BCSSE 2014: Highpoints and Keystones for Action
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Overview:
UW-La Crosse administered the Beginning College Survey of Student Engagement during the summer of 2014 as an extension of the summer registration process. Admitted students were advised during their visit that an email would be sent for them to complete the measure. Emails were sent from the Chancellor's office requesting them to participate. Out of the 2,060 emails sent, completed responses were received from 573 students for a response rate of 28%. The respondents closely approximated the race/ethnicity profile of the first year class, but higher percentages of female and first generation students completed the survey. The remainder of this report shares particularly interesting data points and also items indicating need for further investigation. It is important to note that in addition to these summary data, that individual student level advising reports were created and that these were shared with the Academic Advising office for possible follow up. See Appendix A for a sample report of this type.

BCSSE Structure:
The survey contains twelve items about the nature of students' high school experiences, eighteen related to expectations for the first year of college and six demographic items. Out of these items, nine subscales are created (See Table 1) that align with general academic background, expectations for success, and concerns about perseverance. The standard report includes comparison data from within the sample such that students with self-report grades of A- or higher are compared with those indicating a B+ or lower. A second comparison is made between students who are first generation and those who are not. Frequencies are reported for each item while mean scores are provided for each scale. Note that we do not receive comparative results from other institutions on this measure. Only data from our own students is used.

Highlights from the BCSSE Scales
Investigating the scale scores, only one statistically significant difference was found in that students with higher self-reported grades in high school appeared to have used more effective learning strategies (See Table 2).   Across the rest of the scales there were no statistically significant differences found. The ranking of the subscale means, while a less rigorous measure, highlighted that students rated the important of the campus environment as the highest factor in the list followed by a cluster of scales related to perceived academic preparation, expectations for discussions with diverse others, and expectations on their ability to persevere academically. A mid-range cluster of scales related to hopes for collaborative learning, use of learning strategies in high school, and expectations for faculty engagement. The final two scales receiving the lowest average ratings involved perceived difficulty of the first year and high school experiences with quantitative reasoning.

Table 1: List of BCSSE Scales and Descriptions.

Scale name	Description	Mean (SD)
Quantitative Reasoning (HS_QR)	High school engagement with analysis and numerical information	28.70 (14.57)
Learning Strategies (HS_LS)	Use of effective learning strategies in high school.	37.43 (12.81)
Collaborative Learning (EXP_CL)	Expectation to interact and collaborate with peers	38.65 (10.86)
Student-Faculty Interaction (EXP_SFI)	Expectation to interact and engage with faculty	31.45 (12.35)
Discussions with Diverse Others (EXP_DD)	Expectation to engage in discussions with diverse others	44.14 (12.66)
Academic Perseverance (EXP_PER)	Student certainty that they will persist in the face of academic adversity	43.92 (8.61)
Academic Difficulty (EXP_DIF)	Expected academic difficulty during the first year of college	30.37 (9.76)
Perceived Academic Preparation (PER_PREP)	Student perception of their academic preparation	44.62 (8.11)
Importance of Campus Environment (IMP_CAMP)	Student-rated importance that the institution provides a challenging and supportive environment	47.46 (8.19)

Our results do paint interesting picture when compared to other institutional data sets. UW-La Crosse also participated in the National Survey of Student Engagement (NSSE) in the spring semester preceding the BCSSE. By comparing NSSE and BCSSE data, we saw NSSE results that indicated low student faculty interaction between first year students and their instructors and low rates of discussions with diverse others. While there appears to be an expectation of these two activities in the summer before entry on the BCSSE, the actual first year experience does not seem to meet these expectations. The ratings for academic perseverance seem to match our current retention rate levels that range around 86%. We do currently see concerns when looking at the mathematics preparation of our students and the demands placed upon students as they enter their majors especially in the STEM fields. These lower levels of preparation are captured from the student self-reports on the BCSSE also may be an issue in student success in those majors and should be investigated more in depth.

Individual BCSSE Items of Interest

High School Experiences

Characterization of the respondents from the survey indicates most were graduates of public schools in 2014. The pattern of academic success in high school is shown by self-reports that over half held an A average (53%) with most of the remainder achieving levels above a B (26% = A-, 13% = B+, 8%= B). For mathematics courses, 94% reported having taken Algebra II earning at least a C, 84% Pre-Calculus /Trig., 39% Calculus, and 35% Probability/Statistics. Only 17% had not taken at least 1 Advanced Placement course. Some reported some experience with college courses (38% taking 1-2 classes, 14% 3-4 classes).

