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Cover Page Footnote

We would like to thank Jacob Fraire for his thought leadership and support in the conceptualization of this paper. Also, we are thankful to Donna Boutwell for sharing her financial aid expertise in the development of the recommendations presented in this paper.

Leveraging Guided Pathways to Improve Financial Aid Design and Delivery

By Maria Luna-Torres, Melet Leafgreen, and Lyle McKinney

To address low completion rates, postsecondary leaders are championing a “guided pathways” approach that puts students on a prescribed route towards graduation. Designing solutions to address low completion rates is complex; in addition to academic roadblocks, insufficient financial resources coupled with a complicated financial aid system can intensify barriers to completion, especially for students whose continued enrollment is highly dependent on financial aid. Without a comprehensive approach that specifically addresses financial aid funding shortages, students will continue to struggle to complete their programs of study. Opportunities exist to redesign the financial aid system so that the current guided pathways movement more holistically addresses the barriers to completion. This paper presents an overview of the guided pathways approach, addresses financial aid policy barriers to enrollment and program completion, and highlights recommendations for strengthening the guided pathways approach, such as forging partnerships with employers to provide training to students while in college, offering Federal Pell-eligible students the opportunity to pay a discounted rate of tuition, and investing in student peer debt advisors.

Keywords: guided pathways, low-income students, financial aid, community colleges

Several nationwide initiatives are underway to address a major issue facing higher education: low college completion rates among underrepresented groups. According to the most recent data by the National Center for Education Statistics (NCES, 2014), the overall six-year completion rate for bachelor’s degree seekers at public institutions is 57%, and 19.5% for students seeking a degree or certificate at a two-year public institution. Disaggregating the data provides further insight into the racial disparities in completion rates between ethnic groups. Graduation rates for Black and Hispanic students are not only below the institutional sector average, but also are lower than the completion rate for White students (NCES, 2014). To address low completion rates, postsecondary leaders are championing a *guided pathways* approach that puts students on a prescribed route toward graduation.

Addressing low completion rates is a monumental task that requires postsecondary institutions to work across sectors, given the demographics of today’s growing college population, and major completion initiatives involve the community college sector. Today’s undergraduate student population is composed of a growing number of low-income and minority students who are first-generation college-goers (Center for Postsecondary and Economic Success, 2011). This vulnerable population is in greater need of a more transparent roadmap that directs them to the necessary information and support services for engaging in and moving through college successfully. As part of their mission, community colleges serve a large

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percentage of these student populations, which have the greatest susceptibility for non-completion of a degree or credential (American Association of Community Colleges [AACC], 2016). Thus, community colleges experience significant challenges in creating adequate support systems. In addition, community colleges also serve as a point of entry into higher education for students of all academic backgrounds and age groups. Students range from the non-college ready in need of developmental education to the academically-prepared recent high school graduate opting to take basic courses at the community college to save money. The community college spectrum also includes adult learners returning to complete degrees or to enhance job skills by acquiring additional certifications and training. (AACC, 2016).

Designing solutions to address low completion rates in the context of today's college student is complex, as there are numerous factors that influence student persistence. In addition to academic roadblocks, financial factors, such as insufficient financial resources coupled with a complicated financial aid system, can generate even more obstacles and derail students' college plans. This is especially true for students whose continued enrollment is highly dependent on financial aid. With the rise in tuition and absence of more favorable types of aid, students have come to rely on primarily student loans to offset costs beyond tuition and fees (The Institute for College Access & Success [TICAS], 2014). Without a comprehensive plan that specifically addresses financial aid funding shortages, students will continue to struggle to complete their programs of study. This paper presents an overview of the guided pathways approach, addresses financial aid policy barriers, and highlights recommendations for strengthening the guided pathways approach.

College Completion and the Guided Pathways Approach

A Brief History of the Guided Pathways Movement

The movement towards a guided pathways approach can be traced back to the Achieving the Dream (ATD) initiative funded by the Lumina Foundation in 2004. The ATD initiative was a response to low completion rates among community college students (Achieving the Dream, 2016). With a focus on improving student completion, this initiative emphasized the importance of using data to longitudinally track enrollment outcomes of students, beginning at community colleges (Community College Research Center [CCRC], 2015).

