QM Research Online Conference

NSSE-QM Data on the Online Student Experience

Shimon Sarraf

November 15, 2019
Today’s Agenda

- Study Goals
- About NSSE
- Research questions
- Data sources & sample characteristics
- Results
- Summary
- Increasing Survey Response Rates
Goals

- To better understand how well college student experiences align with Quality Matters course design standards across a diverse group of colleges

- Explore the level of variation in student online learning experiences at the student- and institution-levels

- Improve the online learning experience!
Since 2000, the National Survey of Student Engagement (NSSE) has given over 1,600 four-year colleges and universities snapshots of the first-year and senior student experience in and outside of the classroom (500 - 750 annually).

Grounded in decades of student development theory and research, NSSE’s questions focus on frequency of student behaviors and their perceptions of the college environment. Both found related to desirable college outcomes.

Schools use NSSE to inform institutional improvement efforts and assess the impact of their campus initiatives. NSSE can inform discussions about why something is working or not working well.
Research Questions

1. To what extent does college online learning experiences align with QM standards, according to students? Do these results vary by student type (e.g., full-time status, sex, minority)?

2. Does the online learning experience at certain institutions appear better aligned with QM standards than others?

3. Does the level of satisfaction with the overall online learning experience vary by level of QM standards experienced?
Data Sources

- Core NSSE instrument: student background and demographic variables (nsse.indiana.edu/links/EIRS)

- NSSE 2018 experimental Online Learning Experiences item set (nsse.indiana.edu/links/EOLQ)
Sample Characteristics

Institution-Level (n=21)
- All US institutions with substantial online populations
- 74% full-time enrollment
- 61% female
- 22% taking all courses online
- 39% underrepresented minority
- ~3,600 total undergraduates

Median statistics shown above

- 4 schools with 50% or more NSSE respondents taking all courses online; no for-profits; 7 privates

Student-Level (weighted n=3,531*)
- 24% first-year / 76% senior
- 68% full-time enrollment
- 73% female
- 64% first-generation college student
- 25% underrepresented minority
- 70% adult learners (>23 years of age)
- 70% transfer students
- 13% STEM
- 54% report having mostly As
- 58% taking all courses entirely online

*unweighted count = 4,892
Important Core NSSE Questions

- How many courses are you taking for credit this current academic term? (0 to 7 or more)

  - Of these, how many are *entirely* online? (0 to 7 or more)

Only students who reported taking 1 or more entirely online course received experimental online learner questions.
Online Learning Experimental Questions *

**Effective Course Structure** (1a to 2f)

During the current academic term, to what extent have your entirely online courses provided the following?
Very much (4) to Not at all (0)

- Clearly stated learning goals
- A clearly stated grading policy
- Instructions for using technology

...12 items total

**Engaged Online Learning** (3a to 3e)

During the current term, about how often have you done the following in your entirely online courses?
Very often (4) to Never (1)

- Used tools that help you learn course content
- Identified questions you had about course readings and sought answers to them

...5 items total

* For complete item set, see: nsse.indiana.edu/links/EOLQ
Other Key Experimental Item Set Questions

How does the instruction for the online courses you were thinking about in the previous questions occur?

- Only taught online (in person, face-to-face instruction not provided) 83%
- Taught mostly online with some in-person, face-to-face instruction 9%
- Taught online and in-person/face-to-face about the same amount 4%
- Taught some online but mostly in-person/face-to-face 2%
- Other, please specify 2%

n=6,237 (unweighted)

How would you describe the communication in your entirely online courses this term?

- Synchronous (real-time communication with instructors and students) 15%
- Asynchronous (communication with instructors and students that does not occur at the same time) 47%
- A mixture of synchronous and asynchronous 37%
- Other, please specify 1%

n=3,531 (weighted)
## Online Learning Scales: Structure & Engagement

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach’s Alpha</th>
<th>Intraclass Correlation</th>
<th>Distribution</th>
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</thead>
<tbody>
<tr>
<td>Effective Course Structure</td>
<td>3,528</td>
<td>0</td>
<td>4</td>
<td>3.33</td>
<td>0.72</td>
<td>0.95</td>
<td>2.7%</td>
<td></td>
</tr>
<tr>
<td>Engaged Online Learning</td>
<td>3,526</td>
<td>1</td>
<td>4</td>
<td>3.07</td>
<td>0.78</td>
<td>0.85</td>
<td>6.4%</td>
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Results
Research Question #1
To what extent does college online learning experiences align with QM standards, according to students? Do these results vary by student type (e.g., full-time status, sex, minority)?
Effective Course Structure Questions
## To what extent have your entirely online courses provided the following?

