

Engagement Insights

Survey Findings on the Quality of Undergraduate Education

Support for Learners Are the students who most need support getting it, and does it help?

Mindset Matters How does a growth mindset affect learning in college?

Safety and Belonging How safe and valued do students feel on campus? Who feels *least* safe and valued?

Dual Enrollment and the First Year of College

Does taking dual-credit courses in high school make a difference in the first year of college?

Student-Faculty Interaction and Effective Teaching

How do faculty identities relate to good practice?

Quick Facts from NSSE 2016

Audiences

NSSE's audiences include college and university leaders, faculty members, advisors, teaching and learning center staff, assessment professionals, institutional researchers, student life staff, governing boards, students, higher education scholars, accreditors, government agencies, higher education organizations, prospective students and their families, high school counselors, and journalists.

Participating Colleges & Universities

More than 1,600 four-year colleges and universities in the US and Canada have participated in NSSE since its launch in 2000, with 530 U.S. and 27 Canadian institutions participating in 2016. Participating institutions generally mirror the national distribution of institutions in the 2015 Basic Carnegie Classification (Figure 1).

In addition to the participation of individual institutions, state and multi-campus systems may coordinate system-level participation in NSSE. Institutions sharing a common interest or mission also can coordinate to add questions to the core survey through consortium participation.

Participation Benefits

Participation benefits include uniform third-party survey administration with several customization options. Deliverables include a student-level data file of all respondents, a comprehensive report package with results for three customizable comparison groups, major field reports, concise

summary reports for campus leaders and prospective students, and resources for interpreting results and using them to inform practice.

Survey

The Center for Postsecondary Research at Indiana University's School of Education administers NSSE, in partnership with the Indiana University Center for Survey Research. Completed in about 15 minutes, the online survey represents a census or a random sample of first-year and senior students. Institutions may append to the core survey up to two topical modules, permitting deeper examination of particular interest areas.

Validity & Reliability

NSSE is continuously and extensively tested to ensure validity and reliability. A Psychometric Portfolio available on the NSSE website provides more information about NSSE data quality.

Response Rate

The average institutional response rate in 2016 was 29%. The highest response rate among U.S. institutions was 77%, and 3 out of 5 institutions achieved a response rate of 25% or higher.

NSSE Findings

Visit the NSSE website for summary tables of Engagement Indicators, High-Impact Practices, and individual items. The website also provides access to NSSE publications, examples of institutional data use, lists of participating institutions, and much more. nsse.indiana.edu

Use of Student Data

Participating colleges and universities agree that NSSE can use the data for aggregate reporting and other research and improvement initiatives. NSSE may not disclose institutionally identified results without permission. Colleges and universities may use their own data for institutional purposes, including public reporting, which NSSE encourages.

Other Programs & Services

The NSSE Institute offers workshops and webinars, faculty and staff retreats, custom analyses, and consulting. Companion surveys include the Beginning College Survey of Student Engagement (BCSSE) and the Faculty Survey of Student Engagement (FSSE).

Partners

NSSE was established with a grant from The Pew Charitable Trusts. For more about NSSE's origins, visit:

nsse.indiana.edu/html/origins.cfm

The National Survey of Student

dimensions of quality in undergraduate



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Figure 1: NSSE 2016 Participating Colleges and Universities

Carnegie 2015 Basic Classification

| | Doctoral Universities (Highest Research Activity) | | | |
|--|---|--|--|--|
| | Doctoral Universities (Higher Research Activity) | | | |
| | Doctoral Universities (Moderate Research Activity) | | | |
| Master's Colleges and Universities (larger pro | | | | |
| | Master's Colleges and Universities (medium programs | | | |
| | Master's Colleges and Universities (smaller programs) | | | |
| | Baccalaureate Colleges—Arts & Sciences Focus | | | |
| | Baccalaureate Colleges—Diverse Fields | | | |

Percentages are based on U.S. institutions that belong to one of the eight Carnegie classifications above

carnegieclassifications.iu.edu

Doc/Highest

Doc/Higher

Master's M Master's S

Bac/A&S Bac/Diverse

Doc/Moderate Master's I

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Northwestern College

Cover Image: University of Guelph

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Director's Message

The National Survey of Student Engagement and its companion projects serve colleges and universities committed to monitoring and improving the quality of the undergraduate experience. While participating institutions receive detailed customized reports, the Annual Results series presents noteworthy aggregate findings from the most recent administration. This report presents selected results from students at 512 U.S. institutions or subsets of that group where supplemental survey items were appended to the survey. We also report selected results from NSSE's two companion surveys, the Beginning College Survey of Student Engagement (BCSSE) and the Faculty Survey of Student Engagement (FSSE).

Colleges and universities increasingly prioritize interventions that promote success for all students. Are these interventions working? Are they reaching the students who need them? What else should colleges and universities be doing to ensure that all students thrive and derive the maximum educational benefit? These important questions motivate this year's report. We examined NSSE results that bear on support for learners who are challenged by their coursework and how a "growth mindset" corresponds to student engagement. We also present findings on students' perceptions of safety and belonging at their institution.



The BCSSE analysis focuses on dual enrollment—taking college courses while in high school—and how that experience can prepare students for what awaits them in college. We used FSSE results to investigate variations in selected teaching practices as related to faculty gender and racial/ethnic identity.

Preview of Key Findings

 Support for Learners: About one in five first-year students had difficulty with both learning course material and getting help with coursework. Compared to their peers who were able to get help, these students

studied fewer hours, made less frequent use of effective learning strategies, were less likely to earn high grades, and were more likely to seriously consider leaving their institution.

- Growth Mindset: Seniors who were more inclined toward a growth mindset—meaning they embrace challenges and believe that rising to those challenges can enhance their capabilities made more frequent use of effective learning strategies and showed higher levels of reflective and integrative learning. They also believed their college experience contributed to higher levels of learning and personal development.
- Feelings of Safety and Belonging: The vast majority of undergraduates felt safe and comfortable being themselves at their institution, and at least three-quarters felt valued and part of a campus community. However, certain populations—such as those with a gender identity other than man or woman as well as African American, Alaska Native or American Indian, and multiracial students—expressed less agreement with statements about safety and belonging.
- Dual Enrollment: About one in four beginning college students took college-level courses while in high school as part of a dual enrollment program. Students who took dual credit (DC) courses had more accurate expectations of how much time they would devote to class preparation in college, and those whose DC courses were more academically rigorous were significantly more engaged in the first year of college.

