academic department before you registered for classes?

<1> YES

<5> NO

<9> NA

>A3<

Did you meet with an **academic advisor** either at University Advising or in your academic department at any time later in the semester?

<1> YES

<5> NO

<9> NA

>A4<

During the first few weeks of your (first) fall semester, did you feel you got **enough** information about the procedures, regulations, or services in the University?

<1> YES [goto A5]

<5> NO

<9> NA [goto A5]

>A4a<

During the first few weeks of your (first) fall semester, **how often** did you feel you didn't have enough information about the procedures, regulations, or services in the University?

<1> Very often

<2> Often

<3> Sometimes

<4> Rarely

<5> Never

<9> NA

>A5<

Now I have some questions about your living situation during (the spring semester of your first year at UMass/the last semester you were enrolled at UMass).

Were you living with any other adults?

<1> YES

<5> NO [goto A6]

<9> NA [goto A6]

>A5a<

INTERVIEWER NOTE: IF R INTERRUPTS, ACCEPT ANSWER WITHOUT READING

THE REMAINING CATEGORIES

Were you living with:

- <1> Your parent or parents
- <2> A spouse or partner
- <3> Other relatives
- <4> Friends or roommates
- <9> NA

>A5b< [if A5a ne <4> goto A6]**A5b only asked if R was living with friends or roommates**

Were any of them attending UMass Boston?

- <1> YES
- <5> NO
- <9> NA

>A6<

Do you have any children?

- <1> YES
- <5> NO [goto A7]
- <9> NA [goto A7]

>A6a<

How many children do you have who live with you?

- <0-20> NUMBER OF CHILDREN
- <99> NA

>A6b< [if A6a eq <0> goto A7]**If no children, go to A7**

How old is (he or she/your oldest child)?

- <0-25> AGE OF CHILD
- <99> NA

>A6c< [if A6a eq <1> goto A7]**If only one child, go to A7**

How old is your youngest child?

- <0-25> AGE OF CHILD
- <99> NA

>A7< **If living with no kids or other family members, goto A8**

For the next few questions, please think about how you spent your time during a typical week **including** weekends. (Last spring/During your last semester at UMass Boston), about how many hours in a typical week did you spend taking care of [if A5 ne <1> and A6 eq <1> and A6a eq <1>]your child?[endif]

[if A5 ne <1> and A6 eq <1> and A6a gt <1>]your children?[endif]  
[if A5a eq <4> and A6 eq <1> and A6a eq <1>]your child?[endif]  
[if A5a eq <4> and A6 eq <1> and A6a gt <1>]your children?[endif]  
[if A5a ne <4> and A6 ne <1>]family members living with you?[endif]  
[if A5a ne <4> and A6 eq <1>]your children or other family members living with you?[endif]  
<0> NONE  
<1> 1 TO 5  
<2> 6 TO 10  
<3> 11 TO 15  
<4> 16 TO 20  
<5> 21 TO 25  
<6> 26 TO 30  
<7> MORE THAN 30  
<9> NA

>A8<  
(Last spring/During your last semester at UMass Boston), did you work for pay off campus?  
<1> YES  
<5> NO [goto A9]  
<9> NA [goto A9]

>A8a<  
About how many hours in a typical week did you spend working for pay off campus?  
<1> 1 TO 5  
<2> 6 TO 10  
<3> 11 TO 15  
<4> 16 TO 20  
<5> 21 TO 25  
<6> 26 TO 30  
<7> MORE THAN 30  
<9> NA

>A9<  
(Last spring/During your last semester at UMass Boston), did you have a job on campus?  
<1> YES  
<5> NO [goto A10]  
<9> NA [goto A10]

>A9a<

About how many hours in a typical week did you spend working at a job on campus?

- <1> 1 TO 5
- <2> 6 TO 10
- <3> 11 TO 15
- <4> 16 TO 20
- <5> 21 TO 25
- <6> 26 TO 30
- <7> MORE THAN 30
- <9> NA

>A10<

(Last spring/During your last semester at UMass Boston) did you attend any social or cultural events that were sponsored by the University?

- <1> YES
- <5> NO
- <9> NA

>A11<

(Last spring/During your last semester at UMass Boston), were you involved on a regular basis with any student clubs or organizations, including athletic programs?

- <1> YES
- <5> NO
- <9> NA

>A12a<

We are interested in how you spent the rest of your time during (last spring semester/your last semester at UMass). In a typical week during that semester, about how many hours did you spend doing **homework**, such as studying, reading, writing, or other activities related to your class work?

