



Research in Practice

Series V: Postsecondary Transition

Paper No. 1

Postsecondary Transitions: Recommendations for Effective Implementation

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Background

Students face a number of personal, academic, and social challenges as they transition from high school into postsecondary education. Some of the factors that can negatively affect their transition include, “new found independence, homesickness, time management, finances, or different teaching styles” (Salinitri, 2005, p. 854). Also, depending on their level of preparation, high school graduates may find that they are under-prepared for the academic rigors of college. Taken together, these factors and others may make it hard for students to stay in college. Of students entering as full-time, first-year freshmen in 2009, 59.1% had earned a degree six years later. For students who entered two-year public institutions as full-time, first-year students in 2009, 22.1% had completed a postsecondary credential, and 43.5% were still enrolled in college. (National Student Clearinghouse Research Center, 2016). Additionally, postsecondary graduation rates are generally lower for minority and low-income students (Kena, et al., 2015; Pell Institute, 2015).

The purpose of this *Research in Practice* series is to provide evidence-based guidance for the development of successful college transition programming. In this first paper, the emphasis is on secondary school transition programs and programs offered during the summer before the freshman year. Freshman year transition programming is addressed only in terms of the role of college access programs in providing these services, when they “follow” students they serve from secondary school into college.

The second paper focuses on freshman year programming from the postsecondary perspective, and the third paper focuses on student characteristics that impact the transition to college.

A Longitudinal View of the Postsecondary Transition

The postsecondary transition is an educational process consisting of three phases that begins during secondary school and continues until the end of the first year of postsecondary education. This somewhat lengthy transition can be divided into three time frames: (a) secondary school (middle school/high school); (b) summer before the freshman year; and (c) the freshman year. Programming to support students' postsecondary transition has been designed for each of these phases.

Transition Programming During Secondary School

A successful transition to postsecondary education has its roots in students' middle and high school experiences. Clearly, students' academic preparation in secondary school is a key factor in a successful postsecondary transition, but their personal and social development is also important. For example, one of the more challenging roles of high school counselors is to guide students toward realistic life goals while not "diminishing their expectations and unrealized potential" (NACAC, 2009, p. 4).

College transition courses. College transition courses provide support during students' senior year to help them become college and career ready. California's Early Assessment Program (EAP) is an example of transition programming that includes college transition courses.

California's EAP has three main components: (a) a college-readiness exam taken voluntarily by students in 11th grade, (b) curricular opportunities for students to increase their college readiness in English and/or math in 12th grade (college transition courses), and (c) professional development for high school mathematics and English teachers. The EAP resulted from a collaboration between the California State University System, the California Department of Education, and the California State Board of Education. The goal is to increase the number of entering freshman students who are ready to enroll in credit-bearing courses in English and math. This type of transition program has also been implemented and evaluated in other states, including Colorado, New York, Tennessee and West Virginia. Similar efforts are underway in Arizona in 2016 through partnerships between the Arizona Board of Regents, the Arizona Department of Education and several local education authorities (districts).

More methodologically rigorous evaluations of college transition courses have yielded mixed findings. Howell, Kurlaender, & Grodsky (2009) found that California's EAP reduced the probability that students would need remediation in English by 6% and in math by 4.3% (EAP effects were only marginally significant for math). It is important to note that the observed reduction in enrollment in college remedial courses does not seem to be

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the result of the EAP test results discouraging less prepared students from applying to the California State University System. In a recent impact study of college transition courses in West Virginia, however, the results of a regression discontinuity analysis revealed no positive impacts of college transition courses on students' college readiness as measured by college enrollment, earned college level credits, and likelihood that students attempted a gatekeeper course such as Freshman English in the first year (Pheatt, Trimble, & Barnett, 2016).

