

The Influence of the First-Year Seminar Participation on Student Retention

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Abstract

College student retention is a complex phenomenon influenced by a myriad of factors and with wide-ranging implications for university functions. First-year seminar is one approach to increase first-year student retention through involvement, engagement, and integration. This quantitative study examines the influence of first-year seminar on retention of first-year, full-time, four-year degree-seeking students who matriculated during the fall 2016, 2017, 2018 semester and remained enrolled for fall 2017, 2018, 2019 semester at six institutions in two Northwest states in the United States.

This study utilized an odds ratio to investigate whether first-year seminar participation had a statistically significant influence on the probability of students being retained at the targeted institutions. The results of this study were not statistically significant indicating that first-year seminar participation did not have a statistically significant effect on the probability of students being retained at the study's institutions.

Keywords: retention, first-year seminar, first-year full-time, involvement, engagement, integration

1. Introduction

Student retention is critical to the success and future of institutions of higher education (Thompson & Prieto, 2013). Nearly thirty percent of students drop out of college during their first year (Alarcon & Edwards, 2013), therefore institutions need to look into the reasons so as to develop retention programs that will improve the success rate.

First-year students enter college with a wide array of characteristics, including age, economic factors, gender, and race (Miller & Lesik, 2014). These factors substantially affect student preparedness and experience transitioning into higher education (Melnik, Kelly, Jacobson, Arcoleo, & Shaibi, 2014). Their transition experiences involve adjusting, developing, and changing in response to academic and social experiences (Kantanis, 2000; Latham & Green, 1997). These transition experiences have long been recognized as challenging (Schlossberg, 1981). First-year seminars can be effective means to help students adjust to college (Miller & Lesik, 2014). Indeed, not considering the varying backgrounds of the incoming students, those who complete the first-year seminar programs are more likely to persist and graduate than other students, and with higher academic standing (Miller & Lesik, 2014; Vaughan, LaLonde, & Jenkins-Guarnieri, 2014).

The purpose of this quantitative study was to examine the relationship between freshman seminar course participation and student retention. Understanding domestic student retention is an important first step to understanding all student retention including international student retention.

2. Literature Review

2.1 Definitions of Terms

For purposes of this study, the following definitions were used:

Dropout. A student decision to leave college before earning a degree (Astin, 1975).

First-Time-Full-Time Freshman. First-year students enrolled in institutions of higher education for the first time, without regard to age or background (Federal Financial Aid Handbook 2017-2018).

Persistence. A student decision to continue active status at an institution (Seidman, 2012).

Student Retention. Students who are enrolled and registered in their third consecutive semester, or second year of an institution of higher education (Tinto, 1988, 1990).

2.2 History

In his book, *College Student Retention*, Alan Seidman described nine stages of student retention in American higher education (2012). The author claim that these areas depict the emergence of student retention as a critical issue in higher education in a systematic way. The following sections will look at these historical eras.

1. Retention Pre-History (1600s-Mid 1800s)
2. Evolving toward Retention (Mid 1800s-1900)
3. Early Developments (1900-1950)
4. Dealing with Expansion (1950s)
5. Preventing Dropouts (1960s)
6. Building Theory (1970s)
7. Managing Enrollments (1980s)
8. Broadening Horizons (1990s)
9. Current and Future Trends (Early Twenty-First Century) (Seidman, 2012, p. 13)

2.3 Student Engagement & Expectations

Research into retention is critical for institutions of higher education, and student engagement is a central focus of such studies (Baars & Arnold, 2014; Clark & Cundiff, 2011; McKenzie & Schweitzer, 2001; Murray, Ireland, & Hackathorn, 2016; Permzadian & Credé, 2016). It is increasingly more common for institutions to promote activities and integrated academic experiences to improve student engagement (Kuh, 2016). Such programs include first-year seminars, faculty mentoring, and extra-curricular activities in the community. Encouraging student engagement can be challenging because of unique characteristics of the students and the broader community (Fredricks, Blumenfeld, & Paris, 2004; Kahu, 2013).

