

To represent the multiple dimensions of student engagement, NSSE reports on 10 Engagement Indicators calculated from 47 core NSSE items. The indicators are grouped within four themes (adapted from the former NSSE Benchmarks). Additionally, in a separate report, NSSE provides results on six High-Impact Practices, aptly named for their positive associations with student learning and retention.

## Engagement Indicators

Engagement Indicators (EIs) provide valuable information about distinct aspects of student engagement by summarizing students' responses to sets of related survey questions. (Component items are listed on the next page.)

Theme	Engagement Indicators
<i>Academic Challenge</i>	Higher-Order Learning
	Reflective & Integrative Learning
	Learning Strategies
<i>Learning with Peers</i>	Quantitative Reasoning
	Collaborative Learning
	Discussions with Diverse Others
<i>Experiences with Faculty</i>	Student-Faculty Interaction
	Effective Teaching Practices
<i>Campus Environment</i>	Quality of Interactions
	Supportive Environment

The EIs 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 EI provides valuable, concise, actionable information about a distinct aspect of student engagement.

### Scoring EIs

In the *Engagement Indicators* report, each EI is expressed on a 60-point scale. Component items are converted to a 60-point scale (e.g., Never=0, Sometimes=20, Often=40, and Very often=60), then averaged together to compute student-level scores. Institutional EI scores are the weighted averages of student-level scores for each class level. Student-level EI scores are provided to participating institutions in their NSSE data file.

## 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 reports student participation in six HIPs: three for both first-year students and seniors, and three for seniors only (see below).

High-Impact Practices	First-Year	Senior
Learning community	✓	✓
Service-learning	✓	✓
Research with faculty	✓	✓
Internship or field experience		✓
Study abroad		✓
Culminating senior experience		✓

Note: Survey wording is on the next page.

### Scoring HIPs

For each HIP except service-learning, participation is reported as the percentage of students who responded “Done or in progress.” For service-learning, it is the percentage of students for whom at least “Some” courses included a community-based project. Thus, a HIP score of 26 means that 26% of respondents participated in the activity.

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. The *High-Impact Practices* report summarizes student participation in “1” or “2 or more” HIPs for first-year and senior students and disaggregates results by student and enrollment characteristics.

## Engagement Indicators and Items

### 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

#### 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 real-world problem or issue (unemployment, climate change, public health, etc.)
- Evaluated what others have concluded from numerical information

### 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

### 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

### 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.)

#### 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 Practice Items

*Which of the following have you done or do you plan to do before you graduate?*

- Participate in a learning community or some other formal program where groups of students take two or more classes together
- Participate in an internship, co-op, field experience, student teaching, or clinical placement

- Participate in a study abroad program
- Work with a faculty member on a research project
- Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

*About how many of your courses at this institution have included a community-based project (service-learning)?*

# High-Impact Educational Practices



## First-Year Seminars and Experiences

Many schools now build into the curriculum first-year seminars or other programs that bring small groups of students together with faculty or staff on a regular basis. The highest-quality first-year experiences place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students' intellectual and practical competencies. First-year seminars can also involve students with cutting-edge questions in scholarship and with faculty members' own research.

## Common Intellectual Experiences

The older idea of a "core" curriculum has evolved into a variety of modern forms, such as a set of required common courses or a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community (see below). These programs often combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and cocurricular options for students.

## Learning Communities

The key goals for learning communities are to encourage integration of learning across courses and to involve students with "big questions" that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link "liberal arts" and "professional courses"; others feature service learning.

## Writing-Intensive Courses

These courses emphasize writing at all levels of instruction and across the curriculum, including final-year projects. Students are encouraged to produce and revise various forms of writing for different audiences in different disciplines. The effectiveness of this repeated practice "across the curriculum" has led to parallel efforts in such areas as quantitative reasoning, oral communication, information literacy, and, on some campuses, ethical inquiry.

## Collaborative Assignments and Projects

Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one's own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.

## Undergraduate Research

Many colleges and universities are now providing research experiences for students in all disciplines. Undergraduate research, however, has been most prominently used in science disciplines. With strong support from the National Science Foundation and the research community, scientists are reshaping their courses to connect key concepts and questions with students' early and active involvement in systematic investigation and research. The goal is to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions.

## Diversity/Global Learning

Many colleges and universities now emphasize courses and programs that help students explore cultures, life experiences, and worldviews different from their own. These studies—which may address U.S. diversity, world cultures, or both—often explore "difficult differences" such as racial, ethnic, and gender inequality, or continuing struggles around the globe for human rights, freedom, and power. Frequently, intercultural studies are augmented by experiential learning in the community and/or by study abroad.

## Service Learning, Community-Based Learning

In these programs, field-based "experiential learning" with community partners is an instructional strategy—and often a required part of the course. The idea is to give students direct experience with issues they are studying in the curriculum and with ongoing efforts to analyze and solve problems in the community. A key element in these programs is the opportunity students have to both *apply* what they are learning in real-world settings and *reflect* in a classroom setting on their service experiences. These programs model the idea that giving something back to the community is an important college outcome, and that working with community partners is good preparation for citizenship, work, and life.

## Internships

Internships are another increasingly common form of experiential learning. The idea is to provide students with direct experience in a work setting—usually related to their career interests—and to give them the benefit of supervision and coaching from professionals in the field. If the internship is taken for course credit, students complete a project or paper that is approved by a faculty member.

## Capstone Courses and Projects

Whether they're called "senior capstones" or some other name, these culminating experiences require students nearing the end of their college years to create a project of some sort that integrates and applies what they've learned. The project might be a research paper, a performance, a portfolio of "best work," or an exhibit of artwork. Capstones are offered both in departmental programs and, increasingly, in general education as well.



Table 1

**Relationships between Selected High-Impact Activities, Deep Learning, and Self-Reported Gains**

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++	+	+	++
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	+++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

Table 2

**Relationships between Selected High-Impact Activities and Clusters of Effective Educational Practices**

	Level of Academic Challenge	Active and Collaborative Learning	Student-Faculty Interaction	Supportive Campus Environment
<i>First-Year</i>				
Learning Communities	+++	+++	+++	++
Service Learning	+++	+++	+++	+++
<i>Senior</i>				
Study Abroad	++	++	++	++
Student-Faculty Research	+++	+++	+++	++
Internships	++	+++	+++	++
Service Learning	+++	+++	+++	+++
Senior Culminating Experience	++	+++	+++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

Source: *Ensuring Quality & Taking High-Impact Practices to Scale* by George D. Kuh and Ken O'Donnell, with Case Studies by Sally Reed. (Washington, DC: AAC&U, 2013). For information and more resources and research from LEAP, see [www.aacu.org/leap](http://www.aacu.org/leap).