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# Campus-Based Retention Initiatives: Does the Emperor Have Clothes

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# Campus-Based Retention Initiatives: Does the Emperor Have Clothes?

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In a recent meeting of senior campus administrators, one of the vice presidents commented, "I have set aside $300,000 for retention initiatives to be implemented over the next two years. My question is, on which programs should I spend these dollars?" These kinds of conversations take place on the campuses of colleges and universities each year. Since the mid-1970s, perhaps no other topic in the published literature has garnered the attention of higher education researchers and administrators more than student persistence. Indeed, the field of higher education now sports a journal that is devoted to the topic of student retention. This article describes our attempt to conduct a systematic review and critique of the research that has been done on campus-based retention initiatives.

It is important for us to define clearly the boundaries of our efforts. Hundreds of studies have tested assumptions of theories of student departure. Some examples include the following: Bean (1990), Mallette and Cabrera (1991), Munro (1981), Pascarella, Duby, and Iverson (1983), Pascarella and Terenzini (1983), Stage (1989), Stoeker, Pascarella, and Wolfle (1988), Tinto (1993), and Williamson and Creamer (1989). Efforts to test the models of Tinto (Braxton, Sullivan, and Johnson, 1997; Cabrera, Stampen, and Hansen, 1990; Halpin, 1990; Hurtado and Carter, 1997; Milem and Berger, 1997; Nora, Attinasi, and Matonak, 1990; Tierney, 1992) and Bean (Andreu, 2002; Farabaugh-Dorkins, 1991; Himelhoch, Nichols, Ball, and Black, 1997; Stahl and Pavel, 1992) dominate this line of research. Although these theories and

the efforts to test the properties of each model are useful, they do not provide empirical analyses of campus-based programs that purportedly enhance student persistence. This paper examines the existing published research on college student retention in order to determine the extent to which the assertions about enhancing student persistence have been confirmed through rigorous analysis and program evaluation.

## Methodology and Preliminary Results

The first step in this research effort was to examine the assertions made about campus programs and strategies to decrease student dropout rates at universities. Published articles, both empirical and propositional, were reviewed in order to develop a comprehensive list of the assertions made about the efficacy of various retention initiatives. After identifying the assertions, we grouped them into similar categories and began our literature searches in electronic databases and relevant published journals.

We reveal one of our most important findings early in this chapter when we note that this study immediately produced initial findings that in some respects are as interesting as the actual results of our analyses. We say this because one of the most important findings of this investigation is the dearth of evidence to support the claims proffered on the efficacy of a wide range of campus-based retention initiatives.

As a form of quality control, we limited our search to propositional and research-based published studies in first- and second-tier journals that commonly publish research in the field of higher education. Working within these guidelines, we conducted a thorough review of approximately one hundred published research reports on student persistence. In selecting articles for this chapter, each published article was reviewed and evaluated using the following criteria: a detailed description of the programmatic intervention, methodological rigor in the sampling strategies, and analytic rigor of data analytic techniques. Using these criteria we grouped all of the articles into three categories: most rigorous, moderately rigorous, and least rigorous.

The articles we determined to be most rigorous typically included most of the following attributes: they yielded statistically significant results or provided strong qualitative findings, they included large sample sizes, they included some form of a control group, and they contained detailed information about the retention-centered program. Studies deemed to be of moderate rigor usually had a modicum of information about the retention-based program and more simplistic and less robust analytical findings. Articles judged to be of low rigor had important limitations, such as no description of statistical tests used to assess the program's effectiveness, a very small number of students who participated in the study, or little information about the retention program that was implemented.

Our search identified a large set of assertions about campus-based programs and strategies to enhance student persistence; however, too often we

could find little or no supporting evidence for the claims often made about strategies to enhance persistence. In other instances, the research did indicate that campus-based interventions were linked to positive changes in student retention.

