

# Results from the 2018 Survey of Incoming Freshmen

## Summary Report

### Survey Background

A web-based survey was administered in the summer of 2018 to all incoming first-time, first-year students at Virginia Tech. This survey was designed in consultation with a group of faculty members with experience working with undergraduate students and administered by Assessment and Evaluation in the Office of Academic Decision Support. The purpose of the survey was to gather information regarding incoming students' previous learning experiences and perceptions of their future collegiate learning and engagement. This survey assesses four core elements: students' high school experiences; their purpose in coming to Virginia Tech; how they hope to be challenged and grow; and their anticipated university involvement.

The survey was designed to provide information for faculty and staff about Virginia Tech's incoming students. This survey contains institutionally-focused questions rather than the generic items contained on national instruments such as the Cooperative Institutional Research Program Survey and the National Survey of Student Engagement. Student participation in the survey was voluntary and approval was obtained from Virginia Tech's Institutional Review Board prior to administration.

### Limitations

Since student participation in the survey was voluntary, the results may not be generalizable to the entire population of incoming freshmen. Many responses indicate only what incoming students *intend to do* while they are at Virginia Tech.

### Participant Demographics

- Of 6,419 incoming students invited to participate in the survey, 2,796 responded, resulting in a response rate of 43.6%.
- Of those students who completed the survey's demographic questions:
  - 47.9% were male (See Table 1 in Appendix A).
  - 68.8% identified as White (non-Hispanic), 13% as Asian/Pacific Islander, 4.9% as Hispanic, and 4.2% as African American (See Table 2 in Appendix A).
- 65.8% of students indicated that they will be transferring at least four credit hours into Virginia Tech. Of those students, 36.3% indicated that they would be transferring more than 16 credit hours (See Table 3 in Appendix A).
- The top ten intended majors for freshmen entering Virginia Tech in August 2018 are:
  1. Mechanical Engineering – 10.4% (233 responses)
  2. Biological Sciences – 6.8% (152 responses)
  3. Computer Science – 6.3% (142 responses)
  4. Aerospace Engineering – 5.8% (129 responses)
  5. Business Information Technology – 3.7% (82 responses)
  6. Human Nutrition, Foods, and Exercise – 3.7% (82 responses)
  7. Computer Engineering – 3.6% (81 responses)

8. Animal and Poultry Sciences – 3.3% (73 responses)
9. Chemical Engineering – 3.1% (69 responses)
10. Neuroscience – 3.0% (68 responses)

### **Results: High School Experiences**

- 85.2% of students graduated with a GPA greater than 3.75. Of those students, 66.5% indicated that they graduated with a 4.0 or better (See Table 4 in Appendix B).
- When students were asked about instructional methods used in their high school classes:
  - The most commonly reported method was “teacher lecture.”
    - 83.1% indicated that teacher lecture was used more than 50% of the time in their high school classes, with 59.9% indicating that teacher lecture was used more than 75% of the time (See Table 5 in Appendix B).
  - The second most commonly used instructional method was “projects using technology.”
    - 59% of students reported that this instructional method was used in their high school classes more than 50% of the time, with 37.8% indicating that projects using technology were used more than 75% of the time (See Table 5 in Appendix B).
- When students were asked to report their **level of confidence to successfully complete a challenging task in a high school class** (See Table 6 in Appendix B):
  - 71.3% reported that they felt “confident” or “extremely confident”;
  - 26.5% reported that they felt “somewhat confident”;
  - 0.7% of students reported that they were “not at all confident”; and
  - 1.6% of students reported that they never had a challenging task in high school.

### **Results: Reasons for Attending Virginia Tech**

- 49.1% of students reported that their **primary reason for pursuing an undergraduate degree** at Virginia Tech was to help them get a job. An additional 38.1% of students indicated that **their primary motivation was to develop a strong foundation for success in graduate, law, or medical school** (See Table 7 in Appendix C).
- 52.5% of students reported that they anticipated their **principal activity upon graduation** to be employment, while 40.6% planned to attend graduate or professional school. The next most frequent response was military service with 4.9% (See Table 8 in Appendix C).
- Of the students responding, 79.3% indicated that they anticipate graduating with their undergraduate degrees in four years. Almost 10% of the respondents (212 students) anticipate taking longer to complete their degree (See Table 9 in Appendix C).
- When incoming freshman were asked **what excited them the most about coming to Virginia Tech**, many students talked about meeting new people, the Hokie spirit and community, and learning to be independent.

- When incoming freshman were asked **what concerned them most about entering Virginia Tech**, many students talked about balancing work, social time, and extracurricular activities; succeeding academically; and making friends.

