

National Research Results on Engaging Students through Learning Communities
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In this session, we present an analysis of data collected from more than 7,000 students that compares the student experience in stand-alone versions of a first-year seminar (a course offered by 94 percent of America's colleges and universities often considered the most researched course in existence) with the student experience in another first-year seminar version linked in a learning community. We also offer summaries of assessments and research projects that have been done over the past several years on learning communities of all varieties.

Three types of learning communities:



Why learning communities? Goals embedded in *Learning Community Readiness Audit*

What are the results of learning communities?

First-Year Initiative Study

Policy Center on the First Year of College – John Gardner, Betsy Barefoot, & Randy Swing. Survey design and administration from Educational Benchmarking, Inc. (Joe Pica and Darlena Jones). Funded by the Pew Charitable Trusts & Lumina Foundation for Education

2002 FYI Data.

- 72 four-year institutions
- Conducted in the last two weeks of the fall 2002 term.
- 1,961 sections of first-year seminars
- 41,294 student records

Of the 72 participating institutions . . .

- 46 (64%) had no linked first-year seminars
- 12 (17%) linked all first-year seminars
- 14 (19%) had both linked and stand-alone courses
- Data reduction focused on these 14 institutions. Non-linked courses are a natural control group
- 484 sections for FYS – 7,059 students
- 298 stand-alone sections
- 186 linked sections
- The reduced data set is still quite large including data from 484 sections of first-year seminars and responses from 7,059 students.

Research question: Does linking a first-year seminar with another course increase its benefit to students? (Note. The “strength” of the link between courses was not measured.) First-year seminars are generally intended to introduce students to the intellectual and social expectations of college and to provide a forum for discussing general transitional issues.

- The **Academic/Cognitive Skills Factor** is derived from 5 student self-evaluations of the level in which the course improved the student’s skills in; 1) Writing, 2) Reading, 3) Decision-making skills, 4) Computer skills, and 5) Oral presentation skills. Linked courses had a higher mean score (4.17) for the Academic/Cognitive Skills Factor than stand-alone courses (4.02). The difference is statistically significant, $F(1, 483)=4.150, p = .042$.
- The **Critical Thinking Skills Factor** is based on three response items about the degree to which the course improved the student’s ability to; 1) See multiple sides of issues, 2) Identify solutions for complex problems, and 3) Evaluate the quality of opinions and facts. Linked courses had a higher mean score (4.58) for the Critical Thinking Factor than stand-alone courses (4.41). The difference is statistically significant, $F(1, 483)=5.329, p = .021$.
- The **Connections with Faculty Factor** contains responses to three response items about the student’s connection with faculty members in his/her other courses. The response items asked students to determine the degree to which the seminar had improved their; 1) Understanding of faculty expectations of students, 2) Seeking feedback from instructors, and 3) Communications with instructors outside of class. Linked courses had a higher mean score (4.71) for the Connections with Faculty Factor than stand-alone courses (4.55). The difference is statistically significant, $F(1, 483)=6.329, p = .012$.
- The **Connections with Peers Factor** is based on three response items about the degree to which the course improved the student’s 1) Efforts to get to know students in classes, 2) Ability to meet new people with common interests, and 3) Ability to establish close friendships with peers. Linked courses had a higher mean score (5.35) for the Connections with Peers Factor than stand-alone courses (4.62). The difference is statistically significant, $F(1, 483)=120.63, p = .000$. The linked structure had the greatest impact on this factor of any of the 15 studied - accounting for 20% of the variance in this outcome.