We found it possible to group the studies we reviewed in several different ways. After considerable review, we aggregated the studies into the following groupings: counseling and mentoring programs (four articles); learning communities, living-learning communities, and structured academic experiences (four articles); student-faculty interaction (three articles), and transition programs (five articles). In the following sections we describe the groupings of studies in each area and then present our findings and summarize our results. In the implications section, we offer suggestions for campus administrators involved in efforts to improve persistence and graduation rates and for researchers conducting evaluation and assessment studies of student retention programs.

## Limitations

The most obvious limitation is the fact that administrators of retention programs are most often members of a small team or solo administrators who have neither the time nor the resources to do more than administer their programs. In addition, we did not search papers, for example, given at scholarly conferences or those catalogued in the ERIC system. Rather, we used the quality control embedded in the review process of scholarly journals as one of our primary criteria for the selection of studies to review. Finally, we used restricted criteria in our search for published articles. We looked only for articles that provided a direct link between institutional programming and retention. Undoubtedly, a number of research articles that do not refer directly to programs could possibly shed some light on other factors that contribute to undergraduate student persistence.

Another important limitation is that none of the studies we reviewed employed sophisticated methods to control for biases that could result from self-selection. Increasingly, researchers have been developing statistical techniques to compensate for potential selection-bias problems (Bifulco, 2002; Hoxby, 2002), but research on programmatic efforts to enhance student persistence are just beginning to employ these methods. As a result, there was little we could do to compensate for this limitation at the time this investigation was conducted.

## Findings

We found a limited number of assessments of the efficacy of counseling or mentoring interventions. Our literature review identified only four empirical studies that focused on the impact of these kinds of programs.

**Counseling Programs**. In a study of high rigor, Turner and Berry (2000) examined the impact of counseling center services on retention at a western state university. This study included a comparison group and a large number of students. Over the course of the study, as many as 70 percent of the students who used the counseling center reported that personal problems were affecting their grades; however, only one in five of those who used counseling services indicated considering withdrawal; more than 60 percent said the counseling was helpful in maintaining or improving their academic performance. In addition nearly 44 percent indicated that counseling helped them to persist. The authors found that students who followed up and used the services of the counseling center had annual retention rates of 70.9 percent in comparison to the general student population, which had a retention rate of 58.6 percent ($p$ <.001); counseled students also had higher return enrollment rates than noncounseled students (77.2 percent versus 67.9 percent; $p$ <.001). On average, counseling clients achieved a total retention rate of 85.2 percent, whereas the general student rate was 73.8 percent.

Wilson, Mason, and Ewing (1997) conducted a study of moderate rigor of the impact of counseling. They found that students who indicated a retention concern and sought counseling had a higher retention rate than students who had previously requested counseling but did not receive it. In an examination of the academic records of 562 students (the demographic makeup of the sample was comparable to the university population), those who received from one to seven counseling sessions were either retained or graduated at a rate of 79 percent, in comparison to noncounseled students, who were retained at a rate of 65 percent. A 2 × 4 chi square table indicated that as the number of counseling sessions increased, the likelihood of retention increased as well.

**Mentoring Programs**. Johnson (1989) claims that mentoring programs provide students with resources and get them actively involved in their own learning. A number of programs are cited, yet we were unable to find much empirical support for the claim. Jacobi (1991) conducted an extensive review of the mentoring literature and found that studies on mentoring were rare and tended to be methodologically weak. We found two studies of mentoring programs.

Dale and Zych (1996) conducted a study, judged to be of low rigor, of the HORIZONS program, a freshman student support program housed at Purdue University. University staff and HORIZONS alumni serve as mentors for low-income, first-generation, and disabled students. The HORIZONS group was compared to a control group of first-year students; both groups consisted of eight Hispanics, fourteen African Americans, and twenty-five white students. The program consisted of content-oriented instruction focusing on academic skills and strategy development; it is presented in conjunction with process-oriented instruction focusing on developmental and affective skills. Dale and Zych found that the retention rate for the HORIZONS group during the first and second semester was 100 percent,

while the control group's retention rate dropped from 100 percent to 89 percent between these semesters. The researchers also found that 85 percent of the HORIZONS group graduated or were working toward graduation, as opposed to the 47 percent of the control group who had either graduated or were working toward graduation. The sample size in this study was small, and only descriptive statistics were provided to support the effectiveness of the program.