Based on their qualitative research on college transition courses in California, New York, Tennessee, and West Virginia, Barnett, Fay, & Pheatt (2016) identified factors that either facilitated or hindered the implementation of college transition courses. Facilitators tended to be school culture related, and included a culture of innovation and caring, teacher and administrator buy-in, and collaboration with external partners. The most frequently noted issue by program staff was a lack of student engagement. Some blamed it on senioritis, but others pointed to deeper levels of student apathy. Other hindrances included delays in getting college readiness test results, funding issues that impacted teacher hiring or professional development, and inadequate access to postsecondary data. The last hindrance potentially made it more difficult to judge program effectiveness and to implement data-driven changes.

Credit-based transition programs. Generally, *credit-based transition programs* allow students to earn college credit while in high school, and/or to be exposed to a more rigorous college preparatory curriculum while in high school (Bailey & Karp, 2003; Fowler & Luna, 2009). Any list of specific *Credit-Based Transition Programs* is likely to be incomplete because of the number of local or regional examples of these programs, but there are some commonly identified national programs that provide a flavor for the types of programming that have been implemented.

- *Advanced Placement (AP) Courses* are administered by the College Board, and provide students with the opportunity to take college level courses in high school. If students score high enough on exams associated with AP courses (criteria established by postsecondary institutions), they can qualify for college credit or can place out of introductory-level courses (Bailey & Karp, 2003).
- *Dual Enrollment/Dual Credit Programs* are collaborative programs between secondary and postsecondary schools that help high school students earn credit in college courses (Allen, 2010). If these programs also simultaneously allow students to earn high school credits for the same courses, they are referred to as *Dual Credit* or *Concurrent Enrollment Programs*.
- *Early College High School* is a credit-based transition program that was initiated through funding from the Bill & Melissa Gates Foundation. *Early College High Schools* are collaborations between postsecondary and secondary schools. They are generally small (75-100 students per grade) and are in communities with populations that are under-

represented in postsecondary institutions. Through dual enrollment, students can exit these schools with enough college credit to enter college as sophomores or juniors (Goldrick-Rab, Carter, & Wagner, 2007). Additionally, while in high school, students are also provided with college access and success assistance.

- The *International Baccalaureate Diploma (DP)* curriculum consists of six subject groups and the DP core requirements (Coca, Johnson, & Kelley-Kemple (2011). The six subject groups are: language and literature, language acquisition, individuals and society, sciences, mathematics, and the arts. According to the International Baccalaureate website,¹ the DP core consists of three elements. The theory of knowledge (TOK) component requires students to reflect on the nature of knowledge and knowing. The extended essay is a 4,000-word paper that results from students' independent research. The creativity, activity, and service (CAS) element requires students to engage in authentic projects or activities that personalize learning, and require thoughtful reflection and personal challenge. Students take exams in specific fields and can earn college credit at the discretion of postsecondary institutions (Allen, 2010).

Research on credit-based transition programs. Research on the effects of *Credit-Based Transition Programs* on students' college success is best characterized as improving but still somewhat inconclusive. Although considerable research has been conducted on these programs, many studies failed to control effectively for the confounding effects of students' characteristics, motivation, and prior achievement (Bailey & Karp, 2003; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). This review is based primarily on papers that did control for pre-existing student characteristics that could impact program success.

1. *Dual Enrollment/Dual Credit*--In the case of Dual Enrollment/Dual Credit Programs, two recent studies that controlled for student characteristics and prior achievement found significant positive effects on students' success in college (An, 2015; Karp, et al., 2007). One interesting but preliminary finding from the research on *Dual Credit/Dual Enrollment Programs* is that location may matter. Smith (2007) found that students in dual enrollment courses located on college campuses had higher educational aspirations than students who participated in similar courses on a high school campus. In a qualitative study of students' experiences in dual enrollment courses, Karp (2012) found that some students in dual enrollment courses located at the high school failed to grasp important differences between high school and college in terms of the increased focus on personal responsibility in college. In addition, any impact dual enrollment courses may have on academic preparation for college may not transfer to social-emotional or logistical preparation for college. Ozmun (2013) found, for example, that students in dual enrollment

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¹ <http://www.ibo.org/programmes/diploma-programme/curriculum/>

courses reported low self-efficacy for accomplishing tasks associated with college enrollment.

