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## First-Year Retention Programs: Recommendations for Effective Implementation

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### Background

Postsecondary institutions today are judged not only by their ability to increase enrollment, particularly among historically underrepresented populations, but also by their success in retaining and graduating students. According to Wild and Ebbers (2002), "student retention is significant for measuring institutional effectiveness in the prevailing environment of accountability and budgetary constraints" (p. 503). The focus on increased retention and graduation rates, however, is driven by more than funding and budgetary issues. Student retention and graduation rates have political and economic implications on a societal level, and the impact of leaving college early is felt directly by students and their families. Given the broad and various impacts of retention and graduation rates, colleges and universities have developed a number of strategies to increase retention and graduation rates that are grounded in college student development theories. These strategies are the focus of this paper.

### Tinto's Theory of Student Departure

Although a variety of theoretical perspectives exist that can guide research on college retention and graduation strategies, Tinto's theory of student departure is one of the most influential theories. Tinto (1975, 1998)

suggests that college freshmen come equipped with a variety of individual characteristics, background variables, and schooling experiences that contribute to their initial commitment to a particular degree and a particular institution. These initial commitments are either strengthened or weakened by the social and academic experiences students have in their first year of college. If college students fail to integrate socially and academically into college, they are more likely to drop out. Although some of Tinto's specific propositions and constructs may be less applicable for non-traditional students, cultural minorities, and students at commuter colleges, the importance of both academic and social relationships for students' retention has been established (Davidson & Wilson, 2013). Successful retention strategies help students build these kinds of relationships through approaches that integrate different types of services into a comprehensive program (Gardner, 2002).

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**Retention Programs and Services**

Although postsecondary institutions offer a variety of retention programs and services, this brief focuses on two categories of services: *Curricular Interventions* and *Personal/Academic Support Services.* The three examples of curricular interventions are *First-Year Seminars, Learning Communities, and Service Learning.* They were selected because they are likely to be found at many types and levels of postsecondary institutions, are often available to students as freshmen, and have been identified to be high impact educational practices (Kuh, 2008). This brief focuses on advising and mentoring as examples of *Personal/Academic Support Service* because they represent widely used examples of services that are included in retention efforts by colleges.

**Curricular Interventions**

Although co-curricular activities like clubs can serve an important role in students' social integration into college, these activities may not be equally accessible to all students. For example, students who commute to college or work off-campus to pay for college may find it difficult to participate extensively in activities that occur outside of class time. As a result, "the classroom remains the one common forum where students may be reached" (Keup, 2005, p. 62).

*First-Year Seminars* are designed for specific purposes such as supporting students' first-year adjustment to college, developing students' academic skills, providing students with an orientation to campus resources and facilities, and motivating students to engage in the kind of activities that are likely to promote retention (Kluepfel, 1994, p. 29). These programs can last from a few weeks to a whole academic year. There are five commonly occurring categories of *First-Year Seminars (*Barefoot and Fidler, 1996).[1]

[1] In addition to these five categories of seminars, schools may offer a hybrid that combines elements from more than one type.

1. *Extended orientation seminar:* These *First-Year Seminars* go by many names including freshman orientation, college survival, and student success courses. Content can vary, but typically includes information on college resources, time management, career and academic planning, and study strategies.
2. *Academic seminars with generally uniform content across sections:* These may be interdisciplinary or theme–oriented courses that count as a general studies requirement. In addition to an organizing theme, these courses often have academic skill components such as critical thinking and expository writing.
3. *Academic seminars with variable content:* This is a second form of an academic seminar. The content may be chosen on disciplinary grounds, or may be selected by the professor who teaches a particular section. These will generally serve as electives that students can select.
4. *Pre-professional or discipline-based seminars*: These seminars are generally taught within professional schools or disciplines, and are designed to prepare students for the rigors of a profession, while fostering connections among students with the same major field of study.
5. *Basic study skills seminars:* These are typically designed for underprepared students and focus on improving their reading, writing, and study strategies.

