



Student Engagement & Information Literacy

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Overview

- What is student engagement?
- The Experiences with Information Literacy Module
- Research using the module
- Additional resources



What is student engagement?

It represents two critical features of collegiate quality:

1. The amount of time and effort students put into their studies and other educationally purposeful activities.
2. How the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning.

Current understanding articulated by Kuh and colleagues (1991). It is informed by:

- Pace's (1984) quality of student effort concept
- Astin's (1984) student involvement theory
- Kuh et al.'s research on the benefits of out of class activities
- Chickering and Gamson's (1987) seven principles for good practice in undergraduate education

National Survey of Student Engagement (NSSE)

- Collects data at about first-year and senior students' participation in programs and activities that institutions provide for their learning and personal development.
- 1600+ institutions have participated since 2000
- Community College Survey of Student Engagement (CCSSE)



National Survey of Student Engagement The College Student Report

This is a facsimile of the 2013 NSSE survey (available at nsse.iub.edu/links/surveys). The survey itself will be administered online.

1 During the current school year, about how often have you done the following? Mark your answers in the boxes. Examples: or

	Very often ▼	Often ▼	Some- times ▼	Never ▼
a. Asked questions or contributed to course discussions in other ways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Prepared two or more drafts of a paper or assignment before turning it in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Come to class without completing readings or assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Attended an art exhibit, play or other arts performance (dance, music, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Asked another student to help you understand course material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Explained course material to one or more students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Prepared for exams by discussing or working through course material with other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Worked with other students on course projects or assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Gave a course presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Combined ideas from different courses when completing assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Connected your learning to societal problems or issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Examined the strengths and weaknesses of your own views on a topic or issue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Learned something that changed the way you understand an issue or concept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Connected ideas from your courses to your prior experiences and knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Talked about career plans with a faculty member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Discussed course topics, ideas, or concepts with a faculty member outside of class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Discussed your academic performance with a faculty member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

	Very much ▼	Quite a bit ▼	Some ▼	Very little ▼
a. Memorizing course material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Applying facts, theories, or methods to practical problems or new situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Evaluating a point of view, decision, or information source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Forming a new idea or understanding from various pieces of information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

	Very much ▼	Quite a bit ▼	Some ▼	Very little ▼
a. Clearly explained course goals and requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Taught course sessions in an organized way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Used examples or illustrations to explain difficult points	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Provided feedback on a draft or work in progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Provided prompt and detailed feedback on tests or completed assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4 During the current school year, about how often have you done the following?

	Very often ▼	Often ▼	Some- times ▼	Never ▼
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Evaluated what others have concluded from numerical information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NSSE Content

Academic Challenge

- Higher-Order Learning
- Reflective & Integrative Learning
- Learning Strategies
- Quantitative Reasoning

Learning with Peers

- Collaborative Learning
- Discussions with Diverse Others

Experiences with Faculty

- Student-Faculty Interaction
- Effective Teaching Practices

Campus Environment

- Quality of Interactions
- Supportive Environment

High-Impact Practices

- Learning community
- Service-learning
- Research with faculty
- Internships
- Study abroad
- Culminating senior experience

Evidence for the Importance of Engagement

Wabash National Study of Liberal Arts Education

Engagement results are good proxy measures for growth in important educational outcomes such as

- ✓ critical thinking,
- ✓ moral reasoning,
- ✓ intercultural effectiveness,
- ✓ personal well-being, and a
- ✓ positive orientation toward literacy activities.

Evidence for the Importance of Engagement

“Connecting the Dots” Study

- Engagement significantly and positively affects *grades* and *persistence*, after holding constant pre-college skills, financial aid/need, socio-economic status, race/ethnicity, etc.
- The relationship between engagement and these outcomes is *stronger* for students with lower skills when entering college and historically underrepresented groups

Experiences with Information Literacy Module



The NSSE Modules

- Academic Advising
- Civic Engagement
- Development of Transferable Skills
- Experiences with Writing
- *Experiences with Information Literacy*
- First-Year Experiences and Senior Transitions
- Global Learning
- Inclusiveness and Engagement with Cultural Diversity
- Learning with Technology

Go here for more details: <http://nsse.indiana.edu/html/modules.cfm>

A little background...

