

## 2020 Entering Freshman Student Survey

*Prepared by*

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**April 2021**

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# Highlights of Survey Findings

## High School Experience

- **More than half** of the entering freshman students mentioned that their courses challenged them very much/quite a bit to do their best during their last two years of high school.
- Approximately **34%** of the entering freshman students mentioned that they were engaged in community or volunteer service during high school, and only **1.8%** mentioned that they were not engaged in any kind of non-school organized activity.
- **More than half** of respondents mentioned that they **sometimes did not do their homework during their last two years of high school.**

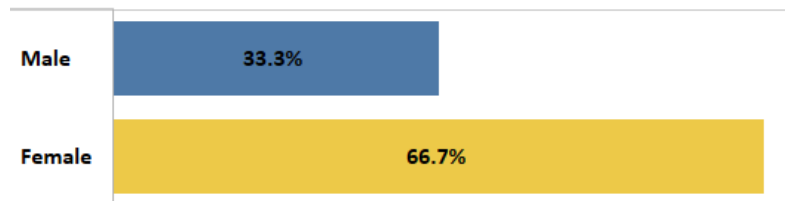
## First-year Expectations

- **70.5%** of respondents reported that they **do not expect to have difficulties with getting help with classes** and **67.6%** of respondents reported **that they do not expect to have difficulties relating to faculty.**
- About **60%** of the entering freshman students reported that **they expect to have difficulties paying tuition.**
- Almost half of the respondents (**49.8%**) reported that they expect to have difficulties managing their time.
- The vast majority of respondents (**94.9%**) reported that **they expect to graduate in 4 years.**
- **58.8%** of the respondents reported they **do not expect to experience distraction from their studies due to the social obligations.**
- About **45%** of entering freshman students would like the university to offer **sports-related co-curricular activities.**
- About **44%** of entering freshman students **expect to experience stress regarding their studies.**
- **39%** of the respondents rated **their level of preparedness in computer skills less than five** (1-not at all, 7-very well) and approximately **43%** of respondents rated their level of preparedness in applying the scientific method of inquiry less than five (1-not at all, 7-very well).
- Approximately **60%** of entering freshman students reported that **they expect to work at a job for pay during the first year of their studies**, compared to **23%** of students who reported **that they worked during last two years of high school.**

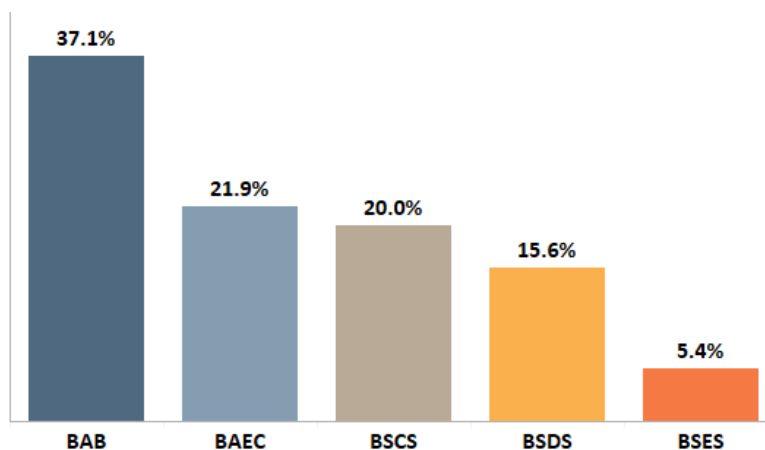
## Respondent Profile

Reponse rate is 86.6%

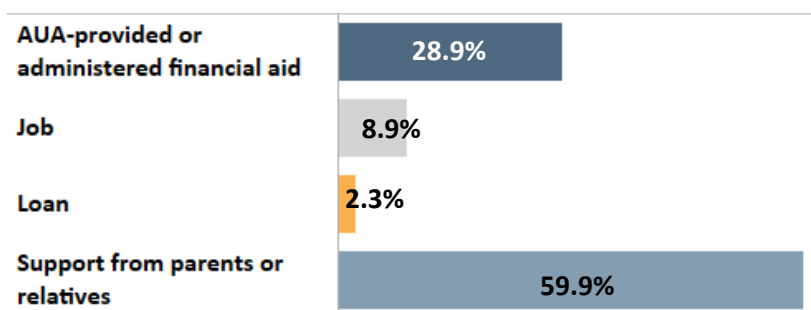
### Sex of Respondents (N=315)



### Program of Respondents (N=315)



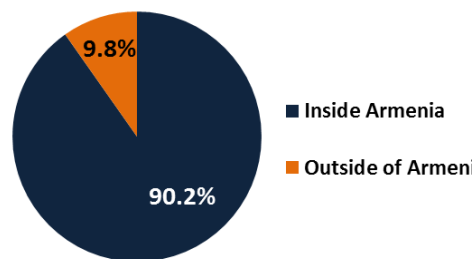
### How are you paying for your university education? (N=437<sup>1</sup>)



<sup>1</sup> Total is based on the total number of responses for the questions with multiple-choice options.



