

Influence of Orientation Coursework on Enrollment Persistence

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Abstract

Since the 1970s, researchers, institutional leaders, and faculty have examined factors that may contribute to the success or failure of first-year college students (American Council on Education, 2005; Astin, 1977; Smith & Vellani, 1999; Tinto, 1987). Student retention and persistence continue to concern today's community college leaders. The purpose of the study was to determine if a freshman orientation course served as a predictor of student semester-to-semester persistence within a large, suburban community college. The study may provide college leaders with valuable information regarding the impact of freshman orientation courses on student persistence and insight into variables that may affect the academic success of first-time college students.

The evolution of community colleges since 1970 has created a level of uncertainty among many campus leaders that exists, in part, because of the transformation of community colleges from vocational training institutions to more diverse, comprehensive institutions of higher learning. During the 1970s and 1980s, community colleges were affordable, flexible, and practical for students (Cohen & Braver, 2003; Pascarella & Terenzini, 2005). Leaders were innovative in the design of academic programs and student support services to meet student and community demands. Today, community college leaders are working within the confines of an uncertain economy, shifting demographic trends, and a student constituency that is technologically savvy with a unique set of academic, social, and personal needs (Miles & Wilson, 2004; Milliron & de los Santos, 2004). Community colleges continue to strive to meet community and workforce needs (Milliron & de los Santos, 2004). The "open admission" policy found at most community colleges has provided educational opportunity for students from multiple academic backgrounds and status and has contributed to growth and diversity.

In 2006, over 11.6 million students enrolled at 1,186 community colleges. Forty-two percent of students enrolled in community colleges are first-time college students (AACC, 2006). Furthermore, community colleges are serving a diverse population, and the African American and Hispanic, non-English-speaking constituency is growing (U.S. Department of Education, 2005). African Americans, Hispanics, and Native Americans enroll in community colleges because of the convenience, flexibility, and support available to students; in fact, African Americans, Hispanics, and Native Americans represented a greater share of first-time freshmen attending two-year institutions than of first-time, full-time freshmen attending four-year institutions in the fall semester of 1997 (Department of Education, 2005).

Smith and Vellini (1999) found that many large, urban community colleges struggle with the design of student support programs and assessment techniques for first-year students. Kolajo (2004) found a positive correlation between developmental courses taken and time needed for community college students to graduate. Although there has been some success in the design of curriculum and student support programs to meet the needs of a diverse student population, first-time college students continue to struggle with the social, academic, and financial adjustments necessary to successfully navigate the college-going process (Educational Testing Service, 2000). In addition, many first-time students are without the benefit of parents or guardians who can share their college experiences. Community colleges, leaders, administrators, and faculty can be thrust into serving as the academic, social, and personal support for first-year college students (Hawley & Harris, 2005). Ironically, two-year college students tend to have higher rates of institutional departure than freshman and sophomores at four-year institutions (Pascarella, Wolniak, Pierson, & Terenzini, 2003; Strauss & Volkwein, 2004). Student persistence has become an issue of concern for many community college leaders. Kolajo (2004) proposed orientation courses to assist students in transitioning and persisting in their community college experiences.

Purpose of the Study

Since the research suggests that developmental courses in various curriculum areas are needed in community colleges and that orientation courses have the potential to affect persistence, the researcher sought to determine whether a freshman orientation course was a predictor of first-year student semester-to-semester persistence. The faculty and staff at an eastern suburban community college sought information to support the hypothesis that a newly implemented freshman orientation course would improve persistence rates for first-time developmental education students.

Selected Literature on Student Retention and Persistence

Since 1950, researchers, faculty, and enthusiasts have postulated models of student retention (Alfred, 1973; Astin, 1977; O'Banion, 1997; Pascarella & Terenzini, 1979; Tinto, 1987). Early models of student retention varied in scope and application. Alfred (1973) examined the impact of the institutional environment on student attrition. Alfred defined attrition as the "separation, in one way or another, of the student from the institutional environment" (p. 22). Students separate or depart the college through (a) graduation, (b) transfer, (c) formal withdrawal, (d) stop-out, or (e) informal withdrawal. His findings suggested that the college's personal, psychological, and financial commitment to students may play a major role in the persistence of students (p. 29).

