

Digging Deeper into Institutional Data:

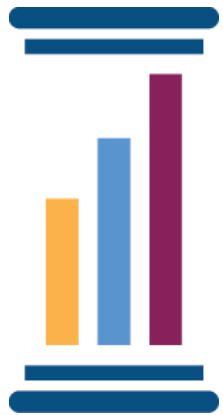
Using Reports and Tools from NSSE and FSSE to Explore Disciplinary Differences



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Today's Agenda

- Introduction to NSSE and FSSE
- Session Purpose
- Grand Frequencies from NSSE and FSSE
- NSSE Major Field Reports (Between and Within)
- FSSE Topical Findings
- FSSE Report Generator



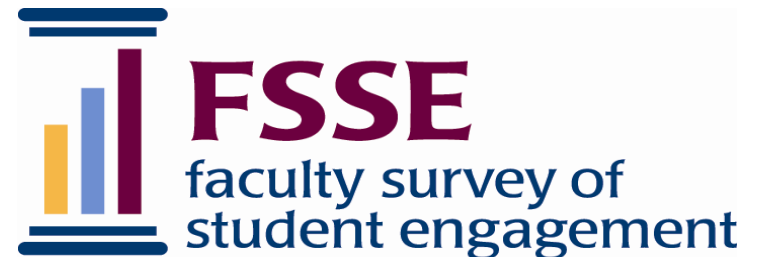
What's NSSE?

- **National Survey of Student Engagement**
 - Annual spring survey to FYS and SRs
 - Hundreds of institutions participate each year
 - Assesses exposure to and participation in effective educational practices
- **Goal:** To query undergraduates directly about their educational experiences



What's FSSE?

- **Faculty Survey of Student Engagement**
 - Annual spring survey of faculty members
 - ~150 institutions participate each year
 - Assesses faculty perceptions and encouragement of student engagement
- **Goal:** To provide information about the faculty role in improving undergraduate education



Session's Purpose

Show examples of how data in NSSE & FSSE reports and tools can be combined to:

- **Develop a contextual picture of student engagement on your campus**
- **Guide campus discussions about disciplinary differences**
- **Better contextualize the undergraduate experience at your institution**

Examine the Grand Frequencies

NSSE/FSSE Grand Frequency Reports

- **Organized by Carnegie Classification**
 - Allows comparison of item-level responses from students or faculty at your institution to those at similar institutions
- **NSSE also offers**
 - grand means
 - reports by gender and by major



FSSE Grand Frequency

Frequency Distributions (Typical-Student)



FSSE 2010 Frequency Distributions All Doctoral/Research University

Faculty who teach First-year students	Faculty who teach Seniors	Faculty Total
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Please respond to the following questions based on the typical students you have taught during this academic year.

About how often has the typical student done each of the following?

	<i>Variable</i>	<i>Response Options</i>	<i>Count</i>	<i>Col %</i>	<i>Count</i>	<i>Col %</i>	<i>Count</i>	<i>Col %</i>
a. Asked questions in class or contributed to class discussions	TCLQUEST	Never	1	1%	2	1%	3	1%
		Sometimes	47	56%	24	17%	71	31%
		Often	25	30%	67	47%	92	41%
		Very Often	11	13%	50	35%	61	27%
		Total	84	100%	143	100%	227	100%
b. Made a class presentation	TCLPRSNT	Never	28	33%	20	14%	48	21%
		Sometimes	32	38%	46	32%	78	34%
		Often	21	25%	36	25%	57	25%
		Very Often	4	5%	41	29%	45	20%
		Total	85	100%	143	100%	228	100%
c. Prepared two or more drafts of a paper or assignment before turning it in	TREWROPA	Never	31	37%	33	23%	64	28%
		Sometimes	28	34%	58	41%	86	38%
		Often	18	22%	29	20%	47	21%
		Very Often	6	7%	22	15%	28	12%
		Total	83	100%	142	100%	225	100%

- Presents faculty responses by institutional type
- Additional analyses: compare to institution-specific FSSE frequencies

NSSE Grand Frequency

Frequency Distributions (NSSE)



NSSE 2010 Grand Frequencies^a Frequency Distributions by Carnegie Classification FIRST-YEAR STUDENTS