• Faculty Practices: Black or African American men and women faculty interacted with students most often, while White and Asian men did so the least, on average. Asian and Hispanic or Latina women faculty were most likely to implement effective teaching practices, while White men faculty were the least likely.

I These findings offer valuable insights into how colleges and universities and high schools, too—can help their students succeed."

These findings offer valuable insights into how colleges and universities—and high schools, too—can help their students succeed. They also call attention to the continuing need to make our institutions hospitable and welcoming places for traditionally underserved populations, and suggest that a diverse faculty confers educational benefits that go beyond mere representation.

NSSE's aim is not merely to survey undergraduates, but to promote evidenceinformed improvement of the undergraduate experience by providing rich diagnostic information that includes results from comparison institutions. To illustrate, we present data-use examples provided by **Carlow University, Oregon Institute of Technology, Rose-Hulman Institute of Technology,** and **Winthrop University**. For more examples, refer to the latest volume in our *Lessons from the Field* series:

nsse.indiana.edu/links/lessons

NSSE is a team effort, involving staff at hundreds of institutions who work to ensure a successful administration, collaborators at Indiana University's Center for Survey Research, project staff committed to quality in all aspects of our work, and a National Advisory Board representing diverse roles and constituencies that keeps us current and relevant. It is a privilege to work with such a team.

Alexander C. McCormick, Ph.D.

Associate Professor of Educational Leadership and Policy Studies, Indiana University Bloomington

Mississippi State University

Selected Results and Institutional Stories

Support for Learners and Its Link to Academic Effort, Academic Performance, and Retention

Academic challenge is an important element in college-level learning, but challenge needs to be complemented by support for learning (Sanford, 1962; Upcraft, Gardner, Barefoot, & Associates, 2005). Students can get help with coursework from many sources including peers, instructors, and learning support services (e.g., tutoring, writing centers, and success coaching). We investigated the experiences of students who encountered difficulty learning course material as related to their ease or difficulty getting help, and how this was related to academic effort, grades, and risk for attrition.

Data were from nearly 25,000 first-year students at 140 institutions who completed NSSE's Topical Module on First-Year Transitions in spring 2016. In this analysis we focused on students who had difficulty^a learning course material, dividing them into two groups: those who had low difficulty getting help with their coursework^b (26% of all first-year students) and those who had high difficulty (21%) getting such help. The latter group—about one in five first-year students merits special concern: They had difficulty learning course material *and* getting help with coursework.

Of students who had difficulty learning course material, first-generation, African American, and Hispanic or Latino students were more likely to have difficulty getting help with coursework (Table 1). Students who had difficulty both learning course material and getting help also had lower average SAT scores, devoted about one hour less per week to class preparation on average, and were less likely to use effective learning strategiesidentifying key information from readings, reviewing notes after class, and summarizing what they have learned. Importantly, they were also more likely to say they had seriously considered leaving their institution, suggesting a likely link to attrition.

Students who get help with coursework invest more time in their studies and make greater use of effective learning strategies, and these behaviors pay off in higher academic achievement "

Table 1. Characteristics of Students Experiencing Difficulty Learning Course Material by Level of Difficulty Getting Help with Coursework

| | Difficulty getting help Low | with coursework High |
|---|--------------------------------|-------------------------|
| Female | 69% | 67% |
| Male | 31% | 33% |
| First Generation ^c | 43% | 49% |
| Asian | 5% | 6% |
| Black or African American | 8% | 10% |
| Hispanic or Latino | 15% | 19% |
| White | 61% | 54% |
| Other | 11% | 11% |
| Seriously considered leaving the insti | tution 31% | 43% |
| Average combined SAT score ^d | 1078 | 1042 |
| Average class preparation time (hours | per week) 15.8 | 14.9 |
| Average Learning Strategies score | 39.7 | 36.7 |
| | | |

a. Responding at least 4 on a 6-point scale where 1="Not at all difficult" and 6="Very difficult."

b. Low difficulty = 1-3 and high difficulty = 4-6 on the 6-point scale

c. Neither parent holds a bachelor's degree.

d. ACT composite scores were converted to the SAT scale (400-1600).

Rose-Hulman Institute of Technology: Assessing the Effectiveness of Campus Programs and Services for First-Year Students and Seniors

Rose-Hulman Institute of Technology has used findings from NSSE's First-Year Experiences and Senior Transitions module to shed light on the positive impact of three ongoing efforts to ensure student success: a first-year student transition course, career planning initiatives, and efforts to inform the improvement and expansion of campus efforts to encourage entrepreneurial learning.

Rose-Hulman's College and Life Skills course assists first-year students in the transition to college and introduces them to tools, people, and resources for a successful educational experience. According to module findings, Rose-Hulman students are much more likely than their peers at other institutions to seek out assistance with coursework and to ask instructors for help when struggling on assignments—highlighting the effectiveness of the College and Life Skills course.

Rose-Hulman's Career Services Office wants students to begin career planning and develop relationships with companies during their first year. The office hosts a quarterly career fair where all students can meet company representatives and interview for internships and employment. The effectiveness of these services is evident in Rose-Hulman's module results on senior transitions. Among students indicating post-graduation plans for full- or part-time employment, 81% of Rose-Hulman seniors already had a job, compared to 43% of the comparison group-offering positive feedback and motivation to maintain Rose-Hulman's highcaliber resources and support for students.

Rose-Hulman is increasing and promoting opportunities for entrepreneurial learning, including a living-learning community and an entrepreneurship minor. The module's senior questions related to entrepreneurial skills, self-employment, and starting your own business provide useful benchmarking information, and Rose-Hulman plans to readminister the First-Year Experiences and Senior Transitions module with NSSE 2018.

