

Assessing the Difference Between 1-, 2-, and 3-Credit First-Year Seminars on College Student Achievement

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Abstract.

Conditional admission programs have increased in popularity at many undergraduate institutions and involve being flexible with admission requirements and believing that even if students are academically underprepared, they can still be successful (Stewart & Heaney, 2013). Students with conditional admission must be provided the necessary support to close their preparedness gap, and first-year seminars are one way that universities are meeting their needs (Laskey & Heztel, 2011). In addition to students with conditional admission, first-generation students are typically labeled at risk for not matriculating successfully (Engle & Tinto, 2008). These students do not have an immediate family member who has completed college and (t) 8 (a) 25 (t) 7.5 (n) 3.9 (-) 10.4 (a) -) 13.5 (l) (ten)

the first semester and first year (Clark & Cundi , 2011; Hansen & Schmidt, 2017). More-

found, respectively, that the “importance of strong and purposeful support staff and systems to help students in their transitions to higher education should not be underestimated” (p. 96) and that “retaining and graduating Black undergraduate men at higher rates necessarily entails identifying what works in improving their classroom experiences and academic outcomes” (p. 20). These studies echo the quantitative work of Connelly and colleagues (2017), which concluded that each institution is responsible for providing quality interventions so that students gain the skills required for higher education attainment. Specifically, there is a call for first-year seminars that focus on high expectations and challenging students to complete college.

Fall 2011 and 2012: 2-credit FYS. This FYS applied to students' 40-credit liberal arts core graduation requirement and was only available during students' first semester. Students were not required to participate and self-selected into the seminar. Like other seminars, this course was small (i.e., 30 or fewer students), highly interactive, and discussion based, with emphases on student-centered instruction, recurrent application, and authentic learning opportunities. The curriculum combined research-based topics in the domain of educational psychology, such as goal and motivation theories, as well as more practical application topics such as time management and four-year educational planning. It was an academic course, rather than an extended-orientation model, that incorporated readings from peer-reviewed research, written assignment, research projects, and examinations.

Unlike many seminars offered, the curriculum was highly coordinated and each section had an identical schedule of topics and assignments. A competitive process was used to select instructors, and only instructors from specific domains (e.g., psychology, education) were eligible to apply. Each instructor then participated in a comprehensive week-long training prior to the semester followed by a concurrent, semester-long training to help ensure that each student received an equivalent course and experience.

Fall 2013 and 2014: 3-credit FYS. After delivering the 2-credit FYS for two years, the institution determined that two credits were not sufficient to meet the course objectives.

Data Analysis

that the 3-credit FYS group had significantly higher proportions of first-generation students and students of color as compared to the other groups. Only the 2-credit FYS group had a significantly higher proportion of conditionally admitted students. See Table 1 for each of the proportions.

Analysis of differences in index score (i.e., entering academic preparedness) also showed a significant main effect for FYS credit, $F(3, 12431) = 24.49, p < .001$. Tukey HSD post hoc comparisons indicated that the index mean scores for all three FYS credits (1s if recd st001. . = 1yed p.3 (

Table 2
First-Term GPA Means and Second-Year Credit Loads for All FYS Credit Groups

	First-term GPA		Second-year fall credit loads		<i>n</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
All	2.56	1.05	9.99	6.89	12,482
0 credits	2.50	1.12	9.60	7.03	8,980
1 credit	2.73	0.85	11.12	6.42	2,004
2 credits	2.72	0.78	10.76	6.39	679
3 credits	2.70	0.85	10.83	6.40	763

Note. 0 credits refer to students who did not participate in the first-year seminar.