2. *Early College High School*--In a study utilizing a randomized control trial design, researchers found that students in *Early College High School Programs* in ten high schools across five states demonstrated significantly higher high school graduation rates, significantly better English/language arts achievement, higher levels of postsecondary enrollment and college degree attainment, and reduced need for remediation than did control students (AIR, 2013). Mathematics achievement, and high school grade point were not significantly different. Program impact on high school graduation and college enrollment was not significantly different for males and females, racial/ethnic minorities and non-racial/ethnic minorities, and for low income and non-low income students. College degree attainment was significantly better for females, racial/ethnic minorities, and low income students.
3. *International Baccalaureate Diploma Programme (IBDP)*--In a study of the impact of the *IBDP* on postsecondary success, researchers from the University of Chicago Consortium on Chicago School Research found that *IBDP* participants were more likely to attend a four-year college than were students in a matched comparison group. However, only 68% of students who entered the International Baccalaureate (IB) cohort in ninth grade enrolled in *IBDP* in eleventh grade. There were no program effects of International Baccalaureate participation for the students who did not enroll in the *IBDP* (Coca, Johnson, & Kelley-Kemple, 2011).
4. *Advanced Placement Courses*--Data from the College Board (2014) indicate that the number of AP examines nearly doubled between 2003 and 2013. In part, this is because of claims that participation in AP courses increase the chances of college admission, improve college readiness, decrease time to degree, and increase GPA. Although research affiliated with the College Board usually supports these type of claims, independent research often paints a more complicated picture. When reviewing both College Board studies and independent research studies, Taylor (2015) found that research was mixed on the impact of AP courses on outcomes such as college GPA, time to degree, and course grades. When research does find that students who pass AP exams perform better in college, these effects are often not solely attributable to AP courses (Challenge Success, 2013). For example, students' academic preparation before high school is an important factor in how student perform in AP courses (ACT, 2010).

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Summer before College Transition Programming

The summer before the freshman year can pose somewhat unique challenges because students at this time may not be included under the service umbrella of either their secondary or postsecondary institutions. Programming has been designed to bridge this gap for both academically prepared and academically under-prepared students.

Summer melt programs. The term “summer melt” is used to describe college-ready high school graduates who intend to go to college, but who fail to attend college in the fall or who do not attend the quality of institution for which they appear qualified (Castleman, Owen, & Page, 2015, p. 168). Although estimates vary, Arnold, Fleming, DeAnda, Castleman, and Wartman (2009) reported that up to one third of low-income students who had been accepted to college rethought where, or even if they were going to attend college. Unanticipated costs, anxiety about leaving home, difficulty completing forms and enrollment tasks without professional support, and course requirements are all common reasons for the “summer melt” (Naranjo, Pang, & Alvarado, 2016). Programs designed to address “summer melt” typically involve providing college-intended students with reminders of enrollment tasks that they needed to complete before the fall, and support for accomplishing those tasks. Summer melt interventions can take the form of outreach from high school or college counselors, text message reminders, and/or peer mentoring. Text messaging is a potentially promising approach, given that it is the predominant way for teens to communicate with each other, and its ability to provide consolidated and timely information to prospective college students (Castleman & Page, 2013).

Research employing experimental designs suggests that the effectiveness of “summer melt” programs may be conditional on setting and student characteristics (Castleman & Page, 2015; Castleman, Owen, & Page, 2015; Castleman, Page, & Schooley, 2014). For example, the same program may not work equally well in different institutions. Also, program effects may vary based on student characteristics such as ethnicity. These types of findings are important for practitioners because they suggest that there are contextual factors that may need to be accounted for in program design. Research should continue to focus on understanding factors that promote or inhibit the success of these programs.