Oregon Institute of Technology: Exploring General Education and Learning Outcomes

In 2013, Oregon Tech began reviewing the general education curriculum to find ways to ensure student achievement of Institutional Student Learning Outcomes (ISLO), including knowledge and skills in oral and written communication, effective collaboration, and critical thinking. NSSE has been integral to investigating disparities between the ISLOs and students' performance, including results on the Reflective and Integrative Learning Engagement Indicator, participation in High-Impact Practices (HIPs), perceived learning gains, and data from the Experiences with Information Literacy module. While first-year students were on par with their peers from comparable institutions, seniors were less engaged than their peers confirming concerns that Oregon Tech's general education foundation was not sufficiently reinforced throughout students' educational experience. These findings inspired a redesign of Oregon Tech's general education structure to intertwine the ISLOs throughout general education and major courses. One approach was to better incorporate HIPs into the general education curriculum. For example, although NSSE results showed that most students completed a capstone project, this had only been an expectation. In the redesigned curriculum it is a requirement of all students.

For first-year students who experienced difficulty learning course material, spending more time preparing for class increased their likelihood of earning high grades (A or A-) (Figure 2). But within levels of study time, those who had difficulty getting help were about 10 percentage points less likely to earn high grades than their peers who were more successful at getting help. This demonstrates the importance of both study time and academic support for academic performance.

How students use their study time also matters, so we investigated the relationship between the use of effective learning strategies and high grades – independent of the effect of study time. More engagement in Learning Strategies (LS) corresponded to higher grades, with about 11 percentage points separating the low and high LS groups (Figure 3). We also found that those who had difficulty getting help were less likely to have high grades, regardless of their use of learning strategies.

Students do not necessarily enter college with the tools needed to be effective learners. Our findings show that students who get help with coursework invest more time in their studies and make greater use of effective learning strategies, and these behaviors pay off in higher academic achievement. Students who get the help they need are also less likely to consider leaving their institution. Yet one in five first-year students experience difficulty both learning course material *and* getting the help they need. These results call attention to the imperative to ensure the availability and effectiveness of learning support services and also to ensure that students take advantage of those services when they confront academic difficulty.





Figure 3. Among Students Experiencing Difficulty Learning Course Material, Percentage Earning High Grades by Use of Effective Learning Strategies and Level of Difficulty Getting Help with Coursework



Note: Percentages were adjusted to control for differences with regard to sex, race/ethnicity, full- or part-time enrollment, first-generation status, SAT/ACT score, and major. Note: Percentages were adjusted using the same variables as figure 2 plus weekly study time.

Oregon Tech also designed a collaborative, interdisciplinary experience for juniors meant to increase engagement in Reflective and Integrative Learning. The new general education curriculum was approved in April 2016 and is now being implemented. Oregon Tech plans to assess its impact in a future NSSE administration.

Mindset Matters

Students at all levels of education benefit from a *growth* mindset – a belief that intelligence and other personality characteristics can change with effort and experience. A growth mindset is associated with a greater openness to learning, willingness to confront challenges, and resiliency when faced with failure (Dweck, 2006). In contrast, people with a *fixed* mindset believe that one's intelligence is generally immutable. As a result they need to prove their intelligence more often, shy away from feedback, and avoid challenging learning opportunities. To explore the relationships between mindset and engagement in effective educational practice, about 11,000 first-year students and seniors from a diverse group of 38 U.S. colleges and universities completed a set of questions appended to NSSE to assess their mindset (items were adapted from Dweck, 1995, 2006). Results indicate that a majority believe intelligence is malleable, suggesting a growth mindset. In fact, depending on the question, well over half to three-quarters agreed or strongly agreed with this basic premise (Figure 4).

We anticipated that three NSSE measures would relate to mindset: Learning Strategies,

Reflective & Integrative Learning, and Perceived Gains. First, we grouped students into quartiles using their average responses across the seven mindset questions. After adjusting for differences in student characteristics, we then estimated average scores for these groups on the three NSSE measures. Among seniors, the difference between the bottom (closer to a fixed mindset) and top (growth mindset) quartile groups showed substantial differences on the three NSSE measures favoring growth-mindset students (Figure 5). Results for first-year students were similar.

Bryant University

4 4 To be honest, I had some problems on quizzes and exams, but the key to solve them is to ask professors for help and have more contact with them. I went to their office hours and solved the complex problems more effectively than before, and obtained better and better grades in every course."

> FIRST-YEAR STUDENT, ENGINEERING, MICHIGAN STATE UNIVERSITY



Figure 4: Selected Questions About Mindset

Note: Includes both first-year and senior students.

Given a growth mindset's emphasis on trying new strategies in the face of challenge, it is understandable that students were more likely to employ effective learning strategies like reviewing notes after class. It is also affirming that they were more reflective in their learning approaches and more willing to consider other points of view. That growth mindset students report gaining more from their college experience in both academic and personal areas is consistent with a stronger belief in their ability to grow and improve.

Interestingly, we found similarly strong relationships between mindset and two other Engagement Indicators: Higher-Order Learning and Effective Teaching Practices. It may be that growth-mindset students are more inclined than others to choose challenging courses taught by well-regarded faculty in their quest for learning. Consistent with this interpretation, students in the top mindset quartile were more likely to describe their courses as challenging them to do their best work compared with those in the bottom quartile (Figure 6).

These results suggest that mindset influences how students approach learning during college. Compared to those of a more fixed mindset, growth mindset students appear to be well served by high levels of engagement in effective educational practice in college. Although further inquiry into the relationship between mindset and learning at the college level is warranted, efforts to promote student awareness of the malleable nature of intelligence promise to pay dividends.

4 My advisors have been a huge part of my success! They never gave up on me and I don't think I would've gotten this far without them."

SENIOR, HISTORY, ROCKFORD UNIVERSITY

Winthrop University: Improving Retention and Graduation for Special Populations

Improving retention and graduation rates is a high priority at Winthrop University. When graduation outcomes revealed gaps by gender regardless of race, Winthrop examined NSSE data for underlying influences or differences in student engagement. Using the NSSE Report Builder-Institution Version, Winthrop staff disaggregated their NSSE 2014 data by gender to conduct preliminary analysis on engagement of first-year and senior men to inform new interventions to better support all students' success. Although this analysis was based on a single year of data, it provided insight into areas needing further investigation. Winthrop's leaders have continued this analysis using 2014 and 2016 combined data, which has shown first-year men report lower rates for three of the four Higher Order Learning Engagement Indicator items. Once Winthrop completes this gender-based analysis, expanded results will be disseminated more widely among academic and student affairs leadership to generate discussion about ways to improve retention and

graduation rates for all students and lessen achievement gaps by gender.