	Variable	Response Options	RU/VH		RU/H		DRU		Master's L		Master's M		Master's S		Bac/A&S	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
1a. Asked questions in class or contributed to class discussions	CLQUEST (ACL)	Never	1,032	5%	1,283	5%	254	3%	1,248	3%	388	3%	114	2%	247	1%
		Sometimes	9,494	44%	11,177	40%	3,281	31%	14,781	35%	5,440	33%	2,004	30%	5,740	28%
		Often	6,995	32%	8,991	33%	3,557	34%	15,134	36%	5,754	35%	2,425	36%	7,508	37%
		Very often	4,273	19%	5,762	22%	3,322	32%	11,163	26%	4,602	29%	2,084	33%	7,083	34%
		Total	21,794	100%	27,213	100%	10,414	100%	42,326	100%	16,184	100%	6,627	100%	20,578	100%
1b. Made a class presentation	CLPRESEN (ACL)	Never	4,062	19%	5,066	19%	1,167	11%	5,215	13%	1,827	12%	552	9%	1,730	9%
		Sometimes	12,168	55%	14,944	54%	5,132	49%	21,727	50%	8,185	49%	3,356	50%	11,597	53%
		Often	4,330	20%	5,527	20%	3,000	29%	11,642	28%	4,636	29%	2,062	30%	5,724	28%
		Very often	1,184	5%	1,691	6%	1,116	11%	3,780	9%	1,564	11%	658	11%	1,519	8%
		Total	21,744	100%	27,228	100%	10,415	100%	42,364	100%	16,212	100%	6,628	100%	20,570	100%
1c. Prepared two or more drafts of a paper or assignment before turning it in	REWROPAP	Never	4,099	19%	3,972	15%	1,231	12%	4,445	11%	1,976	11%	722	10%	2,344	11%
		Sometimes	7,293	34%	8,201	30%	2,920	28%	12,162	29%	4,798	28%	2,102	30%	6,672	32%
		Often	6,379	30%	8,757	32%	3,401	32%	14,262	34%	5,260	33%	2,124	33%	6,679	33%
		Very often	3,906	18%	6,184	23%	2,850	27%	11,341	27%	4,105	27%	1,663	27%	4,816	24%
		Total	21,677	100%	27,114	100%	10,402	100%	42,210	100%	16,139	100%	6,611	100%	20,511	100%

- Presents student responses by institutional type
- Include all Carnegie types in one report

Working with Grand Frequency Reports

Sample Questions to Ask:

- What are the differences in faculty perceptions of student behavior and what students report?
- How do faculty responses vary based on the types of students they teach? Which (LD/UD) is closer to the student reports of their own behavior?
- Is there anything surprising about this? Should either of these be better aligned with student responses?

Questions based on additional analyses:

- How do faculty and students at my institution compare to those at other similarly-sized institutions? Is there anything surprising about this?
- How do the faculty responses change when separated by discipline?

Examine the NSSE Major Field Reports

NSSE Major Field Reports:

- Group student responses by major to show differences:
 - BETWEEN your institution and your selected comparison institutions
 - WITHIN your institution
- Can be used with FSSE data showing disciplinary differences between faculty at your institution



Sample NSSE Report

Major Field Report (Between)

reading, writing, doing
homework or lab work,
analyzing data, rehearsing,
and other academic activities)

(LAC)

1-5 hr/wk
6-10 hr/wk
11-15 hr/wk
16-20 hr/wk
21-25 hr/wk
26-30 hr/wk
30+ hr/wk

First-Year Students

	NSSEville State		Mid East Public		Carnegie Class		NSSE 2010	
	Count	%	Count	%	Count	%	Count	%
	1	1%	2	0%	15	0%	55	0%
	12	11%	130	16%	629	15%	2,185	12%
	28	26%	190	24%	1,025	25%	4,071	23%
	28	26%	169	21%	910	22%	3,864	22%
	17	16%	149	19%	691	17%	3,264	19%
	10	9%	86	11%	422	10%	2,021	11%
	8	8%	33	4%	225	5%	1,117	6%
	2	2%	38	5%	189	5%	1,031	6%
Total	106	100%	797	100%	4,106	100%	17,608	100%

- Shows variations *between* institutions
- Displays student responses against those from students within an institution's comparison groups
- Responses are separated by first-year and senior students
- Separate reports for each disciplinary area

Sample NSSE Report

Major Field Report (Within)