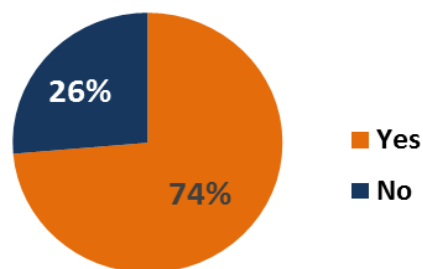
### Where did you graduate from high school? (N=317)



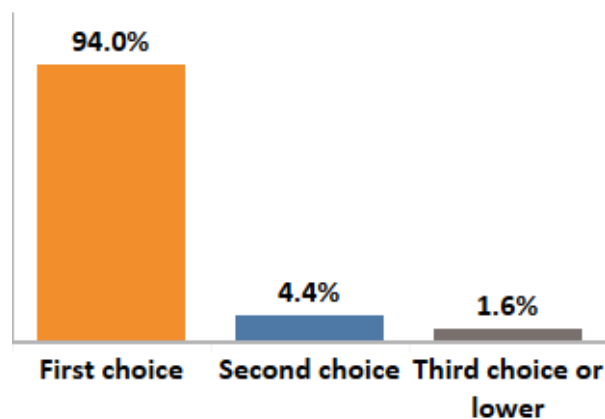
### If inside Armenia, which of the following best describes your high school?



### During your last two years of high school, did you work with a tutor or take individual or group classes outside of high school? (N=315)



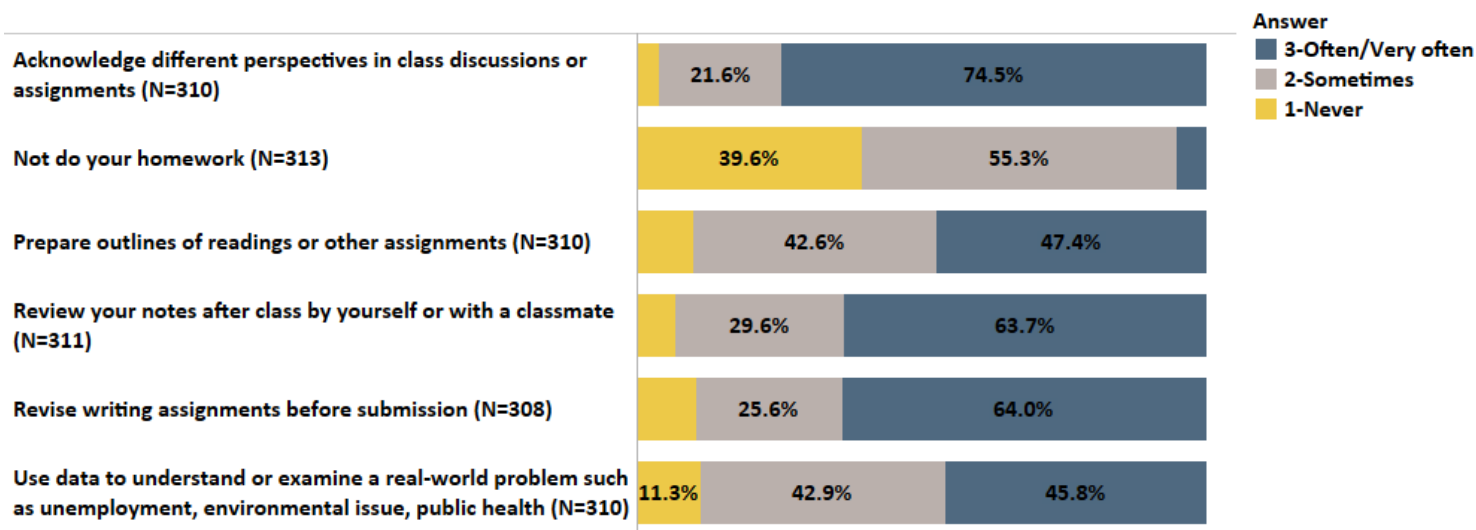
### AUA was your:



## High School Experience

**More than half** of respondents (**55.3%**) mentioned that they sometimes **did not do their homework** during their last two years of high school. **11.3%** of respondents reported that they never use **data to understand or examine a real-world problem** during their last two years of high school.