### **Results: Personal Growth and Openness to Change**

- When students were asked **which skills and abilities they need to improve upon** the most to be successful, the five most frequent responses were oral communication skills (13.1%); computer/technology skills (10.1%); knowledge of global issues (9.8%); critical thinking/analysis skills (9.6%); and interpersonal skills (8.8%) (See Table 10 in Appendix D).
- In contrast, the five least frequent responses were ethical reasoning (2.8%); information literacy/library skills (4.6%); quantitative reasoning (4.6%); scientific reasoning (5.8%); and the ability to communicate with people different from themselves (6.9%).
- As a group, students who participated in the survey believe they will be challenged more intellectually than socially (See Table 11 in Appendix D).
  - A total of 89.9% of respondents indicated that they **expect to be challenged intellectually** “often” or “all of the time” while at Virginia Tech (See Table 11 in Appendix D).
  - In contrast, 51.6% of respondents indicated that they **expect to be challenged socially** “often” or “all of the time” (See Table 12 in Appendix D).
- When asked **“Do you think you will be the same person or a different person by the time you complete your degree?”** 57.0% of students reported that they expect to change while at Virginia Tech (See Table 13 in Appendix D).

### **Results: Anticipated University Involvement**

- When asked about expectations for their future participation at Virginia Tech, students indicated that they were most likely to participate in (1) organizations or clubs designed for people in my primary major; (2) organizations focused on a special interest/hobby; and (3) an internship, field experience, co-op, or practicum (See Table 14 in Appendix E).
- In contrast, students indicated that they would be least likely to participate in (1) university learning community (e.g., Galileo, Hypatia, Da Vinci, Residential Leadership); (2) study abroad for at least a semester; and (3) Student government.

### **Additional Information**

For more information on the 2018 Survey of Incoming Freshmen, please contact Bethany Bodo, Director, Assessment and Evaluation, Office of Academic Decision Support, at [bbodo@vt.edu](mailto:bbodo@vt.edu).

## Appendix A – Participant Demographics

**Table 1. What is your gender?**

<u>Gender</u>	<u>Count</u>	<u>Percent</u>
Female	1126	51.5%
Male	1047	47.9%
Transgender	4	0.2%
Not sure	10	0.5%
<b>Total</b>	<b>2187</b>	<b>100.0%</b>

**Table 2. What is your racial or ethnic background?**

<u>Race/Ethnicity</u>	<u>Count</u>	<u>Percent</u>
African American	91	4.2%
Asian/Pacific Islander	283	13.0%
Hispanic/Latino	108	4.9%
Native American	6	0.3%
White (non-Hispanic)	1503	68.8%
Multi-racial	136	6.2%
None of the above categories	20	0.9%
Prefer not to answer	38	1.7%
<b>Total</b>	<b>2185</b>	<b>100.0%</b>

**Table 3. How many credits will you be transferring into Virginia Tech?**

<u>Response</u>	<u>Count</u>	<u>Percent</u>
0	350	16.6%
1-3	372	17.6%
4-6	330	15.6%
7-10	253	12.0%
11-13	183	8.7%
14-16	119	5.6%
More than 16	504	23.9%
<b>Total</b>	<b>2111</b>	<b>100%</b>

**Appendix B – High School Experiences**

**Table 4. Which of the following best describes your high school G.P.A.?**

<b>Grade Point Average</b>	<b>Count</b>	<b>Percent</b>
Less than 2.5	1	0.1%
2.5-2.75	1	0.1%
2.76-3.00	4	0.2%
3.01-3.25	27	1.2%
3.26-3.50	84	3.9%
3.51-3.75	207	9.5%
3.76-4.00	624	28.6%
Greater than 4.00	1236	56.6%
<b>Total</b>	<b>2184</b>	<b>100.0%</b>

**Table 5. What percent of the time were the following instructional methods used in your high school classes?**

<b>Method</b>	<b>Percentage of Time Used</b>						
	<b>Less than 10%</b>	<b>10 – 25%</b>	<b>26 – 50%</b>	<b>51 – 75%</b>	<b>76 – 90%</b>	<b>More than 90%</b>	<b>More than 50%*</b>
Discussion and debate	17.6%	33.1%	21.1%	15.3%	9.5%	3.4%	28.2%
Student presentations	15.4%	32.0%	22.0%	16.0%	10.5%	4.1%	30.6%
Teacher lecture	0.8%	3.6%	12.5%	23.1%	34.7%	25.2%	83.1%
Role plays	72.7%	16.0%	6.0%	2.6%	1.9%	0.8%	5.3%
Art and drama activities	64.9%	19.6%	8.6%	3.4%	2.0%	1.5%	6.9%
Projects using technology	4.3%	16.4%	20.3%	21.2%	21.9%	15.9%	59.0%
Group projects	3.4%	18.4%	27.9%	24.9%	18.2%	7.2%	50.3%
Research projects	9.5%	24.3%	26.0%	20.1%	13.2%	7.0%	40.2%
Case studies	49.6%	23.3%	13.6%	7.0%	4.1%	2.5%	13.6%

\*This column shows the total percentage of students reporting that a particular instructional method was used in their high school classes either 51-75%, 76-90%, or more than 90% of the time.

