

FEATURE ARTICLE

First-Year Seminars: A Comparison of Course Characteristics and High Impact Practices at Two-Year Colleges

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ABSTRACT

Contemporary literature underscores the salience of First-Year seminars (FYS) in supporting the success of college students. The problem is that the research outlining the characteristics of FYS at two-year colleges is sparse, particularly when certain populations are required to enroll in these courses. There is little information about how these seminars vary to meet the needs of certain students. This study examined the characteristics of FYS at two-year institutions where academically underprepared students were required to enroll in a first-year seminar. The results and implications for practice are discussed in this study.

There is a need to increase the number of students nationally who earn degrees and certificates. The state of Texas reported it will need “approximately 60 percent of 25- to 34-year-olds to hold a quality certificate or degree by 2030” in order to remain globally competitive (Texas Higher Education Coordinating Board, 2015, p. 2). Persistence and degree completion rates of college students remain low among two-year colleges where only “30 percent of first-time full-time students earn a certificate or associate degree within three years” (Karp, Raufman, Efthimiou, & Ritze, 2015, p. 1). These rates are even lower among students who are placed into developmental education. More than half of first-time enrolled students who enter a two-year college and test into a developmental course do not make it through developmental course sequences (Bailey, Jeong, & Cho, 2010). This makes interventions that target academically underprepared students important toward meeting long-term strategic goals for colleges.

Institutions have responded by offering first-year seminars as a tool to provide students with the academic and social support needed to be successful in college. These seminars support student transition into college by developing academic skills (e.g., study skills, writing skills, and time management), introducing students to campus resources, and facilitating collaborative partnerships (faculty, staff, and students). The problem is that there are different types of first-year seminars (extended orientations, academic seminars, etc.), and not all seminars types are correlated with the same student outcomes (Per-

mzadian & Credé, 2016). This may differentially affect the success of academically underprepared students. Unfortunately, limited information exists about how characteristics of first-year seminars vary in two-year colleges when academically underprepared students are required to enroll in them. Assessing the alignment of seminar type and institutional outcomes may be important to student success. This study explored differences in the characteristics and high-impact practices of first-year seminars at two-year colleges that required academically underprepared students to enroll in them. Results may help to inform how first-year seminars currently meet the needs of underprepared students at these institutions.

Literature Review

Earning a high school diploma does not guarantee that a student will be ready for college (Strong American Schools, 2008). As many as 30% of all first- or second-year undergraduate students at four-year colleges are required to take developmental or remedial courses prior to enrollment in college-level English and mathematics (Radwin, Wine, Siegel, & Bryan, 2013). Due to the open-access mission of two-year colleges, students are placed into developmental courses at even higher rates within these institutions. This often results in significant costs to both students and the institutions that serve them. Strong American Schools (2008) estimated that remedial courses cost community colleges between \$1.9 and \$2.3 billion dollars annually. Further, students enrolled in developmental education were reported to

have lower degree attainment rates in comparison to those who do not enroll in developmental education (What Works Clearinghouse, 2016; Levin & Calcagno, 2008). Students enrolled in developmental courses often need additional academic support to be successful in college.

Learning communities are one approach that can be used to support the academic success of underprepared students. Learning communities are small groups of students or cohorts who are placed together based on shared common academic goals. Higher education professionals implement these learning communities to improve relationships with other students and faculty, facilitate greater levels of academic engagement, and improve the level of support provided to students. Learning communities are reported to have a positive effect on the persistence of college students (Bailey & Alfonso, 2005).