**During your last two years of high school, approximately how often did you ...?<sup>2</sup>**



Questions	BAB	BSCS	BSDS	BSES	BAEC	U-Wide
<i>Mean values (1-Never, 4-Very Often)</i>						
Use data to understand or examine a real-world problem such as unemployment, environmental issue, public health	2.5 (SD=0.8)	2.3 (SD=0.9)	2.2 (SD=0.8)	2.6 (SD=0.8)	2.6 (SD=0.8)	2.5 (SD=0.9)
Prepare outlines of readings or other assignments	2.5 (SD=0.8)	2.1 (SD=0.8)	2.3 (SD=0.8)	2.5 (SD=0.9)	2.7 (SD=0.8)	2.4 (SD=0.8)
Review your notes after class by yourself or with a classmate	2.9 (SD=0.9)	2.5 (SD=0.9)	3.0 (SD=0.9)	2.9 (SD=0.8)	2.8 (SD=0.9)	2.8 (SD=0.9)
Acknowledge different perspectives in class discussions or assignment	3.1 (SD=0.8)	2.6 (SD=0.8)	3.1 (SD=0.8)	3.3 (SD=0.8)	3.1 (SD=0.8)	3.0 (SD=0.8)

<sup>2</sup> Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in using data to understand or examine a real-world problem such as unemployment, environmental issue, public health between those in BSDS and BAEC, BSDS and BAB, BSCS and BAEC programs,  $p < 0.05$ .

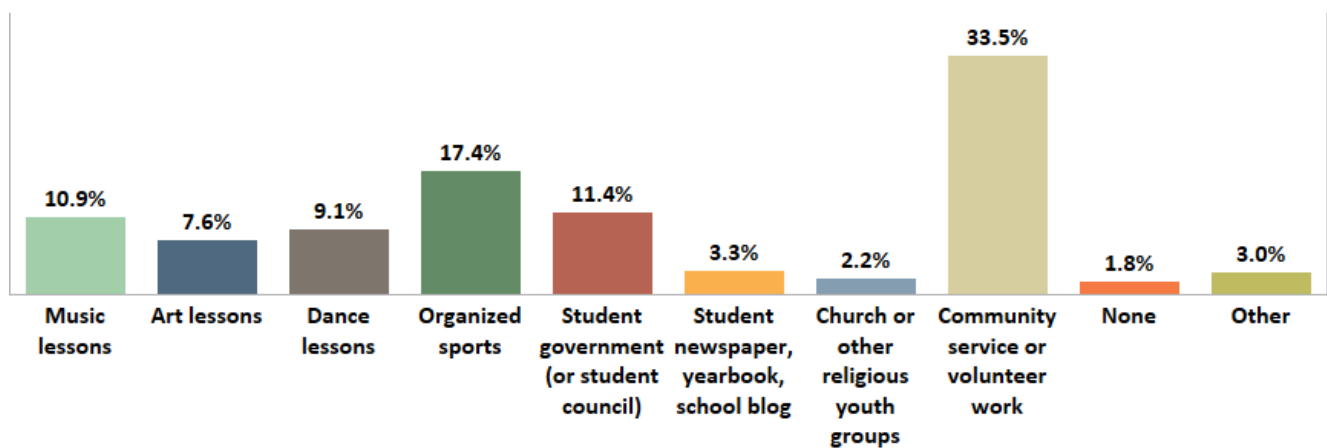
"Significance in Two-way ANOVA (Tukey HSD, LSD, Bonferroni, Sidak) testing the difference in preparation of outlines of readings or other assignments between BSCS and BAEC students, BSDS and BAB programs, after adjusting for sex,  $p < 0.1$

Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in reviewing the notes after class by yourself or with a classmate between those in BAB and BSCS, BSDS and BSCS, BSCS and BAEC programs,  $p < 0.05$ .

