

# (Re)Contextualizing Guided Pathways to Provide Equitable Supports for Community College Students

Shelagh Rose  
*Pasadena City College,  
Los Angeles*

Rebecca Colina Neri  
*Indiana University,  
Bloomington*

Cecilia Rios-Aguilar  
*University of California,  
Los Angeles*

*To remedy currently low rates of completion, community colleges around the country have begun to implement the Guided Pathways (GP) model, a student-centered approach to reforming community colleges that requires colleges to provide students with a clear pathway to program completion, career advancement, and further education (Jenkins, Lahr, & Fink, 2017). While building coherence for students is essential in community colleges across the country, important questions of equity cannot be ignored: completion to what, for whom, and for what end? Practitioners must ground their GP implementation efforts in students' funds of knowledge (FK), or the assets students bring to their campuses and the local resources that exist within their communities. In this brief, we recommend community colleges to: (a) create career communities that integrate students' labor histories and funds of knowledge, (b) provide differentiated work-based learning opportunities; (c) inform practice using regional and equity-focused labor market data.*

*Keywords:* funds of knowledge, labor market, Guided Pathways

In the last decade, local, state, and national initiatives have turned to community colleges to educate and train significant numbers of student populations to address educational, social, economic, and political shortcomings and workforce needs in the United States (Anderson, Barone, Sun, & Bowlby, 2015; Dowd 2003; Kiyama

& Rios-Aguilar, 2018; Rosenbaum, Deil-Amen, & Person, 2009; Stevens, 2015; Teranishi & Bezbatchenko, 2015). Such a high-stakes spotlight for community colleges comes because 46 percent of all undergraduate students enter or continue their postsecondary education through the community college system today (Deil-Amen, 2015;

Espinosa, Turk, Taylor, & Chessman, 2019). Including race/ethnicity, gender, age, and class diversity, community college students possess intersecting and multidimensional identities, including immigration status, full-time/part-time student status, veteran status, language-learner status, and disability/ability status, etc. (Deil-Amen, 2011). While community colleges offer increased college access, greater opportunity has not increased college-degree attainment, specifically for students of color from historically marginalized communities (Anderson et al., 2015; Baker, 2018; Dowd 2003; Kiyama & Rios-Aguilar, 2018; Stevens, 2015; Teranishi & Bezbatchesenko, 2015). In fact, today's community college sector is plagued with "increased enrollment, increased stratification, and stagnation completion" (Baker, 2018, p. 199). In California, only 13% of community college freshmen receive an associate's degree after two years, and 31% do so within three years (Public Policy Institute of California, 2017). When marginalized and vulnerable community college students are not adequately served, they become the *new forgotten half*—the half of college students who accumulate credits, but end up with no credential and few marketable skills (Rosenbaum, Ahearn, Becker, & Rosenbaum, 2015).

To remedy low completion and transfer rates and increase job attainment, community colleges around the country have recently begun to implement the Guided Pathways (GP) model. The ultimate goal of GP is twofold: (a) provide students with clear career pathways, and (b) define and help students

meet their career goals (Bailey, Jagers, & Jenkins, 2015). Through a behavioral economics perspective, Bailey et al. (2015) argued, "providing a structure for decision making in the face of complex choices can lead to better, more satisfactory decisions" (p. 215). It is also assumed that by providing students with roadmaps to program completion, institutions can be more intentional with staff and faculty resources, allowing students to minimize their time to degree (Luna-Torres, Leafgreen, & McKinney, 2017).

We argue that the GP model can only be influential if it is grounded in students' funds of knowledge (Moll, Amanti, Neff, & Gonzalez, 1992), a notion that focuses on people's lived experiences and strengths and that is related to the more familiar idea of social and cultural capital (Rios-Aguilar, Kiyama, Gravitt, & Moll, 2011). Funds of knowledge entail the skills, daily routines, cultural practices, work experiences, etc., that individuals accumulate throughout their lives. Without accounting for these socially based funds of cultural knowledge, GP runs the risk of repackaging economic models and assumptions that blame students, particularly those from historically underserved groups with long histories of struggle against oppressive forces, for not making "right" decisions or "rational" choices (Rios-Aguilar, Jacobo, McLennan, & Zavala, 2018). In other words, GP risks reproducing inequitable and harmful philosophies of education despite intentions to alleviate their historical effects. While defining clear roadmaps to program completion for students is essential in community colleges,

important questions of equity cannot be ignored: completion to what, for whom, and for what end? Practitioners must ground their efforts to implement a GP framework in the knowledge that students bring to their campuses, including information about their local communities, economies, and labor markets. The failure to contextualize GP in the unique realities and circumstances that all students, especially students of color and low-income students, experience may result in colleges reproducing inequities (Rios-Aguilar et al., 2018).