Engagement may be evaluated on behavioral, emotional, and cognitive levels. Measurement of student participation, persistence, attendance, attention, and studying represents behavioral engagement (Fredricks et al., 2004). Successful behavioral engagement can result from promoting programs to improve academic involvement beyond basic coursework, including freshman seminars, study groups, and tutoring (Chickering & Gamson, 1987). Emotional engagement is measured by student reactions to professors, classmates, and the academic experience, which reflect student “ties to an institution and influence willingness to do the work” (Fredericks et al., 2004, p. 60). Student motivation towards academic studies underscores emotional engagement (Fredricks et al., 2004; Kahu, 2013). In turn, emotionally engaged students more easily overcome anxiety, boredom, and apathy (Park, Holloway, Arendtsz, Bempechat, & Li, 2012). Cognitive engagement focuses on student dedication to learning and how they respond to academic challenges (Fredricks et al., 2004). Student motivation also plays a role in cognitive engagement theories. Similarly, self-regulated learning (SRL) attempts to explain how students’ internal processes, including thinking, motivation, and behavior, impacts their control over learning (Pintrich, 2000). Several studies have advocated the importance of teaching SRL strategies to incoming students to improve their learning experience and help them succeed (Barefoot, 1992; Pilling-Cormick & Garrison, 2007; Pintrich, 2000; Pintrich & Zusho, 2002).

Programs addressing the improvement of student engagement need to focus on behavioral, emotional, and cognitive engagement (Kuh, 2005, 2007). Successful efforts may depend on responding to students’ wants and needs. Thus, researchers frequently measure student engagement levels through examining questionnaires, such as the Beginning College Survey of Student Engagement (BCSSE, 2019), the College Student Expectations Questionnaire (Kuh & Pace, 1998), and the 1966 Student Information Form (Astin, Panos, & Creager, 1967), to evaluate whether student expectations have been met.

2.4 First-Year Seminar Models

The institutional goals of first-year seminars dictate the delivery of each program, with the length and substance of the seminar set to achieve each particular institution’s goals. In their 2006 *National Survey of First-Year Seminars*, Tobolowsky and Associates (2008) concluded that the majority of first-year seminars were limited to one semester; of the 968 institutions surveyed, almost half of them required the seminar for all first-year students. The 2006 survey divided first-year seminars into six categories:

1. *Extended orientation*. These courses extend one and two-day orientation programs prior to the beginning of fall semester. Topics include campus resources, student goals, and institutional history and expectations (Barefoot, 1992; Permzadian & Grede, 2016). Such seminars are dedicated to student survival (Hunter & Linder, 2005).

2. *Academic content, either uniform or variable.* These courses aim to develop critical academic and studying skills, such as critical thinking, creative writing, and communication skills (Permazadian & Crede, 2016). Uniform content programs provide the same substance across sections, and variable content programs adapted to differences among sections.

3. *Basic study skills.* This type of seminar focuses on providing detailed study skills, covering grammar, notetaking, reading strategies and time-management. The seminar attempts to “help students identify learning styles, evaluate personal and academic strengths and weaknesses, determine career goals, and develop study skills needed to achieve academic success” (Hunter & Linder, 2005, p. 280).

4. *Pre-professional or discipline-linked.* These courses acquaint students with specific professions such as medicine or engineering, and hard-science disciplines (Hunter & Linder, 2005; Permazadian & Crede, 2016).

5. *Hybrid.* These seminars combine one or more of the previously discussed seminars, such as extended orientation and study skills content (Hunter & Linder, 2005; Saunders & Romm, 2008). Hybrid also describes seminars that include online content (Griffin, Romm, & Tobolowsky, 2008).

6. *Other.* A range of seminars are designed to respond to the unique challenges faced by some student groups. It was reported in 2006 that more than 20% of contributing institutions provided seminars for honors students and nearly 20% offered seminars “for academically underprepared students and learning community participants” (Griffin, Romm, & Tobolowsky, 2008, p. 35).

Young and Hopp (2014) reported in the *2012-2013 National Survey of First-Year Seminars* that the most common seminars available were Extended Orientation and then the Academic Variable Content.

3. Methodology

3.1 Research Question

This quantitative study was guided by the following research question:

What relationship, if any, exists between participation in freshman seminar classes and student retention?

3.2 Hypothesis

For the purpose of this study, the following hypothesis tested:

Students who participated in first-year seminar courses demonstrate a higher retention rate than those who did not participate.

For purposes of this study, the following null hypothesis used for statistical significance testing:

Ho: There is no statistically significant difference in retention rates between students who participated in first-year seminar courses and those who did not participate.

3.3 Research Design

In this research a causal comparative model was selected because it was not possible to arbitrarily select students and assign them to participation or non-participation in a first-year seminar, nor to randomly sample the students. An experimental design would be ideal; however, it would be unethical and could negatively impact the students' education. Moreover, the available data from the institutional data office can only be examined retrospectively.

