Learning Communities: Who Benefits and Do Integrative Activities Matter?
ASHE 2008 Jacksonville, FL

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Paper: www.nsse.iub.edu (click on Presentations)
Learning Communities (LCs)

- Curricular approach for enrolling cohorts of students in common set of classes organized around a theme.
- Found at more than 600 institutions (public & private, 2 & 4-year, majority- and minority-serving institutions, residential & commuter) across US & Canada.
- LCs have long history in pedagogical reform efforts in U.S. higher education (e.g., Meiklejohn & Dewey).
- Identified as “high-impact” practice, desirable for all students to experience.
- LC models vary, therefore, it can be difficult to isolate features that make the most difference for student learning & success.
Research & Assessment: What we Know about Learning Communities (LCs)

• LCs reveal promising results:
  - Strengthens student retention & academic achievement
  - Viewed positively by students and faculty
  - Increased student satisfaction
  - Increased rate of course completion
  - Increased engagement in educationally productive activities (integrated learning, stu-fac interaction, collaborative learning)
  - Some studies show intellectual development gains
  - Benefits to targeted groups (i.e., women in science, underrepresented students)
  - Promotes connectedness to discipline, ideas, peers etc.
  - Positive benefits for peer mentors
  - Long term contributions to student learning
  - Faculty rejuvenation, community
Integration Activities and LC Models

- Integration experiences in LCs advocated as best approach to enhance the quality of student learning.
- Useful for promoting deep learning, and increasing coherence in undergraduate education.
- Purported benefits: increased opportunities for students’ to create new relationships among ideas, sources, and knowledge via supportive community of learners, greater opportunities for collaboration, synthesizing, applying knowledge, and bringing together ideas and sources from associated courses (Lardner & Malnarich, 2008; Smith, MacGregor, Matthews & Gabelnick, 2004).
- Lichtenstein (2005) found first-year students preferred learning communities that involved integrative activities, particularly in which assignments were coordinated across program courses.
Research Questions

• To maximize potential for LCs to live up to their promise as high-impact practices and opportunities for integrated learning, and to support their sustainability in higher education, we need more information about their structural features and effects. We also need to know whether certain types of students are more likely to take advantage of them.

• **Two central questions guided this analysis:**
  1. What is the likelihood of students with diverse backgrounds participation in learning communities?
  2. What learning community structural features, specifically the level of integration activities, are related to approaches to deep learning, and important learning processes that lead to positive learning outcomes?
Data Source, Sample, Measures and Methodology

- Data from the National Survey of Student Engagement (NSSE) 2007, First-year students only
  - Research Q1: Likelihood of participation in LCs, used entire NSSE 2007 sample (116,000 first-year students at 610 institutions).
  - Research Q2: Level of integration activities, responses to additional LC items on NSSE (1,228 first-year students, 39 institutions)
- Regression models
- **Outcome variables**: five scales of learning processes and outcomes (higher-order learning, reflective learning, integrative learning, collaborative learning, and academic effort)
Do All Students Access LCs?

• First-generation, adults, and international students are less likely to participate, while women, students who live on campus, and members of Greek organizations are more likely.

• In comparison to underrepresented minorities, Foreign and Asian/White students are less likely to participate in learning communities.

• In comparison to the social science major reference group, first-year students in biological science, education, engineering, and professional studies are more likely to report being in a learning community. Students in physical sciences and those who reported an undecided major are less likely.
Level of Integration: LC Groups

• LC participants categorized into 3 LC groups by level of integration activity:
  - **Full integration** = program had integrating course or discussion group and students frequently (“often” or “very often”) experienced instructors requiring course material to be integrated (n= 407)
  - **Partial integration** = one or the other of these program facets, but not both (n=408)
  - **Non-integration** = all other learning community participants that did not experience either program facet (n= 313)
## Results: Levels of Integration and 5 Learning Processes and Outcomes

**Table 2: Effect Sizes with Controls by Learning Community Type (Non-Participants as Reference Group)**

<table>
<thead>
<tr>
<th></th>
<th>Higher Order Learning</th>
<th>Integrative Learning</th>
<th>Reflective Learning</th>
<th>Collaborative Learning</th>
<th>Academic Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Integration</strong></td>
<td>0.36 ***</td>
<td>0.57 ***</td>
<td>0.36 ***</td>
<td>0.48 ***</td>
<td>0.44 ***</td>
</tr>
<tr>
<td><strong>Partial Integration</strong></td>
<td>0.15 **</td>
<td>0.25 ***</td>
<td>0.09 *</td>
<td>0.18 ***</td>
<td>0.21 ***</td>
</tr>
<tr>
<td><strong>No Integration</strong></td>
<td>-0.12 *</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.03</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

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

• First-generation students may need more encouragement to participate; explore differences by major – appropriate for discipline?
• Higher the frequency of integrated assignments and participation in a course/discussion group focused on integrating across learning community courses, the higher the frequency of doing activities that promote higher order thinking, reflective learning and integrative learning. The more integrated activities are present in a learning community, the more students report dedicating greater effort to academic pursuits and also collaborating with peers in and outside the classroom.
• Just putting cohort of students together in learning communities does not in and of itself, guarantee engagement in effective educational practices or deep learning.
Implications

• Critical to ensure every student has real chance to participate in LCs and that experience employs integrated activities -- practices and pedagogies that optimize gains across important student learning outcomes

• Examine equity across the learning community experience

• Intentionally structured integrative activities are important to increase deep learning, collaboration, and academic effort

• LCs with integrated activities can be attractive option for faculty who want students to become deep learners

• Need to look further at student work for evidence of the integrative learning that learning communities claim as a goal
NSSE scales

• **Higher order learning (4 items)** Coursework emphasizes analyzing, synthesizing, applying, and making judgments

• **Integrated Learning (5 items)** Worked on a paper or project that required integrating ideas/information from various sources, Included diverse perspectives (different races, religions, genders, political beliefs, etc.), Put together ideas/concepts from different courses; Discussed ideas with faculty outside of class

• **Reflective learning (3 items)** Examined strengths & weaknesses of own views on a topic/issue, Tried to better understand someone else's views, Learned something that changed way you understand

• **Collaborative learning (3 items)** Worked with other students on projects during class, Outside of class, Discussed ideas from readings or classes with others

• **Academic effort (6 items)** Asked questions in class, Made class presentation, Prepared two or more drafts, Worked harder than you thought you could Challenging examinations, time spent studying