The purpose of this brief is to provide concrete recommendations to practitioners as they implement GP on their campuses. To do so, we integrated existing literature with what we have learned from our efforts to facilitate a Research-Practice Partnership (RPP) between university researchers and a local community college. Specifically, we recommend: (a) developing career communities that integrate students' funds of knowledge and labor histories (Neri, 2018); (b) creating differentiated work-based learning opportunities for diverse sub-groups of students (e.g., student-parents, adult learners, minoritized students, formerly incarcerated students.); and (c) utilizing regional and equity-focused labor market data to inform practice.

### **GP Model: Assumptions, Strengths, and Weaknesses**

In the GP model, when students apply they select from a broad but predetermined field of interests. GP recommends collaboration between faculty,

high-level administrators, and local industries to select programs of study that prepare students for high-demand careers in selected industries, a logical recommendation considering research has found that college students rely on faculty, in addition to peers and family members, as information sources regarding careers (González-Canché, D'Amico, Rios-Aguilar, & Salas, 2014). Counselors and instructional faculty collaboratively create program maps with recommended courses to help students quickly identify a specific program. The goal is to accelerate an informed decision-making process while still offering options (Bailey et al., 2015). To increase student success, the GP model has defined four main pillars: (a) clarify paths to students' end goals; (b) help students choose and enter a pathway; (c) help students stay on path; (d) and ensure students are learning (Jenkins, Lahr, Fink, & Ganga, 2018). In these ways, the GP model supports the reorganization of the college structure and redistribution of resources to help students make more informed major and career decisions. However, the general assumptions that comprise GP deserve to be interrogated.

The GP model is grounded in perspectives from psychology, marketing, and economics (Bailey et al., 2015; Scott-Clayton, 2011). Several arguments made from these perspectives, particularly economics, fail to capture how individuals engage in decision-making processes. For example, it is assumed that an oversaturation of academic programs and services exists and that fewer, more streamlined options for low-income students and students of color will

automatically lead to better decisions. A second assumption is that students, as rational beings, primarily act upon cost-benefit analysis when faced with choice. As Bailey et al. (2015) argued:

they must identify relevant obligations and commitments, judge the tradeoffs involved in withdrawing from certain activities and investing more heavily in others, develop a strategy that maximizes benefits while minimizing costs, and modify the strategy if it proves less than optimal. (p. 96)

However, under-examined in the GP approach to community college redesign is the reality of racial privilege and oppression that largely shapes students' perceived and actual opportunities. Yet, conversations about equity, race, and racism are often omitted from the conversation about the GP model (Bensimon, 2017).

While the previous cafeteria model of community college has been linked to low completion rates, several educators question the assumption that fewer options will lead to better outcomes, especially for a predominantly underserved student population. As Rose (2016) argued, GP "runs the risk of reducing nuanced and layered human dilemmas to a technical problem, and thus being unresponsive to or missing entirely the particular life circumstance of students" (p. 1). Career decisions have also been demonstrated to be complex, high-stakes choices that require career exploration and guidance; an emerging awareness of personal talents, values, and interests; the ability to navigate contextual, structural, and perceived

barriers and constraints; and having access to information about the labor market, majors, and work environments (Duffy, Blustein, Diemer, & Autin, 2016; Fouad & Bynner, 2008; Porfeli, Lee, & Vondracek, 2013; Savickas, 2012). Most students enroll in community college without clear goals for college and career and the opportunities available to them (Gardenhire-Crooks, Collado, & Ray, 2006). Furthermore, in K-12, students of color and low-income students continue to experience less access to qualified teachers; high quality curriculum, instruction, and resources; laboratories, computers, STEM programs, and internships; and even the math, science, and AP courses needed for college (Battey, 2013; Darling-Hammond, 2010; Dondero & Muller, 2012; Noguera, 2004; Oakes, 2005; Riegle-Crumb & Grodsky, 2010). Disparities like these not only limit the amount of information students have access to, they also limit students' perceptions of their capabilities (e.g., the relationships between prior math experience and STEM) (Diemer, 2009).

