

Investigating a First-Year Seminar as an Anchor Course in Learning Communities

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Abstract. First-year seminars have increasingly been used as anchor courses in learning communities. This study investigated the impact participation in Freshman Seminar had on the grade earned in a linked learning community course in fall 2004. Grades in the linked course for 1,294 first-year students who were enrolled in 37 different learning communities where Freshman Seminar served as the anchor course were analyzed. Students enrolled in a linked section of Freshman Seminar earned higher grades in the learning community course than both students enrolled in a non-linked version of Freshman Seminar and students not enrolled in Freshman Seminar. In addition, first-year students enrolled in a Freshman Seminar that was not linked to the learning community class outperformed first-year students who did not enroll in Freshman Seminar.

First-year seminars have become ubiquitous on college campuses. According to the National Survey of First-Year Seminars (2003), more than 81% of colleges and universities surveyed offered some form of first-year seminar. These courses vary in content and structure from institution to institution, but they are typically designed to promote academic achievement and personal success. While these courses have stood on their own for a great deal of their history, they are increasingly being used and leveraged as anchor courses in learning communities. In 2003, 24.8% of responding institutions indicated that they link their first-year seminar with another course to create a learning

community (National Survey of First-Year Seminars). Although the term may be used to encompass a wide variety of campus initiatives, learning communities are based on the premise of enrolling groups of students in a common set of thematically or substantively linked courses (Pascarella & Terenzini, 2005). The major goals of learning communities include changing the way students think about the curriculum, promoting active learning, enhancing the level of faculty collaboration, and creating an interdisciplinary curriculum. Although programming varies widely across institutions, curricula are typically adapted from three main structures: (a) student cohorts linked with an integrated seminar, in which small groups of students enroll in larger classes where faculty coordination is minimal; (b) course clusters in which students enroll in two or more classes linked by content or theme; and (c) coordinated study, an integrated program of study that involves coursework that faculty members team teach (MacGregor, 1994).

Improving student performance is the basis of many learning community models, but there is added value in incorporating a first-year seminar as an anchor course. In this role, first-year seminars may add the active learning environment that assists students in transferring learning strategies to other content-based classes in the learning community. In addition, first-year seminars may also be the most appropriate vehicle for introducing peer instruction to the classroom, fostering student-to-student relationships that translate into study groups and social interaction, and enhancing academic collaboration among disciplines (Levine, 1999).

The benefits of stand-alone first-year seminars have been extensively documented. These courses have been shown to increase retention and graduation rates, academic performance, and student satisfaction (Barefoot, Warnock, Dickinson, Richardson, & Roberts, 1998; Tobolowsky, Cox, & Wagner, 2005). Coupling a first-year seminar with one or more courses as part of a learning community has the potential to further enhance these benefits. For learning communities in general, research has demonstrated that students in these programs are more likely to be active learners and academic risk takers. Laufgraben (2005) noted that students in learning communities are “more likely to participate in class discussions, raise questions, and seek an instructor’s assistance than nonparticipants” (p. 374). Other studies have suggested that learning communities strengthen academic achievement and retention (Taylor, Moore, MacGregor, & Lindblad, 2003). Pascarella and Terenzini (2005) posited that learning communities foster conditions that promote retention and graduation, namely supportive peer groups,

involvement in classroom learning and social activities, and perceptions of academic success.

Research has also suggested benefits of learning communities that involve linking a first-year seminar as an anchor with another academic course. Swing (2002) found that students enrolled in linked first-year seminars gave higher ratings on learning outcomes and overall satisfaction measures than students enrolled in non-linked seminars. In a study of 14 campuses that used both stand-alone and linked first-year seminars, Swing (2004) discovered that in comparison to stand-alone courses, linked seminars were associated with greater perceived gains in study strategies, academic/cognitive skills, critical thinking, connections with faculty, connections with peers, out-of-class engagement, knowledge of campus policies, knowledge of academic services, time management, and knowledge of wellness. With regard to academic achievement, a study at Ithaca College found that students enrolled in a first-year seminar, linked to an Introduction to Business course, earned slightly higher grades in the business class than students who were not enrolled in a linked first-year seminar course (Lifton, Cohen, & Schlesinger, 2005).