- <0> NONE
- <1> 1 TO 5
- <2> 6 TO 10
- <3> 11 TO 15
- <4> 16 TO 20
- <5> 21 TO 25
- <6> 26 TO 30
- <7> MORE THAN 30
- <9> NA

>A12b<

In a typical week during (last spring semester/your last semester at UMass), about how many hours did you spend **relaxing and socializing** by doing activities such as watching TV, partying, exercising, or playing computer games?

- <0> NONE
- <1> 1 TO 5
- <2> 6 TO 10
- <3> 11 TO 15
- <4> 16 TO 20
- <5> 21 TO 25
- <6> 26 TO 30
- <7> MORE THAN 30
- <9> NA

>A12c<

In a typical week (last spring semester/your last semester at UMass), about how many hours did you spend doing **extra-curricular** activities at UMass Boston, such as student government, athletics, and student clubs or organizations?

- <0> NONE
- <1> 1 TO 5
- <2> 6 TO 10
- <3> 11 TO 15
- <4> 16 TO 20
- <5> 21 TO 25
- <6> 26 TO 30
- <7> MORE THAN 30
- <9> NA

>A13<

Thinking about a typical week, about how many **hours** did you spend on campus (last spring semester/your last semester at UMass)?

- <1> Less than 10
- <2> 10 to 20
- <3> 21 to 30
- <4> More than 30
- <9> NA

>A14<

(Last spring/During your last semester at UMass Boston), how many days a week did you usually come to the UMass Boston campus?

- <0-7> NUMBER OF DAYS
- <9> NA

>A14a<

How long did it usually take you to get to UMass Boston from home?

@h HOURS (0-10)

AND/OR

@m MINUTES (0-60)

(99) NA

>A15<

Now I'm going to ask you about your experiences with various departments and services in the University during (last spring semester/your last semester) here.

Did you have any contact with:

1=YES 5=NO 9=NA

- a. The Bursar's Office @a
- b. The admissions office @b
- c. The registrar's office @c
- d. The financial aid office @d
- e. Staff from student advising @e
- f. Staff from student life @f

>A16< **Each office appears on screen only if R said 'yes' in A15**

Using a scale from 0 to 10, where 0 is the worst possible and 10 is the best possible, how would you rate your experience with:

- a. The Bursar's Office @a
- b. The admissions office @b
- c. The registrar's office @c
- d. The financial aid office @d
- e. Staff from student advising @e
- f. Staff from student life @f

>A17<

We are interested in your satisfaction with campus resources and with other experiences you had on campus (last spring/during your last semester at UMass).

Using a scale from 0 to 10, where 0 is the worst possible and 10 is the best possible, how would you rate:

99=NA

- a. The academic advising @a
  - b. The library resources @b
  - c. The registration procedures @c
  - d. The availability of email and internet access @d
- (Using a scale from 0 to 10, where 0 is the worst possible and 10 is the

best possible, how would you rate:)

- e. The computing facilities @e
- f. The social life on campus @f
- g. The appearance of the campus @g
- h. Safety on campus

>A18<

Now we want you to describe your relationships with **faculty** during (last spring semester/your last semester) at UMass Boston. Using a scale from 0 to 10, where 0 is very unhelpful and unavailable and 10 is very helpful and available, how would you rate your relationships with faculty?

<0-10> RATING

<99> NA

>A19< (Last spring/During your last semester at UMass Boston), how often did you have contact with faculty outside of class?

<1> Often

<2> Sometimes

<3> Rarely

<4> Never

<9> NA

>A20<

Was that enough contact or would you have liked more?

<1> ENOUGH

<5> WANTED MORE

<9> NA

>A21< (Last spring/During your last semester at UMass Boston), did you ever meet with a teacher outside of class?

<1> YES

<5> NO [goto A22]

<9> NA [goto A22]

>A21a<

About how many times did you meet with a teacher outside of class?

<0-98> NUMBER OF TIMES

<99> NA

>A22<

Overall, how would you rate the quality of the courses that you took (last spring semester/in your last semester) at UMass? Would you say they were:

- <1> Excellent
- <2> Very good
- <3> Good
- <4> Fair
- <5> Poor
- <9> NA

>A23<

Now I am going to ask about your relationships with **other students** during (last spring semester/your last semester) at UMass Boston. Using a scale from 0 to 10, where 0 is very unfriendly and unsupportive and 10 is very friendly and supportive, how would you rate your experience with other students?