Generally, the research on First-Year Seminars has failed to yield consistent evidence about their effectiveness. In their meta-analysis of research on *First-Year Seminars,* Permzadian and Credé (2016) found that *First-Year Seminars* on average have only a small positive effect on first-year GPA, and a small, but somewhat larger, effect on the 1-year retention rate of participating students. They concluded that *First-Year Seminars* "have, on average, low levels of effectiveness" (p. 27). However, given the small number of randomized studies that were included in their review, Permzadian and Credé cautioned that their results should be seen as "an absence of evidence for effectiveness rather than evidence for the absence of effectiveness" (p. 28).

On the other hand, Pascarella and Terenzini's (2005) review of the available literature found that there was considerable evidence to show that first-year programs increase persistence into the second year of college. However, Goodman and Pascarella (2006, p. 28) noted that the design of existing research typically "has been discernibly weaker" than is necessary to demonstrate the impact of these seminars on student persistence.

The What Works Clearinghouse (WWC) has recently published two reports that examined the evidence for the effectiveness of *First-Year Seminars.* The first WWC Intervention report evaluated the impact of *First-Year Seminars* on college freshmen in general. The WWC did not identify a study that met their group design standards without reservation, but was able to

identify four quasi-experimental studies out of 97 reviewed that met group design standards with reservations. The WWC found that *First Year Experience courses* "have potentially positive effects on credit accrual, degree attainment (college), and general academic achievement (college) for freshman college students" (U.S. Department of Education, 2016a, p. 20).

The second report addressed research on the effectiveness of these seminars for students in developmental education. The WWC was able to identify just one study on the effects of *First-Year Seminars* for students in developmental education that met WWC standards without reservations for rigorous research. Based on this one study (Rutschow, Cullinan, & Welbeck, 2012), *First-Year Seminars* did not have a significant effect on academic achievement, progress through developmental education, credit accrual, or persistence for postsecondary students in developmental education (U.S. Department of Education, 2016b). Although not addressed by the WWC review, this study did find a positive impact on students' self-reported skills in the areas of self-management, interdependence, self-awareness, interest in lifelong learning, emotional intelligence, and college engagement among students with low levels of these attributes.

Permzadian and Credé (2016) found that there were characteristics of *First-Year Seminars* that moderated their effects on retention. Based on these results, they made four recommendations about how those implementing *First-Year Seminars* could use their findings to increase the impact of these seminars on retention.

- First, if retention is the goal, seminars should have an orientation rather than an academic focus. Interestingly, they recommended the opposite if the goal were to improve GPA.
- Second, the effectiveness of these seminars can be improved when the instructors are faculty or professional staff at a college rather than students.
- Third, these seminars are more effective if they are open to all freshmen rather than only to academically underprepared students.
- Fourth, they found that seminars were more effective in increasing retention when they are stand-alone courses rather than a part of a learning community.

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Additionally, Porter and Swing (2006) found the content of *First-Year Seminars* is related to their effectiveness. *First-Year Seminars* that were perceived by students as doing a good job of teaching study skills and educating them in health matters were associated with an intent to persist. The potentially positive impact of seminars that focused on self-regulation and study skills was also observed by Zeidenberg, Jenkins, and Calcagno (2007). In general, seminars that focus on helping students adjust to college tended to be impactful on retention.

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**Learning communities.** According to Lenning and Ebbers (2005, pp. 29-30) *learning communities* take various forms, but they can be grouped into four categories: *curricular learning communities, classroom learning communities, residential learning communities*, and *student type learning communities*. In this paper, the focus is on *linked learning communities* as a specific form of *curricular learning communities* and *residential learning communities.*

Although *linked learning communities* can vary somewhat, they typically share two main elements. First, there is usually a shared conceptual theme that serves to integrate curriculum across different courses, and second, students learn together as a cohort or community by participating in the same courses at the same time (U.S. Department of Education, 2014a). Instructors in the linked courses work as partners to create curricular connections between the courses. The hope is that students will integrate into academic and social networks, and that they will build cross-curricular connections that promote higher levels of engagement.

