

2008 Alumni Survey Report



Word cloud image created using Wordle (www.wordle.net), based on relative frequencies of words appearing in survey comments.

CAMPUS ASSESSMENT WORKING GROUP
RETENTION AND COMPLETION SUBGROUP

CAMPUS ASSESSMENT WORKING GROUP

The Campus Assessment Working Group (CAWG) was created in 1996 and is currently chaired by Robert E. Waters, Associate Vice President of Academic Affairs and Special Assistant to the President. CAWG is dedicated to building a culture of evidence at the University of Maryland (UM). One way of accomplishing this task is by administering large-scale surveys to cross-sections of students on a regular basis, thereby gathering evidence regarding the student experience from multiple perspectives. CAWG presently consists of three subgroups covering various aspects of the student experience. The members of the CAWG subgroup – Retention and Completion – who worked on the project reflected by this report are:

Patricia Hunt (Chair), Counseling Center
Michelle Appel, Office of Institutional Research, Planning and Assessment
Deborah Reid Bryant, Division of Letters and Sciences
Chip Denman, Office of Information Technology
Audran Downing, College of Arts and Humanities
Marsha Guenzler-Stevens, Campus Programs
Barbara Jacoby, Campus Programs
Jonathan Kandell, Counseling Center
Julie Choe Kim, Campus Programs
Sharon La Voy, Office of Institutional Research, Planning and Assessment
Irene Martin, Campus Programs
Dora Elias McAllister, Department of Resident Life
Jennifer Meyers, Office of Institutional Research, Planning and Assessment
Jessica Mislevy, Office of Institutional Research, Planning and Assessment
Chad Muntz, Office of Institutional Research, Planning and Assessment
Jennifer Rossignol, Academic Achievement Programs
Nicole Roop, College of Engineering, Aerospace Engineering Undergraduate Program
Dawn Smith, College of Education, Curriculum and Instruction
Pathe Sow, Academic Achievement Programs
Rob Waters, Office of the President
Letitia Williams, University Career Center

More information about CAWG is available on the website: <https://www.irpa.umd.edu/CAWG/> or from Sharon La Voy
Director of Assessment
Office of Institutional Research, Planning and Assessment
1101 Mitchell Building
slavoy@umd.edu
University of Maryland
College Park, MD 20742
301.405.3828

Table of Contents

EXECUTIVE SUMMARY	3
BACKGROUND	5
METHOD.....	5
RESPONDENTS	6
FINDINGS	7
ROLE OF FINANCIAL AID	7
CURRENT EMPLOYMENT	9
LOCATION OF CURRENT RESIDENCE AND CURRENT JOB.....	12
POST-BACCALAUREATE EDUCATION	13
PERCEIVED VALUE OF THE UM EXPERIENCE.....	14
OTHER DISTINCT FEATURES OF THE UM EXPERIENCE	19
CURRENT ATTITUDES TOWARD UM.....	21
LIMITATIONS OF THE STUDY.....	22
CONCLUSIONS AND USING THE DATA.....	22
APPENDIX A: THE INSTRUMENT	24
APPENDIX B: SCALE DEVELOPMENT.....	30

Executive Summary

The Alumni Survey is administered online every three years to students who have earned a baccalaureate degree from the University of Maryland in the past year. The 2008 Alumni Survey was administered between May and July 2008 to 5815 UM degree recipients who had graduated between July 2006 and June 2007, or FY07. Nine hundred responded, for a response rate of 15%.

Many of the questions on the 2008 Alumni Survey – such as those concerning employment issues and further education – are mandated by the Maryland Higher Education Commission. In addition, the Completions Subgroup of the Campus Assessment Working Group (CAWG), now the Retention and Completion Subgroup, drafted and inserted into the questionnaire several additional fixed-choice questions. A single open-ended question also asked respondents to describe what seemed distinct about the UM experience in comparison to the experiences of those they know who had graduated from other universities.

CAWG projects are exploratory in nature, with goals of facilitating decisions concerning policy, programs, and resource allocation, as well as of identifying possible effects for further study. Therefore, survey responses were compared across four demographic variables: entry status, gender, race/ethnicity, and (for select items only) residency at matriculation. The following is a brief summary of the major findings. More detailed findings can be found in the main report.

Role of Financial Aid

Over one third of respondents reported not receiving any type of financial aid while completing their degree and 16% said they could have finished their program without major hardship without the financial aid they received. Twenty percent said they would have experienced financial hardship if they had not received the aid they did, and another 28% said they would not have been able to complete their degree without their aid. The role of financial aid in degree completion differed by entry status, gender, and race/ethnicity (see Charts 1 through 3).

Current Employment

The majority of respondents (82%) reported they were currently employed either full time or part time, with most rating the preparation by UM for their current job as excellent (23%) or good (52%). Perceived quality of job preparation depended on the degree of relationship between one's undergraduate major and current job (see Chart 6).

Location of Current Residence and Current Job

More than half the respondents reported that they currently live in Maryland and work in Maryland, and sizable portions also live and/or work in nearby areas such as the District of Columbia. Many of the respondents who were classified as in-state residents when they entered UM (74%) say they still live in Maryland one year after graduating (see Chart 7).

Post-Baccalaureate Education

Nearly 40% of respondents said they have re-enrolled in school since receiving their bachelor's degree from UM, with most pursuing a graduate or professional degree. The majority of those returning to school (88%) said UM's preparation for graduate study was good or excellent.

Perceived Value of the UM Experience

Respondents rated the value of their UM experience in a variety of areas along the following dimensions: cognitive skills, social interaction, diversity, and mentoring. On average, alumni rate their UM experiences as valuable in these areas, though perceptions differed in some cases with respect to entry status, gender, race/ethnicity. Overall, alumni perceive the greatest relative value in the cognitive skills area, and the least relative value in the mentoring area (see Table 9). Some of the qualitative comments offered by respondents help to shed light on alumni's varying experiences.

Current Attitudes Toward UM

On average, respondents offered favorable responses to a series of items tapping overall satisfaction with UM. Overall satisfaction was strongly related to perceived value of the UM experience; as perceived value increases, so does general satisfaction with the University (see Table 11). Qualitatively, many respondents spoke of being proud to be a Terp for life: "Once a Terp, always a Terp."

Background

The Alumni Survey is administered online every three years to students who have earned a baccalaureate degree from the University of Maryland in the past year. Many of the questions included in the survey are mandated by the Maryland Higher Education Commission. In the summer of 2007, the Completions Subgroup of the Campus Assessment Working Group (CAWG), now the Retention and Completion Subgroup, drafted and inserted several additional questions into the 2008 Alumni Survey. The purpose of these fixed-choice questions was to explore the perceptions of these recent graduates of the value of their UM experiences on a series of life skills. A single open-ended question also asked respondents what seemed distinct about the UM experience in comparison to the experiences of those they know who had graduated from other universities.

Method

The 2008 Alumni Survey was administered online between May and July 2008. See Appendix A for a copy of the instrument. A combination of email, letter and postcard solicitations was sent to alumni to request participation.

CAWG projects are exploratory in nature, with goals of facilitating decisions concerning policy, programs, and resource allocation, as well as of identifying possible effects for further study. Therefore, survey responses were compared across four demographic variables: entry status, gender, race/ethnicity, and (for select items only) residency at matriculation. Because there were no formal hypotheses a priori, an alpha value of .05 was selected to identify significant differences, and liberal post-hoc tests based on Fisher's least significant difference method were conducted at the .05 level for mean comparisons involving more than two groups. Note that percents have been rounded to the nearest whole number, and may not sum to 100 due to rounding.