Given the ease of using the Report Builder and the institution's emphasis on improving retention, Winthrop added transfer status to their 2016 NSSE population file to facilitate additional analysis in the Report Builder. This will allow Winthrop to explore differences between those who transferred to the institution and their peers with respect to perceived learning gains, student-faculty interaction, and their perceptions of the campus environment, and to conduct a similar analysis of firstyear students to examine factors associated with persistence.



Notes: ANCOVA adjusted means. Covariates included sex, race/ethnicity, first-generation status, enrollment status, and major. All differences were statistically significant at the .001 level. Perceived gains is a scale composed of 10 items that explore the degree to which students said their college experience contributed to their gains in a variety of skills and competencies. Top quartile signifies a higher growth-mindset orientation.

Figure 6: Proportion Reporting High Course Challenge^a by Mindset Quartile Groups



 a. Rated 6 or 7 on a 7-point scale where 1=Very little and 7=Very much

60

Figure 5: Average Senior Learning Strategies, Reflective & Integrative Learning, and Perceived Gains by Top and Bottom Mindset Quartiles

4 Most veterans are afraid to commit to higher learning because of the learning gap in their education. This institution has made the transition, while difficult, easier for me with all the available extra activities to assist me in writing."

FIRST-YEAR STUDENT, CRIMINAL JUSTICE ST. JOHN'S UNIVERSITY (NY) Annual Results 2016

Reis

Perceptions of Safety and Belonging

Feelings of safety and belonging in a college community are important to students' well-being and ability to learn. More than 13,000 first-year and senior students from 34 bachelor's degree-granting institutions answered questions about their feelings of safety and belonging at their institution.

Questions on Safety and Belonging

To what extent do you agree or disagree with the following statements?

(Strongly agree, Agree, Disagree, Strongly disagree)

- I feel physically safe at my institutionI feel comfortable being myself at
- my institution
- I feel valued by my institution
- I feel like part of the campus community

Fully 93% felt physically safe^a and 92% felt comfortable being themselves^a at their institution, while smaller proportions—but still a majority—felt valued by their institution (nearly four in five) or part of the campus community^a (about three-quarters).

Students who felt safe, comfortable being themselves, valued, and part of the community had more positive interactions with others on campus, perceived greater institutional support, and believed more strongly that their college experience had facilitated their growth and development across a range of outcomes (Table 2). These relationships were strongest for students who felt valued by the institution and part of the campus community.

While these results affirm that our campuses are generally safe and welcoming places, perceptions varied among demographic groups. Students with a gender identity other than man or woman disagreed^b with these statements nearly twice as often as their Missouri University of Science and Technology

cisgender peers (Figure 7). Black or African American students were least likely to feel safe^b (14% disagreement). Multiracial students and Black or African American students were least likely to feel valued (about one in four disagreed), and American Indian or Alaska Native and multiracial students were least likely to feel like part of the campus community (about two in five disagreed) (Table 3). These findings demonstrate the importance of institutional attention to building community and addressing safety and inclusion concerns, and point to the need to redouble efforts to ensure that students from historically underrepresented backgrounds feel safe, valued, and included members of our college and university communities.

a. "Agree" or "Strongly agree"

b. "Disagree" or "Strongly disagree"

Table 2: Correlations Between Selected Measures and Feelings of Safety and Belonging

| | Quality of Interactions | Supportive Environment | Perceived Gains | |
|---|----------------------------|---------------------------|--------------------|--|
| I feel physically safe at my institution | .34 | .27 | .26 | |
| I feel comfortable being myself at my institution | .38 | .32 | .33 | |
| l feel valued by my institution | .50 | .45 | .46 | |
| I feel like part of the campus community | .46 | .44 | .43 | |

Figure 7: Percentage of Students Who Disagreed with Statements about Safety and Belonging, by Gender Identity



Table 3: Lack of Safety and Belonging by Racial/Ethnic Identification

| | l feel physically safe at my institution | l feel comfortable being myself at my institution | l feel valued by my institution | l feel like part of the campus community |
|--|--|--|---------------------------------------|---|
| American Indian or Alaska Native | 10 | 9 | 21 | 38 |
| Asian, Native Hawaiia or other Pacific Island | n, 6 er 6 | 9 | 18 | 24 |
| Black or African American | 14 | 10 | 24 | 27 |
| Hispanic or Latino | 5 | 8 | 20 | 26 |
| Nhite | 5 | 6 | 21 | 25 |
| Multiracial | 9 | 11 | 26 | 31 |

Notes: Bivariate correlations; All are positive and statistically significant at ${\rm p}<.001.$

Safety and Belonging

Note: Percentages are those who "Disagree" or "Strongly disagree."

Dual Enrollment and the First-Year Academic Experience

The number of students who earn college credits prior to high school graduation has risen dramatically over the past several years (Marken & Lewis, 2013), and part of this increase is due to growth in dual enrollment programs in which students simultaneously earn high school and college credits (i.e., dual credits). Unlike advanced placement (AP) courses, dual credit (DC) courses do not require students to take a standardized test to earn the credits (Tobolowsky & Allen, 2016). In addition, dual enrollment programs can potentially reduce college costs and improve students' readiness for college-level work.