Frequency Distributions: First-Year Students

	Variable	Response Options	Arts and Humanities		Biological Sciences		Business		Education		Engineering		Physical Sciences		Professional	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
9a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	ACADPR01 (LAC)	0 hr/wk	1	1%	1	1%	0	0%	0	0%	0	0%	1	2%	0	0%
		1-5 hr/wk	12	11%	6	4%	12	10%	3	7%	4	9%	5	11%		
		6-10 hr/wk	28	26%	43	27%	35	30%	9	21%	17	38%	10	23%		
		11-15 hr/wk	28	26%	32	20%	37	32%	14	33%	11	24%	10	23%		
		16-20 hr/wk	17	16%	36	23%	15	13%	8	19%	6	13%	11	25%		
		21-25 hr/wk	10	9%	19	12%	8	7%	7	16%	3	7%	3	7%		
		26-30 hr/wk	8	8%	12	8%	4	3%	0	0%	0	0%	3	7%		
		30+ hr/wk	2	2%	8	5%	5	4%	2	5%	3	7%	2	5%		
Total			106	100%	157	100%	116	100%	43	100%	45	100%	44	100%		

- Shows variation *within* an institution
- Displays student responses to an item across majors/disciplines
- Separate report for first-year and senior students

Working with Major Field Reports

Sample Questions to Ask:

- Is there a pattern in student responses across all comparison groups?
- How do our students compare to those in your comparison groups? In the overall NSSE sample? [Between]
- Are there any major disciplinary differences in how your (first-year or senior) students responded to this question? [Within]
- Is this what you expect to see?
- Where is there opportunity for dialogue or improvement?

Use the FSSE Topical Findings

FSSE Home > FSSE Findings > Topical Findings

FSSE faculty survey of student engagement

ABOUT FSSE | **FSSE FINDINGS** | ADMINISTERING FSSE | TOOLS & SERVICES

Topical Findings

To encourage participating institutions to showcase their FSSE findings, a list of sample analyses accompanied by an explanation of the selected results are featured below. Findings come from the population of institutions that participate in a FSSE administration year and can be used to contextualize faculty practices and perceptions on individual campuses. FSSE data users can recreate each illustration by downloading the SPSS syntax associated with each survey option.

Many of the featured findings are based on survey items that were only asked during a particular FSSE administration, this is why some findings only feature results from one year.

Faculty Time
Research, Teaching and Other Professional Activities (Findings from 2010, 2009, 2008, 2007, and 2006)

Teaching Practices
Class time allocated to teaching activities (Findings from 2010, 2009, 2008, 2007, and 2006)
Faculty Participation in Professional Development (Findings from 2008)

Comparing NSSE-FSSE Results
Expectations: Hours per week students spend preparing for class (Findings from 2009, 2008, and 2007)
Perceptions: Supportive Campus Environments (Findings from 2009, 2008, and 2007)
Classroom Practices: Student participation in selected learning tasks (Findings from 2009, 2008, and 2007)



2010 FSSE and NSSE Results: Comparing faculty and student expectations for time spent preparing for class

SPSS Syntax: Course-Based Data
SPSS Syntax: Typical-Student Data

Each version of the FSSE survey captures faculty responses regarding the amount of time students are expected to spend preparing for class, and the amount of time faculty believe students actually dedicate to this task. However, the questions are worded differently from the Course-Based to the Typical-Student version. The ways in which the questions are asked of faculty respondents, and the steps taken to align the faculty responses from each survey option with the student responses to NSSE, are described below.

COURSE-BASED

The Course-Based version of the FSSE survey asks faculty members how much time students are expected to spend preparing for their selected course and how much time students actually report spending preparing for class. Similarly, the NSSE survey asks students to report how many hours per week they spend preparing for class. To compare student and faculty responses, student-reported means are converted from weekly to per class averages by dividing the total hours per week by four which represents the typical course load for full-time students.

In general, results from NSSE and the Course-Based version of FSSE reveal a considerable gap in the amount of time faculty members expect students to spend and how much time students actually report spending preparing for class. Results suggest faculty expect students to study about six hours per week for a single class, but students report actually studying a little less than four hours per week per class. Although faculty members have higher expectations, their estimation of the actual time students spend preparing for class (3.2 hours) closely resembles students' self-reported data (3.7 hours).

Faculty expectations and estimates, as well as student self-reports, also vary by disciplinary area. For example, faculty members in the physical sciences expect more per class study time than faculty in any other discipline. Also, while most faculty tend to closely estimate students' preparation for class, biological science faculty underestimate study time by more than an hour per week.

