A Discussion of High-Impact Educational Practices

Institutional Research Coffee Talk
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Sunny Moon  hmoon@fullerton.edu
Senior Research Associate

Edward Sullivan  esullivan@fullerton.edu
Assistant Vice President for Institutional Research and Analytical Studies

www.fullerton.edu/analyticalstudies for more information
What are High Impact Practices?


The following teaching and learning practices have been widely tested and have been shown to be beneficial for college students from many backgrounds. These practices take many different forms, depending on learner characteristics and on institutional priorities and contexts.

- First-Year Seminars and Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing-Intensive Courses
- Collaborative Assignments and Projects
- Undergraduate Research
- Diversity/Global Learning
- Service Learning, Community-Based Learning
- Internships
- Capstone Courses and Projects

An overarching assumption is that the High Impact Practice is done well (with high quality).
Why are they important?

• If done well they augment the academic experiences of our students
• They provide opportunities to better connect with the subject matter and/or the university as a whole
• They provide opportunities for academic and social connections to evolve through collaborative experiences
Some CSU Fullerton Exemplars

- **Learning Communities**
  - Freshman Programs
  - ECS Scholars

- **Supplemental Instruction**
  - Math
  - Biology

- **Internships, Civic Engagement, Capstone Courses**
Quick thoughts on Retention / Graduation

• Central Mission of Higher Education Institutions
  - Higher Education Institutions are ultimately responsible for student retention (Tinto, 2002)

• Astin’s Theory of involvement, Tinto’s Integration Model, Pascarella’s Causal Model of College Student Change

• Link between retention theory & practice?

Student Characteristics

Learning Outcomes
  Successful Graduation

Cultural Factor

Engagement

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Closing the Gap: **HIPS (High Impact Practices)**

- Deepen Engagement & Learning  [Kuh (2008)]
- Culturally-Responsive Practices

- First-year seminars and experiences *
- Common intellectual experiences *
- Learning communities *
- Collaborative assignments and projects *
- Diversity/global learning *

**Collaborative Learning Approach**

- 1) Learning Community , 2) Supplemental Instruction
- Maximizing College Impact on Learning Outcomes
- Culturally-Responsive \(\Rightarrow\) Collectivistic Culture
Closing the Gap: HIPS (High Impact Practices)  
Culturally-Responsive Practices

- Research on Collaborative Learning
  - Collectivistic Culture
    - Focus on valuing needs of group or family instead of individuals
    - View themselves as members of groups
  - Collaborative Learning in early research
    - (1) Achievement gains for all (race, gender)
    - (2) Social Climate in the classroom
  - Underrepresented students
    - Collaboratively-Oriented learning preferences
  - Vygotsky’s Zone of Proximal Development
    - Closing the gap between low achievers and high achievers
What We Have Found

* Learning Community
  – Students build academic and social cohesion
  – Collaborative pedagogy, active learning, mutual responsibility for group (Tinto, 2008)
  – Maximize college impact (Kuh, 2008)

* Supplemental Instruction
  – Peer-facilitated review session in a collaborative group learning setting
  – Integrated support programs (Tinto, 2008)
## Closing the Gap

### Supplemental Instruction (SI) in BIOL 171

### Course Success Rates and Course Grade

<table>
<thead>
<tr>
<th>Effects</th>
<th>Success Rates</th>
<th>Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous GPA</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>SI participation</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Underrepresented/Non-Underrepresented</td>
<td>*</td>
<td>*</td>
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<tr>
<td>SI participation X Underrepresented/Non-</td>
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<tr>
<td>Underrepresented</td>
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</tr>
</tbody>
</table>

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Closing the Gap
Supplemental Instruction (SI) in BIOL 171

- Dependent Variables
  - Course Grade (ANCOVA) with covariate Previous GPA

Interaction Effects between
SI Participation x Underrepresented/Non-Underrepresented

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# Closing the Gap

**Freshman Program (FP) - Learning Community**

1-year Retention, 2-Year Retention, & 6-year Graduation GPA

<table>
<thead>
<tr>
<th>Effects</th>
<th>1-year</th>
<th>2-year</th>
<th>6-year</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Retention Rates</td>
<td>GPA</td>
<td>Retention Rates</td>
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<tr>
<td>High School GPA</td>
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</tr>
<tr>
<td>Parent Education</td>
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<tr>
<td>Freshmen Program</td>
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<tr>
<td>Underrepresented/Non-Underrepresented</td>
<td>*</td>
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<tr>
<td>Freshmen Program x Underrepresented/Non-Underrepresented</td>
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</tr>
</tbody>
</table>

Closing the Gap

**Freshman Program (FP) - Learning Community**

*Interaction Effects* between
FP Participation × Underrepresented/Non-Underrepresented

### 1-year Retention Rates

<table>
<thead>
<tr>
<th></th>
<th>Non-Participant</th>
<th>Participant</th>
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</thead>
<tbody>
<tr>
<td>Non-Underrepresented</td>
<td>0.83</td>
<td>0.86</td>
</tr>
<tr>
<td>Underrepresented</td>
<td>0.76</td>
<td>0.84</td>
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</table>

### 6-year Graduation Rates

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<tr>
<th></th>
<th>Non-Participant</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Underrepresented</td>
<td>0.54</td>
<td>0.62</td>
</tr>
<tr>
<td>Underrepresented</td>
<td>0.43</td>
<td>0.59</td>
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Conclusion

Collaborative Learning Approaches

→ High Impact Practices as Culturally-Responsive Strategy

- 1-yr Retention & GPA
- 2-yr Retention & GPA
- 6-yr Grad Rates & GPA
- Course Retention
- Course Grade

PRE-COLLEGIATE

OUTCOMES

INSTITUTIONAL

HS GPA

1st Generation

Ethnicity
(Underrepresented vs. Non-Underrepresented)

Learning Community

Supplemental Instruction

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Conclusion

Collaborative Learning Approaches
-- High Impact Practices as Culturally-Responsive Strategy

Supplemental Instruction, Freshman Program

- Raised Achievement for All
- Narrowed Achievement Gap between Underrepresented and Non-Underrepresented
Questions?