Similar to patterns on the NSSE for first year students, most students reported having more written assignments in High School consisting of 5 pages or less, with fewer in the 6-10 page range, and very few in the 11 pages or more range. Reports on the use of time in high school indicated that more hours on average were typically spent participating in co-curricular activities followed by socializing, working for pay, and then studying. (See Chart 1) Digging more deeply into the kinds of co-curricular events students were in, 74% reported high athletic participation, 63% volunteer work, 53% academic clubs/honor societies, 42% performing/visual arts. Less participation was noted for student government (17%), vocational clubs (14%), and student publications (11%).

Activity reported in specific academic tasks indicated that students were most often pulling key ideas from their readings (79%), trying to understand issues from other perspectives (62%), and reviewing notes after class (59%). There were lower reported levels of using numerical information to solve real world problems (39%) and evaluation of others use of numerical information (36%). A good note was that only 6% reported regularly coming to class unprepared. Another positive indication was that 82% indicated that their last year of high school challenged them to do their best work (i.e. a score of 5, 6, or 7 on a 7-point scale where 1 = not at all, 7 = very much).

Chart 1: Students Self-reported Use of Time across Four Core Activities (BCSSE 2014)
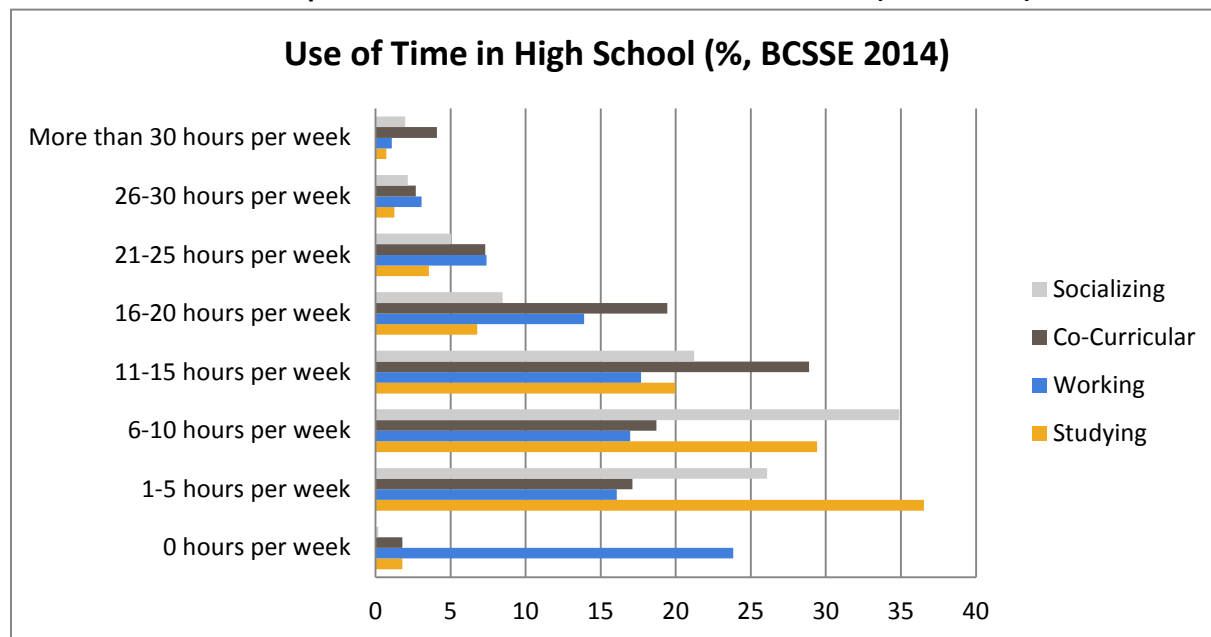
Table 2: Results on the BCSSE subscales, Comparisons between levels of High School Grades and First Generation Status