The open-ended responses were analyzed using qualitative procedures. A subgroup of the volunteer research team was formed to read the open-ended comments and generate a list of common themes. The responses were then coded by pairs of subgroup members. Each member first coded independently and then met with his or her partner to finalize the coding and interpretation of each theme, and to select illustrative quotes representing these viewpoints. Although the only open-ended item did not specifically ask respondents to comment on or elaborate about the topics covered by the fixed-choice items, many of the themes emerging from the open-ended responses mirror other survey areas. Where possible, qualitative results follow the presentation of quantitative results on a similar topic throughout this report.

Respondents

The target population considered for this study included 5815 alumni who earned a baccalaureate degree at the University of Maryland between July 2006 and June 2007, or FY07. With 900 respondents, the response rate for the survey was 15%. Table 1 displays demographic statistics for the target population and the respondents.

Table 1: Target population and respondent demographic characteristics

	Target Population N=5815	Survey Respondents N=900
Column Percents		
Entry status		
Entered as Freshman	66	74
Entered as Transfer	34	26
Sex		
Female	51	58
Male	49	42
Race/citizenship		
African American/ Black: U.S.	11	9
American Indian: U.S.	<1	<1
Asian: U.S.	15	11
Hispanic: U.S.	5	4
White: U.S.	58	66
Unknown: U.S.	8	8
Foreign	2	2
Residency at matriculation		
In State	76	74
Out of State	24	26

It is important to note that as with all self-selected samples, there may be a response bias in that alumni who stay more connected to the University may be more likely to participate.

As previously noted, CAWG reports typically analyze survey results by four demographic variables: entry status, gender, race/ethnicity, and (for select items) residency at matriculation. In the present report, the analyses by race/ethnicity include only U.S. citizens with an identifiable race (e.g., not 'Unknown'), and excludes American Indians because of the very low number of respondents.

It is worth noting that not all survey participants offered a response to the open-ended item regarding what was distinct about the UM experience; a total of 358 of the 900 respondents (40%) supplied a response. Thus, the qualitative results in particular should not be generalized to the alumni population. Instead, they are offered to share the UM experiences of alumni in their own words and to explore some possible explanations for the quantitative results. Furthermore, not all themes are represented by equal numbers of comments. Some themes are more prominent than others, as is indicated throughout this report.

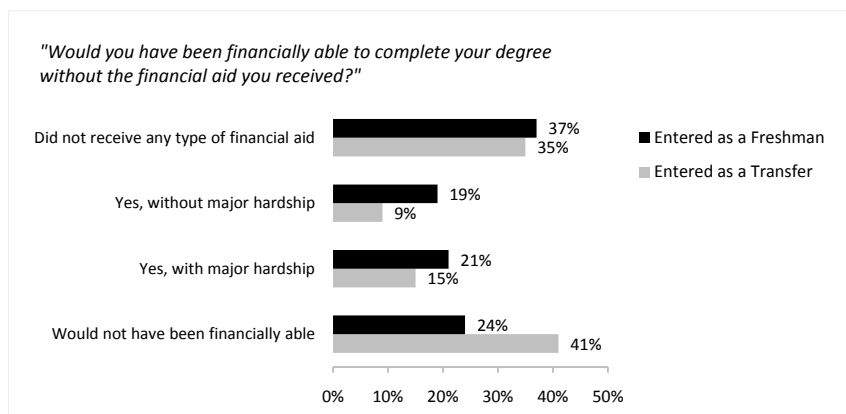
Findings

Role of Financial Aid

Alumni were asked if they would have been financially able to complete their degree without the financial aid they received. Overall, 36% of the respondents reported not receiving any type of financial aid; 16% would have been able to complete their program without major hardship without the financial aid they did receive; 20% would have experienced financial hardship if they had not received the aid they did; and 28% would not have been able to complete their program without the financial aid they received. There were statistically significant differences on this variable by entry status, gender, and race/ethnicity, but not residency at matriculation. The following charts display the alumni responses in terms of these relevant variables.

The analysis by entry status (Chart 1) shows that when compared to respondents who entered as freshmen, a lower percentage of those who entered as transfers said they could have completed their degree without major financial hardship (9% vs. 19% of those entering as freshmen), and a higher percentage said they would not have been financially able to complete their degree (41% vs. 24% of those entering as freshmen).

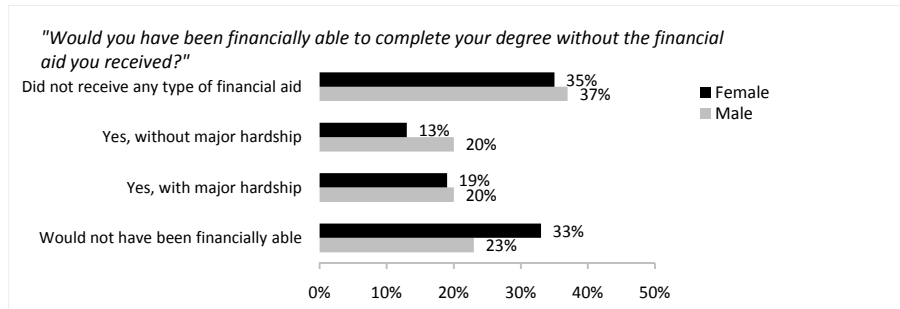
Chart 1: Respondents who entered as transfers were more dependent on financial aid than those who entered as freshmen.



One might expect that students who transfer into UM – particularly those coming from community colleges in Maryland where their tuition and fees were only about one-quarter of the cost of UM's – would find paying for school difficult or impossible without financial aid. The difference in cost may not be fully actualized until after they are accepted at UM.

The analysis by gender (Chart 2) indicates that when compared to female respondents, a higher percent of male respondents said they could have completed their degree without major financial hardship (20% vs. 13% of females), and a lower percent said they would not have been financially able to complete their degree (23% vs. 33% of females).

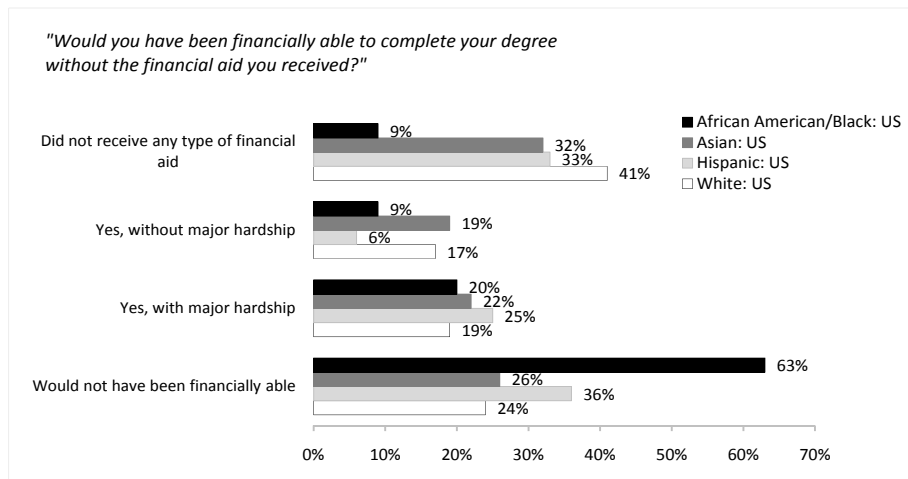
Chart 2: Female respondents were more dependent on financial aid than were males.



Data reported by the U.S. Census Bureau (<http://www.census.gov/population/www/socdemo/FTF-tabs.html>) demonstrate a national trend of females receiving less financial aid than males. Therefore, the findings from this survey of females reporting that paying for school would be difficult or impossible without financial aid is not that surprising.