Yet some are concerned that DC courses lack the academic rigor of their college equivalents (Tobolowsky & Allen, 2016), leading students to misjudge the demands of college. Using data from the Beginning College Survey of Student Engagement (BCSSE) and NSSE, we examined the relationship between first-year students' perceptions of the academic rigor of their DC courses relative to other high school courses and their experiences in the first year of college. Because many high school students complete both AP and DC courses, our analysis sought to isolate the impact of DC courses on the first-year experience. To do this, students were categorized into four groups:

- 1. No DC/AP: Completed no DC or AP courses in high school
- 2. DC only: Completed only DC courses in high school
- 3. Both DC & AP: Completed both DC and AP courses in high school
- 4. AP only: Completed only AP courses in high school

Carlow University: Assessing Learning with Technology to Enhance Instructional Practice

To prepare for accreditation by the Middle States Commission on Higher Education, Carlow University's office of Assessment for Institutional Research, Effectiveness, and Planning used NSSE data to identify the ways Carlow students outperformed students at peer institutions and to find evidence of underachievement to drive improvement. NSSE findings provided evidence to campus constituencies and were used to track the progress of interventions aimed at improving key outcomes, such as co-curricular learning, intensive writing, and participation in High-Impact Practices. Of particular interest were Carlow's results from NSSE's Learning with Technology module, which measures student use of technology, institutional support for such use, and the contribution of technology to student learning. Results indicated less use of technology in Carlow's classrooms compared with peer institutions, corroborating evidence from other sources. These findings reinforced the need to improve the digital literacy components of student learning at Carlow, and the need for additional training of faculty to support this objective. The Carlow University professional development institute's spring 2016 faculty training focused on the use of technology in the classroom to enhance student learning. The institute was an intense educational opportunity structured as a conference, featuring a plenary, three flights of concurrent sessions, and an "open mouse" gathering where faculty demonstrated their uses of technology. Intentional and comprehensive training opportunities like this complement evidence of improvement assembled for accreditation, while also building interest in improving student engagement that will be measured in future NSSE administrations.



While about one-quarter (28%) of all first-year students completed a DC course during high school, most of these also completed at least one AP course, while almost half completed only AP courses (Table 4).

Men and women exhibited similar patterns of DC and AP course taking. First-generation students were less likely than non-firstgeneration students to complete DC or AP courses in high school (72% and 80%, respectively). About 28% of first-generation and non-first-generation students completed DC courses in high school. White and Asian students had the highest rates of DC course taking (29% and 27% respectively), while Black students were least likely to do so (22%).

Expected Study Time in College

Beginning college students generally overestimate the amount of time they will study during the first year. Interestingly, those who completed DC and AP courses (Group 3) or AP only (Group 4) expected to spend even more time preparing for classes than students in Groups 1 or 2 (Table 5). However, the time estimates of students who completed DC courses only or in combination with AP courses (Groups 2 or 3) were more accurate than students in Groups 1 or 4.

Academic Rigor of Dual Credit Courses

Students who took DC courses in high school answered questions about how much the courses challenged them to do their best work, prepared them to be successful in college, and demanded harder work than their regular high school courses. We used these responses to group students into thirds representing low, middle, and high perceived rigor of their DC courses. About 11% of those who completed DC courses said that the courses were not more difficult than their other high school courses, and one-third indicated that their DC courses were very much more difficult. After statistically adjusting for high school grades and AP course-taking, results indicated that students who took rigorous DC courses were more academically engaged in college than

those whose DC courses were less rigorous (Table 6). The largest differences between the low- and high-rigor groups were for engagement in Reflective and Integrative Learning and use of effective Learning Strategies. Overall, those who experienced a high level of academic rigor in their DC courses were significantly more engaged and felt they had made greater academic gains in the first year of college than students who took less rigorous DC courses.

Students benefit from academically rigorous dual enrollment programs. While not all students experienced rigorous DC courses, those who did were more engaged in the first year of college and believed they gained more academically. In addition, taking DC courses resulted in more accurate expectations about the time demands of the first year of college.

Note: BCSSE data were from about 25,000 students enrolled at 43 bachelor's degree-granting institutions who completed the web version in 2015. BCSSE-NSSE data were from nearly 4,500 (from the original 25,000) students who also completed NSSE in 2016.

Table 4: Distribution of First-Year Students by Selected Characteristics, According to Dual-Credit and AP Course Groups

| | 1. No DC/AP % | 2. DC only % | 3. Both DC & AP % | 4. AP onl % |
|-------------------------------|------------------|-----------------|----------------------|----------------|
| Man | 28 | 6 | 18 | 47 |
| Woman | 22 | 7 | 22 | 48 |
| First-generation ^a | 29 | 8 | 20 | 44 |
| Not first-generation | 20 | 6 | 22 | 51 |
| Asian | 19 | 4 | 24 | 54 |
| Black or African America | n 34 | 7 | 15 | 44 |
| Hispanic or Latino | 22 | 7 | 19 | 52 |
| White | 23 | 8 | 22 | 47 |
| Other | 26 | 6 | 21 | 47 |
| Total | 24 | 7 | 21 | 48 |

Table 5: Comparisons Between Expected and Actual Hours Studying During the First Year of College

| | Expected hours studying | Actual hours studying | Significance | Effect size ^a |
|----------------|----------------------------|-----------------------|--------------|--------------------------|
| . No DC/AP | 15.6 | 13.4 | * * * | .29 |
| . DC only | 15.4 | 14.3 | * | .14 |
| . Both DC & AP | 16.7 | 16.1 | * | .09 |
| . AP only | 16.8 | 15.0 | * * * | .24 |
| | | | | |

*p<.05, **p<.01, ***p<.001

Note: Expected hours were collected on BCSSE before the start of the first year, and actual hours were collected NSSE during the spring semester of the first year. a. Cohen's *d*. See Rocconi & Gonyea (2015).

Table 6: Average Engagement Indicator Scores by Academic Rigor of DC Courses^a

| Rigor of DC Courses | | | | |
|--|------|------|--------------|--------------------------|
| | Low | High | Significance | Effect size ^b |
| Reflective and Integrative Learning | 33.7 | 38.9 | *** | .031 |
| Learning Strategies | 36.8 | 42.8 | * * * | .030 |
| Collaborative Learning | 34.5 | 39.4 | *** | .027 |
| Student-Faculty Interaction | 21.9 | 26.1 | * * * | .017 |
| Supportive Environment | 37.8 | 41.2 | ** | .015 |
| Perceived Academic Gains° | 34.5 | 39.4 | * * * | .020 |
| | | | | |

p<.01, *p<.001

Note: Limited to students who took DC courses in high school.

a. Adjusted means using AP courses and HS grades as covariates

b. Partial eta squared where .01 to .04 is a small effect, .05 to .14 is medium, and .15 or large ris large effect.

c. Based on four items about how the student's experience at the institution contributed to knowledge, skills and personal development in writing, speaking, thinking critically, and analyzing information.