Insights gained from the ATD initiative led to the development of the Completion by Design (CBD) initiative, funded by the Bill and Melinda Gates Foundation. The CBD initiative encourages institutions to adopt a completion model that consisted of a combination of ATD's early data-driven principles infused with new, evidence-based practices for improving completion rates (Completion by Design, n.d.). The CBD model calls institutions to a transformation of culture and a better alignment between institutional policies and practices. Adopters of the CBD model integrate elements ranging from providing a more structured onboarding process so that students receive clear and actionable information from the start, to being proactive with academic and career advising. As a result, students have a designated point of contact through major decisions, such as transferring across institutional sectors (Completion by Design, n.d.).

The success realized with the initial Gates Foundation funding fueled additional investment in scaling the CBD model nationwide. As a result, a cadre of trained experts, change agents, and leaders are now leading the way in the implementation of a guided pathways approach across the nation. Most recently, this cadre serves as the backbone of the current Pathways Project led by the American Association of Community Colleges (AACC, n.d.; CCRC, 2015).

Understanding the Guided Pathways Approach

The guided pathways approach promotes institutional efficiency in supporting college access as well as ensuring completion of a postsecondary credential. By providing students with a roadmap to program completion, institutions can be more intentional with staff and faculty resources, allowing students to minimize their time to degree.

This approach focuses on distinct segments of a student's college journey. The scope of that journey ranges from helping students find the right college in the front end, to helping them once en route with decisions about choosing the right course sequences and making other choices critical to successful completion.

Collectively, advocates recognize the importance of reducing academic barriers to completion. From an institutional perspective, the guided pathways approach calls for a redesign of college programs so that attention is given to the entire student experience and not just a segment of a student's college experience (CCRC, 2015). The redesign essentially calls for a paradigm shift in the approach to helping students, emphasizing a framework that helps unify a variety of reform elements, such as course sequencing to minimize lost credits; articulation agreements between sectors; developmental education reform; and proactive academic and career advising. Advocates of a guided pathway approach suggest starting with a student's end goals and then working "backwards," mapping to ensure students prepare and make informed decisions (Bailey, Jaggars, & Jenkins, 2015).

Helping students make better academic decisions may, in itself, lead them to a more efficient pathway toward completing a degree. However, without an intentional approach to also address financial barriers, a guided pathways approach may not benefit the students who are in most need of a college roadmap for completing a degree. Further, without an explicit intent to address financial barriers, this approach will not improve low-income students' chances for timely entry into the workforce.

Financial Aid Policy Barriers Along the Pathway

By embracing a guided pathways approach, institutions can provide advantages to new students, especially first-generation college students struggling to connect the dots across the administrative "silos" on college campuses. Certainly, an academic roadmap coupled with career and academic counseling on campus can help new students make better-informed decisions about how to best pursue their program of study. Advising support can also help them in sorting and navigating through the services and information they need.

However, beyond academic guidance, low-income students also need financial assistance and financial literacy education. The struggle of postsecondary institutions to provide students with adequate financial resources will not subside without making systemic changes to current financial aid policy. In the last decade, greater calls for a redesign of the financial aid system, with the goal of providing students with adequate financial resources, have been raised by both public officials and the private sector. For instance, in 2013, the Lumina Foundation allocated half a million dollars in funding for papers that would examine the and offer alternatives for a redesign of the current financial aid system (Merisotis, 2013). Additionally, Congress acted recently to simplify the FAFSA, and reinstate year-round Pell. (NASFAA, 2017). However, a fundamental redesign of the financial aid system has not occurred. The current framework and policies under which financial aid operates still stand in the way of a student's "guided" pathway.

Four examples of financial aid policies that do not align with a guided pathways approach include current limitations on Pell Grant eligibility, insufficient federal student loan counseling, inflexible provisions of the Federal Work Study (FWS) program, and insufficient federal and state need-based aid.

The Federal Pell Grant program is the largest source of grant aid for low-income postsecondary students (College Board, 2015). In the last 10 years, the percentage of undergraduate students in need of Pell Grants increased from 26% in 2004-05 to 35% in 2014-15 (College Board, 2015). The growing need for Pell funds has not kept up with funding, as Pell expenditures have experienced a \$9 million, decrease from \$39 billion in 2010 to \$30 billion in 2015 (College Board, 2015).