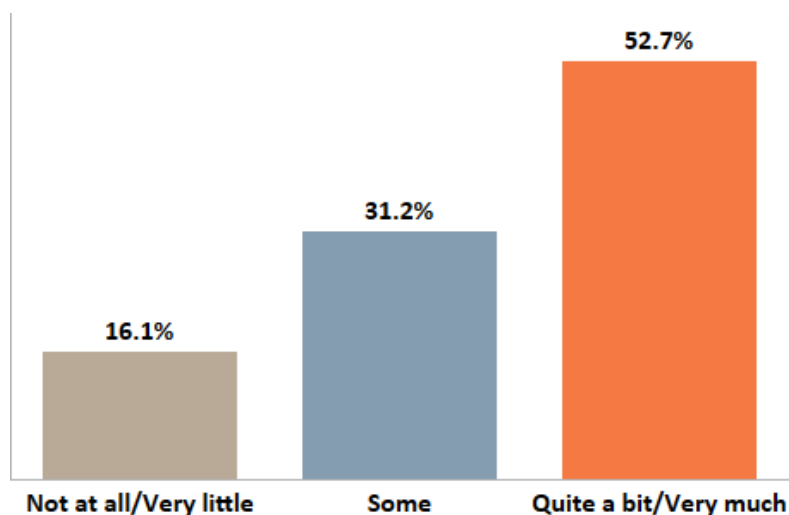
Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in acknowledging different perspectives in class discussions between those in BSCS and BAB, BSDS, BSES, BAEC programs,  $p < 0.05$ .

**33.5%** of the entering freshman students mentioned that they have been **engaged in community service or volunteer works** during their high school and only **1.8%** mentioned that they have not been engaged in any kind of non-school organized activities. **More than half (52.7%)** of respondents mentioned that **their courses challenged them very much/quite a bit to do their best** during their last two years of high school.

### During high school, what kinds of non-school organized activities did you engage in? (N=676<sup>3</sup>)



### During your last two years of high school, to what extent did your courses challenge you to do your best? (N=311)<sup>4</sup>



<sup>3</sup> Total is based on the total number of responses for the questions with multiple-choice options.

<sup>4</sup> Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in courses challenging students to do their best in high school between those in BSCS and BAB, BSCS and BSDS, BSCS and BAEC programs,  $p < 0.05$ .

### Statistically Significant Differences by Program:

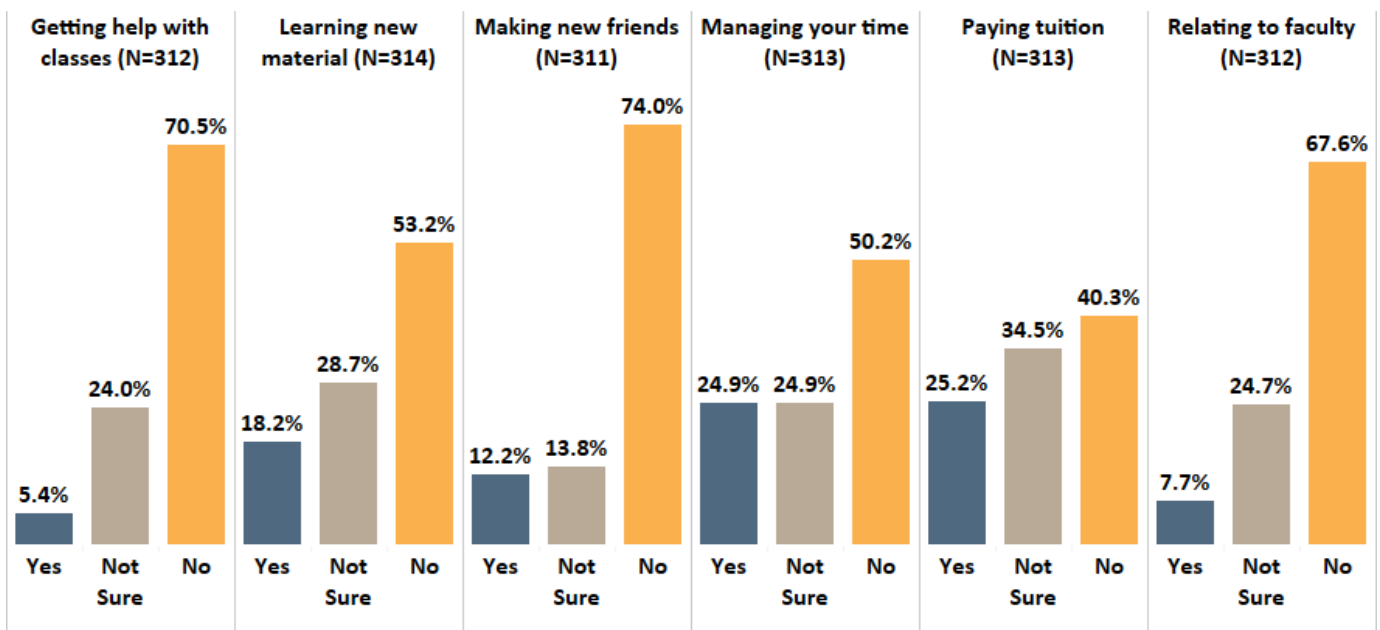
Program	During your last two years of high school, to what extent did your courses challenge you to do your best?
<i>Mean Values, (1-Not at all, 5-Very much)</i>	
BAB	3.7 (SD = 1.1)
BSCS	3.2 (SD = 1.1)
BSDS	3.6 (SD = 1.0)
BSES	3.3 (SD = 1.0)
BAEC	3.6 (SD = 1.1)
U-wide	3.5 (SD = 1.1)