According to Visher, Schneider, Wathington, and Collado (2010), *learning communities* in community colleges typically enroll cohorts of students in the same sections of two or three courses, generally in the first semester of college. One common approach is to link a developmental course or a student success course to a content course. A potential benefit is that students can apply what they are learning in the developmental course to the content course, and can earn credit while completing developmental courses. Another benefit of linking courses in this fashion is that it may prevent students from being marginalized in developmental education tracts.

Kuh (2008) identified *Learning Communities* as a "high impact educational practice" for college students' success. However, other research suggests that the effects may be conditional somewhat on students' characteristics. In November of 2014, the What Works Clearinghouse published a What Works Clearinghouse (WWC) Intervention Report on *Linked Learning Communities* with students in developmental education (U.S. Department of Education, 2014b). The WWC identified six experimental studies to review that met the WWC group design standards (Bloom & Sommo, 2005; Scrivener, et al., 2008; Sommo, Mayer, Rudd, & Cullinan, 2012; Weis, Visher, & Wathington, 2010; Weissman, et al., 2011; Weissman, Cullinan, Cerna, Safran, & Richman, 2012). The WWC concluded that *Linked Learning Communities* did not have "discernable effects" on academic achievement, degree attainment, postsecondary enrollment, nor on progress in developmental education. These studies, therefore, failed to demonstrate a positive impact of learning communities on traditional measures of college success for students in developmental education.

**Residential learning communities**. *Residential Learning Communities* can be thought of as a sub-type of a *Learning Community.* However, due to its special nature, it was decided to treat it separately in this brief.

Also called *Living-Learning Communities, Residential Learning Communities* attempt to enhance students' social and academic integration into college by combining curricular, co-curricular, and residential components of college life (The Council of Independent Colleges, 2015). *Residential Learning Communities* can range from groups of students living together in a dorm because they share common academic goals to four-year "colleges-within-a-college" (Brower & Inkelas, 2010).

The National Study of Living-Learning Programs is an example of "studies that are multi-institutional, use longitudinal designs and mixed methods, and examine complex student outcomes" (Brower & Inkelas, 2010, p. 38). Nearly 24,000 college students at 34 postsecondary institutions completed a program-developed survey. On each campus, students who lived in a *Residential Learning Community* and comparison students in traditional residence halls completed surveys. Students in the two groups were matched on gender, race or ethnicity, and year in school. The two groups also did not differ in terms of ACT/SAT scores, high school grades, or types of financial aid received. Students in the study were followed longitudinally and surveyed three years after the initial survey. Additionally, the researchers also surveyed college practitioners about their programs. Key findings from this study include the following.

- Although the intent of *Residential Learning Communities* is to promote integrated learning experiences for students in and out of the classroom, over half of the communities did not include any form of academic content.
- Although the goal of *Living-Learning Programs* was to integrate classroom experiences with out-of-class experiences, faculty participation was generally low. However, participation by student affairs professionals tended to be high.
- The more often students interacted with peers and faculty, and the more academic support they perceived in their residential environment, the more likely they were to meet their academic goals.
- A number of social and intellectual benefits were found for students in the *Residential Learning Communities*. For example, these students applied more critical thinking skills and applied knowledge across settings. They also reported more commitment to civic involvement and participated in volunteer opportunities and service-learning courses more frequently.
- The most effective programs had a strong student affairs/academic affairs partnership, well conceptualized academically oriented objectives, and promoted learning wherever it occurred.

Although the National Study of Living-Learning Programs makes important contributions to the understanding of *Residential Learning Communities*, more information is needed on how these programs impact different student populations. For example, the WWC was not able to identify a single study that met their group design standards for studies of the impact of *Residential Learning Communities* for students in developmental education. It is not possible, therefore to draw conclusions about the effects of these programs for this student population (U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. 2014b).

**Service-learning**. Celio, Durlak, and Dymnicki (2011, p. 184) define service learning as "a teaching and learning strategy that attempts to integrate community service with an academic curriculum." Zlotkowski (2002) notes that service-learning is different from community service in that service-learning connects to academic learning. Service-learning is thought to influence retention by increasing student engagement in their courses (Braxton, Jones, Hirschy, & Hartley, 2008; Simonet, 2008; Braxton, Millem, & Sullivan, 2000). Descriptive analyses from Keup's (2005) study of three curricular interventions suggest that, "service-learning may be a particularly salient means of facilitating interactions with faculty" (p. 81).