Table 3

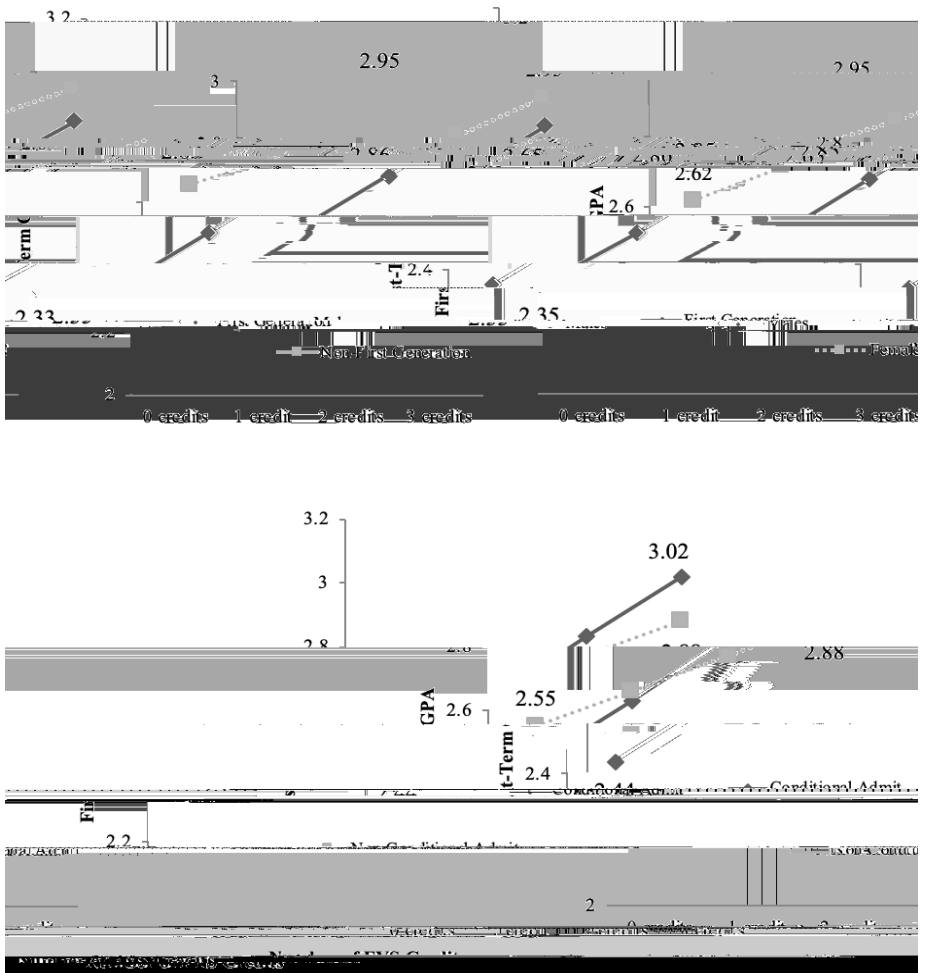


Figure 1. The significant interactions of first-generation status, gender, and conditional admittance with FYC credits on first-term GPA.

Discussion

Because of the challenges faced by students entering college for the first time, first-

the GPAs and credit loads for students who did not participate in any of the first-year seminars. These outcomes were clear even though the 3-credit FYS had a higher proportion of students who were first-generation and students of color and as a group had significantly lower average index scores.

Although this information is helpful when considering FYS types and their effectiveness, these outcomes reveal only a small part of the story. The additional analyses that assessed potential interactions offered more information about the relationship between at-risk student subgroups, their first-year achievement, and FYS credit levels. These findings suggest that first-generation students, male students, students of color, and conditionally

Implications

Because these findings suggest similar outcomes for all students regardless of FYS credit loads, administrators in higher education who are contemplating instituting these types of programs for the first time or are considering changes to their current programs may be tempted to establish or maintain programs that require the least amount of resources.

student-centered and engaging learning environment. The research-based academic FYS has opportunities and time to include learning and motivation theories that likely have a direct impact on the behaviors of these students. For example, instructors promote help-seeking behaviors by having students examine their own self-efficacy beliefs and attributions in different educational contexts. For institutions seeking practices to support these students, particularly institutions where these students are the majority, this type of model may provide increased opportunities for success and persistence for their students.

Limitations and Future Research

The primary limitation of this study is its generalizability because it included only one institution. However, it is this limitation that made the study possible. It is unlikely that many institutions have the range of FYS types and credit loads available within a relatively short time. It also allowed a more direct comparison because the overarching educational context, university culture, and environment were essentially the same for each student. However, there are still limitations to designing a study with only one institution, as the “process of student retention differs in different institutional settings” (Tinto, 2006-2007, p. 4).

Another limitation is the information that can be generalized by doing a strict comparison based on number of credits (or no credits for nonparticipation). Although the curriculum at this institution changed as the seminar increased in credits, this quantitative study can provide evidence only that the increase in contact hours (i.e., number of credits) is related to differences in the achievement outcomes. Additional a

References

Barefoot, B. (1992). *Helping first-year college students climb the academic ladder: Report of a national survey of freshman seminar programming in American higher education* (Unpublished doctoral

- year: Black undergraduate men's academic adjustment experiences. *Teachers College Record*, 118(6), 1-30.
- Huerta, A., & Fishman, S. (2014). Marginality and making: Urban Latino male undergraduates in higher education. *Journal of the First-Year Experience & Students in Transition*, 26(1), 85-100.
- Huck, S. W. (2000). *Reading statistics and research* (3rd ed.). New York, NY: Longman.
- Hussar, W., & Bailey, N. (2003). *Projections of education statistics to 2012* (NCES 2003-018). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Jajjairam, P. (2016). First-year seminars (FYS)— the advantages that this course offers. *Journal of Educational and Learning*, 5

- Swanson, N. M., Vaughan, A. L., & Wilkinson, B. D. (2017). First-year seminars: Supporting male college students' long-term academic success. *Journal of College Student Retention: Research, Theory & Practice*, 18(4), 386 - 400. doi: 10.1177/1521025115604811
- Tinto, V. (2006-2007). Research and practice of student retention: What's next? *Journal of College Student Retention*, 8, 1-19.
- Vaughan, A. L., Lalonde, T., & Jenkins-Guarnieri, M.A. (2014). Assessing student achievement in large-scale educational programs using hierarchical propensity scores. *Research in Higher Education*, 55(6), 564-580. doi: 10.1007/s11162-014-9329-8
- Vaughan, A. L., Parra, J., & Lalonde, T. (2014). First-generation college student achievement and the first year seminar: A quasi-experimental design. *Journal of the First-Year Experience & Students in Transition*, 26(2), 53-69.
- Wang, J. S., Pascarella, E. T., Nelson Laird, T. F., & Ribera, A. K. (2015). How clear and organized