## Expected First Year Experience

Approximately 60% of entering freshman students reported that they **expect to have difficulties paying tuition**. Almost half of the respondents (49.8%) reported that they **expect to have difficulties managing their time**. 70.5% of respondents reported that they **do not expect to have difficulties with getting help with classes** and 67.6% of respondents reported that they **do not expect to have difficulties relating to faculty**. The vast majority of respondents (94.9%) reported that they **expect to graduate in 4 years**.

### Do you expect difficulty with the following?

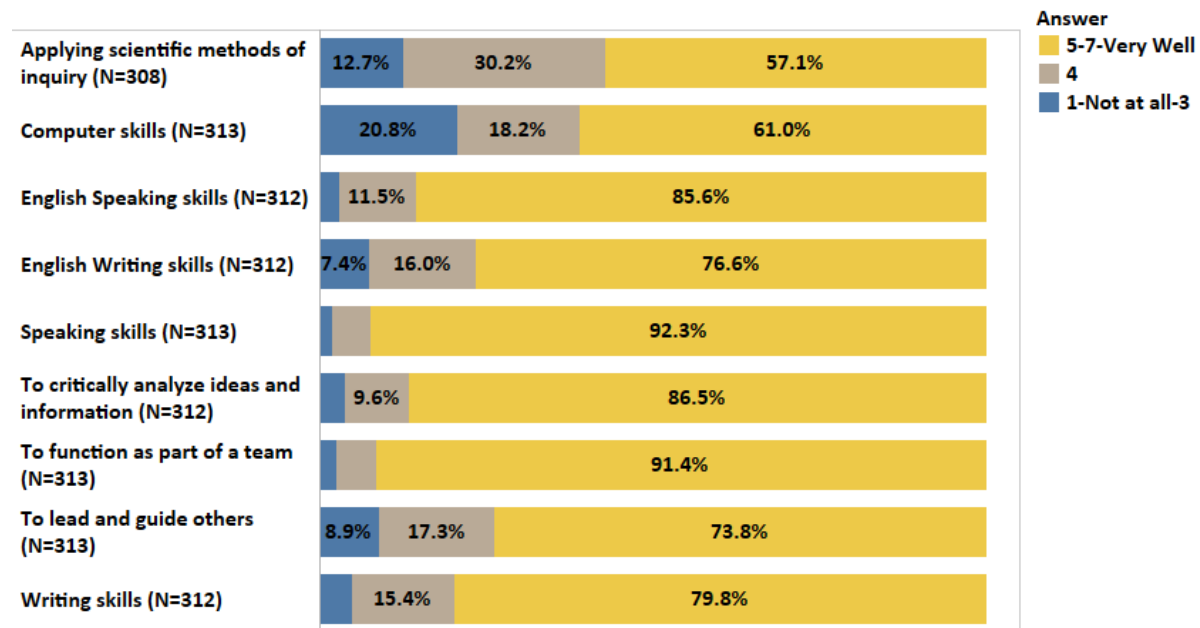


### Do you expect to graduate in four years? (N=312)



**39.0%** of the respondents rated their **level of preparedness in computer skills less than five** (1-not at all, 7-very well) and about **43.0%** of respondents rated their **level of preparedness in applying the scientific method of inquiry less than five** (1-not at all, 7-very well). **More than 75%** of respondents rated their **level of preparedness in English writing skills and English speaking skills five and more** (1-Not at all, 7-Very well)

### How well prepared are you in the following skills?<sup>5</sup>



### Statistically Significant Differences by Program

Questions	BAB	BSCS	BSDS	BSES	BAEC	U-Wide
<i>Mean values (1-Not at all, 7-Very well)</i>						
Applying scientific methods of inquiry	4.6 (SD=1.3)	4.8 (SD=1.2)	5 (SD=1.2)	5.2 (SD=1.2)	4.4 (SD=1.3)	4.7 (SD=1.3)
Computer skills	4.4 (SD=1.4)	5.6 (SD=1.2)	5.0 (SD=1.3)	5.1 (SD=1.5)	4.4 (SD=1.5)	4.8 (SD=1.5)
To lead and guide others	5.5 (SD=1.3)	4.8 (SD=1.6)	5.3 (SD=1.2)	5.8 (SD=1.0)	5.3 (SD=1.3)	5.3 (SD=1.4)
To function as part of a team	6.3 (SD=1.0)	5.8 (SD=1.1)	6.2 (SD=0.9)	6.4 (SD=0.8)	6.1 (SD=1.1)	6.1 (SD=1.1)

<sup>5</sup> Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in the preparedness in applying the scientific method of inquiry between those in BSES and BAEC, BSDS and BAEC programs,  $p < 0.05$ .