Freshman Seminar and Learning Communities at Appalachian State University

Appalachian State University (ASU) is a public comprehensive institution in the mountains of western North Carolina. This moderately selective institution enrolls approximately 14,000 students, the vast majority of whom are traditional-aged and live on or close to campus. In fall 2004, ASU enrolled 2,516 first-year students, with an average high school grade point average (GPA) of 3.67 and SAT of 1123. First-semester first-year students have the opportunity to enroll in US 1150 (Freshman Seminar), which is a three-credit-hour, graded elective taught by a wide variety of faculty, administrators, and student affairs professionals. In fall 2004, 64 sections of this course were offered, enrolling close to 65% of all entering first-year students. At ASU schedules for first-semester, first-year students are created by an academic advisor based on information provided by the student on a preliminary course request form. Students may indicate possible majors, areas of interest, and anticipated Advanced Placement credit(s). Students are also given the option of selecting into Freshman Seminar. However, students who do not show a definitive interest in the course on the request form are often placed into

Freshman Seminar at the discretion of the academic advisor. During New Student Orientation students have the option of revising their schedule and can either add or drop Freshman Seminar. Students who do not enroll in a Freshman Seminar-based learning community generally participate in some other form of learning community, whether it is a residential community or non-Freshman Seminar-based academic community. Examples include honors students, teaching fellows, ROTC students, and Watauga College (a residential college within ASU that offers two years of interdisciplinary coursework). In fall 2004, approximately 90% of all first-semester, first-year students participated in some form of learning community.

Freshman Seminar course goals include developing academic and intellectual competence; establishing and maintaining interpersonal relationships; managing transition; broadening personal horizons; and discovering campus resources, traditions, and history. While there is no common syllabus for Freshman Seminar, instructors are required to attend a week-long training workshop that introduces the goals, common components, and various approaches used in teaching the course. While all sections must abide by the loose set of common course goals, instructors are given the flexibility to incorporate these objectives creatively.

The Freshman Seminar course has been incorporated in Freshman Learning Communities (FLC) since 1998. FLCs are designed to provide opportunities for first-semester, first-year students, in groups of 15 to 24, to take at least two classes together as a cohort. The Freshman Seminar course fulfills an important role, as the anchor course, in these learning communities by integrating course content, promoting study groups, employing practical learning skills appropriate for the linked course, and exploring the field for a possible major. Students in Freshman Seminar may be co-enrolled in a general core curriculum linked course, such as history or geography; a major-specific course, such as forensic science or criminal justice; or a special topic learning community, such as leadership or military science. In fall 2004, all 64 sections of Freshman Seminar were linked to at least one other core curriculum or major specific class as part of FLCs.

Freshman Seminar may be linked to another course in a learning community in two ways (see Figures 1 and 2). As shown in Figure 1, students in a one-to-one link are co-enrolled in two classes. All 22 students enrolled in Freshman Seminar are enrolled in the same English class. No other students are enrolled in the English course. In the example illustrated by Figure 2, students are enrolled in Freshman Seminar and then co-enrolled as a subset

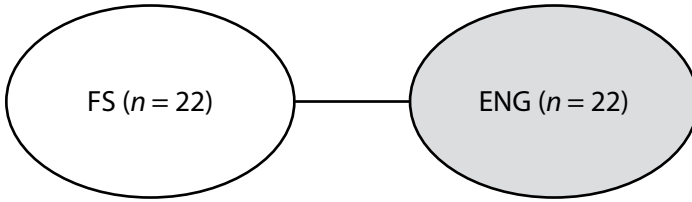


Figure 1. One-to-one learning community link.

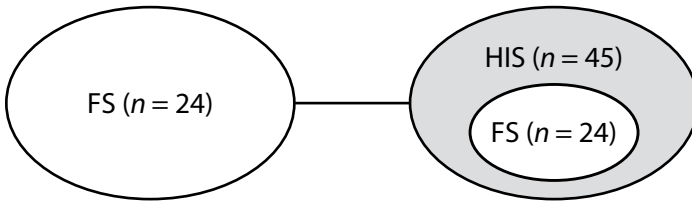


Figure 2. Subset learning community link.

of a larger history course. The other 21 students enrolled in the history course may be other first-year students not taking Freshman Seminar, first-year students in a different section of Freshman Seminar, or sophomores, juniors, and/or seniors.