First-year seminars represent one type of learning community and are broadly defined as “a course intended to enhance the academic and/or social integration of first-year students” (Barefoot, 1992, p. 49). The origins of these seminars date back more than a century but gained momentum in the 1980s as accountability became increasingly important for institutions. First-year seminars were seen as a way to help students successfully transition into the college and university environment. Various names have been used to describe these seminars over the years, including freshman orientation courses, student success courses, and first-year seminars. The use of the term seminar is more contemporary and “reflects an increasing rigor and acceptance in the academy” of these courses (Hunter & Linder, 2005, p. 279). Some institutions have expanded even further the academic focus of these seminars by developing frameworks courses, such as the Frameworks for Mathematics and Collegiate Learning course at the University of Texas. Frameworks is also a first-year seminar but incorporates theory from psychology and the learning sciences and is credit bearing (Charles A. Dana Center, 2014a). However, these variations illustrate that seminars can differ in terms of the curriculum, awarding of college credit, and number of credit hours, in addition to the titles used to describe them. The term first-year seminar is thus used here and throughout the paper to refer more broadly the collection of these courses, which is consistent with the higher education literature and national surveys used to examine them.

First-year seminars are best distinguished

Throughout the professions’ history, developmental educators and learning assistance professionals have been at the forefront in creating access, developing new pedagogies for teaching, and innovating academic support programs designed to support a diverse array of college students.

from one another based on course characteristics or the seminar type offered by the institution. Barefoot (1992) offered a typology of first-year seminars based on course characteristics that is still commonly used today. The types of first-year seminars in that typology included a) extended orientation seminars, b) academic seminars with generally uniform academic content, c) academic seminars on various topics, d) paraprofessional seminars, and e) basic study skills seminars. The most common type of first-year seminar were those that served as an extended orientation, although the use of academic seminars (e.g., Frameworks for Mathematics and Collegiate Learning) has increased more than any other seminar type in recent years (Young, & Hopp, 2014). Extended orientation seminars typically provide access to information about “campus resources, college policies, and procedures, basic study skills, time management, and learning strategies” (Permzadian & Credé, 2016, p. 286). Academic seminars commonly include content that promotes the development of skills such as writing, reading, and critical thinking. Successful seminars offer academic credit, collaboratively include faculty and staff in the development of these seminars, provide instructor training and compensation, involve upper-level students in course delivery, and actively assess course effectiveness (Hunter & Linder, 2005).

Research indicates a positive relationship exists between first-year seminars and both persistence (Lang, 2007; Pascarella & Terenzini, 2005; Porter & Swing, 2006; Schnell & Doetkott, 2003;) and grade performance (Blackett, 2008; DeRoma, Bell, Zaremba & Albee, 2005), but those relationships are also moderated by the type of seminar offered by the institution (Permzadian & Credé, 2016). Not all seminar types are correlated with the same student outcomes. It was recommended that institutions seeking to improve student retention design first-year seminars with an orientation focus. In contrast, institutions that seek to improve the academic performance of college students should design first-year seminars with an academic component.

According to national data, 86% of two-year institutions and 91% of four-year institutions offered some type of first-year seminar in 2012–2013 (Young & Hopp, 2014). Despite the increased availability of first-year seminars at colleges, “31% of two-year campuses required fewer than 10% of their students to take a first-year seminar” (Young & Hopp, 2014, p. 12). This may be the result of pressure to avoid

mandating additional courses for students who are already required to take other non-credit bearing courses (i.e., developmental or remedial courses). This may also be a function of the differentiated ways in which first-year seminars are integrated into the academic curriculum. Some institutions include first-year seminars as part of the core curriculum (e.g., Frameworks) while other institutions offer them only as an elective course. When first-year seminars are elective or outside the student’s degree plan, the students most likely to benefit from these courses may be the least likely to enroll in them.

Students who come to college academically underprepared often need additional academic support and may benefit from a first-year seminar with an academic component, particularly given that the retention of these students is dependent upon on their academic performance. However, little information exists about the characteristics of these seminars at two-year colleges when academically underprepared students are required to take these courses. Given the number of students who come to college academically underprepared, the lack of national survey data disaggregated in this way is concerning. The purpose of this study was to explore how the characteristics and high-impact practices varied among two-year colleges that required academically underprepared students to enroll in the institution’s first-year seminar and those that did not. This may help to inform the alignment between seminar type and the needs of academically underprepared students at two-year colleges.