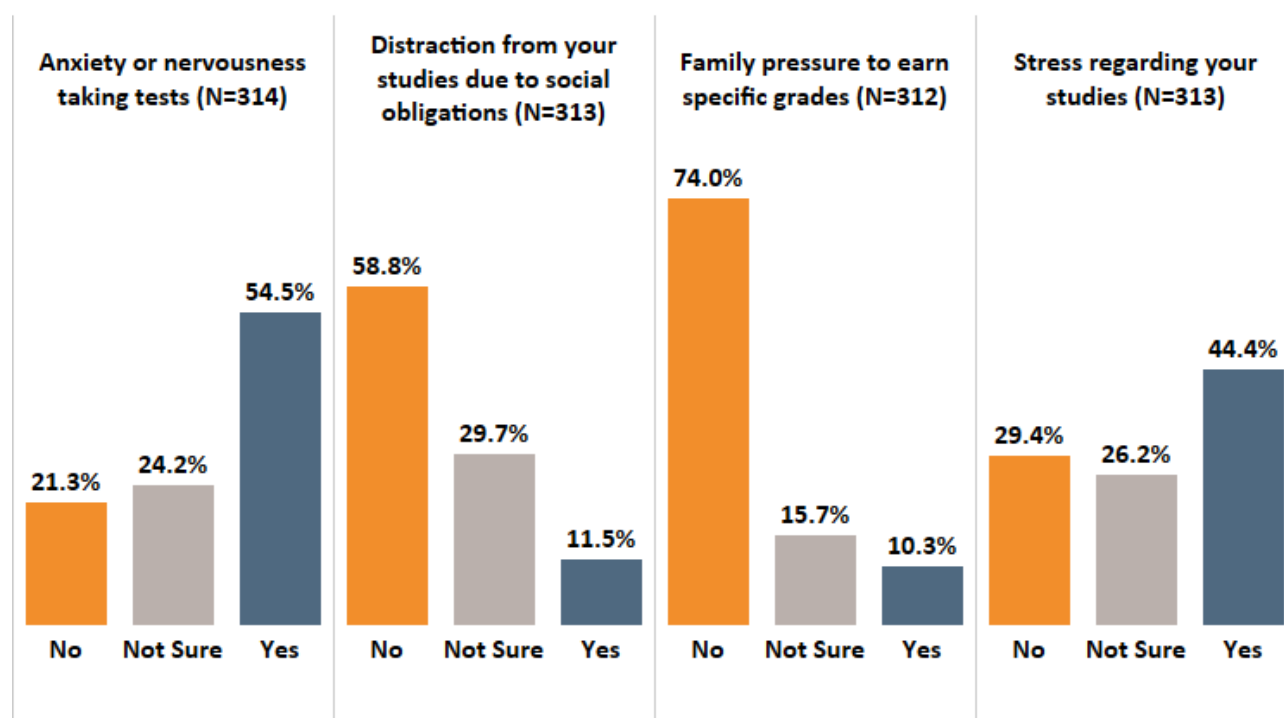
Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in the preparedness in computer skills between those in BSCS and BAB, BAB and BSDS, BSCS and BAEC, BSCS and BSDS, BSDS and BAEC, programs,  $p < 0.05$ .

Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in the preparedness to lead and guide others between those in BSCS and BAB, BSCS and BSES, BSCS and BSDS, BSCS and BAEC programs,  $p < 0.05$ .

Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in the preparedness to function as a part of team between those in BSCS and BAB, BSCS and BSES, BSCS and BSDS programs,  $p < 0.05$ .

74.0% of the survey respondents reported they do not expect to experience family pressure to earn specific grades. Approximately 58.8% of the survey respondents reported they do not expect to experience distraction from their studies due to the social obligations. Approximately 44.8% of entering students like to have sport related co-curricular activities at the University.