1

a. Neither parent holds a bachelor's degree

Instructional Staff Race and Gender Relate to Experiences with Faculty

As part of the 2016 Faculty Survey of Student Engagement (FSSE), more than 14,500 instructional staff from 119 bachelor's degreegranting institutions responded to questions about their engagement in effective teaching practices and aspects of their interactions with students. Many FSSE items form scales that mirror NSSE's Engagement Indicators. The Student-Faculty Interaction scale contains four items that ask how often instructional staff had discussions with students about career plans, course topics, and academic progress; and how often they have worked with students on noncourse-related activities such as committees and student organizations. The Effective Teaching Practices scale contains eight items about providing timely and detailed feedback on assignments and using a variety of teaching techniques. An examination of these scales by the racial/ethnic and gender identity of the instructional staff revealed interesting patterns.

While only one in five instructional staff identified as faculty of color (Table 7), racial/ ethnic and gender identifications were related to how instructional staff teach and engage with students (Figures 8 and 9). In general, men interacted less often with students and used effective teaching practices less often in their courses. Hispanic or Latino men and Black or African American men used effective educational practices more often than other men, and White women did so less often than other women and some men of color.

Interestingly, Black or African American men and women interacted most often with students in meaningful ways, while White and Asian men did so the least. On average, White and Asian men and women interacted with students significantly less than Hispanic or Latina women or Black or African American men and women. The range of variation within these subgroups, however, is notable. For example, there is noticeably less variation among Hispanic or Latino men than Hispanic or Latina women (Figure 8). Relative to Hispanic or Latino men, a greater proportion of Hispanic or Latina women scored above

45 on the student-faculty interaction scale. So, while there is considerable overlap in the two distributions, the greater variability for Hispanic and Latina women results in a higher average score for that group.

Effective Teaching Practices, on average, were most likely to be used by Asian and Hispanic or Latina women. White men did so the least often – averaging significantly less frequent use of effective practices than Black or African

I The best part about my time at Rowan is that I have had a lot of professional development opportunities within my field of study. I have been able to attend national and state conferences, a photography conference, and I have been involved with the national chapter at Rowan (NAEA)."

SENIOR, ART EDUCATION, ROWAN UNIVERSITY

American, Asian, and Hispanic or Latino men. Although there is considerable variation within these subgroups, it is more consistent across groups than for Student-Faculty Interaction (Figure 9).

Table 7: Distribution of FSSE Instructional Staff by Racial/Ethnic Identification and Gender Identity

| | % |
|---------------------------------|------|
| White women | 42.3 |
| White men | 37.5 |
| Black or African American women | 4.1 |
| Black or African American men | 2.7 |
| Asian women | 2.1 |
| Asian men | 2.8 |
| Hispanic or Latina women | 1.9 |
| Hispanic or Latino men | 2.0 |
| | |

Figure 8: Student-Faculty Interaction by Racial/Ethnic Identification and Gender Identity



Figure 9: Effective Teaching Practices by Racial/Ethnic Identification and Gender Identity



Given the above findings, institutions seeking to improve the amount of student-faculty interaction and the use of effective teaching practices should consider multiple strategies. First, they can communicate the importance of these activities and the results illustrating group differences to their instructional staff. Second, they can put additional energy into recruiting and retaining faculty from groups likely to score high on these measures. Third, they can adapt support mechanisms (e.g., faculty development opportunities) to better address the needs of those groups of instructional staff likely to score low on these measures.

Note: The Asian category of racial/ethnic identification reported here includes Native Hawaiian and other Pacific Islander instructional staff.

Use of Rubrics Common Among Faculty

For more than a decade, faculty members have been encouraged to use rubrics in grading and other feedback on student work, yet little is known about faculty use of these tools or on what they base their use. In 2016, the Faculty Survey of Student Engagement administered a set of items about the use of rubrics to faculty members at a diverse set of 21 colleges and universities. Faculty were informed that a rubric is a tool educators use to evaluate student work. Rubrics define categories for judging student work and specify successive levels of performance in each category. Pre-specified criteria aid in judging whether a student's work achieves a certain level. Points or grades can be assigned depending on how well a student performs across the categories defined in the rubric. Faculty drew from several resources to develop their rubrics:

- 25% used feedback from faculty peers
- 22% used institutional learning outcomes
- 17% used feedback from students
- 13% used national rubrics^a
- 13% used resources from disciplinary associations

a. For example, the AAC&U VALUE rubrics (Rhodes & Finley, 2013).





Institution-Level Correlations: Engagement, Retention, and Graduation

Increasing postsecondary degree attainment is an important priority for the nation. Student attrition is costly to individuals and society. Students who leave college without a degree do not realize the educational or earning gains associated with a college degree and are at greater risk for defaulting on student loans, while society loses the payoff for subsidized tuition and student financial aid. Given the importance of degree attainment, we examined the relationship between first-year students' engagement and institution-level retention and graduation rates as calculated by the U.S. Department of Education.

We merged institutional results from NSSE for first-year students with first-year retention and sixyear graduation rates from the U.S. Department of Education's College Scorecard. We correlated NSSE institutional averages with the College Scorecard data for 1,196 NSSE participating institutions from 2013 through 2016. We examined NSSE's 10 Engagement Indicators (Els) and two key academic challenge items: institutional emphasis on studying and academic work, and the average number of hours per week students spent preparing for class.

Most NSSE Engagement Indicators for first-year students were positively related to both first-year retention and six-year graduation rates (Figure 10). The strongest relationship was for Collaborative Learning at .41 for both outcomes. The correlations for Higher-Order Learning, Reflective & Integrative Learning, Discussions with Diverse Others, Student-Faculty Interaction, and Supportive Environment ranged from .22 to .30. The associations with both outcomes were negative for Learning Strategies and negative between Student-Faculty Interaction and retention, likely reflecting institutions that serve larger numbers of underprepared students.

The correlations for institutional emphasis on studying and academic work were .32 and .34. However, the relationships for the average number of hours per week first-year students spent preparing for class—.55 for retention and .65 for graduation—were the strongest of any of the measures examined. This means that the average amount of time first-year students spent studying accounted for 30% of the total variance in institutional retention and 42% in graduation rates. As the amount of time students spend studying during the first year appears to be a key indicator of undergraduate persistence and graduation, colleges and universities should take affirmative steps to promote a culture where first-year students practice positive study habits.