The analysis by race/ethnicity (Chart 3) reveals a higher percent of African American/Black respondents said they would not have been financially able to complete their degree (63%), and a lower percent said they did not receive any type of financial aid (9%), as compared to respondents of other race/ethnicities. In contrast, more of the White respondents said they did not receive financial aid (41%) and fewer said they would not have been financially able to complete their degree (24%).

Chart 3: African American/Black respondents were more dependent on financial aid than other groups.



Eighty-three percent of African American and 71% of Hispanic respondents to this survey indicated they would find paying for school difficult or impossible without financial aid. This finding is consistent with data from the U.S. Census Bureau showing that Hispanic students receive the least amount of financial aid, followed by African American students. However, the result from this investigation may be unique to Maryland demographics. The U.S. Census Bureau (<http://quickfacts.census.gov/qfd/states/24000.html>) reports that the state of Maryland is made up of 63% White and 29% African American, and 7% Hispanic people. Nevertheless, what this finding from the current investigation demonstrates is a high financial need among African American students attending UM.

Finally, over one-third of respondents to this survey said they did not receive any type of financial aid. While this may seem like a large proportion, it appears that this finding is consistent with trends reported by the Maryland Higher Education Commission (<http://www.mhec.maryland.gov/Publications/research/2002Studies/TrendsinfinaicialaidtostudentsinMDPostsecondaryeducation.pdf>). Data from that report show that 67% of undergraduates attending four-year public institutions in Maryland received financial aid in 1999, a figure increasing almost every year since 1990.

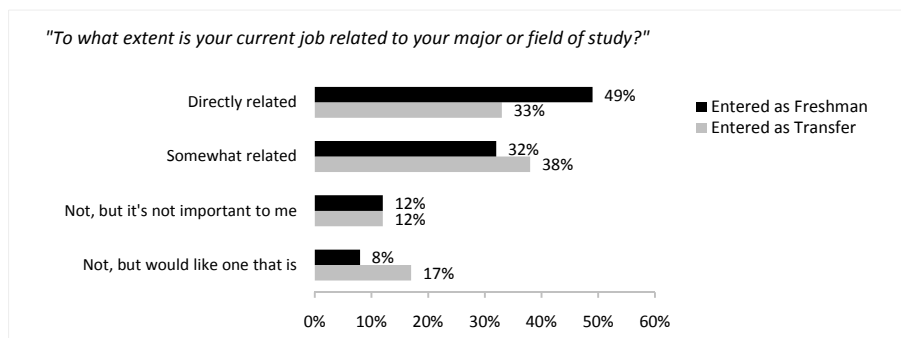
Current Employment

Seventy-one percent of the one-year out alumni respondents reported that they were currently employed full-time; an additional 11% were employed part-time. Among the employed respondents, 74% said a bachelor's degree was required to obtain their current job, 20% said it wasn't, and 6% weren't sure. Just over three-quarters of the respondents said their current job was either directly related (44%) or somewhat related (33%) to their major/area of study at UM. Three-fourths of those who were currently employed said the preparation by UM for their current job had been excellent (23%) or good (53%).

Further analyses show that there were statistically significant differences on current employment issues by entry status, but not by gender or race/ethnicity. Among those who entered as transfers, 86% were employed either full or part time, as compared to 80% of those who entered as freshmen, a greater percent of whom were not employed and not seeking employment (14% vs. 6%, respectively).

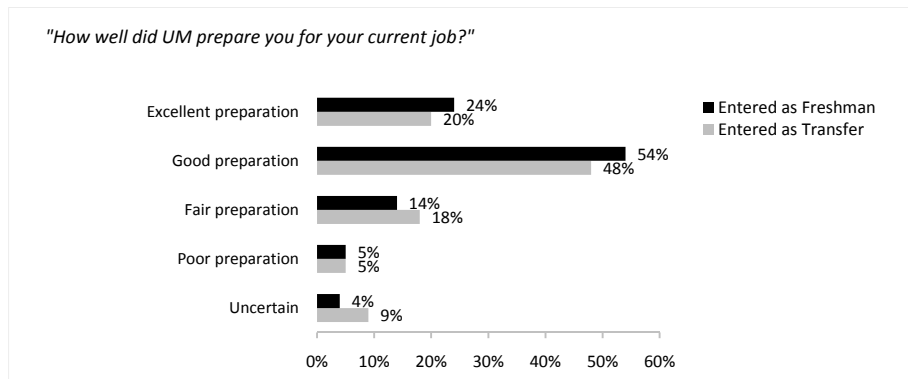
Among those who were employed, differences occurred in the degree to which their current job related to their major or area of study, as shown in Chart 4. A lower percent of those entering as transfers said their job was directly related to their major/area of study (33% vs. 49% of those entering as freshmen), and a higher percent said their job was not related but they would like one that is (17% vs. 8% of those entering as freshmen). Statistically significant differences also emerged on this item with respect to race/ethnicity, however, results are not presented due to their limited practical significance (i.e., small differences across racial/ethnic groups appeared in whether one’s major and job were directly related or somewhat related, as opposed to being related versus unrelated).

Chart 4: Transfer student respondents were less often employed directly in their field of study.



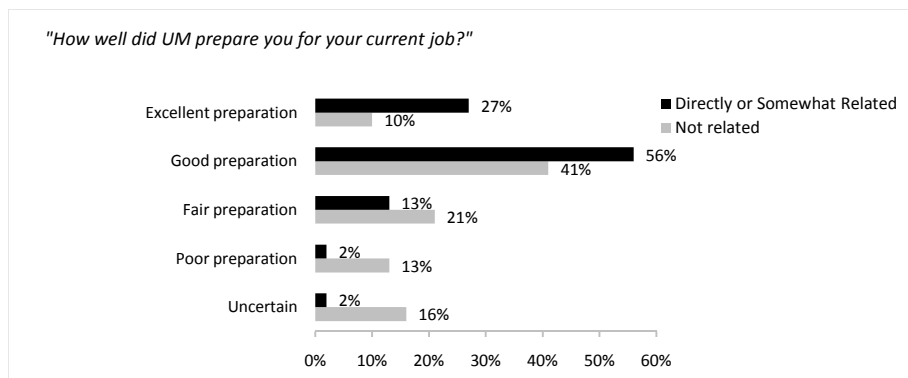
Seventy-eight percent of those entering as freshman reported that the preparation UM gave them for their current job was good or excellent, as compared to 68% of those entering as transfers. Instead, a higher percent of alumni who entered as transfers were uncertain about the quality of the job preparation (9% vs. 4% of those entering as freshmen). See Chart 5.

Chart 5: Respondents who entered as freshmen reported better levels of job preparation.



The perceived job preparation also depended on whether the alumni’s current job is related to their major while at UM. As Chart 6 demonstrates, a higher percent of alumni who said their major was directly or somewhat related to their current job rated the preparation as excellent (27% vs. 10% of those with a non-related major) or good (56% vs. 41% of those with a non-related major). In contrast, higher percents of alumni who said their major was not related to their current job rated the preparation as fair or poor, or were unsure about the extent to which UM prepared them for their current job.

Chart 6: Respondents in jobs related to their field of study rated their UM preparation more positively.