3.4 Participants and Population

This study was retrospective, therefore the participants were not contacted by or connected with the researcher. The data examined were consistently collected and applied uniformly as they were collected in line with the federal regulations and institutional policies, and it uses accepted definitions of retention (Tinto, 1988).

One issue in testing the generalizability of the data is the fact that the students were unidentified. Although this was beneficial as it protects the privacy of the students, it should be acknowledged that relying on unidentified sources precludes the possibility of testing the impact of different characteristics, including the family background, economic status, race, and other factors. With anonymous participants, the study did not facilitate a generalization of the entire population of the first-year college students throughout the United States. This research did not focus on the growing diversity of the students in higher education, which would create more challenges for understanding student retention (Newman, Couturier, & Scurry, 2010a; Selingo, 2015; Tinto, 1988, 1990).

3.5 Data Collection Procedures

This study was conducted in the Northwest region of the United States and six public, four-year institutions in two states participated. For this study, previously collected institutional data were used and de-identified to ensure student

confidentiality. Data were collected directly from the institutions or the state higher education research institute. Participants included in this study met the following criteria:

- Are first-time full-time freshmen. Full-time enrollment will be determined by using the Federal Financial Aid definition of being enrolled for at least twelve (12) credits of academic work
- Participated in the first-year seminar course during their first year of enrollment at University

3.6 Variables

Student Retention (SR): SR is the dependent variable in this study which is a categorical and binary variable. For the purposes of this study, the definition of SR refers to the students who are enrolled and registered in their second year of an institution of higher education (Tinto, 1988, 1990). The definition of SR includes First-Time-Full-Time Freshman. The first-year students are those enrolled in higher education for the first time seeking a four-year degree, regardless of age or background. SR is defined as a rate or percentage of students who return to institutions from one enrollment period to another. According to the standardized definition of the Integrated Postsecondary Education Data System (IPEDS) system retention is the percentage of students who are first-time, full-time, degree-seeking from the previous fall semester or term and who have reenrolled or completed their program successfully by the current fall semester or term (Habley et al., 2012).

First-Year Seminar (FYS): FYS is the independent variable of the study which is a categorical and binary variable. In this study, the researcher will examine the FYS course participation to determine whether it has a significant relationship to student retention. Typically, FYS focuses on the engagement, involvement, and integration of the First-Time-Full-Time students in institutions of higher education for the purpose of acquiring academic study and life management skills.

3.7 Data Analysis

Four student retention groups were identified: (1) those who participated in first-year seminar programs and were retained and (2) not retained, and (3) those who did not participate in first-year seminar programs and were retained, and (4) not retained. The subject unit of analysis is students who are retained or who withdrew.

Each group was evaluated for Relative Risk, to determine the efficacy of these programs in improving retention at four-year institutions in the Northwestern United States. Relative Risk was evaluated according to the established methods of comparison of students coming from wide-ranging backgrounds, a non-parametric model (Zar, 2010; Zhang & Yu, 1998). This evaluation facilitated a fairer comparison of students who participated in the first-year seminar programs with those who did not. It should be acknowledged that the non-parametric statistics were applied because of the different group sizes and different characteristics between those students who participated in the first-year seminar programs and those who did not. Nonetheless, parametric studies may not be effective to compare retention rates between students (Zar, 2010).

In this study, the researcher utilized the non-parametric test, or Chi-Square Goodness of Fit test, to evaluate unexpected numbers included in the four groups identified above. The non-parametric test assumes no difference between the hypothesis and considers all subjects equal (Zar, 2010). The researcher determined a priori $\alpha = .05$ to reject the null hypothesis. As the study was non-parametric, experimental results were not evaluated (Zar, 2010).

The researcher utilized Odds Ratio (OR), which is the inferential statistic, used in retrospective Case-Control Studies, Chi-Square Analyses, and in Multivariate Models predicting for categorical, ordinal, and time-to-event outcomes. It is also used in cross-sectional and cohort study designs. OR allows a fair evaluation of how the independent and predictor variables determine the dependent variable (student retention), which has a dichotomous value of either 0 or 1. OR is a measurement of relationship between an exposure and an outcome, and represents the odds that an outcome occurs given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure (Privitera, 2015).