- <0-10> RATING
- <99> NA

>A24a< **Off-campus employer appears on screen only if R said s/he had a job off campus**

Now, think about how helpful and supportive other people in your life have been of you for going to UMass Boston. Using a scale from 0 to 10, where 0 is very unsupportive and 10 is very supportive, how would you rate the help and support you got from:

- a. Your family? @a
- b. Friends you were close to before @b you enrolled at UMass Boston?
- c. Your off-campus employer? @c

>A25<

Are any of your **family members** currently enrolled at UMass Boston?

- <1> YES
- <5> NO
- <9> NA

>A26<

Do you have any **friends** who are currently enrolled at UMass Boston?

- <1> YES
- <5> NO [goto B1]
- <9> NA [goto B1]

>A26a<

Were any of them your friends **before** you enrolled here?

<1> YES

<5> NO

<9> NA

>B1<

I'd like you to think back about why you might have decided to attend UMass Boston. For each of the following, please tell me if it was one of your reasons for coming.

1=YES 5=NO 9=NA

- a. The cost of attending UMass Boston @a
- b. The academic reputation of UMass Boston @b
- c. The quality of instruction at UMass Boston @c
- d. The location of the UMass Boston campus @d
- e. You wanted to obtain a degree @e
- f. you wanted to develop work skills @f

-----  
REASONS FOR CHOOSING UMASS - ALL SAMPLE  
-----

>B1A<

(Again, I'd like you to think back about why you might have decided to attend UMass Boston. For each of the following, please tell me if it was one of your reasons for coming.)

1=YES 5=NO 9=NA

- g. You intended to take courses to transfer @g credits to another school
- h. You didn't get into your first choice college @h
- i. UMass Boston offered a specific course @i of study you wanted
- j. The diversity of the student body @j
- k. You had friends or family who @k attended UMass Boston

>B2<

When you were choosing a college to attend, was UMass Boston your:

<1> First choice

<2> Second choice

<3> Third choice, or

<4> Fourth choice or lower

<9> NA

>B3<

When you first enrolled at UMass Boston, were you planning to complete your degree here or not?

<1> YES

<5> NO

<9> NA

-----  
REASONS FOR LEAVING UMASS - DROPOUTS ONLY  
-----

>C1< [if STAT eq <1> goto D1] **Returning students go to D1**

Now I'm going to read some reasons why you might have decided to **leave** UMass Boston. For each, please tell me if it was one of your reasons for leaving.

1=YES 5=NO 9=NA

- a. You had financial problems @a
- b. You were not able to get into the courses you wanted @b
- c. The courses you wanted were not offered @c
- d. The major you wanted was not offered @d
- e. You had concerns about the quality of courses and the faculty @e
- f. School created conflicts with job responsibilities @f

>C1A<

(Please tell me if any of the following were reasons for you leaving

UMass Boston.)

1=YES 5=NO 9=NA

- g. You had health problems @g
- h. You had family responsibilities that interfered with school @h
- i. You had other personal problems that made it difficult to attend school @i
- j. You or your family decided to move out of the Boston area @j
- k. The work was too hard @k
- l. There was too much work @l

>C1B<

(Please tell me if any of the following were reasons for you leaving

UMass Boston.)

1=YES 5=NO 9=NA

- m. You were getting bad grades @m
- n. You were uncertain about your career choice @n
- o. You wanted to live in a dormitory @o

**p.** You felt out of place or uncomfortable with the other students @p

**q.** You felt uncomfortable with the neighborhood and location @q

**r.** Your commute was too long or difficult @r

>C2< [allow 2]

Thinking about all the reasons you had for not returning, what was the **most** important one?

@ SPECIFY [specify]

>C3<

Before you decided not to return to UMass Boston, did you discuss your plans for leaving with **an academic advisor**?

<1> YES

<5> NO

<9> NA

>C4<

Before you decided not to return to UMass Boston, did you discuss your plans for leaving with anyone from **Academic Support or Student Services**?

<1> YES

<5> NO

<9> NA

>C5<

Did you **complete** your first **fall** semester at UMass Boston?

<1> YES

<5> NO

<9> NA

>C5a<

Did you **complete** your first **spring** semester at UMass Boston?

<1> YES

<5> NO

<9> NA

>C5b< [if C5 eq <1> and C5a eq <1> goto C6]**If R completed both semesters, go to C6**

In what month did you stop going to classes?