Table 1: Average hours per week students spend preparing for class by academic discipline (NSSE and Course-Based FSSE)

	Faculty Expectations	Faculty Beliefs	Student-Reported ^a
General academic discipline ^{a,b}			
Physical science	6.7	3.5	4.2
Engineering	6.4	4.1	4.4
Biological science	6.4	2.9	4.2
Professional	6.1	3.4	4.1
Arts & Humanities	5.8	3.1	3.9
Business	5.8	3.1	3.4
Social science	5.7	2.8	3.5
Other	5.5	3.1	3.4
Education	4.9	3.2	3.6
Undecided	--	--	3.3
Total	5.9	3.2	3.7

^aGeneral area of faculty members reported selected course section.

- Sample analyses on topics of interest
- Downloadable SPSS Syntax
- Easily replicated graphic displays of survey findings



Time Spent Studying (CB)

- FSSE: time students are *expected* to study for one course
- FSSE: time students *actually* spend studying for one course
- NSSE: time students spend studying during one week

	Faculty Expectations	Faculty Beliefs	Student-Reported ^c
General academic discipline^{a,b}			
Physical science	6.7	3.5	4.2
Engineering	6.4	4.1	4.4
Biological science	6.4	2.9	4.2
Professional	6.1	3.4	4.1
Arts & Humanities	5.8	3.1	3.9
Business	5.8	3.1	3.4
Social science	5.7	2.8	3.5
Other	5.5	3.1	3.4
Education	4.9	3.2	3.6
Undecided	--	--	3.3
Total	5.9	3.2	3.7

^aGeneral area of faculty members' reported selected course section

^bGeneral area of students' reported major

^cFull-time, eligible students

Time Spent Studying (TS)

- FSSE: time students are *expected* to study in a typical week
- FSSE: time students *actually* study in a typical week
- NSSE: time students spend studying during one week

	Faculty Expectations	Faculty Beliefs	Student-Reported ^c
General academic discipline^{a,b}			
Physical science	18.1	9.3	16.8
Biological science	17.6	9.6	16.8
Arts & Humanities	17.4	9.3	15.4
Social science	17.1	8.6	14.2
Engineering	16.3	11.0	17.5
Other	15.2	8.4	13.4
Business	15.0	8.5	13.5
Education	14.1	9.5	14.5
Professional	14.1	8.6	16.3
Undecided	--	--	13.2
Total	16.5	9.0	14.9

^aGeneral area of faculty members' reported selected course section

^bGeneral area of students' reported major

^cFull-time, eligible students

Working with Topical Findings

Sample Questions to Ask:

- Are there major differences between faculty in different disciplines?
- Are faculty and student responses well-aligned overall? Within specific disciplines?
- How and where can I present this information? What campus groups can benefit from knowing these survey results?

Coming Soon: FSSE Report Generator

- **The FSSE Report Generator**
 - An interactive tool that instantly generates frequency reports based on user selections
 - The tool draws from a secure database of responses from the three most recent years of FSSE
 - The generator can be queried using any combination of faculty and institutional characteristics
 - Variable options include individual items and FSSE scales

FSSE Report Generator

The **FSSE Report Generator** guides users through a series of steps to filter the data and produce tables of items or scales, according to their selections.



Welcome to the FSSE Custom Report Generator

You choose the group. We'll show you the results.

The FSSE Custom Report Generator is a public interactive tool that instantly generates frequency reports based on your selections. The tool draws from a secure database of responses from the three most recent years of FSSE, and can be queried using any combination of faculty and institutional characteristics. Variable options include individual items and FSSE scales.

The report generator will guide you through a series of steps to filter the data and produce tables of items or scales according to your selections.

Step 1: SELECT SURVEY OPTION

Choose whether you want Course-Based or Typical-Student data in your report.

Step 2: SELECT REPORT VARIABLES

Choose which grouping variables you want in your report

Step 3: SELECT INSTITUTIONS

Select the types of institutions you want included in the data (Carnegie Classification, control, and enrollment size)

Step 4: SELECT FACULTY

Select the faculty characteristics to include in the data (academic rank, teaching format, race, gender, etc.)

Step 5: CONFIRM YOUR SELECTIONS

Confirm your selections and run the analysis.



Photo courtesy of Earlham College

[Go to Step 1: Select Report Variables >>](#)

Other Online Resources & Services

- **Web Resources & Tools**
 - Past Presentations and Publications
- **Annual gatherings**
 - NSSE Users' Workshops
 - Webinars
 - Professional Conferences
- **Print Materials**
 - *FSSE Overview*
 - Scales & Reliabilities
 - *Using FSSE Data*
 - *Working with NSSE and FSSE Findings: A Facilitator's Guide*
- **Reports**
 - Custom Analysis Reports

Questions?

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- NSSE Web site: www.nsse.iub.edu