- $OR=1$ Exposure does not affect odds of outcome
- $OR>1$ Exposure associated with higher odds of outcome
- $OR<1$ Exposure associated with lower odds of outcome

The Confidence Interval (CI) indicates the degree of uncertainty around the measure of effect (precision of the effect estimate) which is expressed as an OR. When a study includes only a small sample of the overall population using CI is appropriate. In this way, the researcher will be able to have an upper and lower confidence limit to infer that the true population effect lies between these two points. Most studies report the 95% CI to estimate the precision of the OR. Confidence intervals can be used for hypothesis testing and the assessment of statistical significance of any estimate (Privitera, 2015).

4. Results

4.1 Descriptive Statistics

Table 1. Breakdown of First-Time Full-Time Freshman Student Enrollment by Institution

Institution	Freshman Enrollment
Institution 1	3566
Institution 2	7844
Institution 3	1076
Institution 4	678
Institution 5	4544
Institution 6	3514

This table presents the breakdown of the dataset for six public, four year institutions in two Northwest states in the United States who participated in this study. In table 1, you can see the participating institutions and the freshman enrollment is higher in institution number two and lower in institution number four. The range is 7844 to 678.

Table 2 presents the overall percentage of retention for each institution including all academic years.

Table 2. Overall Percentage of Retention for each Institution by all Academic Year

Institution	Seminar			No Seminar		
	Retain	No Retain	% Retain	Retain	No Retain	% Retain
Aggregate Inst 1	1623	669	71%	847	427	66%
Inst 1 AY 2016-2017	484	232	68%	351	158	69%
Inst 1 AY 2017-2018	601	216	74%	258	142	65%
Inst 1 AY 2018-2019	538	221	71%	238	127	65%
Aggregate Inst 2	4765	1280	79%	1324	475	74%
Inst 2 AY 2016-2017	1397	418	77%	627	235	73%
Inst 2 AY 2017-2018	1665	419	80%	349	110	76%
Inst 2 AY 2018-2019	1703	443	79%	348	130	73%
Aggregate Inst 3	296	241	55%	339	200	63%
Inst 3 AY 2016-2017	100	89	53%	115	72	61%
Inst 3 AY 2017-2018	94	86	52%	111	70	61%
Inst 3 AY 2018-2019	102	66	61%	113	58	66%
Aggregate Inst 4	207	50	81%	334	87	79%
Inst 4 AY 2016-2017	48	17	74%	102	28	78%
Inst 4 AY 2017-2018	72	19	79%	109	24	82%
Inst 4 AY 2018-2019	87	14	86%	123	35	78%
Aggregate Inst 5	1226	662	65%	1013	653	61%
Inst 5 AY 2016-2017	430	217	66%	307	200	61%
Inst 5 AY 2017-2018	434	213	67%	316	223	59%
Inst 5 AY 2018-2019	362	192	65%	390	230	63%
Aggregate Inst 6	226	56	80%	3409	853	80%
Inst 6 AY 2016-2017	83	16	84%	1249	284	81%
Inst 6 AY 2017-2018	87	21	81%	1138	271	81%
Inst 6 AY 2018-2019	56	19	75%	1022	298	77%

In the table two, you can see that in institution number three more students who did not take the first-year seminar retain at higher rate than students did participate in first-year seminar.

4.2 Odds Ratios

Table 3. Odds Ratios of Student Retention Based on Freshman Seminar Participation

Variable	OR	95% CI	<i>p</i> value
Retain Aggregate			
Retain Institution 1 Aggregate	1.22	1.07-1.37	0.85
Retain Institution 1 AY 2016-2017	0.93	0.69-1.18	0.68
Retain Institution 1 AY 2017-2018	1.53	1.27-1.78	0.77
Retain Institution 1 AY 2018-2019	1.29	1.03-1.56	0.73
Retain Institution 2 Aggregate	1.33	1.21-1.45	0.91
Retain Institution 2 AY 2016-2017	1.25	1.06-1.43	0.80
Retain Institution 2 AY 2017-2018	1.25	1.01-1.49	0.74
Retain Institution 2 AY 2018-2019	1.43	1.20-1.66	0.79
Retain Institution 3 Aggregate	0.72	0.48-0.96	0.64
Retain Institution 3 AY 2016-2017	0.70	0.29-1.11	0.58
Retain Institution 3 AY 2017-2018	0.68	0.27-1.10	0.58
Retain Institution 3 AY 2018-2019	0.79	0.35-1.23	0.59
Retain Institution 4 Aggregate	1.07	0.68-1.46	0.63
Retain Institution 4 AY 2016-2017	0.77	0.08-1.46	0.55
Retain Institution 4 AY 2017-2018	0.83	0.16-1.50	0.99
Retain Institution 4 AY 2018-2019	1.76	1.09-2.44	0.63
Retain Institution 5 Aggregate	1.00	0.70-1.31	0.66
Retain Institution 5 AY 2016-2017	1.17	0.62-1.72	0.60
Retain Institution 5 AY 2017-2018	0.98	0.49-1.48	0.60
Retain Institution 5 AY 2018-2019	0.85	0.32-1.39	0.58
Retain Institution 6 Aggregate	1.27	1.13-1.40	0.88
Retain Institution 6 AY 2016-2017	1.29	1.04-1.53	0.75
Retain Institution 6 AY 2017-2018	1.43	1.20-1.67	0.78
Retain Institution 6 AY 2018-2019	1.11	0.87-1.35	0.72