One key unresolved policy issue with “summer melt” programs is who should be primarily responsible for administering these programs. More specifically, should the outreach come from the high school or the intended postsecondary school for students? There are preliminary data suggesting that students may be more receptive to college-based outreach (Castleman, Owen, & Page, 2015). However, a collaborative program between high schools and colleges may be more consistent with an integrated and cohesive view of college transition services.

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Summer Bridge Programs. Typically, *Summer Bridge Programs* consist of a short term and intensive course or courses students take the summer before their first fall semester in college that are designed to enhance important academic and/or social skills for transitioning to college (Bir & Myrik, 2015; Sablan, 2014). Sometimes referred to as Pipeline Programs or Developmental Summer Bridge Programs, these programs can vary widely in terms of their focus, student population served, funding, duration, and administrative control (Kezar, 2000; Sablan, 2014). For example, although some programs focus almost exclusively on academics, others provide opportunities for students to acquire better study skills or to become involved in service projects (Kezar, 2000; Strayhorn, 2011). Some summer bridge programs specifically target minority, low-income, disabled, or first generation students. Other programs are designed around students' majors (often math or science). Some programs serve more of a developmental or remedial purpose, while other programs are designed for gifted students from economically disadvantaged backgrounds that focus more on the social-emotional and practical issues related to transitioning to college than on academic or study skills.

Wathington, Pretlow, & Barnett (2016) conducted an experimental study on the effects of the *Bridge Programs* offered at six community colleges and two non-selective, four-year institutions in Texas. These programs offered accelerated instruction in either reading, writing, or math for students who had identified needs in these areas. Additionally, students received instruction in "soft skills" through seminars and workshops. The dependent measures for this study were persistence (enrollment for two subsequent years), credit accrual, and performance in their first math and English course. No significant differences were found for persistence and credit accrual. There was some initial positive impact on the need for developmental courses in math, but this advantage diminished over time.

Murphy, Gaughan, Hume, & Moore (2010). Conducted a quasi-experimental study on the effects of a five-week summer bridge program at a selective technical university on postsecondary graduation rates. The summer bridge program was available to all incoming students and consisted of short, non-credit courses in English composition, calculus, chemistry, computer science. The program also included a peer coaching/mentoring component. The authors found that graduation rates were significantly higher for participants than non-participants.²

² It should be noted that this study met WWC group design standards with reservations (es.ed.gov/ncee/wwc/pdf/intervention_reports/wwc_summerbridge_071916.pdf).

Freshman Year Transition Programming

Students' academic performance during their first year of college is an important predictor and mediator of other predictors of college persistence (Burrus et al., 2013). As a result, colleges and universities have instituted a number of interventions to encourage successful transition and retention. The interventions include: (a) student services such as advisement, counseling, and orientation programs, (b) developmental (remedial) courses, (c) learning communities, and (d) first year experiences (FYE). These interventions are discussed further in the next *Research in Practice Brief* that addresses the postsecondary transition from the perspective of postsecondary institutions. In this *Brief*, the focus is limited to the work of the National College Access Network's (NCAN) *Supporting Best Practices in Student Success* Project, through which three college access programs and a scholarship foundation continued to serve and support their students through the first year of college. Through this Project, the National College Access Network endeavored to "create, enhance or expand their student persistence, retention and college success programs" (Smith, Benitez, Carter, & Melnick, 2012, p. 5). Although preliminary, NCAN's work provides some guidance on freshman year programming that college access programs, like GEAR UP, which have historically stopped serving their students upon high school graduation, might implement to best support their students through the first, and critical, year of college.

Common "student success strategies." The *Freshman Year Transition Programs* designed by the four organizations that partnered with NCAN for the *Supporting Best Practices* initiative have the following "student success strategies" in common.