For many community college students, a GP model could offer valuable support to their achievement of academic goals by providing coherence to their course selection, but this will not necessarily accelerate their educational progress through college nor support the healthy development of their vocational identity. Even with the most effective and coherent curricular pathway available, there will still be students who divert from this streamlined path to take time off from college to figure out their lives, who may take years to find their occupational path, and who need more

time to heal from the pain and oppression they have experienced throughout their lives. This reality requires institutional responses (as well as extra-institutional support services) that go beyond GP, a model that does *not* take into consideration the specialized needs of students of color. In fact, Bensimon (2017) warned that efforts dedicated to community college reform “when viewed through ostensibly race-neutral frameworks run the risk not only of perpetuating inequality but worsening it” (p. 13). With these considerations in mind, we offer three concrete recommendations for practitioners as they continue to implement GP in their colleges.

### **Recognizing and Utilizing Students’ Funds of Knowledge and Labor Histories to Create Exploratory Career Communities**

While the majority of students of color begin their postsecondary journey in community colleges (Rios-Aguilar & Deil-Amen, 2019), there has been no coordinated effort to recognize and integrate students’ funds of knowledge and labor histories to improve classrooms and programmatic efforts; a missed opportunity to support students’ educational and career decision-making. Our Research Practice Partnership (RPP) has been instrumental in collecting student data to identify the resources they bring to campus, including the wealth of work experiences that they (and their families) have acquired and that can be valuable information to redesign curricula and services.

Because many students of color come from collectivist cultures where information is shared among extended family and community networks, colleges can support students’ career, major, and academic goal exploration through the creation of *career communities* (see Figure 1) that intentionally integrate students’ lived experiences. When career communities are devised with students in mind, they connect students with faculty, counselors, support staff, peers, and alumni who tailor major and career guidance to expand students’ knowledge base and networks of support and information. These communities provide co-curricular opportunities such as career panels, engagement activities, mentoring, and networking that allow students to gain career knowledge in informal social settings. In contrast to the belief that students of color arrive at college without the necessary capital to succeed, these communities build upon their work experience and prior knowledge while providing opportunities for students to gain critical information about labor market data to make informed choices.

Career Communities’ work is conducted through our RPP that includes university researchers and practitioners from a large community college in California. First, our RPP team interviewed a large subset of students to better understand their experiences *getting in, fitting in, and moving on* (Neri, 2019; Rios-Aguilar & Deil-Amen, 2012) in relation to their funds of knowledge and career aspirations. The findings from these interviews (Neri, 2019) were shared with campus stakeholders and