BCSSE Scales[a]	Variable	All Students			Self-Reported High School grades				First-Generation[d] Comparisons			
					Means		Tests of mean differences		Means		Tests of mean differences	
		Mean	*SD*	*N*	*A- or higher*	*B+ or lower*	*Sig* [b]	*Effect size* [c]	*FG*	*Non-FG*	*Sig* [b]	*Effect size* [c]
Quantitative Reasoning *High school engagement with analysis and numerical information*	HS_QR	28.70	14.57	573	28.84	28.02		.05	28.47	29.14		-.05
Learning Strategies *Use of effective learning strategies in high school*	HS_LS	37.43	12.81	573	37.97	35.19	*	.23	36.59	37.75		-.09
Collaborative Learning *Expectation to interact and collaborate with peers*	EXP_CL	38.65	10.86	573	38.81	37.90		.09	38.45	38.86		-.04
Student-Faculty Interaction *Expectation to interaction and engage with faculty*	EXP_SFI	31.45	12.35	573	31.80	29.90		.16	30.95	31.82		-.07
Expected Discussions with Diverse Others *Expectation to engage in discussions with diverse others*	EXP_DD	44.14	12.66	573	44.46	42.92		.12	44.06	44.50		-.03
Expected Academic Perseverance *Student certainty that they will persist in the face of academic adversity*	EXP_PER	43.92	8.61	573	44.17	42.78		.17	44.10	43.69		.05
Expected Academic Difficulty *Expected academic difficulty during the first year of college*	EXP_DIF	30.37	9.76	573	30.31	30.59		-.03	30.45	30.26		.02
Perceived Academic Preparation *Student perception of their academic preparation*	PER_PREP	44.62	8.11	573	44.83	43.70		.14	43.78	45.11		-.17
Importance of Campus Environment *Student-rated importance that the institution provides a challenging and supportive environment*	IMP_CAMP	47.46	8.19	573	47.45	47.35		.01	47.61	47.38		.03

[a] Scale scores are expressed in 0 (minimum) to 60 (maximum) point scales. See the following page for complete scale descriptions and component items.

[b] T-test results (2-tailed): * $p<.05$, ** $p<.01$, *** $p<.001$. The smaller the significance level, the less likely that the difference is due to chance.

[c] Effect size is the mean difference divided by pooled standard deviation. It indicates the practical significance of the mean difference (effect size .2 is often considered small, .5 is moderate, and .8 is large).

[d] First generation is defined as no parent or guardian having graduated with a 4-year college degree.

Expectations for College

A general pattern to note is that student anticipated that their college experience would be different from their high school life especially in the amount of work and kinds of tasks they would be involved in. (e.g. higher expectations for writing more and longer papers). Students anticipated use of time showed a marked changed with highest average hours expected to be spent on studying, followed by socializing, co-curricular activities, and working. This is almost the reverse order from their reported high school experiences.

Table 3: Student Expectations for Select Academic Behaviors by % Very Often/Often (BCSSE 2014)

Academic Behaviors	% Very Often/Often
Prepare for exams by discussing or working through course material with other students	82
Work with other students on course projects or assignments	75
Prepare two or more drafts of a paper or assignment before turning it in	70
Ask another student to help you understand course material	67
Talk about career plans with a faculty member	58
Explain course material to one or more students	56
Discuss your academic performance with a faculty member	49
Discuss course topics, ideas, or concepts with a faculty member outside of class	42
Work with a faculty member on activities other than coursework (committees, student groups, etc.)	39
Come to class without completing readings or assignments	6

Academic Behaviors in College

In the list of expected college level academic behaviors, the highest ratings for items included working with other students and the lowest for working with faculty (Table 3). This resonates with a trend in NSSE data that first year students report low contact with faculty especially outside of class. Respondents also expected to have many conversations with people from different political, religious, economic, and racial/ethnic backgrounds (ratings of very often/often ranged from 83 to 88%). When asked about some common situations that impact academic success, students reported having greater ease with finishing a tasking after encountering challenges, ask instructors for help if they struggle, and seek more information if they don't understand an assignment. In this same section student were less certain they would study when other interesting activities were available and participate in course discussions if they did not feel like it.

Expected College Difficulties, Belief in H.S Preparation

Responses related to expected difficulties in college painted the picture that paying for college would be the most difficult followed by managing time, learning course material, interacting with faculty, getting help with school work and finally making friends. Across seven areas of specific skills, the students rated

how well they felt their high school work prepared them for college. Topping this list was the ability work effectively with others followed by writing effectively. In the midrange, items focused on the ability to learn on their own, think critically, and use technology. There was less confidence on items that were related to speaking effectively and analyzing numerical information.

