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## The Long-Term Impact of First-Year Seminars

### Abstract

This study examined the net effects of participating in a residential first-year seminar (FYS) program by comparing the outcomes of participants with those of non-participants at the point of graduation, while controlling for background and pre-college variables. Outcome variables focused on student academic performance and self-reported gains as a result of their undergraduate education; they included: cumulative GPA; intellectual development; development of problem solving; development of social and civic engagement; institutional preparation for career path, graduate school, and interpersonal relationships and family living/personal development; and participation in faculty-mentored research. The study was based on a sample of 853 graduating seniors at a highly selective liberal arts college. Participation in a FYS was negatively associated with two outcomes--development of problem solving and institutional preparation for career path, on which FYS participants reported significantly smaller gains than non-participants. On the remaining outcome variables, participation in a FYS did not demonstrate any significant long-term effects.

### Keywords

First-Year Seminar, Outcomes, Liberal Arts College, Long-Term Net Effect, Assessment

### Disciplines

Educational Assessment, Evaluation, and Research | Higher Education | Liberal Studies

### Comments

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# The Long-Term Impact of First-Year Seminars

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## Introduction

A great deal of research has been conducted showing the positive effects of first-year seminars (FYS). However, researchers typically focus on their short-term benefits. Moreover, few studies examined the FYS impacts for underserved students.

The FYS program under study was first launched in Fall 2010. All students in a FYS lived in the same residence hall. Two types of FYS were offered: traditional (academic course), and BURG (a more intensive model; academic course plus enriching educational experiences, e. g., field trips; each instructor is paired with an administrator to enrich the course content). Among FYS goals are development of careful reading, writing, speaking, critical thinking, quantitative reasoning, teamwork, information literacy, integrative thinking, and understanding people from different backgrounds.

## Research Questions

1. Do FYS participants differ from non-participants on select background and pre-college characteristics?
2. At the point of graduation, are there significant differences for outcomes between FYS participants and non-participants after controlling for background and pre-college differences?
3. At the point of graduation, are there significant differences for outcomes between FYS participants from underserved groups (i.e., students of color; first-generation students) and their counterparts after controlling for background and pre-college differences?

## Method

**Data Sources:** CIRP Freshman Survey; HEDS Senior Survey; data retrieved from the college's administrative database

**Sample:** N=853 graduating seniors at a highly selective liberal arts college (735 FYS participants; 118 non-participants), who entered the college in fall 2012 and graduated in May 2016, or entered the college in fall 2013 and graduated in May 2017.

**Delimitation:** International students were excluded.

### Control Variables:

- Background variables: sex; race/ethnicity; first-generation (FG) status; native English speaker or not; HS average grade; HS type; HS & neighborhood racial composition; household income
- Input/pre-college variables:
  - financial concerns; socializing with someone of a different race/ethnicity during HS; political views; planning on pre-law or pre-med;
  - composite measures: HS habits of mind (behaviors and traits associated with academic success); civic engagement (HS civic involvement and motivations); social agency (extent to which students value political and social involvement as a personal goal); likelihood of college involvement (study abroad, student clubs, volunteer/community service, student government, socializing with someone of another racial/ethnic group);
  - likelihood of communicating regularly with professors, having a roommate of a different race/ethnicity, working on a professor's research project
- Major (at the point of graduation)

**Methods of Data Analysis:** chi-square tests; independent-samples T tests; multiple regressions; logistic regressions (participation in faculty-mentored research)

## Results

### Significant Differences on Select Background and Pre-college Characteristics:

- FYS participants were disproportionately women.
- FYS participants reported a higher likelihood of college involvement (at the point of starting college).

### Long-term Impact of Participation in a FYS:

At the point of graduation (the end of their 4 <sup>th</sup> year)...	FYS Participants vs. Non-participants	Among FYS Participants	
		Was Participation in FYS a Significant Predictor of This Outcome?	Significant differences by Race/Ethnicity?
Cumulative college GPA	No	No	Yes <sup>4</sup>
Intellectual development (careful reading; critical thinking; information literacy; effective writing)	No	No	No
Development of problem solving (teamwork; problem solving; quantitative literacy)	Yes <sup>1</sup>	No**	No
Development of social and civic engagement (civic engagement; intercultural knowledge and competence; ethical reasoning)	No	Yes <sup>3</sup>	No
Institutional preparation for career path	Yes <sup>2</sup>	No	No
Institutional preparation for graduate/professional school	No*	No	No
Institutional preparation for interpersonal relationships and family living	No	No	No
Participation in faculty-mentored research	No	No	No

<sup>1</sup>FYS participants reported significantly smaller gains than non-participants.

<sup>2</sup>FYS participants reported significantly smaller gains than non-participants. Examination by FYS type indicated that Traditional FYS participants reported significantly smaller gains than non-participants, while difference between BURG participants and non-participants approached statistical significance ( $p=.051$ ).

<sup>3</sup>Minority FYS participants reported larger gains than White FYS participants.

<sup>4</sup>FG FYS participants reported a significantly lower GPA than other FYS participants.

\*approaching statistical significance ( $p=.051$ ; FYS participants as a whole reported smaller gains than non-participants. Examination by FYS type indicated that Traditional FYS participants reported significantly smaller gains than non-participants).

\*\*approaching statistical significance ( $p=.076$ ; minority FYS participants reported larger gains than White FYS participants).

## Conclusion and Discussion

After controlling for background and pre-college variables, participating in a FYS is negatively associated with two outcomes measured at the point of graduation--development of problem solving and institutional preparation for career path, on which FYS participants reported significantly smaller gains than non-participants. On the remaining outcome variables, participation in a FYS did not demonstrate any significant long-term effects.

This surprising finding could be explained by a serious limitation of this study. By the end of their 4<sup>th</sup> year, compared with FYS participants, a significantly higher proportion of non-participants had discontinued enrollment at the college (mostly transferred to another school). It was possible that those who discontinued would have reported less gains at the point of graduation. Had they been included in the study, the pattern might have been different.

The absence of positive net effects of FYS also underscores the importance of pre-college characteristics and major. Control variables that contributed to the regression models include: HS grade, sex, HS habits of mind, HS racial composition, likelihood of college engagement, and major. These significant predictors help explain the difference between FYS participants and non-participants, thus leaving no net effects attributable to FYS.

It may also be true that the impact of FYS diminishes beyond the first year. Additionally, a myriad of other college experiences exerts influence on student outcomes, making the long-term effects of FYS undetectable.

Among FYS participants, after controlling for background and pre-college variables, students of color and FG students reported similar gains on almost all of the outcomes. Minority FYS participants reported larger gains on development of social and civic engagement than White FYS participants.

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