Under current regulations, institutions can schedule only one Pell Grant award per academic year, which is typically provided to the student in two disbursements (e.g., fall and spring semesters). Recent Congressional approval for year-round Pell, will now allow students to draw an additional Pell Grant award during the same academic year. While final regulations have not been issued, the first iteration of year-round Pell required that students attend full-time in the fall and spring before they could get summer Pell Grant. For the traditional student who attends full-time in the fall and spring, year-round Pell enrollment requirements will not be a problem. However, the enrollment patterns of today's college students, especially students attending community colleges, have changed. Most students now enroll part-time throughout the year, not just fall and spring (Bailey, Jaggars, & Jenkins, 2015).

Additionally, students are limited to receiving no more than 12 semesters or its equivalent in Pell Grant funding. In theory, the 12 semesters should cover six academic years of full-time attendance. However, actual enrollment patterns show that students are taking longer to graduate. Only 39.2% of students complete a bachelor's degree in four years and 29.8% of students complete an associate degree in two years (NCES, 2014). For students who start at a community college and then transfer to a four-year institution, the remaining Pell Grant eligibility may be insufficient to cover the remaining semesters at the transfer institution. These circumstances are especially prevalent in cases where coursework taken at the community college is not accepted by the four-year institution.

The current schedule for when institutions must provide counseling to federal student loan borrowers also presents challenges. The U.S. Department of Education requires that postsecondary institutions provide loan "entrance counseling" to first-time federal student loan borrowers when they receive their first loan. This often occurs at the beginning of their studies, when complex entrance counseling concepts may overwhelm students as they deal with issues like transitioning to college, registration, textbook purchases, and settling housing arrangements (Fernandez, Fletcher, Klepfer, & Webster, 2015; Fletcher, Klepfer & Webster, 2015).

Counseling is again required for all federal student loan borrowers when they exit their program, whether due to graduation, program completion, or withdrawal (Federal Student Aid, 2014). Institutions often struggle to locate students who stop attending without notice. In these cases, loan counseling information may reach them long after they have dropped out, placing them at greater risk of delinquency and default.

While FWS is a helpful source of financial aid for low-income students, it is another program that could benefit from reevaluation of its requirements. For students employed by private for-profit organizations, federal statute limits institutions to using no more than 25% of their FWS allocation for an award year to cover no more than half of the wages earned by FWS students (Federal Student Aid, 2014). For students employed by not-for-profit organizations, an institution may use up to 75% of its FWS allocation to cover up to 75% of students' wages.

Increasing the allowable FWS allocation thresholds for for-profit employers could expand opportunities for collaboration with diverse business entities that can offer students of all majors a chance to engage in meaningful work-based learning experiences. One reason students drop out of college is because they are unable to see the connection between their program of study and specific jobs in the labor market (Symonds, Schwartz, & Ferguson, 2011).

Additionally, according to Georgetown's University Center on Education and the Workforce, future job growth will be concentrated in occupations related to healthcare; community services; and science, technology, engineering, and math (STEM) fields (Carnevale, Smith, & Strohl, 2013). Expanding work-study provisions would give colleges more flexibility in forming partnerships with more diverse business industries that can provide jobs in high demand fields. In turn, students would have more opportunities to participate in FWS positions that would provide them not only with a source of income while in college, but also offer them valuable work experience. After all, work experience and outside-the-classroom learning, such as internships, give recent college graduates an edge in the job market (Association of American Colleges and Universities, 2013).

Finally, the amount of financial aid for low-income students is currently insufficient to allow them to cover the costs of full-time attendance. While students are encouraged to apply for financial aid, often the amount they receive is insufficient to cover all education-related expenses. Eighty-two percent of full-time students at community colleges rely on financial aid to help pay for their education, and 2% of them meet their financial need with grants (TICAS, 2014). The remaining need is typically covered by a combination of student loans and employment. Further, while only 17% of community college students take out education loans, the greatest share of defaults come from the lower debt amounts taken by community college students (Campbell & Hillman, 2015; Radwin, Wine, Siegel, & Brian, 2013; TICAS, 2014).