- <1> JAN <7> JUL
- <2> FEB <8> AUG
- <3> MAR <9> SEP
- <4> APR <10> OCT
- <5> MAY <11> NOV
- <6> JUN <12> DEC
- <99> NA

>C6<

Is there anything UMass Boston could have done differently that would have helped you stay here?

- <1> YES
- <5> NO [goto C7]
- <9> NA [goto C7]

>C6a< [allow 2]

What was it?

@ SPECIFY [specify]

>C7<

Are you currently enrolled at another college or university?

- <1> YES
- <5> NO [goto C8]
- <9> NA [goto C8]

>C7a< [allow 50]

What school are you attending?

@ NAME OF SCHOOL

>C8<

How likely is it that you will return to UMass Boston?

- <1> Very likely
- <2> Somewhat likely
- <3> Not very likely or
- <4> Are you definitely planning not to return
- <7> DON'T KNOW
- <9> NA

>C9< [allow 2]  
What could UMass Boston do to get you to return?  
@ SPECIFY [specify]

-----  
DEMOGRAPHICS - ALL SAMPLE  
-----

>D1<  
Finally, I have a few questions about you and your  
background.  
Do you usually speak a language other than English at home  
or with your family?  
<1> YES  
<5> NO [goto D7]  
<9> NA [goto D7]

>D2< [allow 30]  
Which language is that?  
@ LANGUAGE

>D3<  
How well can you speak English?  
<1> Well  
<2> Just fair or  
<3> Only a little  
<9> NA

>D4<  
How well can you read English?  
<1> Well  
<2> Just fair or  
<3> Only a little  
<9> NA

>D5<  
How much of a problem was language for you in your studies  
(during your first year )at UMass Boston? Was it:  
<1> A big problem  
<2> A small problem or  
<3> Not a problem [goto D7]  
<9> NA [goto D7]

>D6<

Do you think UMass Boston did enough to help you with English or should they have done more?

<1> ENOUGH

<5> SHOULD HAVE DONE MORE

<9> NA

>D7<

Did your mother graduate from college?

<1> YES [goto D7b]

<5> NO

<7> NO MOTHER/DON'T KNOW [goto D8]

<9> NA [goto D8]

>D7a< **If mother graduated from college, go to D7b**

Did she graduate from high school?

<1> YES/COMPLETED GED

<5> NO

<7> DON'T KNOW

<9> NA

>D7b< **If mother did not graduate from college, go to D8**

Did she complete a graduate degree?

<1> YES

<5> NO

<7> DON'T KNOW

<9> NA

>D8<

Did your father graduate from college?

<1> YES [goto D8b]

<5> NO

<7> NO FATHER/DON'T KNOW [goto D9]

<9> NA [goto D9]

>D8a< **If father graduated from college, go to D9**

Did he graduate from high school?

<1> YES/COMPLETED GED

<5> NO

<7> DON'T KNOW

<9> NA

>D8b< **If father did not graduate from college, go to D9**

Did he complete a graduate degree?

<1> YES

<5> NO

<7> DON'T KNOW

<9> NA

>D9<

Is there anything else you'd like to tell us about your  
experience at UMass Boston?

<1> YES (SPECIFY) [specify]

<5> NO

<9> NA

>ENDw<

### Appendix V: Correlation Table of Key Variables

	satmath	satverb	us_cit	dsp	eng_at_home
satmath	1.0000				
satverb	<b>0.4377</b>	1.0000			
us_cit	0.0114	<b>0.4969</b>	1.0000		
dsp	<b>-0.4302</b>	<b>-0.5326</b>	-0.1296	1.0000	
eng_at_home	0.1405	<b>0.4405</b>	<b>0.4671</b>	-0.1729	1.0000
cas	-0.1316	-0.1247	-0.1121	0.2140	0.0640
cpcs	0.0234	0.0430	0.1174	-0.0976	-0.0339
mgt	0.1282	0.1096	0.0377	-0.1483	-0.1040
nur	0.0383	0.0397	0.0339	-0.1017	0.0687
minority	-0.2408	<b>-0.4606</b>	-0.3424	0.3314	<b>-0.5772</b>
asianpac	0.0878	-0.2229	-0.2072	0.1249	-0.3518
blacknh	-0.2499	-0.1626	0.0282	0.1962	-0.0083
foreign	0.1704	-0.1593	X	-0.1601	-0.1844
hispanic	-0.2530	-0.1312	0.0061	0.2151	-0.2396
whitenh	0.1711	<b>0.4061</b>	0.3878	-0.2130	<b>0.5542</b>

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