The Ethnic Mentor Undergraduate (EMU) program was designed to increase the number of underrepresented ethnic students in the educational pipeline in the College of Health and Human Services at a state university (Thile and Matt, 1995). In order to explore the effectiveness of this program, thirty-two incoming students (seventeen first-year students, fifteen transfer students) participated in the study. The authors of this study compared participants in the EMU program with students who were enrolled but not participants in the program. In addition to being paired with faculty mentors, the first-year students were paired with seniors while junior transfer students were paired with graduate students, matching ethnicity and major as closely as possible. Embracing students' ethnic-cultural background, unique strengths, skills, experiences, and learning styles, the program endeavored to capture and cultivate these attributes during the students' tenure at the institution. Academic and personal-social elements were introduced to students to provide balanced exposure to and enhancement in both areas.

The authors of this high-rigor study examined the mean GPA of the students in the EMU program. The group's mean GPA (2.95) was comparable to the all-university average, and their average SAT score of 755 was well below that average. However, after one year in the program, 82 percent of the EMU first-year students and 87 percent of the junior transfers persisted. The authors reported that the differences among all first-year students and EMU first-year students were not significant. For this study, however, finding similar persistence rates can be viewed as an indicator of the efficacy of the program, since the average SAT score of the participants was lower than that of the rest of the student body. In addition, the differences among transfer students were significant at the .05 level.

In total, these two studies led us to conclude that there is at best weak support for the assertion that mentoring programs are effective vehicles to improve the retention rates of undergraduate students. The few investigations, one of them of low rigor, combined with the results, did not fully establish the efficacy of the interventions and led to the conclusion that the evidence for mentoring programs improving retention rates was not strong.

The cumulative evidence from these studies of the impact of counseling and mentoring provides, at best, moderate support for the efficacy of these programs in enhancing student persistence. First, there are few (four) research-based published studies on this topic. Each of these studies found evidence that counseling and mentoring did have a positive impact on student retention. However, some of the studies provided only minimal details

about the statistical analyses that were used to assess the programs, others had small sample sizes, making the generalizability of the findings difficult. The pattern across these studies was moderately supportive of the assertion that counseling and mentoring programs can help to improve student persistence. We found no evidence to support the positive impact of other forms of support, such as career advising.

**Learning Communities, Living-Learning Communities, and Structured Academic Experiences**.  Astin (1985) characterizes a learning community (LC) as a small cluster of students who participate in an environment designed to foster cohesiveness, shared purpose, and an integrated, continuous path of in-class and out-of-class experiences. Schuh (2004) states that "the environment created in a campus residence contributes to student learning by providing opportunities to experience diversity, to be challenged by their peers, and to learn from one another" (p. 284). Living-learning communities are important because, when designed properly, they create a seamless learning environment that integrates both academic and social experiences that contribute to student development.

Attempts to garner the presumed benefits of LCs are not limited to residential institutions. Some community colleges have adopted the idea of creating learning communities for commuter students. Despite the fact that such communities do not have a residential aspect, students are still assigned to smaller groups and placed in the same cluster of classes and exposed to similar opportunities that foster a sense of community and belonging. While learning communities at both four-year institutions and community colleges sound promising, we found very little research to support such assertions about their effectiveness. Overall, we identified five articles that dealt with living-learning communities.

In a highly rigorous investigation, Pascarella and Terenzini (1980a) conducted a study with three purposes:  to verify the presumed social-psychological and interpersonal dimensions underlying an experimental living-learning community, to determine the main and interaction effects of an LC on a range of first-year educational outcomes, and to determine the impact of faculty and peer interaction within the LC context. The longitudinal study was conducted among a sample of first-year students at a large, private residential university.