**Table 6. When you were working at a challenging task in a high school class, how confident were you that you would succeed?**

<b>Response</b>	<b>Count</b>	<b>Percent</b>
I never had a challenging task in high school	36	1.6%
Not at all confident	16	0.7%
Somewhat Confident	607	26.5%
Confident	1258	54.8%
Extremely Confident	377	16.4%
<b>Total</b>	<b>2294</b>	<b>100.0%</b>

**Appendix C – Reasons for Attending Virginia Tech**

**Table 7. What do you see as your primary reason for pursuing an undergraduate degree at Virginia Tech?**

<b>Primary Reason</b>	<b>Count</b>	<b>Percent</b>
To help me get a job	1244	49.1%
To help me develop a strong foundation for success in graduate school	966	38.1%
To broaden my knowledge base and strengthen skills such as writing and critical thinking	279	11.0%
To take classes to transfer to another institution	8	0.3%
My parents made me attend	6	0.2%
At this point, I am not really sure	31	1.2%
<b>Total</b>	<b>2534</b>	<b>100.0%</b>

**Table 8. Which of the following is most likely to be your principal activity upon graduation?**

<b>Principal Activity</b>	<b>Count</b>	<b>Percent</b>
Employment	1150	52.5%
Graduate or professional school	889	40.6%
Military service	107	4.9%
Volunteer activity (e.g., Peace Corps)	24	1.1%
Starting or raising a family	8	0.4%
Other	11	0.5%
<b>Total</b>	<b>2189</b>	<b>100.0%</b>

**Table 9. When do you think you will graduate with your undergraduate degree?**

<b>Response</b>	<b>Count</b>	<b>Percent</b>
In 3 years	101	4.6%
In 3.5 years	141	6.4%
In 4 years	1734	79.3%
In 4.5 years	100	4.6%
In 5 years	106	4.8%
More than 5 years	6	0.3%
<b>Total</b>	<b>2188</b>	<b>100.0%</b>

**Appendix D – Personal Growth and Openness to Change**

**Table 10. Which of the following skills and abilities do you feel you need to improve upon the most to be successful? (Students could select up to three)**

<b>Skill/Ability</b>	<b>Count</b>	<b>Percent</b>
Oral communication	1084	13.1%
Computer/technology	840	10.1%
Knowledge of global issues	813	9.8%
Critical thinking/analysis	798	9.6%
Interpersonal (social)	727	8.8%
Written communication	711	8.6%
Leadership	688	8.3%
Organizational ability	593	7.1%
Ability to communicate with people different from myself	572	6.9%
Scientific reasoning	483	5.8%
Quantitative reasoning	380	4.6%
Information literacy/library skills	379	4.6%
Ethical reasoning	234	2.8%
<b>Total</b>	<b>8302</b>	<b>100%</b>

**Table 11. During your time at Virginia Tech, how often do you think you will be challenged intellectually?**

<b>Response</b>	<b>Count</b>	<b>Percent</b>
Not at all	2	0.1%
Rarely	9	0.4%
Occasionally	243	9.7%
Often	1665	66.3%
All the time	593	23.6%
<b>Total</b>	<b>2512</b>	<b>100%</b>

**Table 12. How often do you think you will be challenged socially?**

<b>Response</b>	<b>Count</b>	<b>Percent</b>
Not at all	31	1.23%
Rarely	189	7.52%
Occasionally	996	39.63%
Often	976	38.84%
All the time	321	12.77%
<b>Total</b>	<b>2513</b>	<b>100%</b>



**Table 13. Do you think you will be the same person or a different person by the time you complete your degree?**

<b>Response</b>	<b>Count</b>	<b>Percent</b>
The same	22	0.9%
Mostly the same	265	10.5%
More the same than different	804	31.8%
More different than the same	985	38.9%
Mostly different	264	10.4%
Different	191	7.6%
<b>Total</b>	<b>2531</b>	<b>100.0%</b>

**Appendix E – Anticipated University Involvement**

**Table 14. In which of the following do you think you will participate while at VT?**

<u>Type of Activity</u>	<u>Not Likely</u>	<u>Probably</u>	<u>Yes</u>
University learning community (e.g., Galileo, Hypatia, Da Vinci, Residential Leadership)	30.4%	4.7%	9.9%
Study abroad - at least a semester	24.3%	9.9%	7.4%
Student government	17.7%	5.9%	2.4%
Organization related to cultural or ethnic heritage	16.5%	6.4%	5.0%
Intercollegiate sports	16.5%	6.6%	4.6%
Study abroad - break week or short-term	16.3%	13.1%	9.1%
Arts organization (music, theatre, dance)	15.3%	7.0%	7.1%
Social fraternity or sorority	14.3%	9.0%	6.2%
Research project with a faculty member	10.1%	16.6%	8.7%
Give a talk or exhibit work at a professional, scholarly, cultural, or artistic conference or meeting	9.6%	15.5%	7.0%
Community service/volunteer work outside of course requirements	7.0%	13.1%	15.5%
Intramural sports	6.9%	12.8%	19.8%
Attend a professional or scholarly meeting or conference	6.3%	16.9%	11.3%
Community service/volunteer work as part of a course	4.0%	14.4%	16.2%
Organization focused on special interest/hobby	1.8%	18.5%	23.4%
Internship, field experience, co-op, or practicum	1.8%	11.2%	21.8%
Organizations or clubs designed for people in my primary major	1.4%	18.3%	24.6%