For fear of federal sanctions imposed on institutions with excessive cohort default rates, 233 out of the 1,100 community colleges have opted out of participating in the federal student loan program (Cochrane & Szabo-Kubitz, 2014), denying their students access to the favorable benefits offered by federal student loans. This often leads students to resort to private loans, which offer fewer consumer protections and none of the loan discharge benefits found in federal student loans (TICAS, 2014).

In the last five academic years, the community college sector has experienced the highest increase (14%) in average published tuition and fees across public institutional sectors (College Board, 2013). The average Pell Grant award is approximately \$3,600, which is just barely enough to cover average tuition and fees of \$3,400, and leaving the remaining costs of attendance (e.g. housing, transportation, child care) to be covered by the student (AACC, 2016). Furthermore, community colleges financially struggle to offer students more favorable sources of aid beyond the Pell Grant, since they depend mostly on tuition, and state and local revenues (AACC, 2016). In part because of the scarcity of more favorable types of aid, many students have come to rely on federal student loans (McKinney, Mukherjee, Wade, Shefman & Breed, 2015).

Keeping debt levels manageable is a challenge for these students, as they often must decide between working more hours or taking fewer classes. Without an increase in need-based federal and state aid, some students are unable to attend full-time, especially those community college students who are older and have family and/or work obligations.

Recommendations for Policy and Practice

While organizations leading the guided pathways movement are rallying around improving academic support structures for students, equal or greater emphasis should be placed around redesigning the financial aid system so that students are not only academically prepared, but also have the financial means and savviness to move through college in the most cost-efficient and timely manner. Opportunities exist for a redesign of the financial aid system so that the current guided pathways movement more holistically addresses financial barriers to program completion. Changes to the federal requirements on loan counseling, Pell Grant funding, and use of FWS allocations will require amendments to the Higher Education Act (HEA) (NASFAA, 2014). Meanwhile, with reauthorization of the HEA pending in Congress, recommendations that leaders of the guided pathways movement could promote minimizing financial barriers to completion, are presented in Table 1.

Forge Partnerships with Employers to Provide Training to Students While in College

According to the *2014 Industry Report* (Training, 2014), employers already spend over \$61.8 billion in training for their employees. Institutions could leverage employers' training budgets and ask employers to invest in training and internships for low-income students pursuing degrees in fields that align with their company's needs (Symonds, Schwartz, & Ferguson, 2011). Employers would benefit from an ongoing supply chain of well-prepared individuals who would be "ready to go" upon graduation, as they would have been trained and gained relevant work experience while in college. This type of opportunity would ensure students have a more holistic guided pathway composed of academic support, financial resources, and a bridge into the workforce.

Table 1

Recommendations for Embedding Financial Aid Policies and Practices into the Guided Pathways Approach

Financial aid-related policies and practices	Guided pathways approach to financial aid-related decisions
Provide pre-college loan counseling	<i>Onboarding process:</i> Students receive loan counseling in advance of starting college. Students learn about differences in loan types (e.g., federal vs. private/consumer loan) and borrower responsibilities to ensure students and their families make informed choices.
Create individualized student debt plan	<i>Proactive academic and career advising:</i> Students are coached from the start to create a debt plan in the context of their major and associated expected earnings to prevent overborrowing. <i>Early alert system:</i> Student debt plans are reviewed at least once a year to account for changes in students' course load/enrollment intensity, academic progress, and major.
Expand breadth of FWS positions	<i>Proactive career advising:</i> Eligible FWS students explore career options and are matched with positions that may extend beyond on-campus student worker positions and align with students' major/career interests.
Offer tuition discount for Pell Grant recipients to maximize purchasing power of grant and incentivize continuous enrollment	<i>Course sequencing:</i> Students stay continuously enrolled and follow an academic map consisting of sequenced courses that foster timely completion.