### Do you expect to experience the following?



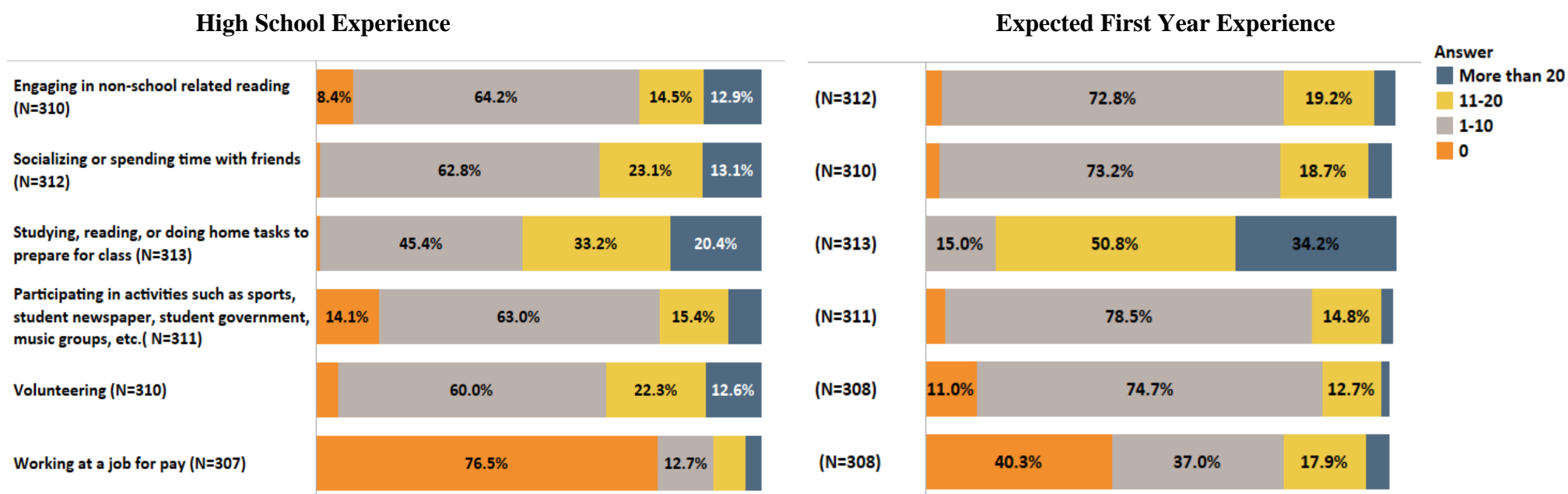
### What types of co-curricular activities would you like the university to offer (i.e. chess, football, first-aid, hiking, chorus, debate, drama etc.)?

Category	Count	%
Sport	94	44.8%
Art	55	26.2%
Education	38	18.1%
Other	23	11.0%
Total	210	

## Comparison of High School and Expected First Year Experiences

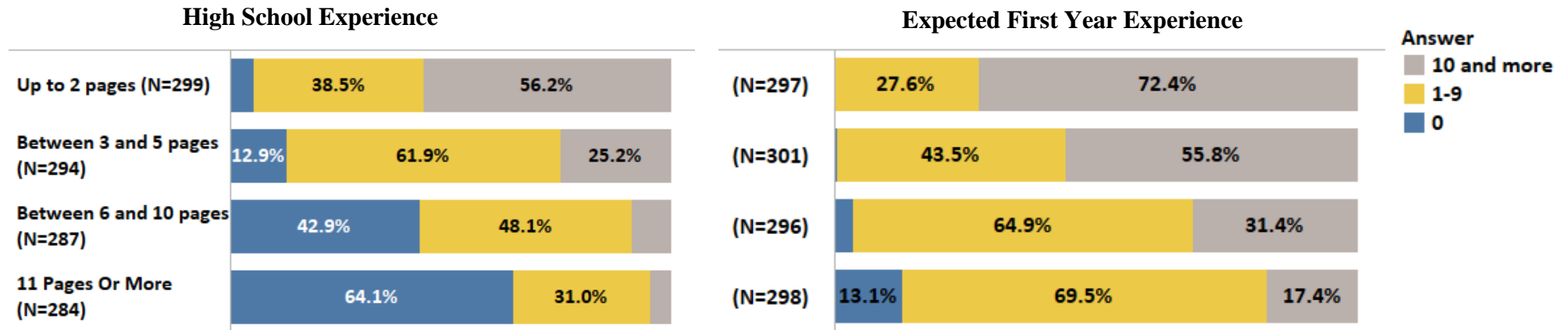
Approximately 60% of entering students reported that they expect to work at a job for pay during the first year of their studies, compared to 23% of students who reported that they worked during last two years of high school.

