Insights into Student Engagement: Best Practices and Empirical Support

Presented at the Innovations in Teaching and Learning Conference

Karen Gentemann and Zhicheng Zhang
Office of Institutional Assessment
George Mason University
September 20, 2013
Objectives

- Introduce research-based best practices on student engagement
- Highlight findings from the 2012 National Survey of Student Engagement (NSSE) report
- Promote use of NSSE data and best practices to enhance student engagement and learning
Why Focus on Student Engagement?

- Student engagement is correlated strongly with student retention and learning. The more actively engaged students are, the more likely they are to persist and to achieve at higher levels. (Cunningham & Bardsley, 2012)
- Students who participate in collaborative learning activities (e.g., service-learning, peer tutoring, senior capstone projects) are more likely to persist and succeed. (Kinzie, 2005)
- Educationally effective colleges and universities direct students’ efforts and energy toward appropriate tasks, activities, and behaviors and engage them in these activities at high levels. (Educational Commission of the States, 1995)
Framework for Student Engagement

Student-Faculty Interaction

Active and Collaborative Learning

Enriching Educational Experiences

Level of Academic Challenge

Supportive Campus Environment
Level of Academic Challenge

- Teach challenging course content
  - Communicate high expectation for student performance
  - Emphasis on reading, writing, class preparation and follow-up

- Engage students in complex mental activities in learning and assessment
  - Assignments and tests require complex mental activities (analysis, synthesis, making judgment, applying)
  - Senior projects require integration and application

(Chen, Lambert & Guidry, 2010; Kuh, Kinzie, Schuh, & Whitt, 2005)
What can faculty do to enhance level of academic challenge?

Level of Academic Challenge

- High Expectation
- Complex Mental Activities
- Rigorous Curriculum
- Academic Support

(Chen, Lambert & Guidry, 2010; Kuh, Kinzie, Schuh, & Whitt, 2005)
Active and Collaborative learning

Student activities promoting engagement:

- Ask questions in class or contribute to discussions
- Make a class presentation
- Work with other students on projects during class
- Prepare class assignments with other students outside class
- Tutor or teach others
- Participate in community-based projects as part of regular course
- Discuss ideas from readings/classes with others outside of class

(Kuh, Kinzie, Schuh, & Whitt, 2005)
What can faculty and staff do to promote active and collaborative learning?

(O’ Connor, 2013)

- Promote class participation
- Create team work opportunities
- Student presentation and projects
Student-Faculty Interaction

- Student activities promoting engagement:
  - Discuss grades, assignment, or ideas from reading with faculty
  - Receive prompt feedback on academic performance
  - Talk about career plans with faculty or advisor
  - Work with faculty on research projects or activities other than coursework (Kuh, Kinzie, Schuh, & Whitt, 2005)

- Interactions with faculty promotes academic integration, which in turn, has a positive impact on persistence (Astin, 1984; Tinto, 1993)
What can faculty and staff do to promote interaction with students?

Faculty Accessibility and Responsiveness

Feedback on Academic Performance

Student-faculty interaction

Student Activities Outside Coursework

Student Research

(Webb, Laird, & BrckaLorenz, 2012)
Student-Faculty Interaction

- Teachers could use immediacy (non-verbal) and clarity to stimulate student emotional and cognitive interest in learning, which in turn, can yield the greatest student engagement (Mazer, 2013)
Enriching Educational Experiences

Student activities promoting engagement:

- Use an electronic medium to discuss or complete assignment
- Have serious conversations with students of another race/ethnicity, or of other religious beliefs, political opinions or personal values
- Participated in practicum, internship, field experience, co-op experience, or clinical assignment
- Participated in community service or volunteer work
- Participated in a learning community
- Complete foreign language coursework
What can faculty and staff do to promote enriching educational experiences?

- Use technology in teaching and assignments (Park, 2013)
- Tap student expertise and practical experiences (Kuh, Kinzie, Schuh, & Whitt 2005)
- Incorporate experiential learning in the curriculum
- Promote diversity and cross cultural experiences
Supportive Campus Environment

Characteristics of a supportive campus environment:

- Positive relationships among different groups
- Institutional support for students’ academic and social success
- Students report positive relationships with faculty, staff, and other students
- Help students cope with nonacademic responsibilities
What can faculty and staff do to help create a supportive campus environment?

(Ingram & Gonzalez-Matthews, 2013)
Empirical Data on Student Engagement

• Mason has participated in the National Survey of Student Engagement (NSSE) every three years since 2000.