Celio, Durlak, and Dymnicki's (2011) meta-analysis included 62 studies that investigated the impact of service learning on students in elementary, secondary, and postsecondary education. Significant gains were observed for "attitudes toward self, attitudes toward school and learning, civic engagement, social skills, and academic achievement" (p. 171). Effect sizes tended to be larger on average for postsecondary students (0.31) than for K-12 students (0.20).

**Mentoring and Advising**

Mentoring and advisement are commonly provided academic and personal support services on college campuses. They can be delivered formally through established mentoring and advising programs or informally through relationships that emerge as a result of continued contact between significant peers or adults and students. Both can be viewed as ways to enhance academic and social integration into college life.

**Mentoring.** Although there tends to be disagreement in the professional literature about how to define mentoring and what the critical functions of mentoring are, Jacobl (1991, p. 513) was able to identify five components of mentoring that tend to be agreed upon in the literature. First, "mentoring relationships are helping relationships usually focused on achievement." Second, mentors provide one or more of the following to their mentees: "(a) emotional and psychological support; (b) direct assistance with career or professional development, (c) role modeling." Third, "mentoring relationships are reciprocal relationships." Fourth, "mentoring relationships are personal." Fifth, "relative to their mentees,

mentors show greater experience, influence, and achievement within a particular organization or environment."

There are three critical reviews of the literature on mentoring services for college students that cover different time frames (Crisp & Cruz, 2009; Gershenfield, 2014; Jacobi, 1991). The Jacobi review addressed the literature as of 1991, while Crisp and Cruz reviewed the literature from 1990 to 2007, and the Gershenfield review focused on the literature from 2008 to 2012. In general, all three reviews indicated that there were significant issues with the quality and rigor of the research on mentoring that made it difficult to judge the impact of mentoring. Although both Crisp and Cruz and Gershenfeld noted that generally the studies they reviewed showed a positive impact on students' success, Gershenfeld summarized the impact of the research quality issues in the following manner.

> There is minimal evidence of positive change to mentors or mentees that is the result of mentoring (despite most studies reporting positive impacts of mentoring" (pp. 381-382).

More recently, Bettinger and Baker (2014) have published an experimental study of a coaching (mentoring) program offered by Inside Track – a for-profit vendor. In this program, coaches regularly contact students during their first year. The coaches help students "prioritize their studies, plan how to be successful, and identify and overcome barriers to students' academic success" (p. 4). Students who participated in the coaching program were more likely to persist in college during the treatment period, and after the treatment concluded. This particular study adds to the evidence suggesting that a mentoring program can have positive effects on persistence.

**College advising**. In writing about the potential of academic advisement, Drake (2011, p. 10) makes the following point.

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The three major models of college advising are prescriptive, developmental, and intrusive (Jeschke, Johnson, & Williams, 2001). In the *prescriptive model*, advisors respond to students' requests for advice about course and major selections. Drake (2011) suggests that with prescriptive advising, "the advisor, in effect, takes on the role of physician and the student becomes the patient" (p.10). Actions are prescribed to students by the advisor, and the goal is to make sure that students get accurate information that allows them to complete a program of studies successfully. Advisors attempt to answer students' immediate questions rather than assist them in long-term planning (Noaman & Ahmed, 2015).

*Developmental advisement* is based on student and adult developmental theories. It is a relationship-based approach to advising that provides support for the "whole student" (McGill, 2016). Developmental advising not only helps students with course and major selection, but also helps them explore academic, career, and life goals (Noaman & Ahmed, 2015). In many cases, developmental advising becomes a teaching/learning interaction in which students acquire skills, abilities and strategies that help them take control of their life and to make effective decisions (Nutt, 2004).