Method

Sample

Data for this study were obtained from the 2012–13 National Survey of First-Year Seminars (NS-FYS) (Young and Hopp, 2014). This survey collected data on first-year seminar programming from Chief Academic Officers, Chief Executive Officers, or Chief Student Affairs Officers at accredited colleges and universities across the United States. Of those invited to participate, 896 responded to the survey (24% response rate). The data were then limited to two-year colleges (n = 206) given that these institutions serve the greatest proportion of students who are academically underprepared or who are required to enroll in developmental courses.

The demographic characteristics of the two-year colleges included in this study are reported in Table 1. Most of these institutions were public (93.2%) with first-year class sizes of 1,000 or more students. The percent of two-year institutions that offered any type of first-year seminar was 86.4 (n = 178) although not all of these colleges provided information about populations of students required to enroll in these seminars. Of the 128 institutions that provided

this information, 30% reported that they required academically underprepared students to enroll in a first-year seminar (n = 38). Only 20% of institutions required students placed into a developmental or remedial course to enroll in a first-year (n = 26).

Table 1
Characteristics of First-Year Seminars at Two-Year Colleges (N = 206)

	n	%
<i>Institutional Control</i>		
Public	192	93.2
Private	14	6.8
<i>First-Year Class Size</i>		
500 or less	33	16.0
501 – 1,000	40	19.4
1,001 – 2,000	49	23.8
2,001 – 4,000	49	23.8
More than 4,000	35	17.0
<i>First-Year Seminar</i>		
Yes	178	86.4
No	28	13.6
<i>Approximate Percentage of Students Enrolled in FYS^a</i>		
Less than 10%	28	13.6
10 – 19%	21	10.2
20 – 29%	17	8.3
30 – 39%	16	7.8
40 – 49%	7	3.4
50 – 59%	18	8.7
60 – 69%	11	5.3
70 – 79%	14	6.8
80 – 89%	15	7.3
90 – 99%	22	10.7
100%	6	2.9
<i>Students Required to Participate in FYS^b</i>		
Developmental Education	26	29.7
Academically Underprepared	38	20.3

Note. ^a Percentages based on the 178 two-year colleges that reported offering a first-year seminar.

^b Percentages based on a sample of 128. Not all colleges that reported offering a first-year seminar provided enrollment information.

Variables

Because requirements for developmental education vary by state (some states allow students to opt out of remedial education courses), and students placed into developmental courses can be considered academically underprepared, groups were compared on this marker in the dataset to increase the comparative sample size in this study. This resulted in a sample size of 128 two-year

colleges, of which 38 required academically underprepared students to enroll in a first-year seminar and 90 did not require these students to enroll in a first-year seminar.

Institutions were asked about the (a) types of seminars, (b) objectives, and (c) topics included as a part of their first-year seminars. Institutions were able to select all discrete types of seminars (extended orientations, academic seminars with generally uniform content across sections, academic seminars on various topics, preprofessional seminars, and basic study skills seminars) offered at that institution’s campus. The NSFYS also asked institutions to identify the three most important course objectives and three most important course topics covered by the seminar. Objectives and topics were selected from a pre-populated list available in Appendix B of Young & Hopp (2014). Course objectives included items such as developing academic skills, increasing student-faculty interaction, and developing a connection with the institution. Course topics included items such time management, writing skills, and critical thinking skills.

Institutions were also asked about the use of high-impact practices (HIPs) within their first-year seminar. HIPs are those practices shown to lead to “deep learning, first-year GPA, and first- to second-year retention as well as gains in 21st century learning outcomes identified through AAC&U’s [Association of American College and Universities] LEAP initiative” (Young & Hopp, 2014). The 2012–2013 NSFYS included seven HIPs most-applicable to first-year students. These HIPs included writing-intensive experiences, collaborative assignments and projects, diversity and global learning, service-learning, learning communities, common reading experiences, and undergraduate research opportunities.