Qualitative responses indicated that more than half of the respondents commenting on the topic had positive things to say about the preparation for the workplace that they received at the University, when asked about what was unique about their UM experience. Several cited student jobs, internships, and “connections for career opportunities.” One specifically mentioned that the University provided “the educational and social experiences necessary to succeed in the workplace and in relationships.” A

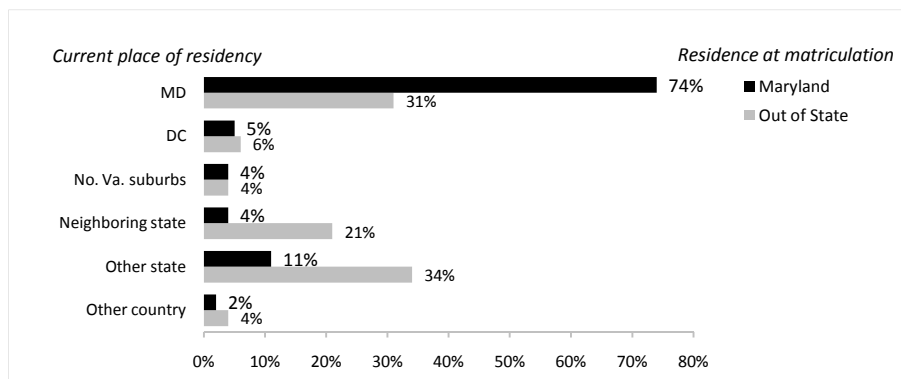
business school graduate spoke of learning practical skills that are useful “in a variety of ways.” Some respondents, however, felt that Maryland did not do enough to help them get a job after graduation. For example, one respondent said that courses taught theory, but not what was needed in the work environment.

Location of Current Residence and Current Job

Alumni were asked to indicate where they currently live and, if they are working, where they are currently employed. Overall, 64% of the respondents indicated they are living in Maryland and 51% say they are working in Maryland. Sizable portions also live and/or work nearby in the District of Columbia, Northern Virginia suburbs, or neighboring states (i.e., DE, NJ, PA, WV, elsewhere in VA). Fewer than a fifth of respondents reside outside the area in another state or country.

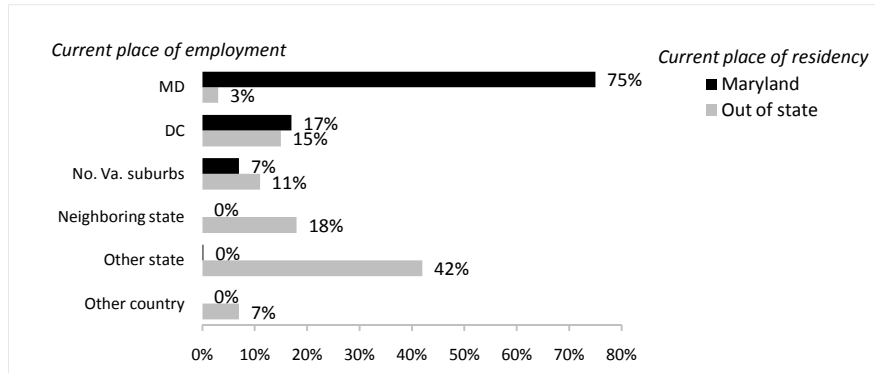
As depicted in Chart 7, 74% of respondents who began at UM as a Maryland resident still reside in Maryland. Among those who came to UM from out-of-state, 31% now reside in Maryland. Although the percent of in-state residents leaving Maryland is lower than the percent of out-of-state residents moving to Maryland, there is still a “net loss” in the actual count of respondents who reside in Maryland after graduation.

Chart 7: A quarter of respondents who matriculated as Maryland residents are now living elsewhere.



Of the respondents who said they currently live in Maryland, 75% reporting working in Maryland as well (Chart 8). Another 17% said they live in Maryland but work in DC, and 7% said they live in Maryland but work in the Northern Virginia suburbs of DC. Of those that live out of state (including DC and the Northern Virginia suburbs), only 3% report working in the state of Maryland.

Chart 8: One quarter of respondents who are current Maryland residents work outside the state.



Further analyses revealed that there were statistically significant differences on both current living and employment location by residency at matriculation (as shown in Chart 7) and entry status, but not by gender or race/ethnicity. In terms of employment, a higher percent of those respondents entering as transfers are working in the state of Maryland (59% vs. 48% of those entering as freshmen). In terms of living arrangements, more of the respondents entering as transfers live in Maryland (75% vs. 60% of their counterparts), while fewer live in a neighboring state (5% vs. 10% of their counterparts) or other state entirely (11% vs. 19% of their counterparts).

When asked what was distinct about their experiences at UM, several alumni noted that the location of the University was an asset and unique to UM. In addition to its proximity to the District of Columbia and Baltimore, internships, cultural opportunities, and a metro system to get there were mentioned. For example, one alumnus said, “Being very close to DC and Baltimore opens you up to more knowledge and valuable experiences.” These positive perceptions of the University’s location could help to explain why so many alumni chose to live and work in the area after graduating. It should also be noted that nearly three-quarters of the respondents were classified as In-State residents at the time of their matriculation. Thus, it is also possible that the alumni chose to return to an area near where they were living before attending UM.

Post-Baccalaureate Education

Thirty-nine percent of the one-year-out respondents had enrolled in school again after having received their degree (see the Limitations section). Of those, 49% were seeking a master’s degree, 3% a graduate certificate, and 37% a doctorate or professional degree. The remaining 11% were not seeking a degree beyond the baccalaureate level. Eighty-eight percent of those who were engaged in graduate or professional study said the preparation from UM was good or excellent. Further analyses found no statistically significant differences by entry status, gender, or race/ethnicity in terms of 1) whether they

had returned to school, 2) what degree they were seeking if they had re-enrolled in higher education, or 3) perceptions of the quality of UM’s preparation for graduate school.

A connection could be made between post-baccalaureate education and academic preparation received at UM. Qualitative responses were mixed regarding the academic rigor students experienced at UM. For example, one respondent noted, “I got a better education at community college. The majority of UMD teachers can’t teach and will pass you as long as you showed up for the classes and did the work.” On the other hand, another respondent wrote, “Maryland provides a great education in a highly competitive atmosphere.”

The majority of respondents who commented on what they learned at UM noted a positive perspective. Individual respondents cited skills such as teamwork, hands-on technology, solving problems, practical skills, and a wider view of the world. For example, “My peers are often surprised at my level of competence and knowledge, considering my self-reported GPA and the fact that I ‘only’ have a bachelor’s.” Another respondent said, “UM has provided better preparation for graduate and further study in my major” when asked what was distinct about the UM experience.

Perceived Value of the UM Experience

One-year-out respondents were asked a series of questions prompting them to indicate how valuable they perceived their UM experience to be in certain areas. The questions were scored on a five-point scale ranging from (1) *not at all valuable* to (5) *extremely valuable*. A factor analysis of all the questions revealed four factors, which were then used to create the following scales: cognitive skills, social interaction, diversity, and mentoring. See Appendix B for a detailed description of the factor analysis. Below are the scales, the items included in each scale, and the overall scale means. All scales run from 1 to 5, with higher scores associated with greater perceived value. Scale means were then analyzed to detect if there were differences by entry status, gender, and race/ethnicity (U. S. only).

Cognitive Skills

Table 2 displays the individuals items included in the Cognitive Skills scale, along with the scale’s descriptive statistics.

Table 2: Perceived value of UM experience on Cognitive Skills

N: 892	Mean: 3.96 (on a 5 point scale with 1=Not at all valuable; 5=Extremely valuable)	Standard deviation: 0.69
Items in scale:		
Increasing academic knowledge outside your major		
Speaking effectively		
Writing effectively		
Listening effectively		
Presenting a persuasive argument		
Revising your thinking based on new information		
Applying what you have learned to other situations		
Seeing relationships, similarities, and differences among ideas		
Using information to make ethical decisions		

As indicated in Table 2, the overall mean for the Cognitive Skills scale approaches 4 on a scale from 1 to 5, suggesting alumni found their UM experiences to be valuable in this area on average. There were no statistically significant differences on means by entry status or by gender. However, there were differences by race/ethnicity, with African American/Black respondents perceiving significantly more value in the UM experience on cognitive items than did Asian Americans and White Americans, and Hispanic respondents also perceiving greater value than Asian Americans, as Table 3 illustrates.