Expectations for Institutional Support Programs/Services

Students were asked about seven specific activities or services they desired their institution to offer rated them on a six-point scale (1=Not Important to 6 = Very important). Combining the amount of ratings in the upper two response choices, these issues took the following order of importance. Help with academic success, ability to attend campus events, and access to learning support services were the highest items. The remain items in order were tied to offering a challenging academic experience, social opportunities, opportunities to interact with diverse groups of students, and help managing non-academic responsibilities (i.e. work, family).
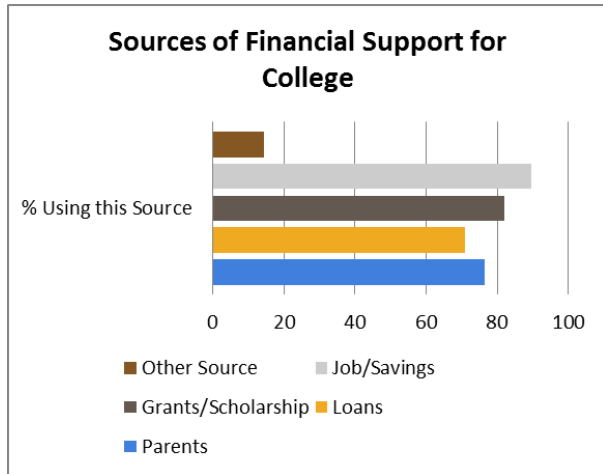
Other College Related Items

Questions on use of financial support, expected college grades, amount of friends attending UW-L, and where UW-L ranked in their college choices were also asked. These results in are presented in charts 2-7 below and on following pages. Most students reported use of multiple financial supports, expected high grades, had at least one friend who would be attending UW-L, rated UW-L as their first choice and were within two but less than four hours away from home.
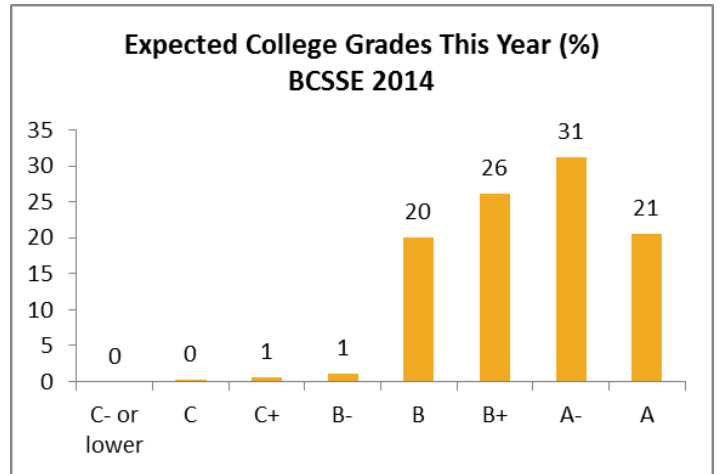
Recommendations:

Based on the pattern of results, it appears that students are entering with concerns about and less exposure to numerical analysis activities. This might need more investigation on the impact this might have on student success. For the issues of faculty contact, there may be a need to help students identify the value in making contacts with faculty and attempt to reshape the students expectation around this issue. While it appears students do expect to spend more time studying and preparing for class as they start college, the level of expectation may need to be increased. Moving from 9 hours per week in high school to 18 hours in college is an dramatic increase but this level of effort may not be enough to help student meet the demands of their classes. So finding ways to address issues of preparation in mathematics, encouraging faculty student interaction, and providing some clearer communication about what level of effort is needed to succeed at UW-L are three steps we might take in response to these results.
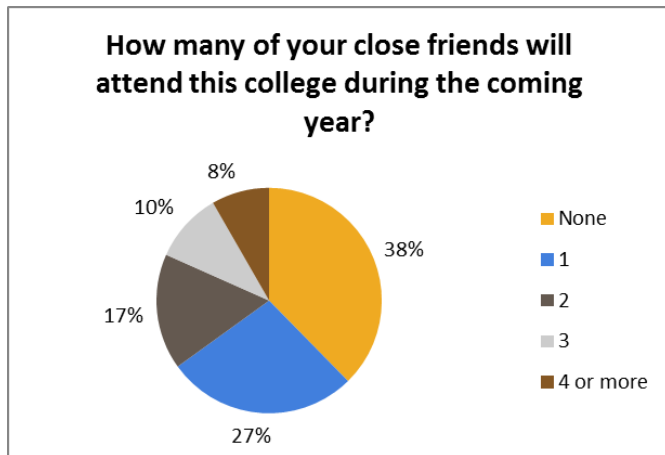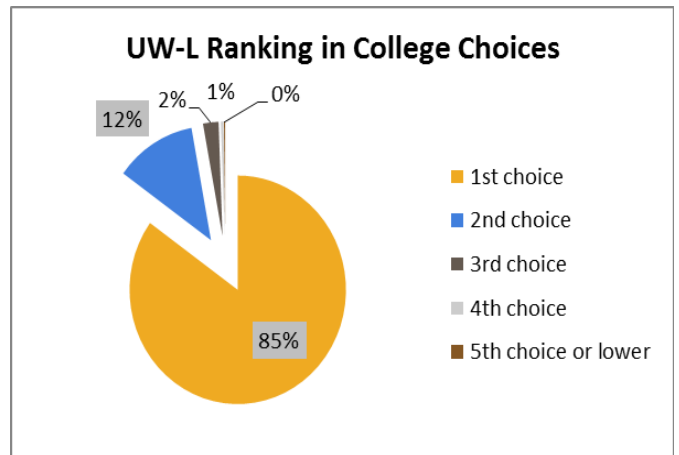
Chart 2: Financial Aid Sources