Table 4. Aggregate Odds Student Retention Across All Participating Universities

	Retain	Not Retain	OR	95% CI	<i>p</i> value
First-year Seminar	9343	4088	1.33	1.27-1.39	0.99
NO First-year Seminar	4266	2495			

The aggregate odds student retention across all participating universities presents the odds ratio of 1.33 with the *p*-value of 0.99. Also the range of the confidence interval is between 1.27-1.39.

Table 5. Aggregate Odds Student Retention Across All Participating Universities AY 2016, 2017, 2018

Year	OR	95% CI	<i>p</i> value
2016	0.91	0.80-1.01	0.86
2017	1.11	1.00-1.22	0.90
2018	1.17	1.06-1.27	0.91

Table 6. Overall Student Retention at Institution 1 Academic Year 2016, 2017, 2018

	Retain	Not Retain
First-year Seminar	1623	669
NO First-year Seminar	847	427
Total	2470	1096
	Odd Ratio	1.22
	Upper 95%	1.37
	E	2.71
	SE	1.15
	<i>p</i> value	0.85

Table 7. Overall Student Retention at Institution 2 Academic Year 2016, 2017, 2018

	Retain	Not Retain
First-year Seminar	4765	1280
NO First-year Seminar	1324	475
Total	6089	1755
	Odd Ratio	1.33
	Upper 95%	1.45
	E	2.71
	SE	0.95
	<i>p</i> value	0.91

Table 8. Overall Student Retention at Institution 3 Academic Year 2016, 2017, 2018

	Retain	Not Retain
First-year Seminar	296	241
NO First-year Seminar	339	200
Total	635	441
	Odd Ratio	0.72
	Upper 95%	0.96
	E	2.71
	SE	1.91
	<i>p</i> value	0.64

Table 9. Overall Student Retention at Institution 4 Academic Year 2016, 2017, 2018

	Retain	Not Retain
First-year Seminar	207	50
NO First-year Seminar	334	87
Total	541	137
	Odd Ratio	1.07
	Upper 95%	1.46
	E	2.71
	SE	3.04
	<i>p</i> value	0.63

Table 10. Overall Student Retention at Institution 5 Academic Year 2016, 2017, 2018

	Retain	Not Retain
First-year Seminar	1226	622
NO First-year Seminar	1013	653
Total	2239	1275
	Odd Ratio	1.27
	Upper 95%	1.40
	E	2.71
	SE	1.080
	<i>p</i> value	0.88

Table 11. Overall Student Retention at Institution 6 Academic Year 2016, 2017, 2018

	Retain	Not Retain
First-year Seminar	226	56
NO First-year Seminar	3409	853
Total	3635	909
	Odd Ratio	1.00
	Upper 95%	1.31
	E	2.71
	SE	2.36
	<i>p</i> value	0.66

5. Conclusions

Student retention and integration experiences depend upon the characteristics that students bring with them to college (Astin, 1975, 1993; Tinto, 1975, 1993). Recognizing such diverse backgrounds, it is important to support students in this critical time through high-impact practices, including the first-year seminars that can encourage academic performance and social integration (Barefoot, 2000; Braxton, 2002; Goodman & Pascarella, 2006; Pascarella & Terenzini, 2005; Upcraft et al., 2005).