Table 3: Perceived value of UM experience on Cognitive Skills varied across ethnic groups

Race/ethnicity	N	Mean (SD)
African American/Black	81	4.22 (0.66)
Hispanic	36	4.17 (0.60)
White	592	3.95 (0.67)
Asian	98	3.87 (0.70)

Social Interaction

Table 4 displays the individual items included in the Social Interaction scale, along with its descriptive statistics. A scale mean approaching 4 on a scale from 1 to 5 suggests alumni, on average, perceive their experiences at UM in this area to be valuable.

Table 4: Perceived value of UM experience on Social Interaction

N: 891	Mean: 3.86	Standard deviation: 0.93
(on a 5 point scale with 1=Not at all valuable; 5=Extremely valuable)		
Items in scale:		
Meeting friends for life		
Making contacts/networking		
Developing your leadership skills		

There were no statistically significant differences on the Social Interaction scale by gender or race/ethnicity. However, there were statistically significant differences by entry status, with those entering as transfers reporting their experiences with meeting friends for life, making contacts/ networking, and developing their leadership skills as less valuable than did those who entered UM as freshmen, as described in Table 5.

Table 5: Perceived value of UM experience on Social Interaction varied by entry status

Entry Status	N	Mean (SD)
Entered as Freshman	656	3.99 (0.86)
Entered as Transfer	231	3.49 (1.02)

Qualitatively, many respondents noted that the size of UM allows for many different opportunities to get involved on campus. Several noted individual opportunities such as the Nyumburu Center, Resident Life, performances, community service, SGA’s Crab Fest, Maryland Day, and Greek life. For example, one noted, “I had many opportunities to become involved in the campus community, and it’s those experiences that I really value.” Another reported, “There is something for everyone. You can always

find a place to fit in no matter who you are.” In addition, several alumni noted that the athletics department does a good job of inspiring student engagement. “The great athletics program has teams for every season that do well year after year.” Alternatively, a few alumni who had been commuter students noted that it was more difficult to be engaged in these types of activities. One respondent exemplified this view by stating, “...I was a commuter student who worked through all my years of schooling and therefore did not have the opportunity to partake in 'afterschool' activities which looking back on it now, I regret. But at the time, I did not have another option. I would've loved to have gotten more involved on that front.”

The strong majority of respondents who commented on community at UM reported that they were able to do and learn many things through a wide variety of experiences while at the University. They mentioned being part of a caring community and feeling a sense of belonging. Some made comments like “UM provided me with the experience of a lifetime.” Several alumni commented that although the University is big it is still “a tight-knit community.” They spoke of participating in small, welcoming communities within the large one. A minority said that it is easy to “get lost in the big population” and that large classes made it hard to get to know peers.

Diversity

Table 6 displays the individual items included in the Diversity scale, along with its descriptive statistics. With an overall scale mean of 3.75, alumni generally rate their experiences at UM as valuable in terms of this area as well.

Table 6: Perceived value of UM experience on Diversity

N: 890	Mean: 3.75 (on a 5 point scale with 1=Not at all valuable; 5=Extremely valuable)	Standard deviation: 0.89
Items in scale:		
Understanding diverse perspectives		
Appreciating others who are different from you		
Gaining and understanding of global issues		
Knowing how to make a difference locally and globally		
Wanting to make a difference locally and globally		

While there were no statistically significant differences on the Diversity scale by entry status, there were statistically significant differences by gender, with men reporting that their experiences with diversity issues were less valuable than women. Differences also emerged on the Diversity scale with respect to race/ethnicity. Both African American/Black respondents and Hispanic respondents reported significantly more value in this area than White respondents. See Table 7.

Table 7: Perceived value of UM experience on Diversity varied by gender and race/ethnicity

Subgroup Differences on Diversity Scale	N	Mean (SD)
Gender		
Female	519	3.81 (0.85)
Male	371	3.67 (0.93)
Race/ethnicity		
Hispanic	36	4.04 (0.79)
African American/Black	81	3.98 (0.83)
Asian	98	3.78 (0.78)
White	590	3.72 (0.89)

Qualitatively, quite a few respondents noted that UM’s diversity is what sets it apart from other institutions. Many did not define what they meant by that term, as though the meaning would be self-evident. Others stipulated the people they met, and experiences they had, were unique. For example, some illustrative comments include:

“Diversity is invaluable.”

“I believe I met people from more diverse backgrounds [than] many of my friends at other universities.”

“The diversity. The people and the classes we had to take expanded the way we take on situations. I think we have a wider view than many.”

“I think I met a diverse group of students and faculty that exposed me to people different from myself. In law school I have met several people who attended small private schools that lacked that diverse experience.”

A few noted frustration with some aspects of diversity at UM. One respondent noted, “Excessive emphasis on diversity, and badly done at that.” A few others commented that although UM is diverse, students tend to stick to people that they feel comfortable with, so there is not as much interaction as they would like. Others suggested some majors are not as diverse as others. One respondent explained, “UM still lacks diversity. In both of my majors, very often I was the sole person of color in my upper level coursework, which I find astonishing.”

At the University of Maryland, diversity is seen as an essential component of academic excellence. Given the University's numerous campus-wide activities to achieve greater diversity and inclusiveness, it is not surprising that alumni perceive their diversity experiences at UM to be of value to them. In spite of the University's commitment to diversity, findings from this survey suggest that diversity experiences at UM are not equally valuable for all alumni. There is a need to understand why men and White respondents report significantly less value in their diversity experiences at UM.

Mentoring

Table 8 displays the individual items included in the Mentoring scale, along with its descriptive statistics. Note that the quantitative items included on the survey did not explicitly define the term “mentorship,” but left alumni to define it for themselves while responding to the questions. For this area as well, the Mentoring scale mean is above the scale midpoint (3.51 on a scale from 1 to 5), suggesting alumni find some value in their UM experiences. No differences were found based on entry status, gender, or race/ethnicity for this scale.

Table 8: Perceived value of UM experience on Mentoring

N: 892	Mean: 3.51 (on a 5 point scale with 1=Not at all valuable; 5=Extremely valuable)	Standard deviation: 0.86
Items in scale:		
Receiving mentorship from faculty		
Receiving mentorship from staff and administrators		
Receiving mentorship from other students		
Providing skills and techniques directly applicable to your job		
Providing preparation for further education		

Of the four dimensions measuring perceived value in the Alumni Survey, the Mentoring scale earned the lowest mean. It would follow that the topic of mentoring also garnered a majority of negative responses qualitatively. Many reported unsatisfactory experiences, due to the size of the institution or department, or due to resources or attitude of advising staff and faculty. Some quotes illustrating these viewpoints include, “Being a very large research university, the University of Maryland did not offer me the challenges nor the mentorship I needed to excel,” and, “Too many students are allowed to fall through the cracks at this institution because of inadequate advising.” On the other hand, one respondent noted, “Working with ... my mentor was a pleasure and an honor.”

Summary and Discussion of Perceived Value

As summarized in Table 9, the scale means for all four areas – cognitive skills, diversity, mentoring, and social interaction – fall above 3 on a scale from 1 (not at all valuable) to 5 (extremely valuable). Thus, on average, alumni rate their UM experiences as valuable in these areas. Note, however, that alumni perceive the greatest relative value in the cognitive skills area, and the least relative value in the mentoring area.