Analysis

Institutions requiring academically underprepared students to enroll in a first-year seminar and institutions that did not were compared using chi-square test of independence ($\alpha = .05$). The chi-square test statistic can be less accurate when small samples are used in the analysis. As such, the probability value for each chi-square test was computed using Fisher’s exact test since this method is a better approximation of the chi-square distribution within small samples (Field, 2013). Odds ratios were also used as a measure of effect size for each chi-square test. Prior to interpreting the odds ratios associated with these comparisons, all ratios below 1.0 were inverted to improve interpretation (Osborne, 2006). These inversions are interpreted as *times less likely*.

Results

Two-year colleges that required academically underprepared students to enroll in a first-year seminar were 5.60 times more likely to offer a basic study skills seminar than two-year colleges that did not require these students to enroll in a first-year seminar ($\chi^2[1] = 18.54, p < .001$). Basic study skills courses tend to focus on note taking, tests-taking strategies, and critical reading techniques (Young & Hopp, 2014). These same colleges were also 3.7 times more likely to offer a hybrid seminar ($\chi^2[1] = 7.28, p = .014$) and 3.8 times more likely to offer a discipline linked seminar ($\chi^2[1] = 5.21, p = .030$). Discipline linked seminars are usually intended to prepare students for the expectations of a certain career or profession. In contrast, two-year colleges that required academically underprepared students to enroll in a first-year seminar were 4.2 times less likely to offer a seminar that served as an extended orientation ($\chi^2[1] = 11.99, p = .001$).

Table 2
Primary First-Year Seminar Type (n = 128)

Seminar Type	Academically Underprepared Students in FYS							
	Not Required		Required		% Diff	χ^2	OR	
n	%	n	%					
<i>Percentages larger for institutions requiring students to attend</i>								
Basic study skills	23	25.6	25	65.8	40.2	18.5**	5.6	
Hybrid	9	10.0	11	28.9	18.9	7.3*	3.7	
Pre-professional or discipline linked	5	5.6	7	18.4	12.8	5.2	3.8	
Academic: uniform content	21	23.3	12	31.6	8.3	0.9	1.5	
<i>Percentages lower for institutions requiring students to attend</i>								
Academic: various topics	9	10.0	1	2.6	-7.4	2.0	0.2 (4.2)	
Extended orientation	74	82.2	20	52.6	-30.4	12.0**	0.2 (4.2)	

Note. Statistically significant values are bolded. Odds Ratios contained within parentheses are inverted by the formula 1/OR to improve interpretation.

* p < .01
** p < .001

Two-year colleges were then compared on the course objectives and course topics of their first-year seminars. Some comparisons could not be made because of the limited number of colleges that identified a particular course objective as being most important. For example, none of the colleges in this sample identified oral communications skills as a primary objective. Among the objectives and topics that could be compared, two-year colleges that required academically underprepared students to enroll in a first-year seminar were 3.6 times more likely to focus on developing academic skills ($\chi^2[1] = 3.59, p = .047$). These institutions were also 4.8 times less likely to focus on creating a common first-year experience ($\chi^2[1] = 4.75, p = .022$). There were no statistical differences found between groups on any of the other course objectives or course topics.

Table 3
First-Year Seminar Course Objectives (n = 120)