Offer Pell-eligible Students the Opportunity to Pay a Discounted Rate of Tuition

To incentivize timely completion, postsecondary institutions have experimented with offering students a fixed-rate tuition for taking an unlimited number of classes per semester. At the federal level, even the U.S. Department of Education introduced lifetime eligibility restrictions in the Pell Grant awards to incentivize timely completion (NASFAA, 2014). In reality, however, such incentives are not fit for low-income students who need to work and are thus unable to take a heavy course load without it affecting their academic performance (King, 2003). The current fixed-rate tuition model is more apt for traditional students who can afford to work less and can enroll on a full-time basis. A more appropriate approach for low-income students would be to incentivize Pell-eligible students by offering a tuition discount if they remain continuously enrolled through fall, spring and summer. Research shows that students are more sensitive to changes in tuition costs than they are to increases in financial aid (Hippensteel, St. John, & Starkey, 1996). Therefore, a reduced tuition rate would be both financially and academically advantageous to students, as they would have the flexibility to enroll either part-time or full-time depending on their work obligations.

Invest in Student Peer Debt Advisors

In addition to fulfilling time-consuming administrative duties, financial aid counselors play a key role in guiding students through applying for aid and making critical decisions about loans to pay for school. Students consider financial aid administrators to be the most credible sources of information regarding the financial aid process (McDonough & Calderone, 2006). Unfortunately, counselor-to-student ratios at community colleges are estimated to be one counselor for every 1,000 students (McKinney & Roberts, 2012) and the ratios for four-year colleges and universities with larger student populations could be even greater. Institutions could ameliorate these circumstances by designating a percentage of current FWS allocations for funding peer advisors who can focus on providing debt counseling. The support of such advisors can improve the current counselor-to-student ratios and allow for more customized, frequent, and comprehensive loan counseling that many overburdened financial aid advisors are presently unable to deliver. First-generation, low-income students—whose families are unfamiliar with college financing and cannot help them think through the implications of their decisions—would be the greatest beneficiaries. More personalized counseling would give them the opportunity to unpack loan details and determine appropriate borrowing levels.

Outlook for an Affordable Pathway

Rethinking student success in the context of today's college student is critical to improving completion outcomes. The guided pathways approach is certainly a step toward helping postsecondary institutions to be more intentional and proactive in advising college students and creating the adequate support services they need. However, a transformation of campus culture and a paradigm shift to a guided pathways approach will be insufficient without acknowledging the changing demographics of today's college students and the profound effects that financial factors have on completion and success.

Nevertheless, Congress may not act quickly to make changes to the financial aid system and institutional practices. Instead, this may occur by gradually leveraging the growing financial support and policy advocacy stemming from philanthropic organizations. These organizations' initial investments have already fueled the momentum of the guided pathways movement. Unfortunately, such support may be the only source that postsecondary institutions have for experimenting with new practices. Nonetheless, a compilation of evidenced-based practices may one day serve to change higher education, including the financial aid system, so that its framework aligns with the needs of today's students and it expands opportunities for the most vulnerable students.

Nexus: Connecting Research to Practice

- While organizations leading the guided pathways movement rally around improving academic support structures for students, equal or greater emphasis should be placed on redesigning the financial aid system so that students are not only academically prepared, but also have the financial means and savviness to move through college in the most cost-efficient and timely manner.
- Recommendations that leaders of the guided pathways movement could reinforce in the approach to minimize financial barriers to completion, include the following:
 - *Forging partnerships with employers to provide training to students while in college.* Institutions could leverage employers' existing training budgets to invest in training and internships for low-income students who are obtaining degrees in fields that align with their company's occupations (Symonds, Schwartz, & Ferguson, 2011).
 - *Offering Pell-eligible students the opportunity to pay a discounted rate of tuition.* Research shows that students are more sensitive to changes in tuition costs than they are to increases in financial aid (Hippensteel, St. John, & Starkey, 1996). Lower tuition rates could help maximize the purchasing power of available financial aid and could facilitate low-income students' ability to maintain continuous enrollment and avoid having to drop out due to limited financial resources.
 - *Investing in student peer-debt advisors.* Students consider financial aid administrators to be the most credible sources of information regarding the financial aid process (McDonough & Calderone, 2006), yet counselor-to-student ratios at community colleges are estimated to be one counselor for every 1,000 students (McKinney & Roberts, 2012). Institutions could ameliorate these circumstances by designating a percentage of their current FWS allocation for funding peer advisors who can focus on providing debt counseling.

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