Table 9: Level of perceived value varies across the four dimensions

Scale	Mean
Cognitive Skills	3.96
Social Interaction	3.86
Diversity	3.75
Mentoring	3.51

Respondents were asked, if they indicated their UM experience was not valuable in any of the areas, to select the primary reason. Overall results, as well as subgroup differences, are as follows:

47% said their UM experience was valuable in all the areas.

50% of those entering as freshmen vs. 38% of those entering as transfers

7% said their experiences prior to attending UM were more valuable.

4% of those entering as freshmen vs. 17% of those entering as transfers

9% of males and 5 % of females

12% said their experiences since attending UM have been more valuable.

12% said that UM offered opportunities in the areas, but they didn't engage in them.

14% said UM offered opportunities in the areas, but they didn't find them helpful.

17% of males and 12% of females

8% said UM did not offer opportunities in the area.

A higher percentage of transfer students (17%) than native students (4%) expressed that their experiences prior to attending UM were more valuable than those they had while at College Park. Since a high proportion of transfer students enter directly from community colleges, and many of those who transferred to UM from a four-year college likely came from a smaller campus than College Park, some respondents may have felt more directly impacted by their direct and individualized experiences at their prior (smaller) institution than those occurring at UM. Those coming to UM from a smaller school may experience UM as large and impersonal. If the campus becomes too large and overwhelming, the student may not feel as comfortable engaging in activities that might prove to be valuable, while they may have taken advantage of at least some of these opportunities at a campus they felt was more "tight-knit" and manageable.

Other Distinct Features of the UM Experience

Several other themes emerged from the alumni responses to the open-ended question about what seems distinct about the UM experience that did not mirror topics covered by quantitative items on the survey.

Classes

About half of the comments regarding courses indicate an appreciation for the breadth of courses offered and even required at UM. For example, one respondent commented, "Diversity of great courses across disciplines" when asked what was distinct about the UM experience. Meanwhile, the other half of the comments indicated a frustration with the very large class sizes often found at UM. Exemplifying this view, one alumnus said, "It is impossible to really learn in a 200-person class."

Faculty

Respondents offered a mix of perspectives regarding the quality and accessibility of faculty at UM. Several alumni complained about the faculty focus on research, lack of true faculty in the classroom, quality of teaching, and lack of challenge. For example, one said, "The majority of the time the professors rarely cared about their students and more about their research," and another commented that,

“At Maryland, the size of the campus community lends itself to a disconnection between the faculty and the student body.”

On the other hand, other respondents praised faculty for their relationships with students, mentorship, knowledge of their field, and commitment. One respondent said, “I was able to gain TONS of faculty interaction and make one-on-one contacts.” Along these lines, another alum indicated, “The faculty is very supportive while also demanding, preparing us for our future independent careers.” A few respondents noted the opportunities that UM’s focus on research afforded them. For example, a respondent said, “A lot of opportunities for research with professors in undergraduate career” was distinct about the UM experience.

Major/Program

The majority of comments regarding majors praised their individual programs, citing preparation for career, reputation in the field, and overall experience. For example, one respondent said, “[My program] provided a much stronger science background than other interns in [my internship program]. I also felt much more prepared for the internship than other interns.” Along these lines, another alumnus commented, “[My major] seems to have been a lot more rigorous than quite a few of other universities. It receives little popular recognition though industry and academic recognition is self-evident in my interactions.”

A minority noted dissatisfaction with their major, citing size of student body (and subsequent lack of special opportunities), lack of career preparation, or focus on research. Representing this viewpoint, one respondent said, “There seemed to not be as much emphasis on hands-on experience at the undergraduate level.” Another said, “[In my major] top faculty focus too much on their research and are able to avoid teaching undergrad courses.”

Opportunities

Almost all comments about opportunities provided by UM were positive, citing specifically academic programs, internships, and proximity to DC. For example, some of the alumni’s comments include:

“I think the best way to sum up my education is that I chose to take advantage of all the opportunities UMD presented me with.”

“There are opportunities at Maryland for anything you want to study, anything you want to get involved in, even anything you might need to be successful.”

“Organizations and academic programs exist at UMD for almost every possible subject area. For an indecisive high school graduate... UMD is ideal because it offers students many avenues to explore their interests.”

“The University certainly has opportunities available for people able (people with time and financial means) that are at least as good as those of other institutions. The University is not particularly good at making these opportunities [available] to persons who would receive greater benefit from these opportunities.”

Academic programs were praised as well, including the Honors program, the Honors Humanities program, departmental honors, the global communities living learning program, the language house,

ROTC, and the CORE program. Exemplifying this view, one alum said, “The CORE program is worthwhile and not a universal thing in other universities.”

Reputation

A few respondents emphasized the reputation of either the institution as a whole or their program as a positive. For example, one commented “My department was well respected globally in its respective fields,” while another said, “[My school] is well-known and why I attended.”

Administration

The few respondents who commented on the University’s administrative procedures appreciated that some processes were kept simple, such as parking permits, financial aid, and course registration. On the other hand, a couple of alumni felt that they were “just a number” and complained about slowness and bureaucracy. In term of parking, one felt it was not easy and suggested, “The only thing, [I] would change about University of Maryland is the parking situation.”

Campus/Neighborhood

Several alumni spoke highly of the beauty of the campus; one respondent said “I loved the beautiful campus and the people I met along the way.” However, several alumni commented on the crime in the surrounding neighborhood and not feeling safe in the areas right off campus. One described it as “an awful ‘college town’ that is borderline dangerous.”

Alumni

Respondents were pleased to be connected to a strong alumni network. For example, one respondent commented, “Everyone seems to know or is related to someone who went to UMD.” When asked what was distinct about the UM experience, another said, “How strongly the alumni community is connected and overall quality of life while attending the University of Maryland was better when compared to other universities.”

Current Attitudes Toward UM

CAWG subgroups typically include in their questionnaires items that attempt to determine current attitudes toward UM. In the 2008 Alumni Survey, there were four such items. A factor analysis, also described at length in Appendix B, indicated these items could be used to form a general attitude scale running from 1 to 5 representing satisfaction with UM. Table 10 displays the individual items included in the Satisfaction scale, along with its descriptive statistics. There were no statistically significant differences on the Satisfaction Scale by entry status, gender, or race/ethnicity.

Table 10: Satisfaction with UM

N: 896	Mean: 4.38	Standard deviation: 0.80
---------------	-------------------	---------------------------------

(on a 5 point scale with
1=Least favorable; 5=Most
favorable)

Items in scale:

- At the present time, my attitude toward UM is positive.
- All in all, if I had it to do over, I would enroll at UM again.
- I would recommend the University of Maryland to my family and friends.
- I am proud to be a University of Maryland graduate.

The Satisfaction scale is significantly positively correlated with each of the four perceived value scales. That is, as perceived value of UM experience increases in a given area, so does general satisfaction with the University, as described in Table 11.

Table 11: Correlations between perceived value scales and satisfaction scale

Scale	N	Correlation with Satisfaction
Cognitive Skills	891	0.55
Social Interaction	890	0.54
Mentoring	891	0.53
Diversity	890	0.48

Qualitatively, in terms of overall perceptions, several alumni responded generally when commenting on distinct features of the UM experience. A few noted that UM is not very unique as compared with others like us. “I attended two universities for undergraduate studies, and I can say that they share the same merits and principle flaws. The UM experience is what you make of it...” A few others had negative things to say about UM. “Much less personal, much less effective, and much less prestigious,” and, “The University of Maryland is a joke. I got screwed out of an education.”