Course Objective	Academically Underprepared Students in FYS						
	Not Required		Required		% Diff	χ^2	OR
	n	%	n	%			
<i>Percentages larger for institutions requiring students to attend</i>							
Develop academic skills	28	32.9	18	51.4	18.5	3.6*	2.2
Self exploration or personal development	20	23.5	14	40.0	16.5	3.3	2.2
Develop writing skills	0	0.0	1	2.9	2.9	2.4	^a
Develop study skills	34	40.0	18	51.4	11.4	1.3	1.6
Develop critical thinking skills	10	11.8	6	17.1	5.3	0.6	1.6
Develop a connection with the institution	36	42.4	15	42.9	0.5	0.2	1.0
Increase student-faculty interaction	6	7.1	3	8.6	1.5	0.1	1.2
Improve second-year return rates	12	14.1	5	14.3	0.2	<0.1	1.0
Develop oral communication skills	0	0.0	0	0.0	0.0	^a	^a
<i>Percentages lower for institutions requiring students to attend</i>							
Develop support network or friendships	12	14.1	4	11.4	-2.7	<0.1	0.8 (1.3)
Other	7	8.2	2	5.7	-2.5	0.2	0.7 (1.5)
Provide career exploration	12	14.1	4	11.4	-2.7	0.2	0.8 (1.3)
Develop intercultural competence	1	1.2	0	0.0	-1.2	0.4	^a
Introduce the liberal arts	1	1.2	0	0.0	-1.2	0.4	^a
Provide pre-professional preparation	1	1.2	0	0.0	-1.2	0.4	^a
Introduce a discipline	2	2.4	0	0.0	-2.4	0.8	^a
Develop information literacy	6	7.1	1	2.9	-4.2	0.8	0.4 (2.6)
Provide orientation to campus resources and services	39	45.9	12	34.3	-11.6	1.4	0.6 (1.6)
Develop financial literacy	7	8.2	0	0.0	-8.2	3.1	^a
Create common first-year experience	19	22.4	2	5.7	-16.7	4.8*	0.2 (4.8)

Note. Statistically significant χ^2 values are bolded. Odds Ratios contained within parentheses are inverted by the formula $1/OR$ to improve interpretation.

^a Could not be computed based on the sample size.

* p < .01

** p < .001

Table 4
First-Year Seminar Course Objectives (n = 120)

Course Topic	Academically Underprepared Students in FYS						
	Not Required		Required		% Diff	χ^2	OR
	n	%	n	%			
<i>Percentages larger for institutions requiring students to attend</i>							
Time management	28	32.9	17	48.6	15.7	2.6	2.1
Academic planning	34	40.0	19	54.3	14.3	2.1	1.8
Study skills	40	47.1	20	57.1	10.0	1.0	1.5
Relationship issues	7	8.2	5	14.3	6.1	1.0	1.9
Other	4	4.7	3	8.6	3.9	0.7	1.9
Career exploration or preparation	21	24.7	9	25.7	1.0	0.1	1.1
Oral communication skills	0	0.0	0	0.0	0.0	^a	^a
Global learning	0	0.0	0	0.0	0.0	^a	^a
<i>Percentages lower for institutions requiring students to attend</i>							
Information literacy	6	7.1	2	5.7	-1.4	0.1	0.8 (1.3)
Critical thinking	14	16.5	5	14.3	-2.2	0.1	0.8 (1.2)
Health and wellness	1	1.2	0	0.0	-1.2	0.4	^a
College policies and procedures	17	20.0	9	14.3	-5.7	0.5	0.7 (1.5)
Writing skills	2	2.4	0	0.0	-2.4	0.8	^a
Specific disciplinary topic	2	2.4	0	0.0	-2.4	0.8	^a
Diversity issues	3	3.5	0	0.0	-3.5	1.3	^a
Campus engagement	21	24.7	5	14.3	-10.4	1.6	0.5 (2.0)
Campus resources	45	52.9	14	40	-12.9	1.6	0.6 (1.7)
Financial literacy	8	9.4	0	0.0	-9.4	3.5	^a

Note. Statistically significant χ^2 values are bolded. Odds Ratios contained within parentheses are inverted by the formula 1/OR to improve interpretation.

^a Could not be computed based on the sample size.

* p < .01

** p < .001

Lastly, two-year colleges were compared on the use of high-impact practices incorporated within the first-year seminar. Again, some comparisons could not be made because of the limited number of colleges that identified the use of a particular practice. For example, only four institutions indicated that they offered undergraduate research. This was anticipated as opportunities for research are usually limited at two-year colleges although research was broadly defined as experiences for scientific inquiry, creative activities, or scholarship guided by a mentor from the faculty or research staff. Two-year colleges that required academically underprepared students to enroll in a first-year seminar were 3.9 times more likely to offer collaborative assignments and projects ($\chi^2[1] = 3.09, p = .037$). There were no differences on the use of other higher impact practices.