During your last two years of high school, approximately how many hours did you spend most weeks doing the following and during the coming academic year, approximately how many hours do you expect to spend each week doing the following?<sup>6</sup>



<sup>6</sup> Significance in ANOVA (LSD, Tukey, Bonferroni, Sidak tests) testing the difference in the likeliness of taking part in class discussion between those in BSCS and BAB, BSCS and BAEC programs,  $p < 0.05$ .

**During your last two years of high school, approximately how many writing assignments (papers, reports, etc.) did you complete of the following length and how many writing assignments of the following lengths do you expect to complete in the coming year?**



### Statistically Significant Differences by Program

Program	How likely are you to take part in class discussion during the academic year?
<i>Mean Values (1-Not likely at all, 6-Very likely)</i>	
BAB	5.3 (SD = 0.9)
BSCS	4.9 (SD = 1.2)
BSDS	5.0 (SD = 0.9)
BSES	5.3 (SD = 1.2)
BAEC	5.2 (SD = 0.9)
U-wide	5.2 (SD =1.0)

# Methodology and Background

## Instrument Design and Timeline

The Office of Institutional Research and Assessment administered the University's 2020 Entering Freshman Student Survey from August 20 to August 28, 2020.

The Entering Freshman Student Survey aims to collect information about entering freshman students' high school experience as well as their expectations for their university academic experience.

This report describes the methodology used for the survey and presents the findings in summary format.

The survey population included 464 entering freshman students.

Program	Number of eligible respondents	Number of survey respondents	Percent (%) completed
Bachelor of Arts in Business (BAB)	165	149	90.3%
Bachelor of Arts in English and Communications (BAEC)	97	88	90.7%
Bachelor of Science in Computer Science (BSCS)	101	77	76.2%
Bachelor of Science in Data Science (BSDS)	71	64	90.1%
Bachelor of Science in Engineering Sciences (BSES)	30	20	6.7%
Missing Values		4	
Total	464	402	86.6%

An email was sent from the Provost to all entering freshman students on August 20 highlighting the importance of the survey, encouraging participation and providing a direct link to the online survey.

In seeking a high response rate, the following course of action was taken:<sup>7</sup>

- Three reminder emails were sent from the Office of Institutional Research and Assessment on August 21 and August 27, 2020.
- Deans, Program Chairs, the Center for Student Success and the Office of the Registrar were asked to promote participation.

A total of **428 (92.2%)** out of **464** entering freshman students participated in the survey. The results of **26** partially completed surveys were excluded from the analyses, thus denoting a response rate of **86.6%**.

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<sup>7</sup> Due to the fact that the University had transitioned to online teaching and learning due to the worldwide pandemic, fliers were not distributed on campus."



To check how well the sample reflected the population with regard to distribution by program and by sex, one-sample chi-square test was conducted. According to the test results<sup>8</sup>, collected data is representative with the corresponding population by program and sex.

Undergraduate graduating students by program and by sex distributions in population and in sample are presented in the tables below.

Program	Population	Proportion in population	Sample	Proportion in sample
BAB	165	35.6%	149	37.1%
BAEC	97	20.9%	88	21.7%
BSCS	101	21.7%	77	19.1%
BSDS	71	15.3%	64	16.1%
BAEC	30	6.5%	21	5.1%
Missing Values			4	0.9%
Total	464	100.0%	402	100.0%

Sex	Population	Proportion in population	Sample	Proportion in sample
Male	172	37.1%	132	32.9%
Female	292	62.9%	265	65.9%
Missing Values			5	1.2%
Total	464	100.0%	402	100.0%

## Description

Upon completion of the on-line survey, data was analyzed in SPSS. Descriptive analysis includes frequencies, custom tables by sex and academic program, calculation of mean values for categorical variables with Likert scale type response options, and medians for ordinal categorical variables.

To detect the difference in the mean values of questions and respondents' sex, independent sample t-test was conducted. One-way ANOVA was run to detect the difference in the mean values of questions between academic programs. Post-Hoc tests helped to identify the mean difference between particular academic programs. The significance level used for the statistical tests was 5%. In addition, marginally significant (10%) results were reported for the two-way ANOVA results. The full report for *internal use only* consists of the following main parts: by program and by sex tables for 2020 survey results, answers to open-ended questions for 2020 survey results, and longitudinal dashboard and tables for 2015-2020 survey results.

For statements that have a Not Applicable (N/A) response option, the mean value is calculated without including Not Applicable responses.

The numbering of the responses in the full reports corresponds to the numbering in the survey questionnaire.

<sup>8</sup> Program:  $\chi^2(1) = 3.177$ ,  $p = 0.529$ ; sex:  $\chi^2(1) = 2.483$ ,  $p = 0.115$