Astin (1977) defined a college persister as a student who completes a degree program within a specified time (p. 7). This definition may not apply to today's community college student whose primary goal may not be degree attainment but workforce training or personal enrichment. Astin's research on student persistence is important because of the focus on the students' behavior within the college environment and the attitude, beliefs, and personal fit of students on college campuses.

Tinto (1987) examined the dropout behavior of students and those factors that contribute to this phenomenon. The level of family and institutional support students receive early in their college instruction can play a major role in their academic and social integration into the college's mainstream. This phenomenon may also affect students' abilities to persist beyond the first semester. According to Tinto, student completion rates can be tracked to institutional commitment

to support the academic, social, and personal needs of students. Tinto's research distinguished whether students' departure from college was institutionally based or was based on the students' educational or personal goals. Pascarella and Terenzini (1979) identified students' lack of integration into the college environment as a contributor to withdrawal. Unfamiliarity with college faculty and staff as well as college processes may serve as an important predictor for student attrition. Toward the close of the 20th century, Grimes (1997) reported that students unfamiliar with the college environment experienced academic and personal difficulty in completing the first year of college study.

Recent research on college attrition, persistence, and retention has focused on student engagement within the college process, academic preparation, goal attainment, and the campus environment (Grimes, 1997; Voorhees & Zhou, 2000; Zamani, 2000). Campus culture, elements of the college's mission, and the managerial behavior of campus leaders were found to contribute to varying degrees of student withdrawal (Berger & Milem, 2000). Smart (2002) identified students' level of dissatisfaction with the first-year college experience as a predictor of student persistence. The level of students' satisfaction with instruction, student services, cocurricular activities, and graduation can affect academic performance and the social and personal outlook of students within systems of higher education. Voorhees and Zhou (2000) found a positive correlation between the number of credits completed and students' perceptions of goal attainment. Student opinions vary on what it means to persist at the college level. A student registered for 12 credit hours may view passing one of the four courses as persistence. Coley (2000) identified seven demographic factors that affect persistence and degree attainment for community college students: (a) delayed entry, (b) part-time enrollment, (c) full-time work, (d) financial independence, (e) dependents, (f) single parenthood, and (g) community college attendance without a high school diploma. Cofer and Somers (2001) found that increased debt load and students' tendency to "stop-in" and "stop-out" had a negative effect on persistence. Kolajo (2004) postulated that students enrolled in developmental coursework appear to be the neediest for instructional interventions to support persistence. He postulated that freshman orientation courses may complement developmental education courses to enhance the learning environment for students by providing students essential skills for college success. Kolajo's results and postulates served as the impetus for this study.

Background for the Study

First-time students at one eastern suburban community college (ESCC) often are placed into developmental reading courses due to low standardized-test scores; these students present a low rate of semester-to-semester persistence. Faculty and staff explored the merits and drawbacks of designing and implementing an orientation course with the intent of improving the persistence of students in developmental courses. The concept of freshman orientation courses is not a new idea, but it has been slow to surface on many two-year campuses.

Development of Orientation Course at ESCC

The orientation course was designed to increase persistence rates of first-time freshman students who place into three or more credits of developmental reading. Changes in demographic patterns among students attending community college, particularly since 1998, precipitated the need to discuss the type and level of service and instruction provided to them. In particular, the growth in the number of first-time college students fueled the discussion. As that enrollment expanded, the college experienced an exponential growth in the number of students in need of developmental instruction. In 2004, 69% of the institution's students were placed into one or more developmental education courses each fall semester (Prince George's Community College, Office of Institutional Planning and Research, 2007). Faculty leaders had viewed the academic success of students in developmental reading courses as the foundational component necessary for students to survive the academic rigor of a college education and for the school to improve rates of persistence. The growth in placement in developmental classes was of grave concern.