NSSE was approached by instructional librarians hoping to add more information literacy content on NSSE.

Informal NSSE-librarian working group (led by Carrie Donovan [Ferris State University] and myself, 18 other members) created the module

Pilot-tested in 2013

Added as an official NSSE module in 2014

208 schools have administered the module since 2014

About 175,00 students have responded to the module

The Questions...

1. During the current school year, about how often have you done the following?

	<i>Very often</i>	<i>Often</i>	<i>Sometimes</i>	<i>Never</i>
a. Completed an assignment that used an information source (book, article, website, etc.) other than required course readings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Worked on a paper or project that had multiple smaller assignments such as an outline, annotated bibliography, rough draft, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Received feedback from an instructor that improved your use of information resources (source selection, proper citation, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Completed an assignment that used the library's electronic collection of articles, books, and journals (JSTOR, EBSCO, LexisNexis, ProQuest, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Decided not to use an information source in a course assignment due to its questionable quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Changed the focus of a paper or project based on information you found while researching the topic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Looked for a reference that was cited in something you read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Identified how a book, article, or creative work has contributed to a field of study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Questions...

2. During the current school year, how much have your instructors emphasized the following?

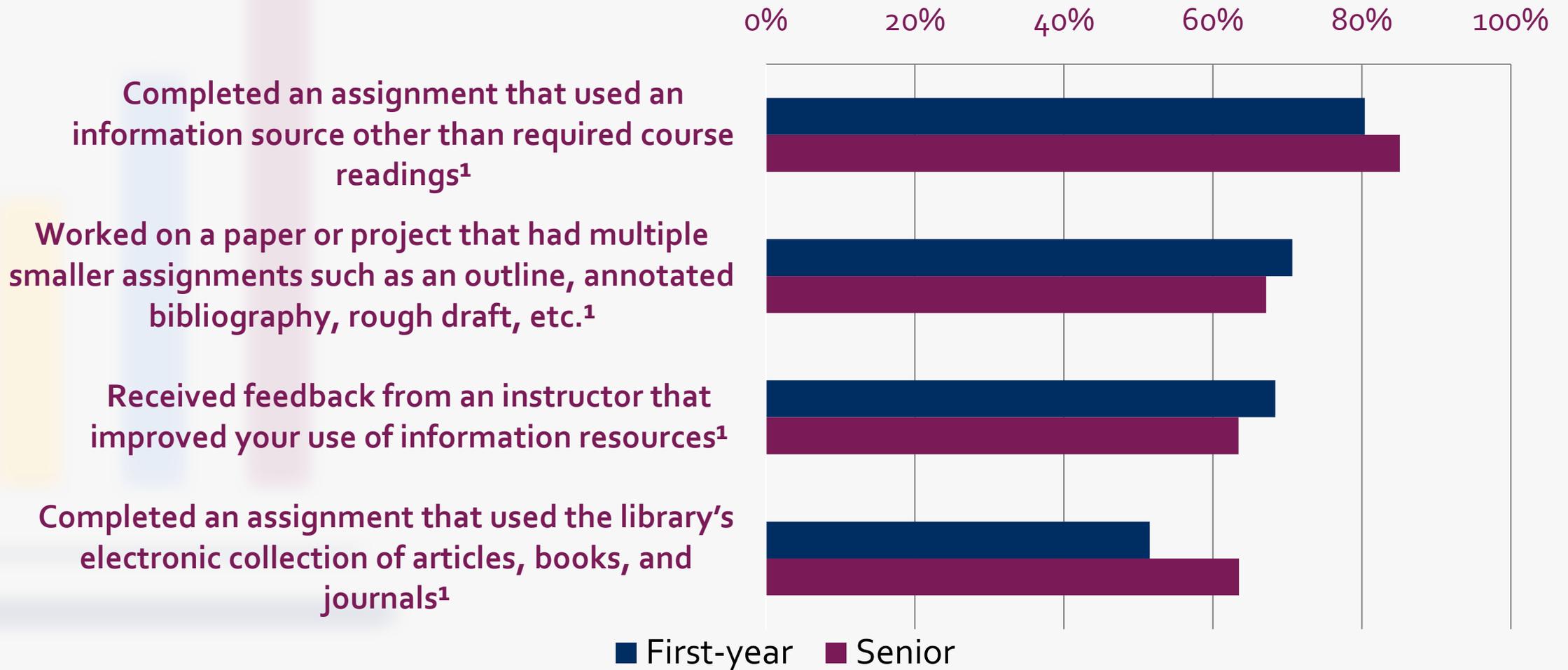
- a. Not plagiarizing another author's work
- b. Appropriately citing the sources used in a paper or project
- c. Using scholarly or peer-reviewed sources in your course assignments
- d. Questioning the quality of information sources
- e. Using practices (terminology, methods, writing style, etc.) of a specific major or field of study