The researchers found that when pre-enrollment characteristics were held constant, exposure to the LC was significantly and positively associated with retention. They also found that the structural arrangements of the LC facilitated informal interactions with faculty, and that the quality of those interactions probably accounted for the differences between the residents' and nonparticipants' levels of satisfaction. Using multivariate analytical techniques, the researchers reported that the experimental LC had a significant impact on the first-year students' gains in measures of intellectual and personal development, sense of community in the first year, and—most important—persistence.

Baker and Pomerantz (2000) examined the impact of an LC program for nontraditional first-year students at a public commuter institution. The authors suggested that LCs provide a value-added component that includes opportunities for students to form bonds with one another and to have increased interaction with faculty. The LC program was based on a course clustering model that included twenty-five students taking the same three courses together. The 328 students who were participating in the LC program were compared to 328 non-LC students on the following outcomes: GPA, retention from fall to spring, credit hours earned, percentage on probation, percentage on the honors or dean's list, and the total number of courses dropped.

Baker and Pomerantz examined both persistence in each of the classes in which students were enrolled as well as persistence between semesters. In this highly rigorous study, the researchers found that the LC group was less likely (only 4 percent) to leave classes within the semester, as opposed to those who were in the control group (9 percent). These differences were significant at the .05 level. No differences were found in the persistence rates of LC participants and nonparticipants across two semesters. However, the LC had an impact on fall GPAs (2.61 compared to 2.34 for the control group, significant at the .002 level), semester hours earned (10.62 compared to 9.54 for the control group, significant at the .004 level), and numbers of students on probation in the LC ($n = 33$) and the control ($n = 54$) groups (11 percent for the LC group and 17 percent for the control group, significant at the .05 level). Consequently, the authors concluded that the LC had an impact on several factors that indirectly and positively affected long-term retention.

Johnson and Romanoff (1999) explored the Russell Scholars Program (RSP), a residential learning community at University of Southern Maine that encouraged faculty and peer interactions for strong students. Students were required to take three courses specific to the learning community. They also received mentoring and were able to have frequent contact with faculty members. Research was conducted during the first year of the program on thirty program participants (fourteen male, sixteen female). Participants were asked to complete background questionnaires and the Johnson Learner Preference Scale ( JLPS). A randomly selected sample of students from the general university population served as a matched control group of non-Russell Scholars. The researchers found that Russell Scholars were more pleased with their experiences with faculty and resources and with their overall experience at the university. The least important concern for the students was working to complete courses in order to transfer to another university. Because this investigation had a small sample, it was classified as a study of low rigor. This study did not speak specifically about retention. However, because students noted that transferring was not a concern, we were led to conclude that the program was beneficial for student retention.

The Coordinated Studies Program (CSP) is another form of an LC, housed at a northwestern metropolitan community college that allows students to register for a cluster of courses. In this study by Tinto and Russo

(1994), judged to be of high rigor, the authors administered two questionnaires at the beginning of the first year and later during the first year to a panel of program students and a panel of nonprogram students. The sample of 287 students included 121 program students and 166 students in the nonprogram comparison group. The qualitative methods included participant observation and interviews of program participants and staff over the course of the year.

The class met between eleven and eighteen hours each week in blocks of four to six hours over two to four days, was team-taught by two to four faculty members, and was organized around a theme that links the courses from different disciplines and fields. Tinto and Russo found that CSP students reported greater involvement in both academic and social activities, which led to greater developmental gains than the nonprogram participants. CSP students persisted at a higher rate than similar non-CSP students, and this difference in persistence occurred in the following spring and fall quarters. More specifically, the CSP students' persistence rate for the spring was 83.8 percent (versus 80.9 percent for the control group); persistence in the fall was 66.7 percent for the CSP group (versus 52 percent for the control group) and both results were significant at the .05 level.

A final example of a structured course is the Gateway program, which is housed at a large public institution in the northeast. The study of this program (Gebelt and Parilis, 1996) was a large-sample study of moderate rigor that included data from 460 participants. Those students who remained in college for two years were considered persisters.