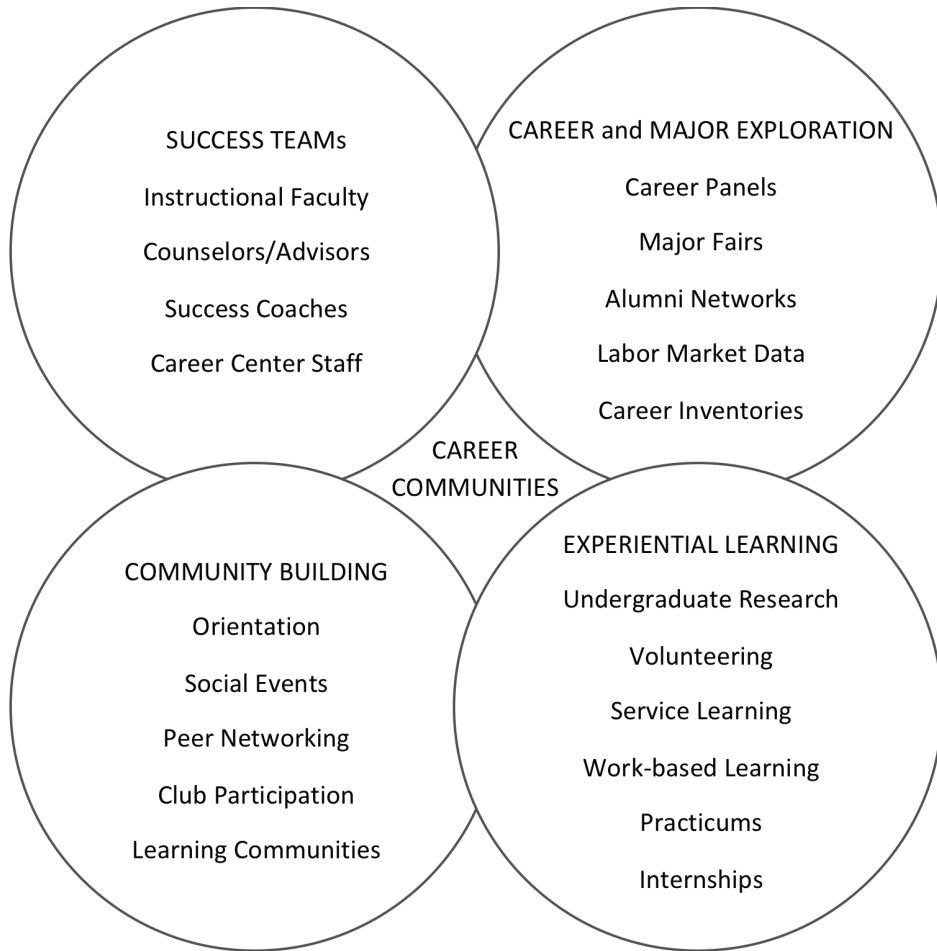


Figure 1. Career communities.

departments (e.g., the Academic Senate, Career Community Faculty Leads, Instructional Deans, and the STEM Faculty Inquiry Group) and led to the revision and development of course schedules, support services, and recruitment and retention strategies. Student voice in the design and implementation of Career Community activities is also centered through student advisory boards. Finally, as part of the Career Communities effort, we are gathering feedback from over three thousand first

year students about their experience with career exploration activities embedded in their introductory courses and first-year seminars. This data will be used by Career Community Faculty Leads to design co-curricular career exploration and development opportunities.

**Work-Based Learning Opportunities for Diverse Groups of Community College Students**

Community colleges play an essential role in preparing students to not



only earn degrees, certificates, and transfer, but to also successfully enter the job market. There are now financial incentives for college campuses in some states, like California, to ensure their graduates earn a “regional living wage” after completing their certificates, credentials, or degrees. Work-based learning (WBL) comprises a set of educational strategies (e.g., internships/apprenticeships, guest-speakers, clinical placement, school-based enterprises, job shadowing, mentor/mentee relationships, and informal interviews with employers) to increase employability of students (Bragg, Dresser, & Smith, 2012). By increasing student employability, providing opportunity, applying essential skills, and guiding students to completion, work-based learning provides students with experiences needed to be successful in the future workforce (California Community Colleges, 2019). Evidence suggests WBL has important benefits for students, specifically students of color (Lerman, 2010). WBL also increases students’ persistence, graduation, and employment rates, with notable gains for students from underserved racial, ethnic, and socioeconomic backgrounds (Holzer & Lerman, 2014; Kuh, 2008; Lerman, 2010).

Despite the benefits associated with WBL for underserved students, a lower percentage of these students are engaged in WBL (National Survey of Student Engagement, 2007). Implementing WBL is not an easy task because it requires coordination of programs and resources, as well as willingness from various institutional actors, including faculty and counselors. Furthermore, the majority

of students who go to community college juggle multiple responsibilities. As a result, they often enroll part-time; may drop out mid-semester because of family emergencies or changes in their employment; attend two or three different institutions to get the classes they need (a practice so prevalent that is now has a name, “swirling”); commute long distances, etc. Minoritized students must also navigate know-how barriers (e.g., the need for an expanded social network, knowing how to activate a social network) when trying to apply for jobs in their fields of study. WBL has the potential to help these students identify and prepare for their future careers, if efforts and programs are flexible and recognize that students must navigate multiple systems and barriers in order to take advantage of these opportunities. In order to design an effective WBL program, community colleges must critically examine students’ needs as well as the benefits associated with various WBL opportunities (e.g., access to a variety of job opportunities, higher wage-earning potential, job satisfaction.). This requires leaders and practitioners to collect and utilize their own institutional data to learn more about who engages in WBL as well as create an inventory of WBL opportunities that can be offered to support the career readiness of diverse groups of underserved students.