<i>Very much</i>	<i>Quite a bit</i>	<i>Some</i>	<i>Very little</i>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How much has your experience at this institution contributed to your knowledge, skills, and personal development in using information effectively?

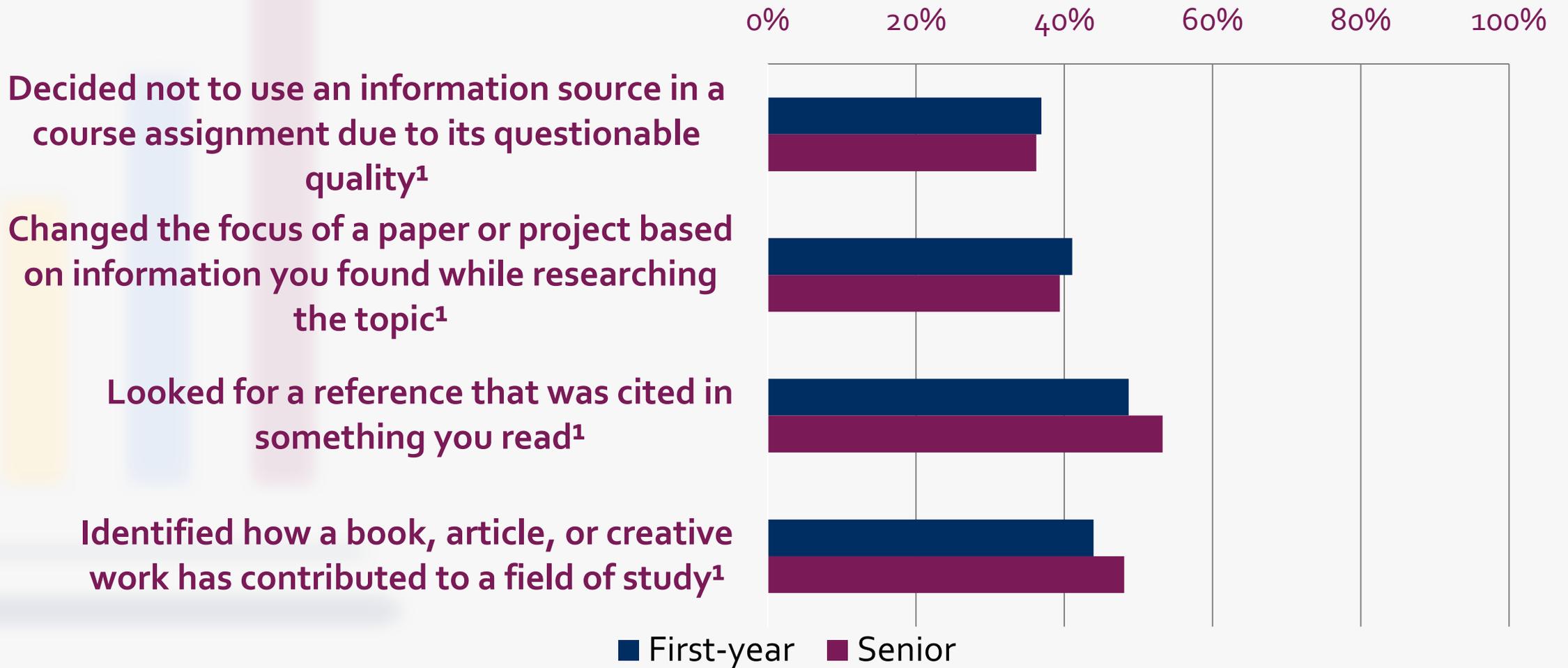
<i>Very much</i>	<i>Quite a bit</i>	<i>Some</i>	<i>Very little</i>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Information Use