Developed for first-year students whose scores on the New Jersey College Basic Skills Test (NJCBST) and SAT scores warrant placing them in developmental classes, the program offers a structured learning environment for at-risk students. Based on a student's weakness in particular areas of the NJCBST, he or she was assigned to the appropriate developmental Gateway course. In their study, Gebelt and Parilis  evaluated the impact of the Gateway Psychology course and its impact on retention from fall 1991 through spring 1994 to determine the extent to which these students persisted at the same rate as non-Gateway general psychology students. The authors noted that because almost all students are enrolled in the remedial English component, there was no way to have a control group.

Participants in the Gateway course persisted at a rate of 78.7 percent compared to 82.7 percent ($p$ = .13) for non-Gateway students. Essentially, no significant differences emerged between Gateway and non-Gateway students in terms of graduation rates. However, the authors did find a significant difference in persistence (at the $p$ <.001 level) for those who continued to be enrolled at the institution but had not yet graduated.

Looking across these studies, we were again struck by the fact that there were not more published studies of the impact of learning communities and structured courses on student retention. Learning communities have received a great deal of positive attention, but we found few rigorous assessments of their impact on student persistence. Overall, these studies

did present linkages between participation in these courses and persistence. Also, most of these studies were highly rigorous. For this group of published research, the results suggest that learning communities and related structured courses have at least a moderate positive effect on student persistence.

**Student-Faculty Interaction**.  Several scholars in the field of higher education have emphasized the impact of student-faculty interaction (Astin, 1993; Pascarella and Terenzini, 1977, 1980b; Tinto, 1993). Posited as a form of academic integration (Tinto, 1987), the concept of student-faculty interaction espouses both in-class and out-of-class activities with faculty members as a method of facilitating the development of meaningful relationships between students and their professors, which in turn enhances persistence. We found only a small number (three) of empirical evaluations of programmatic interventions designed to enhance student and faculty interaction to improve student persistence.

Craft (2001) conducted a low-rigor study of the South Carolina Advanced Technological (SCATE) program. The first phase of the program included faculty development initiatives that provided extensive training. The goal was to move faculty out of their discipline-specific silos and encourage active learning environments as exemplified in the workplace. Another aspect of the program included a component of faculty and student teams. Unfortunately, the author used only descriptive statistics to assess the impact on retention and did not include a control group, so the efficacy of the program could not be determined.

The Adventor program at Kutztown University targeted the needs of incoming students of color and the barriers they encountered in completing their degrees. The study used a small sample consisting of nineteen students and fifteen faculty members. There was a control group, but it is not described. The program required students to interact with their advisers on a weekly basis (such as e-mail messages, visits, phone calls, and so on) and to maintain consistent contact (Schultz, Colton, and Colton, 2001). This study of low rigor summarized data collected during the program's first year. Although the authors did not explain the kinds of analyses they conducted on the data, they reported that 77 percent of the program's participants returned for a second year, while only 67 percent of the control group returned (but no level of significance was provided).

Nagda and others (1998) conducted a study rated to be of moderate rigor of the Undergraduate Research Opportunities Program (UROP), which was designed to facilitate relationship building between students and faculty by creating undergraduate research partnerships. In this study, 1,280 African American, Hispanic, and white first-year students and sophomores served as participants. A stratified random sampling method was used to select students from a pool of 2,873 program applicants. Then, students were assigned to control and experimental groups based on a matched random assignment. The experimental group consisted of 613 students who participated in the program and the control group consisted of 667 students

who were not program participants. Core program components included common matriculation time into the program; peer advising; peer research interest groups; faculty to serve as sponsors; a mutual-selection process between student and faculty sponsor; student research presentations; and academic credit and assessment. The faculty component facilitated regular contact in an engaging, one-on-one relationship to foster academic competency and academic integration. Participants met individually and regularly with their faculty sponsors.

The most significant impact of this program was on low-achieving African American students, as evidenced by their attrition rate of 15.3 percent versus that of the control group's 27.1 percent (significant at the <.07 level). Surprisingly, the researchers also found that the program had a much larger impact on sophomores (attrition rate of 4.3 percent versus 9.5 percent for the control group, significant at the $p = .03$ level) than on first-year students (there was no significant impact on the entire sample of UROP participants).