**Percentage reporting Very Much or Quite A Bit**

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
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<tr>
<td>A clearly stated grading policy</td>
<td>88</td>
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<td>An explanation of the purpose of the course</td>
<td>86</td>
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<td>86</td>
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<tr>
<td>Clear instructions to get started in course</td>
<td>85</td>
</tr>
<tr>
<td>Assessments that help achieve course learning goals</td>
<td>84</td>
</tr>
<tr>
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<tr>
<td>A description of minimum technology requirements</td>
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<tr>
<td>Course information and activities that are easy to locate</td>
<td>83</td>
</tr>
<tr>
<td>Clarity about when instructor provides answers to questions</td>
<td>78</td>
</tr>
<tr>
<td>Clarity about instructor peer-interaction expectations</td>
<td>77</td>
</tr>
<tr>
<td>Instructions for using technology</td>
<td>75</td>
</tr>
</tbody>
</table>

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**Items used for Effective Online Course Structure Scale**

To what extent have your entirely online courses provided the following?

Percentage reporting Very Much or Quite A Bit

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Distribution of Effective Online Course Structure Scale Scores by Student Type

First-year Senior Part-time Full-time
Minority Non-minority Other Male Female

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High online schools have at least 50% of their NSSE 2018 respondents reporting all their classes are online.

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Engaged Online Learning Questions
Exchanged ideas, feedback, and questions with instructors

Exchanged ideas, feedback, and questions with students

Identified questions about course readings and sought answers

Used tools that help you learn course content

Applied key information from assigned readings

Percentage reporting Very Often or Often

83

79

71

62

56

How often have you done the following in your entirely online courses?

Items used for Engaged Online Learning Scale
Distribution of Engaged Online Learning Scale Scores by Student Type

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Engaged Online Learning Scale Score:

- Low online schools have fewer than 50% of their NSSE 2018 respondents reporting all their classes are online.
- High online schools have at least 50% of their NSSE 2018 respondents reporting all their classes are online.

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## Statistical Model Results

### Effective Course Structure

<table>
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<th>Negative Relationship</th>
<th>No Relationship</th>
</tr>
</thead>
<tbody>
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<td>Social sciences and Social service profession majors, Adult learner, Minority</td>
<td>Full-time status, Male</td>
<td>Class level, First-generation</td>
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### Engaged Online Learning

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<th>No Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Course Structure(!), Senior class level, Minority</td>
<td>Male</td>
<td>Adult learner, Enrollment status, Major, First-generation</td>
</tr>
</tbody>
</table>
Research Question #2
Does the online learning experience at certain institutions appear better aligned with QM standards than others?
Institution ID:

Distribution of Effective Online Course Structure Scale Scores By Institution

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Distribution of Engaged Online Learning Scale Scores By Institution

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Research Question #3
Does the level of satisfaction with the overall online learning experience vary by level of QM standards experienced?
How Would You Describe Your Online Learning Experiences?

Percentage reporting Excellent or Good by Course Structure Scale Group

- < 2: 13%
- 2 to 2.49: 55%
- 2.5 to 2.99: 75%
- 3 to 3.49: 92%
- 3.5 to 4: 98%

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How Would You Describe Your Online Learning Experiences?

Percentage reporting Excellent or Good by Engaged Online Learning Scale Group

- < 2: 63%
- 2 to 2.49: 71%
- 2.5 to 2.99: 85%
- 3 to 3.49: 91%
- 3.5 to 4: 96%

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Summary

- Course structures generally appear aligned with QM standards; not much difference between types of students. Engagement scale results also look good overall but there’s more room for improvement—also more differences between student types.

- Certain institutions appear better aligned with QM standards than others, but overall differences are not great. All study institutions appear to be doing well, on average, with effective course structure. More room for improvement with engaged online learning experiences.

- Student satisfaction with the overall online learning experience appears to correlate positively with QM standards related to effective course structure and, to a lesser extent, engaged online learning.
Increasing Survey Response Rates
What NSSE Has Learned
Survey Trends Impacting Response Rates

Survey fatigue

Technology

Smartphones

Learning management systems
NSSE Average School Response Rates by Enrollment Size (2010 to 2019)
Steps for Increasing Response Rates

• Use **incentives** when possible

• Post survey links to **learning management systems**

• **Promote** your survey

• Optimize surveys for **smartphones**

• **Coordinate** with other campus survey projects
Questions?

NSSE-QM Data on the Online Student Experience

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NSSE
National Survey of Student Engagement

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