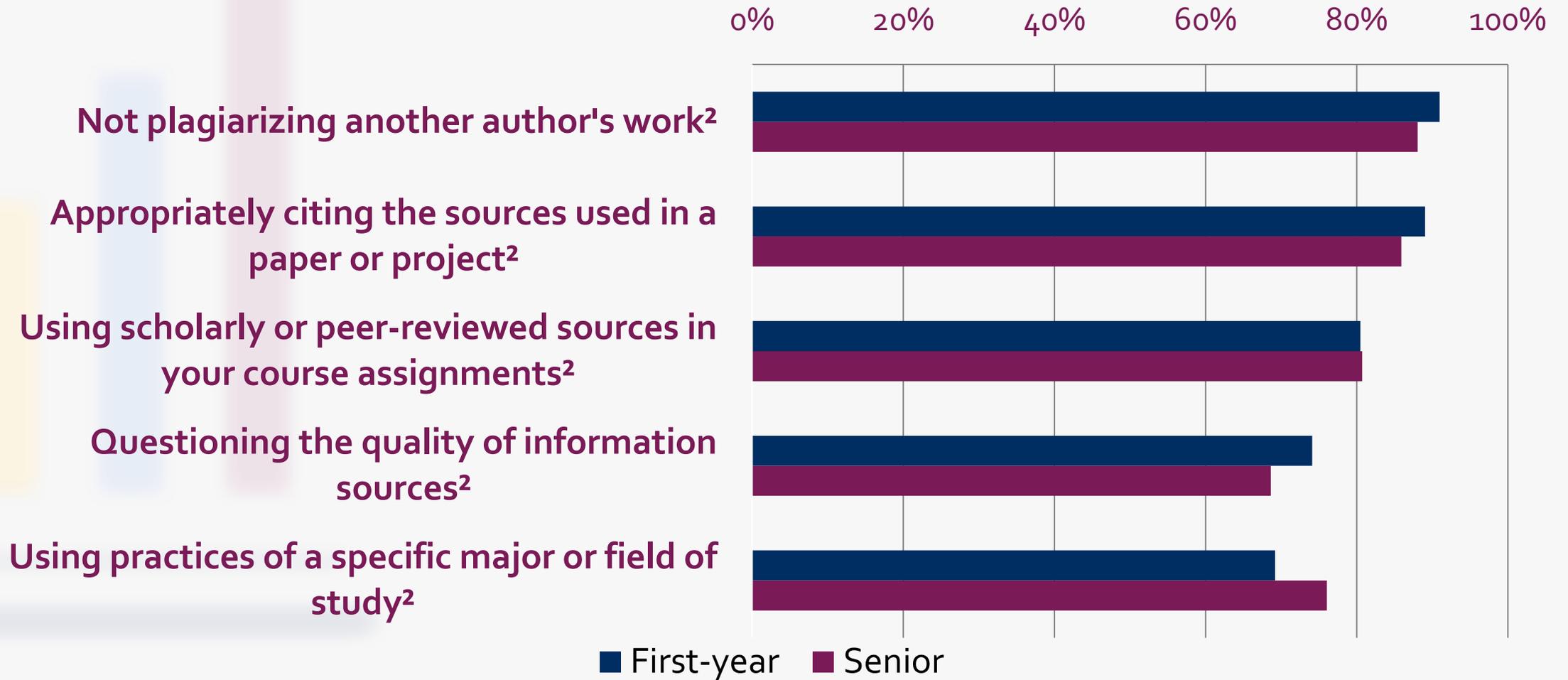
¹ "Often" or "Very Often"