Sources of Financial Support for College

% Using this Source

■ Other Source   ■ Job/Savings
■ Grants/Scholarship ■ Loans
■ Parents

Chart 3: Expected Grades

Expected College Grades This Year (%) BCSSE 2014

Grade	%
C- or lower	0
C	0
C+	1
B-	1
B	20
B+	26
A-	31
A	21

Chart 4: Number of Friends at UW-L in Fall Semester

How many of your close friends will attend this college during the coming year?

None 38%
1 27%
2 17%
3 10%
4 or more 8%

Chart 5: Ranking of UW-L in College Choice

UW-L Ranking in College Choices

■ 1st choice 85%
■ 2nd choice 12%
■ 3rd choice 2%
■ 4th choice 1%
■ 5th choice or lower 0%

Chart 6: Driving Distance to Home

Driving Distance from Home to Campus (% per category) BCSSE 2014

Category	%
8 hours or more	0
At least 6, less than 8 hours	1
At least 4, less than 6 hours	15
At least 2, less than 4…	62
At least 1, less than 2 hours	13
Less than 1 hour	9
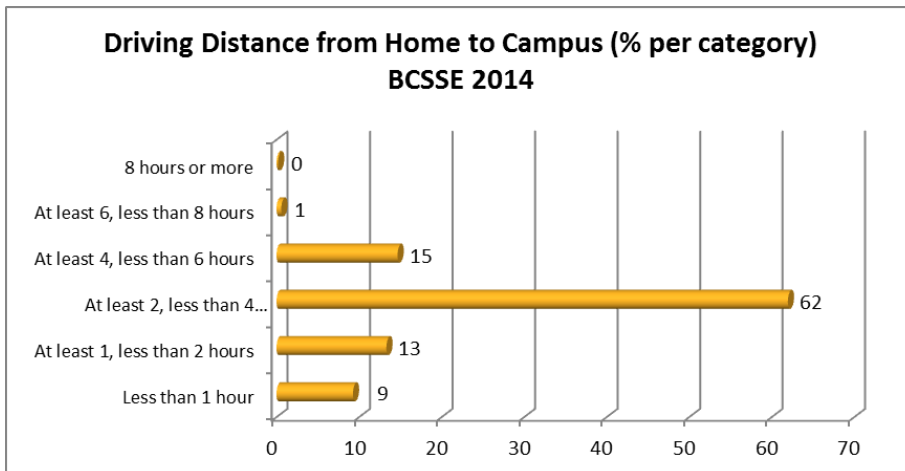
Chart 7: Intended Field of Major

