

Results from the 2016 Survey of Incoming Freshmen

Summary Report

Survey Background

A web-based survey was administered in summer 2016 to all incoming first-time, first-year students at Virginia Tech. This survey was designed and administered by the University's Office of Assessment and Evaluation in consultation with a group of faculty members experienced in working with undergraduate students. The purpose of the survey was to provide information regarding incoming students' previous learning experiences and perceptions of their future collegiate learning and engagement. The survey was designed to incorporate what faculty and staff need to know about incoming students in order to facilitate their learning, and provide an institutionally-focused set of questions rather than the more generic questions that appear on national instruments such as the CIRP and the NSSE. Student participation in the survey was voluntary and approval was obtained from Virginia Tech's Institutional Review Board prior to administering the survey.

Participants

- Of the 5,998 incoming students invited to participate in the survey, 2,317 responded, resulting in a response rate of 38.6%.
- Of those students who completed the survey's demographic questions, 50.3% were male; 71.9% identified as White (non-Hispanic), and 11.5% as Asian/Pacific Islander.
- 60.6% of students indicated that they will be transferring at least four credit hours into Virginia Tech. Of those students, 20.5% indicated that they would be transferring more than 16 credit hours.
- Of the students responding, 1,543 (81.4%) indicated that they anticipate graduating with their undergraduate degrees in four years. An additional 203 students (10.8%) anticipate a longer timeline than four years, while 150 students (7.9%) anticipate finishing their degrees in less than four years.
- The top ten intended majors for first-time freshmen entering Virginia Tech in August 2016 are:
 1. Mechanical Engineering – 10.7% (206 responses)
 2. Biological Sciences – 6.3% (122 responses)
 3. Computer Science – 5.4% (104 responses)
 4. Aerospace Engineering – 4.9% (96 responses)
 5. Electrical Engineering – 4.6% (88 responses)
 6. Business Information Technology – 4.2% (81 responses)
 7. Animal & Poultry Sciences – 3.7% (71 responses)
 8. Civil Engineering – 3.6% (70 responses)
 9. Chemical Engineering – 3.5% (68 responses)
 10. Computer Engineering – 3.3% (64 responses)

Limitations

Since student participation in the survey was voluntary, the results may not be generalizable to the population of incoming freshmen who did not choose to participate. Many responses indicate what incoming students *intend to do* while they are at Virginia Tech, rather than what students may *actually do* while on campus.

Results: What Students Hope to Gain by Coming to Virginia Tech

- 47.8% of students reported that their **primary reason for pursuing an undergraduate degree** at Virginia Tech was to help them get a job. An additional 39.7% of students indicated that **their primary motivation was to develop a strong foundation for success in graduate or professional school.**
- Along similar lines, 52.1% of students reported that they anticipated their **principal activity upon graduation** to be employment, while 40.7% planned to attend graduate or professional school. The next most frequent response was military service with 5.2%.
- When students were asked **which skills and abilities (up to three) they need to improve upon** the most to be successful, the five most frequent responses were oral communication skills (45.6%), computer/technology skills (35.6%), knowledge of global issues (32.6%), written communication skills (31.2%), and critical thinking/analysis skills (30.7%).
 - In contrast, the five least frequent responses were ethical reasoning (9.1%), information literacy/library skills (15.6%), quantitative reasoning (16%), scientific reasoning (19.9%), and ability to communicate with people different from myself (15.3%).
- When incoming freshman were asked **what excited them the most about coming to Virginia Tech**, many students talked about new friends and opportunities, the Hokie spirit of Ut Prosim, and personal growth.
- When incoming freshman were asked **what concerned them most about entering Virginia Tech**, many students talked about missing family and friends, more difficult academics, and social challenges.

Results: Openness to Challenge and Change

- As a group, students who participated in the survey believe they will be challenged more intellectually than socially at Virginia Tech.
 - A total of 92.3% of respondents indicated that they **expect to be challenged intellectually** “often” or “all of the time” while at Virginia Tech.
 - In contrast, 54.3% of respondents indicated that they **expect to be challenged socially** “often” or “all of the time.”
- When asked **“Do you think you will be the same person or a different person by the time you complete your degree?”** 58.3% of students reported that they expect to change significantly while at Virginia Tech.
 - More specifically, 9.4% reported that they expect to be a “different” person by the time they complete their undergraduate degree; 12.3% anticipated they would be a “mostly different” person; 36.6% selected “more different than the

same”; 31.3% selected “more the same than different”; 9.6% selected “mostly the same”; and 0.8% selected “the same.”

- When students were asked to report their **level of confidence to successfully complete a challenging task in a high school class**, a substantial majority, 73.8%, reported that they felt “confident” or “extremely confident.”
 - An additional 23.9% reported that they felt “somewhat confident,” Only 1.5% of students reported that they were “not at all confident,” while another 0.8% of students reported that they never had a challenging task in high school.