Freshman Seminar and linked course instructors are joined by a common academic advisor to form learning community teams. These teams meet monthly to discuss the progress of their students, plan course material, and discuss ways to further integrate content. Methods of integrating these courses vary by community, but most Freshman Seminar classes support the linked course by forming study groups, discussing relevant note- and test-taking strategies, using common readings, and building an academic community in which students feel comfortable asking questions and seeking assistance. Both the one-to-one link and the subset learning community models were used in fall 2004.

One anticipated outcome of connecting these courses is higher grades in the linked class as a result of the intentional support provided in Freshman Seminar. Finding a clean method to evaluate the impact of linking Freshman Seminar to another course is challenging; fortunately, the subset versions of these learning communities provide a convenient control group that allows for comparison of grades while holding constant for the variations that can occur across courses and individual sections of the same course. Thus, the purpose of this study was to ascertain the impact of Freshman Seminar on the grades earned in these linked learning communities courses.

Method

Participants

Participants in this study included 1,294 first-semester, first-year students (53% male, 47% female; 90% White, 4% African American, 2% Hispanic, 1.5% Asian American, 2.5% Other) enrolled in 37 different learning communities where Freshman Seminar served as the anchor course. Examples of courses linked to Freshman Seminar included Accounting I; World Music; World Civilizations; and introductory courses in art, anthropology, sociology, political science, theatre, and psychology.

Procedure

A one-way analysis of variance (ANOVA) was used to test for differences in grades based on participation in Freshman Seminar. The dependent variable was the grade earned in each major specific/core curriculum course involved in the 37 learning community subsets from fall 2004. The independent variable was participation in Freshman Seminar, with three possible groups: (a) students enrolled in a section of Freshman Seminar that was linked to the learning community course ($n = 765$); (b) students enrolled in a different section of Freshman Seminar that was not linked to the learning community course ($n = 175$); and (c) first-year students not enrolled in Freshman Seminar ($n = 354$). For the purposes of this study, upper-class students (sophomores, juniors, and seniors) were omitted from this third group. The groups did not vary significantly by gender, $\chi^2 = (2, N = 1,215) = 1.91, p > .05$; race, $\chi^2 = (10, N = 1,215) = 17.71, p > .05$; or predicted grade point average, $F(2, 1,280) = 1.412, p > .05$. Predicted grade point average

is calculated by the Office of Admissions at ASU and is based on a formula of high school GPA, class rank, and SAT scores.

The researchers also investigated differences between the types of courses (i.e., anthropology, music, history) linked to the Freshman Seminar class. Due to the smaller *n* sizes of individual sections, this analysis was limited to courses that had multiple sections involved with these types of linked learning communities. In this study, nine such courses were analyzed, including World Civilizations I and introductory courses to anthropology, art, chemistry, criminal justice, music, psychology, sociology, and theatre.

Furthermore, because of the small cell size within levels created when disaggregating the data by courses, this analysis compared two groups: (a) students who were enrolled in the linked Freshman Seminar and (b) those that were not. Independent *t*-tests were run for each of these nine courses.

Results

The ANOVA was significant, $F(2, 1,291) = 23.83, p < .001$, with a η^2 of .04. Pairwise, post-hoc comparisons were conducted using Dunnett's C, since equal variances between groups could not be assumed. There were significant differences between all groups (Table 1). Students enrolled in a linked section of Freshman Seminar earned higher grades in the learning community course than both students enrolled in a non-linked Freshman Seminar ($p < .02$) and students not enrolled in Freshman Seminar ($p < .01$). In addition, first-year students enrolled in a Freshman Seminar that was not linked to the learning community class outperformed other first-year students who did not enroll in Freshman Seminar ($p < .05$).

Table 1

Means and Standard Deviations of Learning Community Grades

	<i>n</i>	<i>M</i>	<i>SD</i>
Linked FS class	765	2.78	1.05
Other FS class	175	2.53	1.07
No FS	354	2.30	1.20

The results of the *t*-tests indicated that there were significant differences in four of the nine courses analyzed. In all but one course (World Civilizations), students enrolled in a linked section of Freshman Seminar earned higher grades than their non-linked classmates. Table 2 depicts the mean grades, standard deviations, and level of significance for each of these courses.