According to Albecker (2016), *intrusive advising* assumes that some students will not seek out help on their own to resolve their academic issues. *Intrusive advisement* is also known as *proactive advisement* because advisors contact students rather than waiting for students to contact them. The goal is to help students avoid some problems, or to deal with problems before they become too large (Hagedorn, 2010). Generally, contacts between students and advisors are planned around critical events in students' college career, such as midway through the first year, or when a student has to apply for admission into a program (Noaman & Ahmed, 2015). Also, college early warning systems can be an important part of intrusive advising as a way of identifying students who are at risk (Hagedorn, 2010).

As is the case with mentoring, it has been difficult to establish a clear empirical link between advisement and college retention. In lieu of this, Cuseo (2007, p. 1) posited indirect links between advisement and retention, through "its positive association with, and mediation of, other variables that are strongly correlated with student persistence." For example, student satisfaction with the college experience is related to retention and is impacted potentially by students' experience with advisement. Consequently, improving advisement could improve retention through improved satisfaction. Cuseo made a similar case for the impact of effective advisement on effective educational and career planning and decision making, student utilization of campus resources, student-faculty contact outside of the classroom, and student mentoring.

A reasonable question, therefore, is what constitutes effective advisement. Tinto (2004, p. 8) suggests that effective advisement should address two "unique, though related issues." To be effective, advisement must address the needs of undecided students (major and career) and students who change their major, and first-generation students who may not have access to knowledge about how to negotiate college that is available to students from college-educated families. Cuseo (2007) identified a number of strategies for improving advisement including incentives for college faculty to engage in high quality advisement, improved orientation, training, and development for advisors, assessment of the quality of advisement, small advisor-advisee ratios, incentives for students to meet regularly with

advisors, frontloading of highly effective advisors, and using advising effectiveness as a criterion for recruiting faculty.

In their qualitative study of college advisement that employed student focus groups at six colleges, Kalamkarian and Karp (2015) found that students preferred an "advising as a form of teaching" (developmental) approach to advising. They also preferred an interactive approach to a didactic or one-way communication approach. This was particularly true for complex decision-making situations. Unfortunately, Kalamkarian and Karp noted that colleges may lack the necessary resources to deliver this type of advising on a consistent basis.

**Technology and academic advisement.** Currently, there is an on-going debate on the use of technology in academic advising. On one side are those who contend that technology will improve the quality of advisement services, while others believe that effective advisement is by nature a process that requires human interaction (Kalamkarian & Karp, 2015). The reality, is, however, that the practical issues involved in offering comprehensive advising services to a large number of students are likely to require some integration of technology with face-to-face advisement (Karp, Kalamkarian, Klempkin, & Fletcher, 2016). The use of technology in this fashion is sometimes referred to as integrated planning and advising services (IPAS) or integrated planning and advising for student success (IPASS). According to Kalamkarian and Karp (2014), iPAS services include automated communication with students, institutional systems for identifying at-risk students, interactive multi-semester course planning for students, shared staff access to advising notes, and integration of existing technologies.

Generally, iPAS services help colleges provide more effective advisement services, and are unlikely to be provided by college access programs. In contrast, the work of Castleman and associates on the use of text messaging as an informational and advising tool is a promising example of a way in which college access programs can collaborate with colleges to provide support to their students during the freshman year.

Castleman and Page (2014) conducted an experimental study of the impact of text message "nudges" about FAFSA renewal on college students' persistence. The analytical sample for this study included college freshman who had participated in college access services offered by uAspire during high school. UAspire is a non-profit organization that focuses on issues of college affordability and financial aid. All students in the study had previously participated in either a text-based or peer-mentoring intervention to increase college matriculation.

Students randomly assigned to the treatment group received a series of twelve personalized text messages about important parts of the FAFSA renewal process. The messages informed students where they could go on

their college campus to get help with financial aid, reminded them about filing deadlines, and offered them assistance if they needed it from uAspire. The messages also reminded students about related topics, such as the importance of maintaining satisfactory academic progress. Students in the treatment group received a message about every two weeks. Students randomly assigned to the control group did not receive the text messages, but they could receive help from an uAspire advisor if they initiated contact independently from the text messages.