However, many alumni made general statements regarding the uniqueness of UM, of their time here, and of their pride in UM, in a positive light. Many respondents spoke of being proud to be a Terp for life: “Once a Terp, always a Terp.” Some other illustrative comments include:

“It was a gratifying and challenging experience with a wide array of opportunities to choose from.”

“UM is so much fun, a great balance of school and social life. I absolutely loved my time here.”

“People hear the name University of Maryland and think highly of your degree.”

“Overall, I could not have asked for a better undergraduate experience. UM was excellent.”

Limitations of the Study

Given the low response rate (15%), the representativeness and generalizability of the 2008 Alumni Survey results are limited. For example, it appears there may be a response bias towards alumni who have re-enrolled in higher education, with nearly 40% of respondents indicating they had returned to school. It is possible that alumni who have re-enrolled are more connected to the University (e.g., have updated their contact information in order to request transcripts), and thus more likely to complete the survey. Alumni living and working in the DC/Metro area may also be more engaged with the University given their location, and more likely to participate. Additionally, as previously noted, the qualitative results are not generalizable to the population.

Conclusions and Using the Data

The 2008 Alumni Survey data provide information about recent graduates’ perceptions of their UM experiences and transition into the working world. To conclude, in the words of one alum, “Students who excelled at Maryland took ownership of their own educational experience. Faculty and administrators supported them, but they were able to pursue their own internships and research experiences, and their own mix of electives and extra-curriculars to make sure that the University prepared them to meet their

goals.” This report has shared, both quantitatively and qualitatively, the experiences of some of our recent graduates. The findings highlight the UM experiences they found to be valuable and distinct, and helped to shed light on a few areas in which they felt less prepared for life after graduation.

While not all results presented in this report may be relevant to your unit or department, CAWG encourages you to use those elements that are. Some suggestions for use of the data include:

Review and discuss findings with colleagues: Share this report with others in your college, department or office in order to inform them of current findings about the experiences of UM graduates who participated in this study. Discuss how these findings fit with your perceptions of the alumni experience.

Clarify the data with focus groups: Engage students in small discussion groups to gain further information about topics of interest to your department.

Allow data to help inform resource allocation: Data can be used to help guide decisions about how to prioritize use of funds to meet students’ needs and concerns.

Determine areas for further analysis: CAWG can assist departments, units, and colleges by providing data or conducting relevant subgroup analyses

Appendix A: The Instrument



University of Maryland 2008 Alumni Survey

The purpose of this survey is to examine recent University of Maryland alumni's post-graduation experiences as well as experiences they had while students at UM.

The survey is divided into four sections and should take about 10 minutes to complete. All information collected on this survey will be kept confidential.

Your views as an alumni/alumnae of the University of Maryland are very important to us. Thank you for your participation!

If you encounter any problems when filling out the survey or have questions, please contact us at cawg@umd.edu.

Please enter your first and last name and birth date below for identity verification purposes.

Last Name when you graduated
(as it appears on your diploma):

First Name when you graduated
(as it appears on your diploma):

Birthdate:

Year four-digit year you were born

Month

Day

Post Baccalaureate Education

Since completing your program at UM, have you ever enrolled in school again?

- No, I have not enrolled in school again (please go to [Employment](#))
- Yes (Please continue on to the next question).

What certificate or degree were you seeking at the school referred to in the question above?

- Certificate (Undergraduate level)
- Associate's Degree (2-year)
- Bachelor's Degree
- Master's Degree
 - MA, MS, M.E., etc.
 - MBA
 - MFA
- Doctoral Degree
- Graduate Certificate
- First Professional Degree
 - Dentistry
 - Law
 - Medicine (including nursing/pharmacy)
 - Theology
 - Vet Medicine
 - Other
- I was not seeking a degree or certificate

How was the major you were seeking when you enrolled again related to the major you completed at UM?

- Same major
- Different but related major
- Different major

How well did UM prepare you for graduate or professional study?

- I have not enrolled for graduate or professional study
 - Excellent preparation
 - Good preparation
 - Fair preparation
 - Poor preparation
-

Employment

Are you currently employed?

- Yes, full-time (Please continue to the next question.)
- Yes, part-time (Please continue to the next question.)
- No, but I am seeking employment (Go to [Miscellaneous](#))
- No, and I am not seeking employment (Go to [Miscellaneous](#))

What is your annual salary or wage in your current job?

Please scroll to the appropriate range



To what extent is your current job related to your major or area of study at UM?

- Directly related
- Somewhat related
- Not related, but it is not important to me
- Not related, but I would like a job related to my major

Was a bachelors degree required in order to obtain your current job?

- Yes
- No
- I am not sure

Look at the following list and mark the category that **best** describes your current occupation.

- Financial (to include accountant, financial analyst, banker, broker, claims adjuster)
- Information systems (to include programmer/analyst, computer/software engineer, electronics technician)
- Engineer or architect (to include engineering technician)
- Health professional (to include technicians)
- Legal professional or law enforcement (to include paralegal or legal secretary)
- Manager, executive or proprietor
- Scientist (to include research scientist - social, life, physical or mathematics - statistician, analyst and scientific technician)
- Sales or marketing (to include retail and real estate)
- Social worker
- Teacher
- Other professional
- Skilled trades, secretary, clerical, laborer, service occupations

How well did UM prepare you for your current job?

- Excellent preparation
- Good preparation
- Fair preparation
- Poor preparation
- Uncertain

Where is your current place of employment?

- Maryland
 - District of Columbia
 - Northern Virginia suburbs of DC
 - Neighboring state (DE, NJ, PA, WV, elsewhere in VA)
 - Other state
 - Other country
-

Miscellaneous

Where do you currently live?

- Maryland
- District of Columbia
- Northern Virginia suburbs of DC
- Neighboring state (DE, NJ, PA, WV, elsewhere in VA)
- Other state
- Other country

Would you have been financially able to complete your degree without the financial aid you received?

- I did not receive any type of financial aid
- Yes, without major financial hardship to me and/or my family
- Yes, with major financial hardship to me and/or my family
- No, I would not have been financially able to complete my degree

If you were to do it over, would you major in the same field again?

- Definitely yes
- Probably yes
- Not sure

- Probably not
- Definitely not

If you were to do it over, would you attend UM again?

- Definitely yes
- Probably yes
- Not sure
- Probably not
- Definitely not

Experiences While At UM

How valuable was your UM experience in regard to the following:

	Extremely Valuable				Not at all Valuable			
Providing preparation for further education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing skills and techniques directly applicable to your job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increasing academic knowledge outside your major	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speaking effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Writing effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Listening effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presenting a persuasive argument	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Revising your thinking based on new information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applying what you have learned to other situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seeing relationships, similarities, and differences among ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using information to make ethical decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developing your leadership skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receiving mentorship from faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receiving mentorship from staff and administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receiving mentorship from other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understanding diverse perspectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appreciating others who are different from you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gaining an understanding of global issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowing how to make a difference locally and globally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wanting to make a difference locally and globally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meeting friends for life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Making contacts/networking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you indicated your UM experience was not valuable in any of the above areas, please select the primary reason:

- N/A; I found my UM experience valuable in all the above areas.
- My experience(s) prior to attending UM were more valuable.
- My experience(s) since attending UM have been more valuable.
- UM offered opportunities in the above areas, but I did not engage in them.
- UM offered opportunities in the above areas, but I did not find them helpful.
- UM did not offer opportunities in the area.

Please Indicate Your Agreement with the following statements:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
At the present time, my attitude toward UM is positive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All in all, if I had it to do over, I would enroll at UM again.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend the University of Maryland to my family and friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to be a University of Maryland graduate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What seems distinct about the UM experience in comparison to the experiences of those you know who have graduated from other universities?