Table 2

Means, Standard Deviations, and Level of Significance of Learning Community Grades for Select Courses

Course	Freshman Seminar Students (linked)			All Others			<i>t</i> -value (<i>df</i>)	<i>p</i> -value
	<i>n</i>	<i>M</i>	(<i>SD</i>)	<i>n</i>	<i>M</i>	(<i>SD</i>)		
Anthropology	40	2.64	1.05	22	1.93	1.19	2.45 (60)	.017
Art	45	3.06	.82	5	2.80	1.12	.66 (48)	.512
Chemistry	42	2.26	1.22	35	1.94	1.38	1.09 (75)	.281
Criminal Justice	38	2.68	.81	15	2.13	1.09	2.02 (51)	.048
Music	64	3.10	1.10	43	2.50	1.86	2.78 (105)	.006
Psychology	69	2.80	.96	168	2.46	1.04	2.39 (235)	.018
Sociology	66	2.41	1.09	30	2.00	1.12	1.66 (94)	.100
Theatre	45	3.12	1.12	15	2.93	1.13	.545 (58)	.588
World Civilizations	136	2.62	.99	52	2.69	1.01	-.459 (186)	.647

Potential Limitations

Studies involving first-year seminars generally suffer from the problem of self-selection bias. While this problem does exist for this study, the impact of this bias is mitigated by the registration process in which academic advisors create first-semester schedules and may enroll new students in the course at their discretion. Furthermore, because each Freshman Seminar course is linked with a core curriculum or major-specific class, Freshman Seminar becomes, in essence, a de facto requirement for a student not involved in another form of learning community at ASU.

Discussion

In general, first-year seminars have been shown to increase academic performance in the first year of college. This study has found that a first-year seminar linked to another course can augment academic success significantly in the connected class. While students in Freshman Seminar outperformed non-Freshman Seminar students, the impact of intentionally linking Freshman Seminar with another course provided even greater gains than just a non-linked Freshman Seminar could provide. In other words, enrolling in Freshman Seminar may improve grades in a psychology course compared to other first-year students not enrolled in a seminar, but co-enrolling students in both the Freshman Seminar and psychology courses provided even greater gains in academic achievement. The natural question becomes, why?

The literature on learning communities suggests many reasons for increased academic performance. Laufgraben (2005) suggested that students in learning communities are more likely to participate in class discussions, ask questions, or request help from their professors. These behaviors might be logically correlated with academic success. Furthermore, as Swing (2004) noted, students in linked versions of first-year seminars experience greater perceived gains in their study strategies, academic/cognitive skills, critical thinking, connections with faculty, and connections with peers. Again, it would seem that these gains could lead to greater academic performance. The connection with faculty may be especially significant. Pascarella and Terenzini (2005) noted that student/faculty interaction is positively correlated with every academic attainment outcome, including grade point average. First-year seminars are generally designed to increase contact with a faculty member, and linking the seminar with another course can help further these connections. In many cases, the professor linked with Freshman Seminar

will join the students for out-of-class events, such as cultural performances or class meals. These opportunities allow the students to develop a deeper connection with more than one faculty member.

To further explain the reasons for the improved grades on this campus as a result of participation in a linked Freshman Seminar, document reviews of course syllabi, along with interviews with course instructors (both Freshman Seminar and linked course) were conducted. These data reveal a great deal about why this success might occur. Freshman Seminar instructors were very intentional in the way they designed the course and related content to the linked curriculum. Instructors coordinated with the linked course instructor and the academic advisor, who comprised an academic support team for students. This team met at least one time per month to discuss common themes, events, assignments, and students they considered “at-risk” due to absences, grades, or discipline issues. The concept of Freshman Learning Communities was articulated to the students by including a goal or purpose statement and the contact information for the Freshman Seminar instructor, the linked instructor, and the academic advisor on the course syllabus. Instructors invited the academic support team to participate in out-of-class activities (e.g., Group Interaction Course, class dinners, cultural events) and indicated that community-building activities were crucial to the success of the class and the partnership with FLCs. This community allowed for greater academic risk taking among the students. Faculty from the linked course suggested that students in the Freshman Seminar link were much more willing to ask questions and engage in class discussions.