Field of Major (%) BCSSE 2014

Field	%
Undecided/undeclared	1
All Other	2
Social Service Professions	1
Health Professions	21
Engineering	7
Education	7
Communications, Media & Public Relations	2
Business	13
Social Sciences	12
Physical Sciences, Mathematics, & Computer…	5
Biological Sciences, Agriculture, & Natural…	25
Arts & Humanities	5
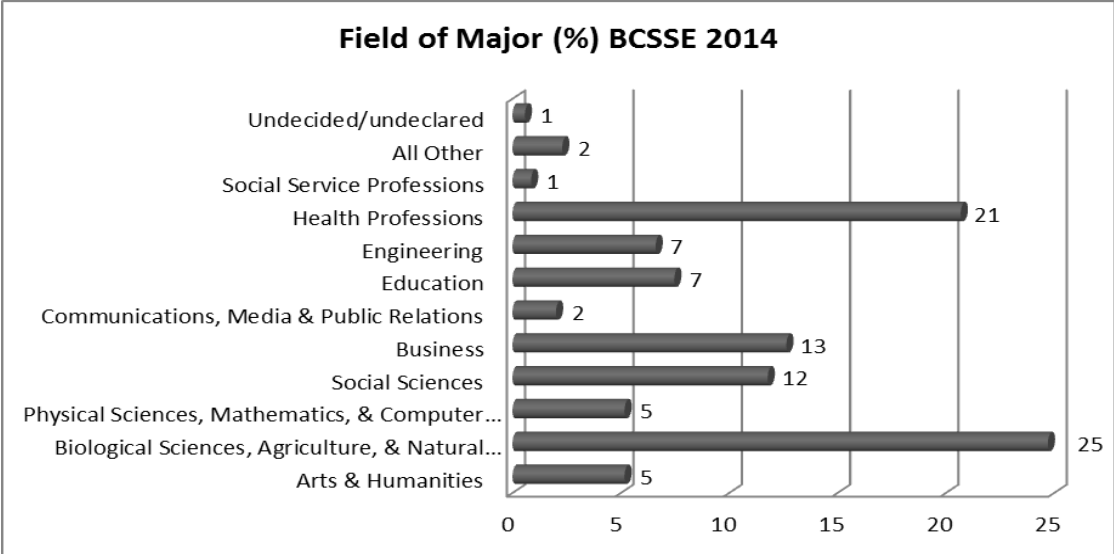
Appendix A: Copy of BCSSE Advising Report

BCSSE
beginning college survey
of student engagement

The *Beginning College Survey of Student Engagement* Student Advising Report is an individualized report for students and is designed to help advisors understand how student expectations about college activities and learning might affect their actual first-year experiences. For example, if a student studied 1-5 hours per week in high school but expects to study 16-20 hours during the first year, does this student have a plan on how to achieve this dramatic increase in study behavior?

Please review these results with particular attention to differences from high school experiences to expectations for the first year, as well as any expectations that may undermine a successful first year of college.

Student Background

Name	J T Smith
Student ID	123456789
Completed Calculus	Not checked
AP courses	1-2
Expected Major	Criminal Justice
What choice was this institution?	*Second*
Does student expect to graduate from this institution?	*Yes*

HS Behaviors and FY Expectations

Hours per week:	HS	FY
Studying	1-5	16-20
Working	0	1-5
Co-curricular	0	0
Socializing/relaxing	11-15	6-10
Assigned reading	1-5	6-10

HS Academic Activities

	0=Very Low to 60=Very High
Quantitative Reasoning (Reached conclusion based on numerical information; Used numerical information to examine real-world problem, etc.)	35
Learning Strategies (Identified key information from readings, Reviewed notes after class, etc.)	40

	1=Not at all to 7=Very much
To what extent, did your courses challenge you to do your best work?	5

First-Year Expectations for Effective Educational Practice

	0=Very Low to 60=Very High
Student-Faculty Interaction (Discuss career plans and academic performance, etc.)	25
Interaction with Diverse Others (Discussions with people of a different race/ethnicity, religious beliefs, etc.)	50
Peer Collaboration (Work with other students on course projects; Prepare for exams by discussing material with other students, etc.)	45

Expected Transition Difficulty

How difficult do you expect the following to be:	*1 = Not at all difficult to 6 = Very Difficult*
Learning course material	5
Managing your time	4
Paying for college expenses	6
Getting help with school work	2
Making new friends	3
Interacting with faculty	5

Academic Perseverance

How certain are you that you will:	*1 = Not at all certain to 6 = Very certain*
Study when there are other interesting things to do	4
Find additional information for assignments when you don't understand the material	3
Participate regularly in course discussions, even when you don't feel like it	2
Ask instructors for help when you struggle with course assignments	3
Finish something you have started when you encounter challenges	4
Stay positive, even when you do poorly on a test or assignment	4

Academic Preparation

How prepared are you to:	*1 = Not at all prepared to 6 = Very prepared*
Write clearly and effectively	4
Speak clearly and effectively	3
Think critically and analytically	4
Analyze math or quantitative problems	3
Use computing and information technology	5
Work effectively with others	5
Learn effectively on your own	5

Importance of Campus Support

How important is it that your institution provide:	*1 = Not important to 6 = Very important*
A challenging academic experience	3
Support to help you succeed academically	4
Opportunities to interact with students from different economic, social, racial/ethnic backgrounds	4
Assistance coping with non-academic responsibilities	3
Support to help you thrive socially	3
Learning support services (tutoring, writing center, etc.)	5