ENDSurvey

Appendix B: Scale Development

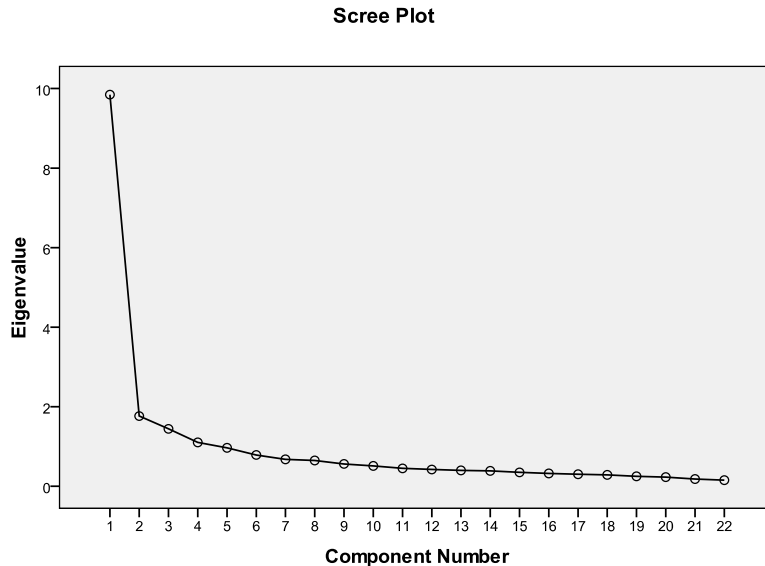
A principal component analysis (PCA) was conducted to explore the dimensionality of the 2008 Alumni Survey items asking respondents to indicate how valuable their UM experiences were in various areas. A PCA was selected in order to summarize or reorganize responses to subsets of highly-correlated items into scales scores for further analysis.

Perceived value of UM experience

The 22 items included on the survey accompanied by 5-point scales ranging from “not at all valuable” to “extremely valuable” were included in the analysis. To ascertain the factorability of the correlation matrix, we utilized Bartlett’s Test of Sphericity ($p=.000$) and the Kaiser-Meyer-Olkin measure of sampling adequacy ($KMO=.933$); the results of both tests suggest that our matrix is factorable.

We ran a PCA on the 22 items and utilized several popular guidelines to determine the number of components underlying the data. Using Kaiser’s familiar eigenvalue rule, the first four components with eigenvalues greater than 1 are retained. Together, these four components explain 64% of the total variance, accounting for nearly two-thirds of the covariation among the original items. Additional components each account for less than 5% of the remaining variance. A visual examination of the scree plot below (Figure B1) shows a drop in amount of information (i.e., eigenvalue magnitude) around the fourth or fifth component.

Figure B1: Scree plot for perceived value items



To determine which items load on which of the four extracted components, a Varimax rotation method was applied to obtain simple structure. Table B1 presents the mapping of items to components, and displays their loadings, or the correlation between the item and the component. A .5 cut-off (within rounding for two items with .49 loadings) was utilized to assign items to their primary component.

Table B1: Rotated component matrix for perceived value items

How valuable was your UM experience with regard to the following:	Component			
	1 Cognitive Skills	2 Diversity	3 Mentoring	4 Social Interaction
Increasing academic knowledge outside your major	0.49			
Speaking effectively	0.66			
Writing effectively	0.71			
Listening effectively	0.76			
Presenting a persuasive argument	0.75			
Revising your thinking based on new information	0.74			
Applying what you have learned to other situations	0.72			
Seeing relationships, similarities, and differences among ideas	0.69			
Using information to make ethical decisions	0.61			
Receiving mentorship from faculty			0.83	
Receiving mentorship from staff and administrators			0.79	
Receiving mentorship from other students			0.66	
Providing preparation for further education			0.49	
Providing skills and techniques directly applicable to your job			0.59	
Understanding diverse perspectives		0.64		
Appreciating others who are different from you		0.67		
Gaining an understanding of global issues		0.81		
Knowing how to make a difference locally and globally		0.78		
Wanting to make a difference locally and globally		0.80		
Meeting friends for life				0.85
Making contacts/networking				0.74
Developing your leadership skills				0.57

Items loading on the first component were used to form a Cognitive Skills scale. A scale reliability analysis confirmed these nine items “hang together” well ($\alpha=.908$). The five items loading on the second component were used to form a Diversity scale ($\alpha=.900$). The five items loading on the third component formed a Mentoring scale ($\alpha=.816$), and the remaining three items loading on the fourth component were used to develop a Social Interactions scale ($\alpha=.774$). All four scales meet acceptable reliability standards with a Cronbach’s alpha greater than .7. To develop scale scores for each respondent, their individual valid responses were averaged across the items in the scale. All scales run from 1 to 5, with higher scores indicating more perceived value.

Satisfaction with UM

A separate PCA was run on the four bellwether items included on the 2008 Alumni Survey to determine whether it was possible to form a Satisfaction scale representing respondents’ general attitude towards UM. These items were accompanied by 5-point scales ranging from “strongly disagree” to “strongly agree.” Again, Bartlett’s Test of Sphericity ($p=.000$) and the Kaiser-Meyer-Olkin measure of sampling adequacy ($KMO=.861$) suggest our matrix is factorable. In this analysis, one component has an

eigenvalue greater than one, which explains 84% of the total variance. The shape of the scree plot (Figure B2) also points to a one-component model, as there is a distinct drop in amount of information across the successive components.

Figure B2: Scree plot for general attitude towards UM items

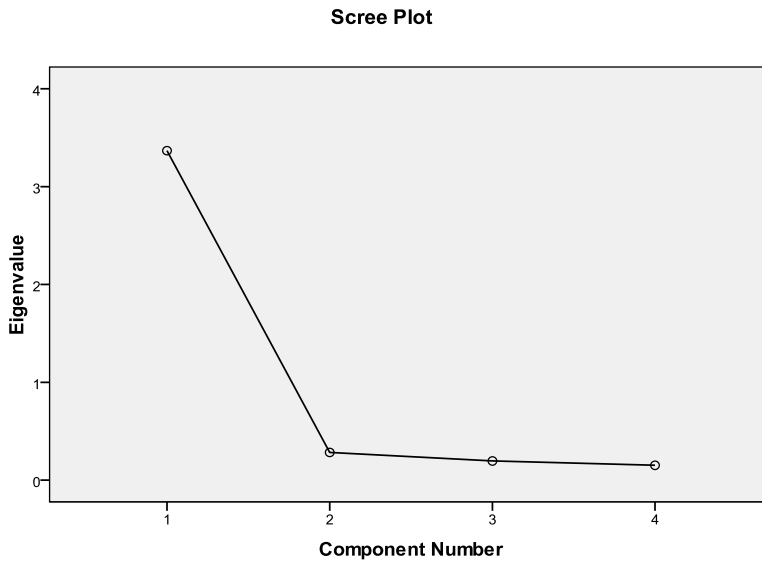


Table B2 presents the loadings of each item on this component. A scale reliability analysis confirmed these four items “hang together” well ($\alpha=.935$). Respondents’ answers across the individual items were averaged together to form a Satisfaction scale, ranging from 1 to 5, with higher scores representing greater satisfaction.

Table B2: component matrix for general attitude towards UM items

	Component
Please indicate your agreement with the following statements:	1
	Satisfaction
At the present time, my attitude toward UM is positive.	0.93
All in all, if I had it to do over, I would enroll at UM again.	0.91
I would recommend the University of Maryland to my family and friends	0.94
I am proud to be a University of Maryland graduate	0.89