In total, these studies provide consistent, positive support for the assertion that student persistence can be enhanced by developing campus-based initiatives that facilitate student-faculty interaction. As a group, these articles further illustrate the need to research the positive impact that faculty contact has on student retention. Once again, however, with only a small number of published studies and a dearth of highly rigorous studies, we conclude that there is only moderate support for this proposition.

**Transition Programs**.  College transition programs, often referred to as orientation programs, are a common student-retention initiative at colleges and universities (Titley, 1985). According to Overland and Rentz (2004), "For as long as new students have experienced a period of transition to the educational environment, orientation programs have been a part of American higher education" (p. 239). Orientation and transition programs are designed to help students make the transition from the high school environment to the collegiate environment (Perigo and Upcraft, 1989). They may consist of an overall summer program format; an introductory course; or smaller, individualized programs, such as Welcome Week. In general, most programs have four central goals: to aid students in their academic adjustment; to assist students with personal adjustment; to help families understand college and available services; and  to assist the institution in gathering data on incoming students (Overland and Rentz, 2004). Our search for published articles located twenty-five articles for review, but only four articles directly assessed the impact of a transition program on student persistence.

The Summer Fireside Experience Program (SFEP), a supplemental precollege, five-day, adventure-based orientation program ($n = 32$), a Freshman Camp (FC) group ($n = 64$), and a control group ($n = 64$) were evaluated by Gass (1990) and studied over three and a half years. The programs were offered to first-year students at a northeastern public institution. SFEP included a

range of outdoor physical activities and team activities that reinforced academic and social goals related to student retention (student development, positive interaction with faculty, career and major development, academic focus, and connection between course offerings and student expectations).

The Freshman Camp participants experienced a four-day program in a residential environment consisting of small-group activities, question-and-answer sessions with upper-class students, interaction with faculty, and school spirit activities. Their follow-up activities consisted of letters from counselors and informal meetings with fellow participants and faculty members. The control group did not participate in either program, nor did they receive any additional orientation beyond the required two-day program. In this study of moderate rigor, attrition data were collected on the three groups both one year and three and a half years after the students entered the institution. The design controlled for high school rank and college aptitude test scores. Retention rates for the SFEP students were 15 percent higher than for the Freshman Camp students and 25 percent higher than the control group for the first twelve months (significant at the .05 level).

In a study of moderate rigor of another transition program, Young, Backer, and Rogers (1989) evaluated the Early Advising and Scheduling System (EASS), which was adopted in the spring of 1986 at a public institution serving twenty-one thousand students. The effectiveness of this program was tested on a population of 2,300 prospective first-year students. The program allowed individuals who had been admitted as first-year students but who had not yet accepted admission to come to campus during the spring semester of their high school senior year for an advising and registration session. The program also provided an orientation to the university for parents. This one-day early orientation program provided students and parents with campus information as well as an opportunity to register early for fall classes.

In this highly rigorous study, the authors measured student attrition from the first year to the second year. The investigators used ACT composite and high school GPA as independent variables and first-year college grades and attrition as criterion variables for all fall 1986 first-year students. Descriptive results suggested that the program had a positive impact on persistence. However, additional multivariate analyses revealed that EASS members scored higher than nonparticipants on the ACT and had higher high school GPAs. Also, they found these differences explained the improved retention rates for EASS, and they concluded that EASS was a predictor of first-year grades at a statistically significant level but was not a predictor of student persistence.

Boyd and others (1997) assessed the impact of the Summer Orientation Parent Transition Program for parents of first-year students attending a large public institution. This investigation included 150 sets of parents who were part of this intervention. Another group of ninety parents went through a different orientation program and served as the control group. This program was designed to equip parents with information about the

institution in hopes of enabling them to act as referral agents should their students encounter academic or social difficulties that were inhibiting their ability to be successful students and to persist.