Results: High School Experiences and Anticipated University Involvement

- All students indicated that they finished high school with a GPA above 2.75. Of those students, 81.8% indicated that they graduated with a 3.75 or better.
- When students were asked about instructional methods used in their high school classes, the most commonly reported method was teacher lecture. 81.7% indicated that teacher lecture was used more than 50% of the time in their high school classes, with 54.8% indicating that teacher lecture was used more than 75% of the time.
 - The second most commonly used instructional method was projects using technology. 53.3% of students reported that this instructional method was used in their high school classes more than 50% of the time, with 32.6% indicating that projects using technology were used more than 75% of the time.
 - All student responses to this question are provided in Table 1 on page 4.
- When asked about expectations for their future participation at Virginia Tech, students indicated that they were most likely to participate in (1) an internship, field experience, co-op, or practicum; (2) organizations or clubs designed for people in their primary major; and (3) community service or volunteer work as part of a course.
 - In contrast, students indicated that they would be least likely to participate in (1) an organization related to cultural or ethnic heritage; (2) student government; and (3) intercollegiate sports.
 - Table 2 on page 5 shows student responses for each activity listed in the survey.

Additional Information

For more information on the 2016 Survey of Incoming Freshmen, please contact Steve Culver, Associate Provost for Institutional Effectiveness sculver@vt.edu or 540-231-4581.

Table 1. Participant responses to “What percent of time were the following instructional methods used in your high school classes?”

| Instructional Method Used in High School | Percentage of Time Used | | | | | | |
|--|-------------------------|--------|--------|--------|--------|---------------|----------------|
| | Less than 10% | 10-25% | 26-50% | 51-75% | 76-90% | More than 90% | More than 50%* |
| Discussion & Debate | 15.6% | 31.4% | 23.4% | 15.2% | 10.1% | 4.4% | 29.7% |
| Student Presentations | 16.3% | 31.3% | 23.1% | 15.1% | 9.8% | 4.5% | 29.4% |
| Teacher Lecture | 1.3% | 4.1% | 12.9% | 26.8% | 31.6% | 23.2% | 81.6% |
| Role Plays | 71.4% | 16.9% | 6.2% | 2.8% | 1.5% | 1.2% | 5.5% |
| Art & Drama Activities | 62.5% | 22.6% | 7.1% | 3.9% | 2.3% | 1.5% | 7.7% |
| Projects Using Technology | 7.1% | 17.8% | 6.1% | 20.8% | 18.9% | 13.6% | 53.3% |
| Group Projects | 4.5% | 19.9% | 28.1% | 24.3% | 16.9% | 6.2% | 47.4% |
| Research Projects | 10.8% | 26.7% | 23.9% | 19.2% | 13.3% | 6.0% | 38.5% |
| Case Studies | 50.2% | 21.7% | 13.9% | 7.6% | 3.9% | 2.8% | 14.3% |

*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 2. Participant responses to “In which of the following do you think you will participate while at VT?”

| Type of Activity | Not Likely | Probably Yes | Definitely Yes |
|--|-------------------|---------------------|-----------------------|
| Internship, field experience, co-op, or practicum | 3.7% | 36.4% | 59.9% |
| Community service/volunteer work as part of a course | 7.9% | 48.9% | 43.1% |
| Community service/volunteer work outside of course requirements | 13.9% | 44.9% | 41.2% |
| University learning community (e.g., Galileo, Hypatia, Da Vinci, Residential Leadership) | 52.5% | 21.7% | 25.7% |
| Research project with a faculty member | 19.9% | 58.6% | 21.4% |
| Study abroad - break week or short-term | 30.8% | 44.4% | 24.8% |
| Study abroad - at least a semester | 47.2% | 31.9% | 20.9% |
| Attend a professional or scholarly meeting or conference | 11.9% | 58.6% | 29.5% |
| Give a talk or exhibit work at a professional, scholarly cultural, or artistic conference or meeting | 43.3% | 45.7% | 10.9% |
| Intramural sports | 26.4% | 40.3% | 33.4% |
| Intercollegiate sports | 68.7% | 23.5% | 7.8% |
| Organizations or clubs designed for people in my primary major | 5.3% | 57.3% | 37.4% |
| Social fraternity or sorority | 60.7% | 26.3% | 12.9% |
| Student government | 74.1% | 21.9% | 3.9% |
| Arts organization (music, theatre, dance) | 66.1% | 21.8% | 12.1% |
| Organization focused on special interest/hobby | 8.1% | 56.9% | 34.9% |
| Organization related to cultural or ethnic heritage | 74.5% | 18.2% | 7.3% |