• NSSE reports are available on the OIA website

• Major findings …
### Peer Comparison on Student Engagement

Mason 2012 Benchmark Peer Comparison: Mean Benchmark Scores

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>First-Year</th>
<th>Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RU/H</td>
<td>RU/VH</td>
</tr>
<tr>
<td></td>
<td>RU/H</td>
<td>RU/VH</td>
</tr>
<tr>
<td>Level of Academic Challenge (LAC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active and Collaborative Learning (ACL)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Student Faculty Interaction (SFI)</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Enriching Educational Experiences (EEE)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Supportive Campus Environment (SCE)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Plus sign indicates a significantly higher score for Mason; minus sign indicates a significantly lower score for Mason; blank box indicates no significant difference between Mason and a peer group. Significance was calculated at the $p < .05$ level using an independent samples t-test (2-tailed).
Highlight of Findings: Student-Faculty Interaction

- Interaction on Course-Related Issues Reported by First-Year Students

![Bar chart showing interactions]

**Percentage of FYs Who “Often” or “Very Often” Interacted with Faculty on Course Related Issues**

- Received prompt feedback from faculty: 54% Mason, 50% RU/H, 46% RU/VH
- Discussed grades/assignments with an instructor: 65% Mason, 56% RU/H, 54% RU/VH

**p < .01, ***p < .001, t-test (2-tailed)**
Highlight of Findings: Student-Faculty Interaction

- Interaction Outside of Class Reported by **Seniors**

![Bar chart showing the percentage of Seniors who never engaged in various activities with faculty outside of class.](chart)
Highlight of Findings: Student-Faculty Interaction

- **Research Outside of Class Reported by Seniors**

![Bar chart showing the percentage of SRs who have worked on a research project with faculty outside of course or program requirements.](chart.png)

*Differences are significant at p < .001, t-test (2-tailed)*
Highlights of Findings: Enriching Educational Experience

- *Students’ Interaction with Diverse Others*

![Bar chart showing percentage of students who "often" or "very often" had serious conversations with students of a different race or ethnicity.](chart)

- First-Year: Mason 64%, RU/H 53%, RU/VH 56%
- Senior: Mason 63%, RU/H 55%, RU/VH 59%

* p < .05, *** p < .001; +++ p < .001 (RU/H only), t-test (2-tailed)
Highlights of Findings: Enriching Educational Experience

- **Institutional Encouragement for Diversity Interactions**

![Bar chart showing percentage of students reporting that the institution encouraged contact among students from different backgrounds.](chart.png)

* p < .05, *** p < .001; +++ p < .001 (RU/H only), t-test (2-tailed)
Highlights of Findings: Enriching Educational Experience

- Participation in Select Enriching Activities by Seniors

![Bar chart showing participation in select enriching activities by seniors.](chart.png)

* p < .05, ** p < .01, *** p < .001; ^^^ p < .001 (RU/VH only), t-test (2-tailed)
Highlight of Findings: Supportive Campus Environment

- Relationships with Administrative Personnel Reported by First-Year Students

Note: Percentages are for answers 5-7 combined on a 7-point rating scale. **p < .01, t-test (2-tailed)
Highlight of Findings: Supportive Campus Environment

- **Relationships with Faculty and Other Students Reported by Seniors**

![Bar Chart]

**Note:** Percentages are for answers 5-7 combined on a 7-point rating scale.

***p < .001, * p < .05 (RU/H only), t-test (2-tailed)
Highlight of Findings: Supportive Campus Environment

- **Institutional Support for Academic Success**

![Bar chart showing percentage of students reporting institutional support](image)

- Percentage of students reporting that the institution provides “Very Much” or “Quite a Bit” of the support needed to help succeed academically:
  - First-Year:
    - Mason: 73%
    - RU/H: 78%
    - RU/VH: 79%
  - Senior:
    - Mason: 64%
    - RU/H: 71%
    - RU/VH: 71%

* Differences are significant at p < .001, t-test (2-tailed)
Summary of SFI, EEE, and SCE: Areas Where Mason Does Better than Peers

- SFI: Interaction on course-related issues (Fr)
- EEE: Interaction with diverse others
- EEE: Institutional encouragement for diversity Interaction (Fr and Srs)
Summary: Areas Where Peers Do Better

- SFI: Research outside of Class (Srs)
- EEE: Participation in enriching activities (Srs)
- SCE: Relationships with administrative personnel (Fr)
- SCE: Relationships with faculty and other students (Srs)
- SCE: Institutional support for academic success (Fr and Srs)
Additional Information About NSSE Reports

Visit our website: http://assessment.gmu.edu. Click Reports and Data…

- 2012 NSSE Self and Peer Comparison Report (available online)
- 2012 NSSE Transfer and Residence Report (available online)
- 2012 College NSSE reports (available upon request)
Select References

Contact Information

Dr. Karen Gentemann (genteman@gmu.edu), Office of Institutional Assessment

Dr. Zhicheng Zhang (zzhang11@gmu.edu), Office of Institutional Assessment