Table 5
First-Year Seminar High Impact Practices (n = 120)

Course Topic	Academically Underprepared Students in FYS						
	Not Required		Required		% Diff	χ^2	OR
	n	%	N	%			
<i>Percentages larger for institutions requiring students to attend</i>							
Collaborative assignments & projects	55	64.7	29	82.9	18.2	3.9*	2.6
Service learning	8	9.6	8	22.9	13.3	3.6	2.8
Diversity and global learning	40	47.1	19	54.3	7.2	0.5	1.3
Common reading experience	9	10.8	6	17.1	6.3	0.9	1.7
<i>Percentages lower for institutions requiring students to attend</i>							
Writing intensive	26	30.6	9	25.7	-4.9	0.3	.8 (1.3)
Learning community	26	31.3	7	20.0	-11.3	1.6	.6 (1.8)
Undergraduate research	4	4.8	0	0.0	-4.8	1.7	^a

Note. Statistically significant χ^2 values are bolded. Odds Ratios contained within parentheses are inverted by the formula 1/OR to improve interpretation.

^a Could not be computed based on the sample size.

Discussion

According to the data from this study, 70% of two-year colleges did not require academically underprepared students to enroll in a first-year seminar (n = 90). Among those institutions, 80% indicated that an extended orientation was the primary type of first-year seminar with a focus on creating a common first-year experience. Extended orientation seminars are reported to help to integrate students into the institution and improve retention (Permzadian & Credé, 2016). Retention is a concern for academically underprepared institutions given that less than half of those placed into developmental courses persist to complete gateway courses (Bailey, Jeong, & Cho, 2010). However, the retention of academically underprepared students is connected to the development of academic skills that are critical to the continual enrollment of these students. It may not be possible to achieve one aim (retention) without the other (academic performance). Extended orientation type seminars do provide information related to skill development such as time management and learning strategies, but this may not be enough to support the needs of academically underprepared students.

Among two-year colleges that required academically underprepared students to enroll in a first-year seminar, these courses were more likely to focus on basic study skills or have a hybrid component. Young and Hopp (2014) reported that “academic seminars have outpaced the growth of any other type over the past 25 years” and may reflect increased rigor in first-year curriculum (p. 49). However, the data from this study may also suggest

that the type of first-year seminar is moderated by whom colleges require (or do not require) to take these courses. Institutions should design first-year seminars based on the needs of their campuses (Hunter & Linder, 2005), but they must also be careful to consider the consequences of a common curriculum for different populations, including those who maybe academically prepared for college. Further, many students who enroll at two-year colleges intend to transfer to four-year institutions. The academic performance of these students (i.e., GPA) will be important component of admission decisions. First-year seminars that focus primarily on retention may achieve an institution’s goals but may not necessarily support the long-term goals of its students.

An unanticipated finding in this study was the lack of differences in course objectives or course topics despite differences between institutions in the type of first-year seminar offered to students. Data in this study were collected from chief academic officers, chief executive officers, or chief student affairs officers and not the individual faculty teaching these seminars. Although these chief executives may be aware of general first-year seminar practices, they may be less able to speak to the specific content of first-year seminar curriculum. This may have affected the accuracy of findings. It is also possible the lack of differences in course objectives and topics may reflect uncertainty in how first-year seminars should be structured with an academic component. There is no uniform approach to the delivery of first-year seminars across institutions. If first-year seminars with an academic component are to be more effective in building the academic

capacity of college students, then the differences in the curriculum between different seminar types will need to be better understood.

The findings from this study also bring to our attention course objectives and topics missing from the first-year seminar regardless of who was required to enroll in these courses. For example, few two-year colleges reported that developing writing skills, oral communication skills, or an introduction to a discipline was part of the first-year seminar curriculum. Perhaps these topics are embedded within others. If not, it may raise questions about why relevant topics are missing from the curriculum of an academic type first-year seminar. It is important to note that the sample size in this study was small despite the use of data from a national survey, which may have reduced the statistical power to detect differences in course objectives and topics.