Information Evaluation



¹ "Often" or "Very Often"

Instructors' Emphasis



² "Quite a Bit" or "Very Much"

A Quick Summary

Positive

Faculty role

- Plagiarism
- Emphasized the use of scholarly resources
- Emphasized questioning the quality of resources
- Modelled information seeking and use process
- Provided feedback on information use

Negative

Students' critical use of information

- Most did not reject a source due to its quality
- Most did not revise the focus of a paper
- Most did not look for a source cited in something they read

Research using the module



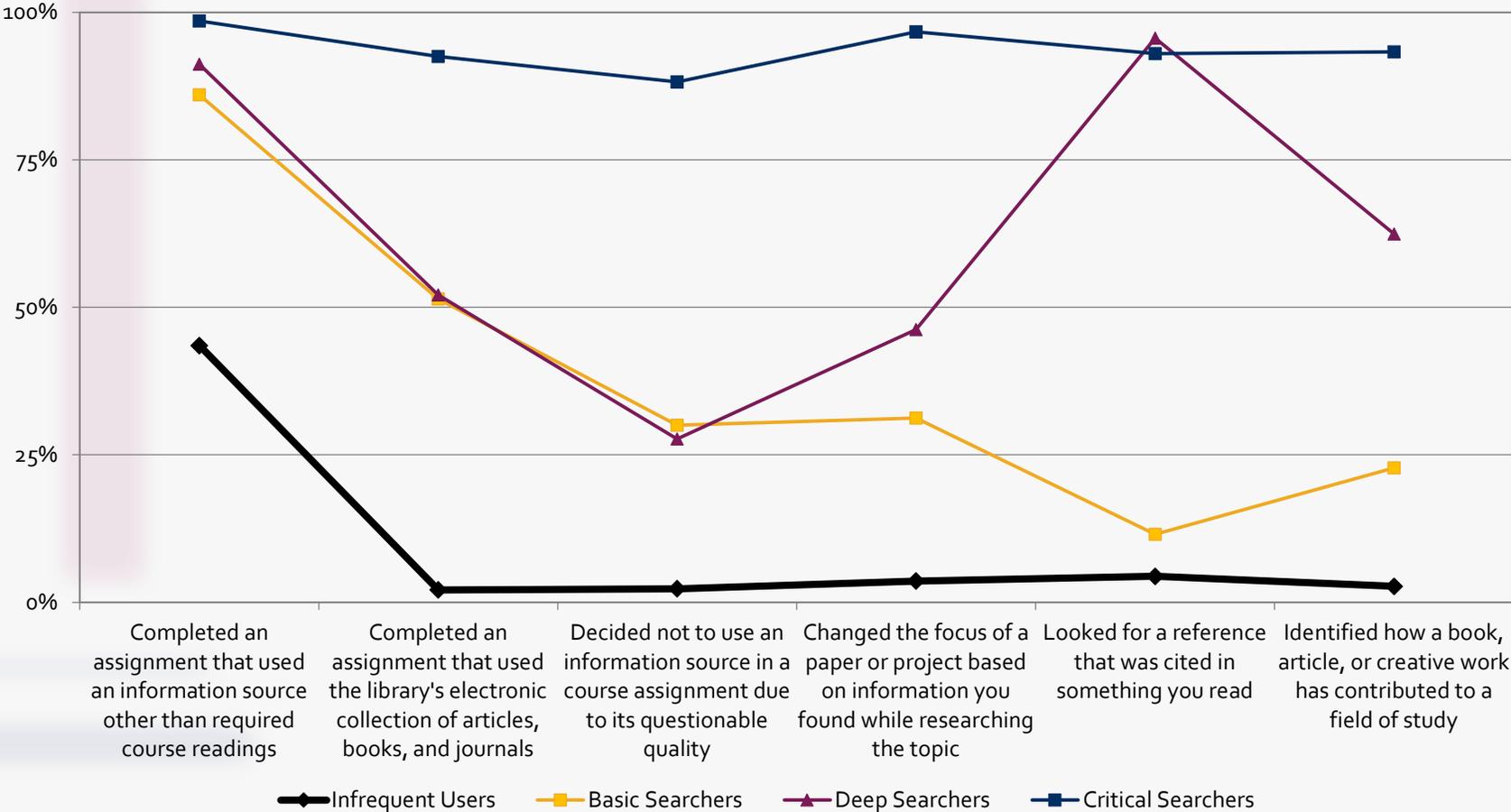
Role of Information Engagement in Senior Outcomes