For several years the community college faculty and staff have argued the merits of offering a freshman orientation course for first-time students. Two areas of debate were (a) added value to the first-year college experience and (b) whether increasing critical thinking skills of developmental reading students would increase student persistence. Recent successes laid the groundwork for exploring the orientation course implementation in earnest. First, findings from past internal studies conducted by the institution concluded (a) that many first-year students did not feel engaged with faculty, (b) first-year students were less likely to ask for assistance or request additional time to work with faculty members on concerns or problems

in the classroom, and (c) any new course should increase students' levels of critical thinking inside the classroom and the world around them (Prince George's Community College, Office of Institutional Planning and Research, 2007).

Second, a study by the National Survey on First-Year Seminars (2003) reported that 629 of 3,258 institutions had first-year orientation courses for students. The learning paradigm for this national survey indicated that the course was offered as a means to improve students' self-confidence and transition to college level coursework. Furthermore, freshman orientation courses were thought to provide an educational roadmap of services and contacts important to students as they navigate their first semester and plan to reenroll for the following semester.

Third, several area community colleges have moved forward with the implementation of freshman orientation or seminar courses and boast student success and improved rates of retention. A common theme among these neighboring institutions in their support of freshman orientation courses was the collective interest of faculty, staff, and administration in the matriculation and persistence of first-time students.

In 2007, a proposal for a freshman orientation course was introduced to the college community at ESCC. The institution proceeded with plans to offer the freshman orientation course in the fall semester of 2007. Faculty and staff at ESCC postulated two goals associated with the newly developed course:

1. The course should improve semester-to-semester persistence for first-time students.
2. The course should increase the level of student-faculty interaction inside and outside of the classroom.

The purpose of this study was to determine if completion of a freshman orientation course would increase student persistence at one eastern suburban community college. Results of the study may provide college leaders with valuable information regarding the impact of freshman orientation courses on student persistence and insight into variables that may affect the academic success of first-time college students.

Methodology

Site Population and Sample

The site was an eastern suburban community college whose name will be kept confidential and referred to in this article as ESCC. The college provides more than 200 academic, workforce development, and continuing education programs and has an annual average enrollment of 38,000.

The population of students for this study included first-time students who were enrolled in a minimum of three credits of developmental courses in the fall of 2007 (N = 1577). Table 1 displays demographic information about the population. There was missing data for 199 students, leaving a population of 1,378. Of those students, 545 students placed into developmental reading and served as the sample. Ethnicity, enrollment status, GPA, age, and PAS enrollment data are displayed. The cohort was comprised of 59.2% women and 40.8% men. Approximately 11.7% (180) of the students who took PAS for the first time received a grade of D or F.

TABLE 1 | Percentage of First-time Students Enrolled in Developmental Courses

Total fall enrollment, developmental students		1,577
Ethnicity of enrollees:		
African American	88.9% (1400)	
Hispanic	4.9% (77)	
Asian American	1.7% (50)	
Caucasian	1.7% (27)	
Other	2.8% (23)	
Enrollment status in college		1,378*
Part time	789 (57.26%)	
Full time	589 (42.74%)	
Enrollment in PAS course		1,378
Age of enrollees		Mean = 20.8 S.D. = 6.4
GPA of enrollees		Mean = 1.60 S.D. = 1.14

*199 student records had missing data and were excluded from analysis.

The dependent variable was the number of the sample that persisted in enrollment in the spring semester. Table 2 displays the demographics and descriptive statistics for the sample.

TABLE 2 | Sample Descriptive Statistics, Developmental Reading Students, 2007–2008
 Sample: 545 students enrolled in development reading in fall semester, 2007–2008

Variable	Number (%)	Mean	s.d.
Dependent variable Developmental reading students who persisted in spring semester of 2007–2008	544	NA	NA
Independent:			
(1) Ethnicity			
African American	477 (88.6%)	NA	NA
Hispanic	27 (4.9%)	NA	NA
Asian American	18 (1.7%)	NA	NA
Caucasian	10 (1.7%)	NA	NA
Other	10 (2.8%)	NA	NA
(2) Enrollment Status			
Part time	241	NA	NA
Full time	304	NA	NA
(3) Enrollment in PAS course	545	NA	NA
(4) Age of enrollees	545	20.8	6.4
(5) GPA of enrollees	545	1.60	1.14

NA = Not applicable

Variables

The predictor variable of greatest interest for this study was the completion of the PAS course. Other predictor variables included age, enrollment status (full or part time), grade point average, and ethnicity. The criterion variable was student persistence, operationalized as enrolled or not enrolled, in the subsequent semester of the 2007–2008 academic year.