In their analysis, Castleman and Page first examined students' responsiveness. They found that approximately 20% of students who received texts replied to a text at least once. About 11% engaged in a more extensive conversation with an uAspire advisor. They found that the intervention did not have an impact on persistence at four-year institutions (the persistence rates were generally high), but that there was a significant impact for two-year colleges. Interestingly, the authors were not able to observe actual FAFSA re-filing behaviors, even though that was the focus of the texting campaign.

Castleman and Meyer (2016) conducted a quasi-experimental study of the impact of text message nudges on academic performance in college. Students in the treatment group were students from 14 GEAR UP high schools who had agreed to participate in a texting campaign administered by the West Virginia Higher Education Policy Commission (WVHEPC). This WVHEPC texting program began when the students were in high school and continued into the summer after high school and the first year of college for these students. Students in the treatment group who attended two particular West Virginia colleges (labeled A and B by Castleman and Page) also received regular text messages from those colleges. There were two comparison groups for this study, students from non-GEAR UP high schools and students from the GEAR UP high schools who had not participated in the text messaging service. The text messages during the freshman year covered a variety of topics including meeting with an academic advisor and the availability of tutoring, financial aid renewal, and course registration.

The findings of this study are somewhat nuanced. When compared to non-GEAR UP students only, students in the treatment group attempted more credits in their freshman fall semester on average. When compared only to non-GEAR UP students, the treated GEAR UP students did not complete significantly more credits. However, when compared to a combined comparison group (both comparison groups), treatment students at colleges A and B completed a higher number of credits. Also, treatment students in colleges A and B achieved higher GPAs. Generally, he main beneficiaries of the program tended to be low-income students at colleges A and B.

The texting interventions are promising because they seem to work particularly well for students at community colleges (FAFSA renewal) and low income students (college persistence). However, consumers of this research must be cautious about assuming that text messaging is the answer to how to provide support to students as they prepare for and enter college. In a recent web site posting, Castleman (2015, August 6) cautioned users that text messaging is not a panacea, and that there are still important questions to be answered. For example, "When should nudging stop?" Without answers to this question, students may develop dependencies on the messages or they may eventually tune them out. Also, educators need to be sure that the nudges provided by the text messages help students make good decisions, rather than telling them what is good for them. Castleman concludes by providing some guiding principles for using texting. First, he suggests that texting should be used at critical junctures when students and families need to make complex transitional decisions that are important for students' success. Nudges at this point should help students and their families make informed decisions. Second, nudges should prompt engagement rather than being overly prescriptive. If text messages are overly prescriptive, they may distort students' decisions. Effective nudges should encourage active decision-making rather than telling people what to do. Finally, nudges should be viewed as supplements to, not substitutes for other educational investments. They should be a part of ongoing efforts to help students make informed decisions

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**Implications for Practice**

To a large extent, the programs discussed in this paper are established and administered by postsecondary institutions. The role of college access professionals with these services, therefore, is likely one of helping students identify these services, or supplementing or extending these services. The following implications for practice are based on this assumed role.

1. **Build partnerships between postsecondary institutions and college access programs.** Postsecondary institutions and college access programs need to learn from each other. The ultimate goal is to exchange information for purposes of helping more students succeed in the first year of college.
2. **Help students, while in high school, to develop the types of contextualized college knowledge and self-advocacy skills they need to succeed at their selected postsecondary institutions.** For example, college access programs can help students identify in advance the combination of services at their intended postsecondary institutions that may be helpful to them and how to access them.
3. **Integrate elements of successful *First-Year Seminars* into high school curricula.** Although the literature on First-Year Seminars is mixed**,** there are some ways to enhance their effectiveness. For example, successful *First-Year Seminars* provide information about adjusting to

college. As part of this process, learning about successful study skills, time management, and self-regulatory skills could be initiated in middle and high school.

4. **Supplement advisement opportunities where appropriate or needed.** One area where college access programs may be able to contribute to already existing programs at a college is through intrusive or developmental advisement for their students. These efforts could supplement and extend available advisement services. For example, college access professionals could offer intrusive financial aid advisement if it is lacking.

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