Figure 10: First-Year Student Engagement Correlations with Institutional Retention and Graduation Rates



Note: Correlation ranges from -1 to 1, where those values represent a perfect negative and positive relationship, respectively.

Bloomfield College

4 A No other ranking or guidebook offers the depth of analysis for prospective students and their families found in NSSE."

> STEPHANIE FABRITIUS, VICE PRESIDENT FOR ACADEMIC AFFAIRS, CENTRE COLLEGE

A Report from the First Annual Teaching and Learning National Institute: Using Evidence for Improvement

How can campuses use evidence of students' educational experiences to improve learning and success? Putting NSSE data to use to respond to this question was one of the key themes of the first annual Teaching and Learning National Institute (TLNI), hosted by The Evergreen State College. The institute was co-sponsored by NSSE, the National Institute for Learning Outcomes Assessment, the Washington State Board for Community and Technical Colleges, the Achieving the Dream National Network, and the Washington Center for Improving Undergraduate Education.

The event brought together teams of faculty, student affairs professionals, institutional researchers, and administrators from 29 twoyear and four-year institutions. Among the four-year institutional teams, the campus plans and uses of NSSE results were diverse. Some used NSSE to inform efforts to more effectively align the curriculum and co-curriculum, while others applied their results toward strengthening a particular student learning outcome, such as quantitative and information literacy. Several teams designed faculty development programs tied to student engagement data and institutional goals for student learning. For many campuses, reshaping general education was a key theme. In one way or another, all of the teams focused on using evidence to identify areas of the student experience that could be strengthened and then—building on what is known about successful practices-to shape more effective approaches both in and out of the classroom.

A good deal of time at the institute was dedicated to work by the campus teams, scaffolded with sessions on topics designed to inform their action plans—topics such as shaping an effective professional development program, understanding the role of faculty in change initiatives, and creating an equity mindset. The creation of campus cohorts addressing similar topics provided further scaffolding, with each cohort working with a group of resource faculty who facilitated their process and provided feedback on draft plans.

The second annual TLNI will be held July 30– August 2, 2017. The call for applications is on the NSSE website: **nsse.indiana.edu**

Engagement Indicators & High-Impact Practices

To represent the multiple dimensions of student engagement, NSSE reports scores for 10 Engagement Indicators calculated from 47 questions and grouped within four themes. Additionally, NSSE provides results on six High-Impact Practices, aptly named for their positive associations with student learning and retention.

Engagement Indicators

Engagement Indicators (Els) provide valuable information about distinct aspects of student engagement by summarizing students' responses to sets of related survey questions.

The Els and component items were rigorously tested both qualitatively and quantitatively in a multi-year effort that included student focus groups, cognitive interviews, and two years of pilot testing and analysis. As a result, each El provides valuable, concise, actionable information about a distinct aspect of student engagement.

| Engagement Indicator | | |
|--------------------------------------|--|--|
| Higher-Order Learning | | |
| Reflective & Integrative Learning | | |
| Learning Strategies | | |
| Quantitative Reasoning | | |
| Collaborative Learning | | |
| Discussions with Diverse Others | | |
| Student-Faculty Interaction | | |
| Effective Teaching Practices | | |
| Quality of Interactions | | |
| Supportive Environment | | |
| | | |

El Component Items

Theme: Academic Challenge

Higher-Order Learning

During the current school year, how much has your coursework emphasized the following:

- Applying facts, theories, or methods to practical problems or new situations
- Analyzing an idea, experience, or line of reasoning in depth by examining its parts
- Evaluating a point of view, decision, or information source
- Forming a new idea or understanding from various pieces of information

Reflective & Integrative Learning

During the current school year, how often have you

- Combined ideas from different courses when completing assignments
- Connected your learning to societal problems or issues
- Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
- Examined the strengths and weaknesses of your own views on a topic or issue
- Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- Learned something that changed the way you understand an issue or concept
- Connected ideas from your courses to your prior experiences and knowledge

Learning Strategies

During the current school year, how often have you

- Identified key information from reading assignments
- Reviewed your notes after class
- Summarized what you learned in class or from course materials

Our use of NSSE shows that our students perceive our environment as supportive both at the end of the formative first year and still as they are about to graduate."

> JANEL A. SUTKUS, PH.D., DIRECTOR OF INSTITUTIONAL RESEARCH AND ANALYSIS, CARNEGIE MELLON UNIVERSITY

Quantitative Reasoning

During the current school year, how often have you

- Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)
- Used numerical information to examine a realworld problem or issue (unemployment, climate change, public health, etc.)
- Evaluated what others have concluded from numerical information

Theme: Learning with Peers

Collaborative Learning

During the current school year, how often have you

- Asked another student to help you understand course material
- Explained course material to one or more students
- Prepared for exams by discussing or working through course material with other students
- Worked with other students on course projects or assignments

Discussions with Diverse Others

During the current school year, how often have you had discussions with people from the following groups:

- People from a race or ethnicity other than your own
- People from an economic background other than your own
- People with religious beliefs other than your own
- People with political views other than your own

Available on the NSSE Website:

Summary statistics for individual survey questions as well as EI and HIP scores by Carnegie classification, sex, and related-major category: nsse.indiana.edu/links/summary_tables The **NSSE Report Builder**—an interactive tool that displays results by user-selected student and institutional characteristics: **nsse.indiana.edu/links/report_builder**



Theme: Experiences with Faculty

Student-Faculty Interaction

During the current school year, how often have you

- Talked about career plans with a faculty member
- Worked with a faculty member on activities other than coursework (committees, student groups, etc.)
- Discussed course topics, ideas, or concepts with a faculty member outside of class
- Discussed your academic performance with a faculty member

Effective Teaching Practices

During the current school year, to what extent have your instructors done the following:

- Clearly explained course goals and requirements
- Taught course sessions in an organized way
- Used examples or illustrations to explain difficult points
- Provided feedback on a draft or work in progress
- Provided prompt and detailed feedback on tests or completed assignments

Theme: Campus Environment

Quality of Interactions

Indicate the quality of your interactions with the following people at your institution:

- Students
- Academic advisors
- Faculty
- Student services staff (career services, student activities, housing, etc.)
- Other administrative staff and offices (registrar, financial aid, etc.)