In this study, judged to be of moderate rigor, the authors looked at "academic persistence" (defined as continuous enrollment for a given semester) and "academic persistence in good standing" (being enrolled for a given semester and ending that semester with no negative academic action, such as probation, warning, or dismissal). Although there was no difference in academic persistence among the experimental and control groups, there was a significant difference among the students who were determined to be in academic persistence in good standing. In the fall semester, retention rates for the treatment group were 79 percent versus the comparison group's 63 percent (significant at the $p < .01$ level); in the spring, the rates were 73 percent and 60 percent, respectively (significant at the $p < .05$ level).

Positive effects of a different type of freshman orientation intervention were also found in a study conducted by House and Kuchynka (1997). "University Experience" is an example of what is commonly described as a University 101-type of course. In this instance it was offered at a public institution. This moderately rigorous study included an experimental group consisting of 85 and a control group consisting of 431 first-year students. Students were exposed to opportunities to learn more about their institution and develop more understanding about and interests in their choice of a major. Using a chi-square analysis, the authors found that students who took the course had an 82.4 percent persistence rate (70/85), in comparison to the control group's 64.5 percent (278/483); these results are significant at the $p < .01$ level.

Overall, the studies in this section included more rigorous statistical testing. Thus, we believe that similar studies in this area could lend further support to the assertion that orientation, University 101, and other transition efforts are important for students. Although not every study found strong links to retention, as with other previously mentioned studies, the findings were associated with retention factors such as GPA and academic and social integration.

## Conclusions

After mining several electronic databases and reviewing almost one hundred articles, only sixteen studies were identified as providing documentation that links a program with retention. The strength of the connections between programmatic interventions and student persistence varied in these studies. Only in the area of transition programs did we find a reasonable number of studies that reported consistently strong connections between interventions and improved student persistence. Overall, our findings demonstrate that academe is without a core set of documents upon which administrators can rely when seeking retention models to employ at their

own institutions. Our analyses of the existing research on programmatic efforts to improve student retention rates lead us to the following substantive conclusions:

The evidence supporting the effectiveness of counseling as a means to reduce dropout rates of undergraduate students is weak.

The evidence to support the efficacy of mentoring programs as a means to reduce dropout rates is weak.

There are small to moderate levels of positive evidence that learning communities have a positive effect on student persistence.

There are small to moderate levels of evidence that programmatic interventions designed to enhance student-faculty interaction can improve student persistence.

There is moderate to strong positive evidence that transition or orientation programs can improve student retention rates.

In addition to these areas, there is a host of areas for which there is simply no evidence to support the effectiveness, or lack thereof, of campus-based retention efforts. Within the body of empirical studies that does exist, the research team found that there is also a lack of longitudinal assessments of retention-based initiatives. The majority of the studies captured the program's impact at a single point in time.

After dissecting the studies, we also found mixed results on various programmatic themes. As we mentioned earlier, the studies' findings were as diverse as the number of programs. We wonder, however, whether an increase in the number of published empirical studies will yield more consistency in the findings. Our findings also revealed other gaps in the retention literature. We found few empirical studies that had been conducted at community colleges or at minority-serving institutions.

## Implications

We end this chapter with the same questions with which we began: How do institutions of higher education know that the programs and services that they offer contribute to undergraduate student retention? How do we know that the countless dollars and budgets that are labeled for retention efforts actually work? In the past it was often possible to make claims again and again about the necessity and success of campus retention programs without providing empirical results. However, increasingly campus administrators are asking for evidence as a return on the institution's investment in campus programs.

As a result of our findings, we contend that the present provides an excellent opportunity for colleges and universities to assess the impact of their various programs on retention. The dearth of published empirical studies emphasizes the need to create and promote models for assessing the

effectiveness of retention programs. Woodard, Mallory, and De Luca (2001) present a framework for this purpose. There are undoubtedly a number of other viable approaches, but the point is that administrators need a point of reference from which to understand the importance of establishing the groundwork for effectively and efficiently assessing a program; understanding how to identify, capture, and analyze data and communicate findings to various audiences; and understanding how to use the findings to improve the program. We encourage campus administrators and higher education scholars to get involved in evaluating the effectiveness of campus-based retention programs.

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