Lastly, findings from this study also indicated that two-year colleges that required academically underprepared students to enroll in a first-year seminar were more likely to utilize collaborative assignments and projects in their courses. Active and collaborative learning are related to critical thinking, life-long learning, intercultural effectiveness, and socially responsible leadership (Kilgo, Sheets, & Pascarella, 2015). The use of these practices is consistent with academically oriented first-year seminars, but other high impact practices, such as research related activities and service learning, are also related to students' academic performance (Hu, Kuh, & Li, 2008; Kilgo et al., 2015). Consideration should be given to how these practices can be included if they help to meet academic performance goals. The primary mission of faculty at two-year colleges may not be to conduct research, but faculty can still encourage scientific inquiry and scholarship of students.

Recommendations

Two-year colleges should carefully consider students' characteristics and needs when determining the most appropriate type of first-year seminar to offer at the institution. Keup and Petschauer (2011) suggested that institutions can "fall into the trap of focusing on the students that they wish they had or used to have rather than the ones that they currently serve" (p. 18). Nationally, about 40% of community college students are placed into developmental education (Valentine, Konstantopoulos, & Goldrick-Rab, 2017). These students are at risk in terms of both their

retention and academic performance at the institution. If the retention of these students is determined to be more of a function of academic readiness, then academic type seminars may be more appropriate for these students. Yet, according to national data, extended orientation type seminars remain the primary seminar type at two-year colleges (Young & Hopp, 2014). This may reflect a mismatch between student needs and desired student outcomes.

For those institutions that want to create a more academically oriented first-year seminar, there exist resources to support the curriculum development. The National Resource Center for The First-Year Experience and Students in Transition provides an extensive database of course syllabi and publications (e.g., Keup & Petschauer, 2011; Groccia & Hunter, 2012), including the University 101 Faculty Resource Manual (Friedman, Clarke, & Strickland, 2016). Colleges may also find the Frameworks for Mathematics and Collegiate Learning course a useful resource for curriculum development (Charles A. Dana Center, 2014a). This course was developed in collaboration with the Texas Association of Community Colleges and was intended to be paired with an academic course (developmental mathematics). In contrast to other first-year seminar courses that orient students to campus resources and services, "learning frameworks courses engage students in a study of the theoretical perspectives on knowledge acquisition" (Charles A. Dana Center, 2014b, p. 2). Two-year colleges may find this resource better suited for those institutions looking to develop a more academically oriented first-year seminar.

Although tools exist to help support curriculum development, it is important to note that there is little research to indicate how varied curriculums within a given seminar type are more or less effective at achieving course aims. It is unlikely that all academic first-year seminars would result in the same level of student success. Particularly as the number of academic first-year seminars continues to grow, more information is needed to guide best practices in the implementation of this seminar type.

Two-year colleges should also consider how professional development and training is offered to first-year seminar instructors. Young and Hopp (2014) reported that adjunct faculty were more likely to be assigned to first-year seminars focused on basic study skills. Adjunct instructors at colleges are less likely to receive the same level of support and

These highly structured guided pathways require more intrusive advising and integrated support services to be afforded to students.

professional development as full-time staff and faculty. Groccia and Hunter (2012) offered suggestions for first-year seminar instructor training and development. These suggestions included consultations with individual instructors, institution-wide orientations, and institution-wide workshops. They also suggested educating first-year seminar faculty with more information about adult learning theory and “how adult learners may differ from children and adolescents” (p. 27).

Conclusion

First-year seminars support the successful transition of students into higher education. The problem is that many two-year colleges do not require academically underprepared students to enroll in these courses. This resulted in a greater likelihood that two-year colleges offered an extended orientation type seminar when an academically oriented seminar may better support the academic performance of underprepared students, which comprise a large population of two-year college students. Colleges should consider how their existing first-year seminar curriculum meets the needs of this population.

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