Data Collection and Data Analysis

All data were collected from ESCC's databases for the 2007–2008 academic year by the researcher. A multiple regression analysis was applied to evaluate the predictive value of the freshman orientation course, along with the other variables, on student persistence. Two multiple regressions were completed. The first examined the predictive quality of the five predictor variables on persistence for the entire sample. The second restricted the analysis to the association between predictor variables and persistence for African Americans only. The analysis was completed using Statistical Package for the Social Sciences (SPSS) software.

Results

Multiple Regression: All Developmental Reading Students

A multiple regression analysis aimed at predicting persistence, operationalized as enrollment in a subsequent semester, used age, GPA, enrollment status (full time or part time), ethnicity, and PAS course completion as predictor variables because of their expected influence. The final regression produced the following: age ($B = -.083$), GPA ($B = .242$), fall enrollment status ($B = .330$), and PAS completion ($B = .145$). All ethnicities (i.e., African American, Native American, Caucasian, Asian American, and other) were included in the analysis. Asian American students surfaced as the ethnicity with the highest level of prediction for persistence ($B = .127$). The final equation was significant: $R^2 = .25$, adjusted $R^2 = .249$, $F(5, 539) = 35.65$, $p < .05$. Thus, the analysis predicted that 24.9% of the variance related to persistence for developmental students can be attributed to these variables. The findings suggested that Asian American students under 20 years of age with strong GPAs who have completed the PAS freshman orientation course were likely to enroll in the subsequent semester.

Multiple Regression: African American Students

Because nearly 90% of the students at ESCC in the fall of 2007 were African American, a multiple regression analysis was used to evaluate the predictive value of the variables on persistence for African American students only. The final regression equation for predicting persistence revealed the variables with the strongest impact upon persistence for African American students were: age ($B = -.083$), GPA ($B = .242$), fall enrollment status ($B = .289$), and PAS completion ($B = .161$). The results were significant with an $R^2 = .227$, adjusted $R^2 = .220$, $F(4, 473) = 34.67$, $p < .05$. The analysis predicted 22.0% of the variance related to persistence for African American students. The findings suggested that African American students under the age of 20 with higher GPAs, who are enrolled full time and who have completed the PAS orientation course, had a strong likelihood for reenrolling for a subsequent semester.

Discussion and Implications for Future Research

The purpose of the study was to assess the effectiveness of a new freshman orientation course for first-year developmental reading students at one institution. The findings of the research suggest that the freshman orientation course can

serve as a predictor of semester-to-semester persistence for developmental reading students. The controlled sample included first-year students who placed into a minimum of three credits of developmental reading, completed the PAS course, and enrolled in the subsequent semester. The data and findings from this study may provide leaders with evidence that additional focused and specific first-semester instruction and academic support may play a role in the persistence of students and subsequent increased enrollments at ESCC.

The results of this study, however, leave many unanswered questions for ESCC administration, faculty, and staff. Age, enrollment status (full or part time), GPA, ethnicity, and course completion all had predictive value in this study. For community colleges, the age of first-year college students may not be the traditional recent high school graduate age of 17 or 18. The average age of community college students is over 25, and many students possess professional and personal experiences as well as commitments that could hamper their success in the first year of college. For these students, variables such as family, employment, child care, and transportation are very real issues that should not be discounted in an analysis of persistence on the part of the students. The variance found among community college students regarding the benefit of part-time versus full-time enrollment status is another troublesome area. One of the reasons for this uncertainty is that, on average, older students who are enrolled part time tend to persist at a higher rate than full-time, traditional-age college students. It may be that the persistence of older, part-time students can be attributed to their exposure to life experiences and professional situations that strengthen their fortitude and motivation to persist (Cohen & Brawer, 2003; Strauss & Volkwein, 2004).