University of Missouri-Kansas City

Supportive Environment

How much does your institution emphasize the following:

- Providing support to help students succeed academically
- Using learning support services (tutoring services, writing center, etc.)
- Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)
- Providing opportunities to be involved socially
- Providing support for your overall well-being (recreation, health care, counseling, etc.)
- Helping you manage your nonacademic responsibilities (work, family, etc.)
- Attending campus activities and events (performing arts, athletic events, etc.)
- Attending events that address important social, economic, or political issues

High-Impact Practices

High-Impact Practices (HIPs) represent enriching educational experiences that can be life-changing. They typically demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and other students, encourage collaboration with diverse others, and provide frequent and substantive feedback.

NSSE founding director George Kuh recommends that all students participate in at least two HIPs over the course of their undergraduate experience—one during the first year and one in the context of their major.

NSSE reports student participation in six HIPs: three for both first-year students and seniors, and three for seniors only.

| High-Impact Practices | First Year | Senior | |
|--|------------|--------|--|
| Learning Community Participate in a learning community or some other formal program where groups of students take two or more classes together ^a | ~ | ✓ | |
| Service-Learning About how many of your courses at this institution have included a community-based project (service-learning?) ^b | ~ | ✓ | |
| Research with Faculty Work with a faculty member on a research project ^a | ✓ | ✓ | |
| Internship or Field Experience Participate in an internship, co-op, field experience, student teaching, or clinical placement ^a | | ✓ | |
| Study Abroad Participate in a study abroad program ^a | | ✓ | |
| Culminating Senior Experience Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) ^a | | ✓ | |

a. Stem question: "Which of the following have you done or do you plan to do before you graduate?"

b. Response options: "All," "Most," "Some," and "None"

Resources Available Online

To support efforts to improve undergraduate education, NSSE provides multiple tools and resources—including those listed below—to participating institutions and others interested in utilizing engagement data.



Lessons from the Field

This three-volume repository highlights examples of how institutions are using NSSE data to enhance undergraduate teaching and learning. Volume 3, released in August 2015, showcases institutions' varied uses of NSSE's updated version (introduced in 2013), including the new and revised measures and redesigned reports.

All volumes of Lessons from the Field can be downloaded from the NSSE website:

nsse.indiana.edu/links/lessons

A searchable database featuring examples of how colleges and universities have used NSSE, FSSE, and BCSSE data is also available:

nsse.indiana.edu/links/data use

NSSE Data User's Guide

This ready-to-use resource assists campus leaders in sharing results and facilitating workshops, presentations, and discussions about their findings. The guide includes worksheets and exercises to identify priorities for action and to generate productive, campuswide conversations among stakeholders about using data for improvement.

nsse.indiana.edu/html/data_users_guide.cfm

NSSE Item Campuswide Mapping

This tool connects NSSE items to institution departments, units, committees, functional areas, and interest groups, and encourages institutions to think more broadly about how engagement data can be shared and used campuswide.

nsse.indiana.edu/links/item_mapping

Summary Tables

Annual survey responses as well as Engagement Indicator and High-Impact Practice scores are available by Carnegie classification, sex, and related-major category:

nsse.indiana.edu/links/summary_tables

NSSE Report Builder

This interactive tool displays NSSE results by user-selected student and institutional characteristics. Two versions are available:

- The Public Version is for media, institutions, researchers, and others interested in unidentified, aggregated results.
- The Institution Version is for participating institutions to create tailored reports using their own NSSE data.

nsse.indiana.edu/html/report_builder.cfm

Psychometric Portfolio

Studies of validity, reliability, and other indicators of quality of NSSE data-including breakdowns by a variety of student and institutional characteristics-are detailed in this resource.

nsse.indiana.edu/links/psychometric_portfolio

Webinars

Live webinars are offered for faculty, administrators, institutional researchers, and student affairs professionals, and all are recorded and available in NSSE's webinar archives. Topics include tips for data use and sharing, interpreting results, ideas for a successful survey administration, trends in engagement research, and much more.

nsse.indiana.edu/webinars

Publications and Presentations

NSSE staff actively conduct and present scholarly research on students, faculty, and institutional quality. One example is the chapter by McCormick, Kinzie, and Gonyea, "Student Engagement: Bridging Research and Practice to Improve the Quality of Undergraduate Education," in Higher Education: Handbook of Theory and Research, Vol. 28 (2013, Springer).

For a full list of NSSE-related research articles, book chapters, conference presentations, and other works, visit the searchable database:

nsse.indiana.edu/html/pubs.cfm

References

Dweck, C. S. (2006). Mindset: The new psychology of success. New York, NY: Random House.

- Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A world from two perspectives. *Psychological Inquiry,* 6, 267–285.
- Marken, S., Gray, L., & Lewis, L. (2013). Dual enrollment programs and courses for high school students at postsecondary institutions: 2010–11 (NCES 2013-002). Washington, DC: National Center for Education Statistics. Retrieved October 4, 2016, from http://nces.ed.gov/pubsearch
- National Survey of Student Engagement. (n.d.) Contextualizing effect sizes: Empirical analysis and interpretation of benchmark comparisons. Bloomington, IN: Indiana University Center for Postsecondary Research. Retrieved October 4, 2016, from http://nsse.indiana.edu/pdf/effect_size_guide.pdf
- Rhodes, T. L. & Finley, A. (2013). Using the VALUE rubrics for improvement of learning and authentic assessment. Washington, DC: Association of American Colleges and Universities.
- Rocconi, L. M. & Gonyea, R. M. (2015, May). Contextualizing student engagement effect sizes: An empirical analysis. Paper presented at the annual forum of the Association for Institutional Research, Denver, CO.
- Sanford, N. (Ed.) (1962). The American college: A psychological and social interpretation of the higher learning. New York, NY: Wiley.
- Tobolowsky, B. F. & Allen, T. O. (2016). On the fast track: Understanding the opportunities and challenges of dual credit (ASHE Higher Education Report, Vol. 42, No. 3). San Francisco, CA: Jossey-Bass.
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. (2005). Challenging and supporting the first-year student: A handbook for improving the first year of college. San Francisco, CA: Jossey-Bass.

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