1. *Cohort model support and advising:* When appropriate, students were grouped together with peers for meetings with advisors and support seminars and meetings.
2. *Course scheduling and sequencing:* Students received extensive support and encouragement as they navigated college bureaucracies associated with course registration, sequencing, and credit transfer.
3. *Peer-to-peer mentoring programs:* Grantees provided peer-to-peer and upper-to-lower class peer mentoring opportunities.
4. *Individual advising sessions:* Students met regularly one-on-one with program staff and retention counselors to discuss pressing issues they were encountering as they adjusted to college.
5. *Enriching co-curricular experiences:* Recognizing the importance of social integration for college retention, program staff guided students toward enriching experiences outside of their academic life including "study abroad" and service learning opportunities.
6. *Career exploration:* Students were guided toward career exploration activities such as internships and apprenticeships.
7. *Financial awards:* Students were provided with additional scholarships to address gaps between financial aid and financial needs.

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8. *Financial literacy services:* Students were provided with guidance on issues such as check book management and budgeting.
9. *Data systems:* Through collaborations with postsecondary institutions, grantees developed early warning systems to monitor students' progress.

Commonly occurring challenges. In accomplishing their goals, the NCAN partners encountered a number of challenges. Some challenges resulted from funding issues that affected the types and number of available services. Other challenges were posed by trying to keep in contact with students with demanding school/work schedules and personal responsibilities. Partners also were challenged by accessing data on students' progress in college because of FERPA restrictions.

Research Implications for Postsecondary Transition Programming

The following implications for college access programs wishing to implement effective college transition programs are based on best evidence available. As such, they should be carefully considered in terms of particular contexts and students' needs.

1. **Strike a balance between intrusive programming and programming that fosters students' ability to self-regulate.** Although there is a tendency to think about high school graduates as adults, it may be more developmentally appropriate to think about them as "emerging adults" (Arnett, 2000). Many students entering college are still acquiring the skills, knowledge, or even confidence to take ownership of their own learning. Transition programming requires a balance between somewhat intrusive support and opportunities for students to learn self-advocacy skills.
2. **College transition efforts should be based on students' own individual learning plans and needs.** According to Bailey & Alfonso (2005, p. 21), "no program, however well designed can succeed in isolation." If proper caution is not exercised, college transition programming can become a series of isolated services, rather than a coherent approach. Incorporating transition support plans into *Student Learning Plans (SLP)* may be helpful for encouraging students to take an active role in planning their postsecondary transition, allowing each student to see how the various transition supports available relate to his or her successful transition to college (Rennie Center for Education Research & Policy, 2011; Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009).
3. **College transition programs should not only focus on academic readiness, but on social integration into postsecondary education.** Students are likely to need help with both the academic demands of college and the personal and social demands. Transition programs should include components that address both. Peer mentoring is one approach that may be helpful for fostering both academic readiness and social integration.

Transition programming requires a balance between somewhat intrusive support and opportunities for students to learn self-advocacy skills and how college bureaucracies operate.

4. **Base feedback to students about their academic preparation for college on data that accurately reflect academic requirements at the postsecondary level.** In their evaluation of California's EAP Program, Howell, Kurlaender, & Grodsky (2009) reported that Sacramento State University students who were informed that they needed college remediation in either math or English in 2007, had carried an average GPA of about 3.1 in the relevant high school courses. This type of disconnect between academic requirements in secondary and postsecondary schools is problematic. GPA or high school course grades may need to be supplemented with ACT, SAT, and college placement test scores. High school counselors and teachers need to address forthrightly with students what these types of data says about their college readiness and the steps they need to take to prepare better before high school graduation.
5. **Ensure that transition support efforts are evaluated.** A commonly occurring theme in the research on college transition programs is the need for more rigorous evaluation. Although the studies referenced in this paper demonstrate progress in this regard, more needs to be done to provide research-based recommendations for practitioners.

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