	Higher-Order Learning		Reflective & Integrative Learning		Perceived Gains	
	Est.	Sig.	Est.	Sig.	Est.	Sig.
Information Use	0.21	***	0.15	***	0.22	***
Information Evaluation	0.13	***	0.24	***	0.19	***
Instructors' Emphasis	0.19	***	0.12	***	0.24	***
R ² change	.16		.12		.25	
Final R ²	.20		.21		.29	

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

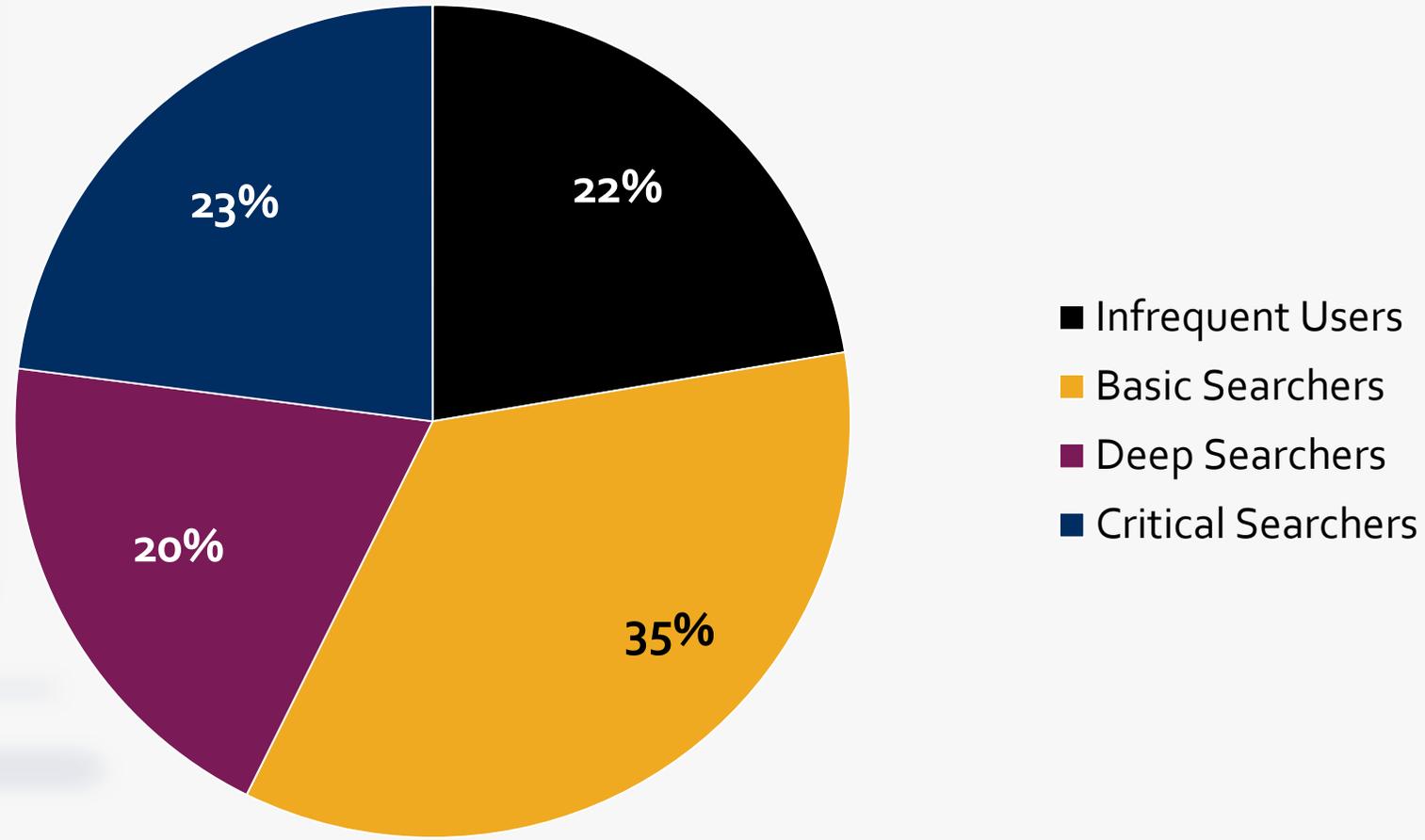
Note: All variables shown standardized with mean of 0 & SD of 1. Models control for both student background characteristics and institutional fixed-effects.