The results of this study indicated the first-year seminar participation does not have a statistically significant effect on student retention however, the results are substantial for future research. For instance, descriptive statistics for percentage of retention in institution one and two indicated that students who participated in the first-year seminar retain at higher percentage rate than those who did not. Future research could analyze this descriptive statistic and explore what happened from academic year of 2016, 2017, 2018 in these two institutions that boosted the retention rates? Another example is that in third institution students who participated in the First-year seminar retain at lower percentage rate than who did not participate. Future action research could explore the effectiveness of the first-year seminar in this institution. Conducting an interview with the first-year seminar instructors and freshman who participated in the first-year seminar could identify the common themes and factors that clarify why students who attended the first-year seminar retain at lower percentage rate than who did not participate. Additionally, Institution Six had very higher percentage rates to begin with and they were higher among all institutions however, gradually they faced lower percentage retention rates that could be investigated in the future research. Therefore, each institution may have done something different in the first-year seminar from year to year that resulted in different retention rates. Future research can identify the underlying factors that may contribute to the results of this research.

5.1 Implications for Practice

There are many factors that influence student decisions to persist or withdraw. Some factors may be within an institution's control, while others depend solely on the student. Recognizing the fact that the majority of students who withdraw do so immediately after the first year, institutions have widely adopted the first-year seminar programs aimed at integrating incoming students into the academic and social culture of their institution. Institutions of higher education increasingly focus on the first-year seminars as a retention strategy to respond to the needs of the first-year college students from a wide range of backgrounds. The results of this study were not statistically significant however they confirm that myriad factors contribute to the retention phenomenon.

5.2 Implication for Policy

Although this study did not find any relationship between first-year seminar and retention rates, some literature shows that participation in first-year seminars can facilitate student success and retention. Institutions of higher education should look at successful systems within first-year seminars to determine what they are doing differently that can be attributed to their success, and design new freshman seminar programs following these models. Furthermore, a better understanding of the many factors that influence retention (such as culture of the university, student support systems, and the role that the advising center plays) would support a comprehensive strategic plan for campus retention efforts. Moreover, policy makers and leaders of institutions of higher education need to constantly evaluate and revise policies.

5.3 Implication for Leaders

As of 2012, only over half of the four-year college students at American universities earned their bachelor's degrees within six years after entering college (Tinto, 2012). The problems related to students drop-out after the first year of college are multifaceted and can negatively affect the institutions of higher education and society at large. Considering the changes in the economy and demands for more specialized degrees, student retention and the effect that the first-year seminar programs have become increasingly important. Supporting student integration both socially and academically is and should continue to be a primary goal of higher education leaders that supports the institutions of higher education and the wider communities at large. Responding to student departure issues, higher education leaders need to constantly evaluate policies and consider factors such as retention and engagement data analysis, admission standards, and budget allocation to strategically plan for student retention and success.

Leaders of institutions of higher education need to have a more comprehensive picture of freshmen students' experience through analyzing data such as students' campus resource utilization, study skills, and engagement. Student campus engagement is a key factor in student retention which is largely based on the connection created by student engagement opportunities provided by the institution (Tinto, 2012). According to Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008) there is a link between low engagement and premature departure from the college. Leaders can investigate and analysis data from the National Survey of Student Engagement (NSSE) which "collects information about first-year and senior students' participation in programs and activities that institutions provide for their learning and personal development" (NSSE website, 2020). This survey provides an informative lens into how the first-year students spend their time and engage in on-campus activities that leads to decisions about leaving or staying at college.

Admission standards can impact retention rates. Institutions of higher education with more selective admission standards and policies admit students who are more academically prepared for college-level coursework. This results in higher retention and graduation rates than institutions with less selective admission standards. If leaders of institutions of higher education are committed to maintain more open access they should invest in more programs to support incoming students and improve retention rates. Institutions can implement the first-year seminar programs to support and respond to the needs of incoming students that are not academically prepared. The first-year seminar programs could be one of many different retention strategies such as tutoring and other developmental courses to increase engagement and develop the necessary academic skills.

6. Summary

This study does not show a relationship between first-year seminar and retention which make sense when one considers the retention complexity. French (2018) research indicated that neither academic advisor type nor any of his study's additional predictor variables were statistically significant predictors of the retention. According to French (2018) due to the complexity of retention many factors can influence student retention. A better understanding of the many factors that influence retention (such as culture of the university, student support systems, and the role that the advising center plays) would support a comprehensive strategic plan for campus retention efforts.

Retention is driven by myriad of factors, and policies and practices for enhancing retention rates require comprehensive understanding of these factors. For example, higher education leaders should consider admission selectivity and budget allocation for developmental courses including the first-year seminars in their retention strategies. In summary, the study shows the need for the larger data sets that can investigate many related variables that impact the relationship between the first-year seminar participation and student retention.

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