Integrating course material was another central theme of the document review. Many Freshman Seminar instructors were familiar with the linked courses’ texts, and they incorporated common texts and readings into their course. In addition, the instructors used integrated class projects where students completed a portion of the assignment in Freshman Seminar and a portion of the assignment in their linked course. Assignments may have been based on or related to material the students were exposed to in the linked learning community course. For example, a journal topic would be a response to a case study discussed in the linked general psychology course. To aid students in making curricular connections, instructors specifically related note-taking, test-taking, and study skills class sessions to the linked course material.

Finally, the document review revealed that in the classes with the highest grade differentials, instructors expressed that they had a personal interest

in the discipline of the linked course. For example, one Freshman Seminar instructor was a psychologist by profession, and his Freshman Seminar class was linked with a general psychology course. Another section of Freshman Seminar that was linked to a theatre class was taught by a drama professional. Leveraging disciplinary expertise when pairing instructors and courses may add an important element to the success of learning communities and merits future study.

The low effect size in this study suggests that the factors above associated with a linked Freshman Seminar class play only a small role in the variance in course grades. Future research should investigate other factors that might explain more reasons contributing to the differences in course grades. Still, fostering collaboration among instructors, integrating course materials and assignments, and creating a sense of academic and social community proved to make a marked impact on students' grades. These findings underscore the importance of incorporating first-year seminars as an anchor course in learning communities programs. The value and benefits of a first-year seminar are further enhanced by linking this course to another major or core curriculum course. By serving as an anchor course, the first-year seminar can become a place where students integrate material, learn and apply direct study strategies that will increase success in the linked course, and build community that allows for greater academic risk taking.

References

- Barefoot, B. O., Warnock, C. L., Dickinson, M. P., Richardson, S. E., & Roberts, M. R. (Eds.). (1998). *Exploring the evidence: Reporting outcomes of first-year seminars, Volume II*. (Monograph No. 25). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Laufgraben, J. L. (2005). Learning communities. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot, & Associates (Eds.), *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 371-387). San Francisco: Jossey-Bass.
- Levine, J. H. (1999). *Learning communities: New structures, new partnerships for learning*. (Monograph, No. 26). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.

- Lifton, D., Cohen, A., & Schlesinger, W. (2005). Ithaca College. In B. F. Tobolowsky, B. E. Cox, & M. T. Wagner (Eds.), *Exploring the evidence: Reporting research on first-year seminars, Volume III* (Monograph No. 42, pp. 12-17). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- MacGregor, J. (1994). Learning communities taking root. *Washington Center for Improving the Quality of Undergraduate Education News*. Retrieved September 8, 2005, from <http://www.evergreen.edu/washcenter/natlc/pdf/spring1994.pdf>
- National survey of first-year seminars*. (2003). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition. Retrieved September 10, 2005, from <http://www.sc.edu/fye/research/surveyfindings/surveys/survey03.html>
- Pascarella, E. T. & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Swing, R. (2002, September). *What type of seminar is best?* (Essay No. 4). Brevard, NC: Policy Center on the First Year of College. Retrieved on September 7, 2005, from <http://www.brevard.edu/fyc/fyi/essays/essay4.pdf>
- Swing, R. (2004). The improved learning outcomes of linked versus stand-alone first-year seminars. In J. M. Henscheid (Ed.), *Integrating the first-year experience: The role of learning communities in first-year seminars* (Monograph No. 39, pp. 9-16). Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Taylor, K., Moore, W. S., MacGregor J., & Lindblad, J. (2003). *Learning community research and assessment: What we know now*. National Learning Communities Monograph Series. Olympia, WA: The Evergreen State College, Washington Center for Improving the Quality of Undergraduate Education, in cooperation with the American Association for Higher Education.
- Tobolowsky, B. F., Cox, B. E., & Wagner, M. T. (Eds.). (2005). *Exploring the evidence: Reporting research on first-year seminars, Volume III* (Monograph No. 42). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.

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