Styles of Information Engagement



Percentage of students who responded "often" or "very often"

% of First-Year Students in Each Group



First-Year Students Need Help

- Most first-year students use information, but many fail to do so effectively and/or critically
- Students information literacy instructional needs vary widely

Solutions

- Collaboration with K-12 librarians/teachers
- Information literacy instruction embedded within first-year curriculum (writing requirements, first-year seminars, etc.)

Don't Assume Who is in Each Group

The ONLY student characteristic significantly associated with group membership was race/ethnicity.

African Americans were more likely to be critical searchers.

Institutional Ideas for Module Results

- Use results as a baseline to assess influence of curriculum changes
- Use module results to inform information literacy programming/offerings
- Link module and administrative data to assess impacts of librarian instructional sessions
- Identify majors/fields with lower than average information literacy activities



Additional Resources

- Fosnacht, K. (2014). Information literacy and NSSE: Introducing the experiences with information literacy module. *College & Research Libraries News*, 75, 490-500.
- Fosnacht, K. (2015). Information Use during the First College Year: Findings from the NSSE Experiences with Information Literacy Module. In D. M. Mueller (Ed.) *Creating sustainable community: The Proceedings of the ACRL 2015 Conference*. Paper presented at the ACRL 2015 Conference, Portland, OR, March 25-28 (pp. 346-355). Chicago: Association of College and Research Libraries.
- Fosnacht, K. (2017). Information literacy's influence on undergraduates' learning and development: Results from a large multi-institutional study. In D. M. Mueller (Ed.) *At the helm: Leading transformation – The Proceedings of the ACRL 2017 Conference*. Paper presented at the ACRL 2017 Conference, Baltimore, MD, March 22-25 (pp. 348-360). Chicago: Association of College and Research Libraries.
- National Survey of Student Engagement. (2017). *Summary tables*. Retrieved from http://nsse.indiana.edu/html/summary_tables.cfm

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