Other predictive factors that affect student retention and persistence rates may differ with institutional type, size, campus environment, campus climate, and culture. At the same time, similarities may exist between different types of institutions and factors that affect persistence. For instance, transportation issues may be problematic for students attending both urban and rural community colleges.

Veltri, Banning, & Davis (2003) and Tinto (1987) identified the level of faculty interaction with students as a predictor of student retention. One of the original goals for the new orientation course was to increase the level of interaction between faculty members and students. The level of faculty interaction was not

assessed as a predictive value in this study. However, the implications of this relationship on student persistence should not be discounted for future research projects. Greater familiarity with the concepts associated with the National Survey of Student Engagement studies that are being conducted at four-year institutions may influence consideration of this variable (NSSE, 2008).

Of particular concern to many community college professionals is the increased enrollment of first-time college students who may need the benefit of a freshman orientation course to smooth the transition of the first-year college experience. Freshman orientation courses may serve as the bridge that students need to support their social, personal, and academic needs during the first year of college. It is imperative that college leaders and faculty evaluate the needs of students and determine the appropriate interventions to support and improve persistence rates. The identification of interventions to stem first-year attrition rates remains a critical goal for future community college leaders; such identification may have far-reaching effects on students' semester-to-semester persistence, graduation rates, transfer rates, student morale, and, ultimately, on institutional budgets should student enrollment drop below expected levels. This study's results suggest that freshman orientation courses, when coupled with attention to other variables, can impact students' ability to persist beyond the first semester of enrollment.

Recommendations

Efforts of college faculty and administration to improve the persistence rates of first-time students will require special attention from all members of the college community. The results of the ESCC study support several recommendations.

Community college leaders should consider the development of a student recruitment and student retention model. Student recruitment and student retention are distinct processes that require their own set of activities, standards, and follow-up to be successful. Traditional enrollment management models identify student affairs staff typically handling recruitment and marketing activities and

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faculty advisors focused on retention activities (McArthur, 2005). Institutions that can create an environment where faculty and staff responsibility for recruitment and retention are intertwined to include all members of the college community may be more apt to identify student problems and issues, and have time to design and implement interventions to decrease levels of student attrition.

O'Banion (1997) and Zwerling (1976) examined institutional factors that impact student retention in community colleges. O'Banion and Zwerling suggest that institutional leaders may need to shift the focus from what is wrong with the student to what is wrong with the institution. An assessment of community colleges' services, programs, supports, and personnel may be necessary to determine the type and level of services needed to support students. These assessments may support institutional leaders in their ability to work with students who typically fall through the cracks and lack the necessary supports to progress beyond the initial semester of enrollment.

Institutional leaders should evaluate assessment tools and strategies, particularly as they relate to developmental education students. The growth in the number of developmental education students should signal to college leaders and faculty the need for the creation of intervention strategies to support greater levels of student learning and persistence. The process for assessing both academic preparedness and the testing environment should be evaluated for meeting acceptable testing standards. The creation of an educational environment that promotes student learning should begin with appropriate assessment measurements and academic course placement. Assessment testing staff who are trained to identify potential problems within the testing environment, or with the testing instrument, may be more directed toward the identification of interventions to improve students' long-term academic success.

Student retention as an institutional goal needs to be a college-wide initiative to include all constituents within the college environment. Wild and Ebbers (2002) offered several recommendations for institutions to increase retention, including (a) the identification of a retention leader, (b) the development of a definition of retention and indicators that support faculty and staff in their work with students, (c) the establishment of institutional retention goals, and (d) the development of evaluative measures of student and institutional success.

An important capability among community college educators is their skill in working closely with students to provide the advisement and mentoring that support the interests of the college and that best serves students' interests. Institutional support for greater levels of academic and social integration between faculty, staff, and students who place into developmental education coursework would not be a unique concept. However, the measurement of impact of the relationship between student, faculty, and staff should be a part of the implementation and assessment process for improved rates of persistence among first-time developmental education students.

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