- The **Out-of-Class Engagement Factor** is built from four response items about the degree to which the course increased the student's; 1) Participation in campus-sponsored organizations, 2) Contributing to the success in campus-sponsored organizations, 3) Volunteering time for worthwhile causes, and 4) Attending campus cultural events. Linked courses had a higher mean score (3.98) for the Out-of-Class Engagement Factor than stand-alone courses (3.66). The difference is statistically significant, $F(1, 483)=14.99$, $p = .000$.
- The **Knowledge of Campus Policies Factor** contains five response items about the degree to which the course increased the student's understanding of; 1) College/University rules regarding academic honesty, 2) The grading system, 3) Academic probation policies, 4) Registration procedures, and 5) Financial aid procedures. Linked courses had a higher mean score (4.83) for the Knowledge of Campus Policies Factor than stand-alone courses (4.62). The difference is statistically significant, $F(1, 483)=8.359$, $p = .004$.
- The **Knowledge of Academic Services Factor** contains four response items about the degree to which the course increased the student's understanding of 1) The role of the academic advisor, 2) How to obtain academic assistance, 3) How to obtain a tutor, and 4) Available library resources. Linked courses had a higher mean score (5.13) for the Knowledge of Academic Services Factor than stand-alone courses (4.93). The difference is statistically significant, $F(1, 483)=7.560$, $p = .006$.
- The **Managing Time and Priorities Factor** is derived from five response items based on the degree to which the course increased the student's 1) Understanding of the impact of establishing personal goals, 2) Preparation for tests well in advance, 3) Establishing an effective study schedule, 4) Setting priorities to accomplish what is most important, and 5) Organizing time to meet responsibilities. Linked courses had a higher mean score (4.65) for the Managing Time and Priorities Factor than stand-alone courses (4.40). The difference is statistically significant, $F(1, 483)=12.016$, $p = .001$.
- The **Knowledge of Wellness Factor** is built on five response items based on the degree to which the course improved the student's understanding of 1) The ability to deal with stress, 2) College students' sexual issues, 3) The impact of alcohol consumption, 4) The impact of drug use, and 5) The impact of exercising regularly. Linked courses had a higher mean score (4.25) for the Knowledge of Wellness Factor than stand-alone courses (3.96). The difference is statistically significant, $(1, 483)F=10.593$, $p = .001$.
- The **Usefulness of Course Readings** factor is comprised of three response items where students evaluated the degree to which the course reading materials were 1) Relevant, 2) Interesting, and 3) Helpful. The **Overall Course Effectiveness Factor** consists of five response items based on the degree to which the student reports that the course 1) Included interesting subject matter, 2) Contributed to the ability to succeed academically, 3) Contributed to the ability to adjust to the college social environment, and 4) Covered topics important to student. The fifth item asks to what degree the student would recommend this course to other first-year students. Neither of these factors was significantly influenced by linking the seminar to another course.

- The **Engaging Pedagogy Factor** is derived from seven response items about the level at which the course included 1) A variety of teaching methods, 2) Meaningful class discussions, 3) Challenging assignments, 4) Productive use of classroom time, 5) Encouragement to speak in class, 6) Encouragement for students to work together, and 7) Meaningful homework. Linked courses had a higher mean score (4.87) on the Engaging Pedagogy Factor than stand-alone courses (4.67). The difference is statistically significant $F(1, 483)=7.934, p = .005$.
- The **Sense of Belonging/Acceptance Factor** is built on three response items about the degree that 1) The student is accepted by other students at this college/university, 2) It is easy to make new friends at this college/university, and 3) The student is able to identify other students with similar interests. Students in linked courses reported a higher mean score (5.61) for the Sense of Belonging Factor than students in stand-alone courses (5.36). The difference is statistically significant, $F(1, 483)=26.099, p = .000$.
- The **Overall Satisfaction with College/University Factor** is built from five response items. Students reported the degree that they 1) Want to return to this college/university for the next fall term, 2) Would recommend this college/university to a friend, 3) Believe their college experience was a high-quality learning experience, and 4) Believe their college experience was a positive experience. In addition, students rated the value of the investment made in their education at their current institution. Students in linked courses reported a higher mean score (5.65) on Overall Satisfaction with the College/University than students in stand-alone courses (5.29). The difference is statistically significant, $F(1, 483)=60.229, p = .000$.

Note: That students rated the pedagogy in the linked seminars as being more engaging is an important finding because the level of engaging pedagogy is a predictor of the other course outcomes. As Engaging Pedagogy Factor scores increase, there is generally an increase in the other FYI Factors. Since linked courses are positively correlated with higher Engaging Pedagogy scores, it would appear that linking the seminar is an effective way to improve the course delivery and, in so doing, improve a range of learning outcomes.

Question –What could explain the significant differences in linked versus non-linked seminars across all but two factors?

Results in *Learning Community Research and Assessment: What We Know Now*.

Results in 14 case studies in *First-Year Seminars in Learning Communities (in press)* and from experience of 59 colleges and universities participating in three years of NLCP summer institutes.

- Links are too weak
- Building of community overrides learning or vice versa
- Faculty development needs more attention

- Too many “Atli”
- Not appropriately placed in the institution
- End of soft funding is a problem
- Incentives are often not adequate
- Administrative and logistical barriers get in the way
- Quick fix for a retention or student readiness problem is not transformation
- Assessment is too narrow

**Question – What other gaps exist in your understanding of learning communities?
Where should research and assessment go next?**

What they can be?

First-year college students deserve a formative, integrative academic experience on which to build lifelong strengths and perspectives. This experience should include not just the courses they take but the combination and sequence, and fit of those courses. The sections included in each FLC interest group were selected with those goals in mind. Each FLC course builds on the other by exploring unique yet related fields of knowledge. In combination, the courses in each interest-group cluster can provide you with opportunities for learning that will benefit you throughout your college days and beyond. (Georgia State University Catalog, 1999, p. 1)

What do students value?

Websites:

National Resource Center for The First-Year Experience and Students in Transition – <http://www.sc.edu/fye>

National Learning Communities Project – <http://www.learningcommons.evergreen.edu>

The Policy Center on the First Year of College – <http://www.brevard.edu/fyc/>