## Using Equity-Focused Labor Market Data to Inform Practices and to Improve Persistence and Completion

In 2014, Stuart, Rios-Aguilar and Deil-Amen proposed a new model for student persistence at community colleges. They made the point that for community college students, the labor market is a critical consideration that students use strategically to make decisions about whether to continue to follow a program of study, change majors/programs, or drop out of college. Basically, students use the information they gain from their socio-academic interactions (Deil-Amen, 2011) with their peers, instructors, and other college staff, and on their understanding of labor market opportunities available to them now and in the future to make their choices (Stuart et al., 2014).

Most recently, Reyes, Dache-Gerbino, Rios-Aguilar, González-Canché, and Deil-Amen (2018) found that in addition to students' own understanding of the labor markets, their "geography of opportunity" (Galster & Killen, 1995) also affects their persistence and success. In other words, a student's decision-making process is greatly influenced by the local opportunity structure of which the local labor market and the educational system are important components. Reyes et al. (2018) found that there are important mismatches between what jobs/careers students choose to pursue, where they live and attend college, and actual jobs

available in a specific location of their interest. Reyes et al. concluded that:

pursuing the "American Dream" ideology—getting a college education and a well-paid job—has also created an "American Nightmare"—high concentrations of minorities in poverty impacted, revenue-strapped, low-paying job areas that are isolated from the educational and occupational opportunities generated in wealthier, vigorously growing outer communities. (pp. 47-48)

To create a new and more equitable "geography of opportunity" for community college students' demands, then, there is need to provide more information to students about careers, availability of jobs, degree requirements, and salaries based on what is available in a variety of local economies. And, as Bensimon (2017) reminded us, data have to be disaggregated at the very least by gender and race/ethnicity so we address structural realities that community college students face. Therefore, an effective student retention strategy would involve the use of equity-focused labor market data to inform both the course content and pedagogical practices employed by faculty as well as the ways counselors, both academic and in career centers, communicate with students about potential jobs and careers in their local economies. There exist various tools to carry this out in practice. For example, Bureau of Labor Statistics (BLS) datasets and labor market data analytic services (i.e., EMSI<sup>1</sup>) can be accessed to

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1 <https://www.economicmodeling.com/data/>



produce labor market reports (with disaggregated data for students of color) that allow both faculty and students to learn about the location of potential jobs, credentials needed to access those jobs, and salaries.

### Conclusion

It is our hope that this brief provides practical steps to assist practitioners and leaders in their localized efforts to adapt a GP model to community college reform. It is our belief that this model, while representing good intentions for all students including historically underserved students, requires further attention in order to put equity at the center of GP. By investing in learning about and differentiating for the specific career-readiness needs of their students—and particularly students of color and low-income students—colleges have a better chance of improving the lives of millions of community college students.

Shelagh Rose, Associate Professor, Year One Pathways Lead, Pasadena City College, Los Angeles, 1570 E Colorado Blvd, Pasadena, CA 91106. Email: serose@pasadena.edu / (818) 415-6044

### References

- Anderson, G. M., Barone, R. P., Sun, J. C., & Bowlby, N. (2015). The new stratification: Differentiating opportunity by race and class at community colleges in America. In A. M. Martinez Aleman, B. Pusser, & E. M. Bensimon, (Eds.), *Critical approaches to the study of higher education: A practical introduction* (pp. 241-256). Baltimore, MD: Johns Hopkins University Press.
- Bailey, T. R., Jaggars, S. S., & Jenkins, D. (2015). *Redesigning America's community colleges*. Cambridge, MA: Harvard University Press.
- Baker, R. (2018). Understanding college students' major choices using social network analysis. *Research in Higher Education, 59*, 198–225.
- Batthey, D. (2013). "Good" mathematics teaching for students of color and those in poverty: The importance of relational interactions within instruction. *Educational Studies in Mathematics, 82*(1), 125–144.
- Bensimon, E. M. (2017). Making American higher education just. In *Social justice in education award lecture*. Presentation at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Bragg, D., Dresser, L., & Smith, W. (2012). Leveraging workforce development and postsecondary education for low-skilled, low-income workers: Lessons from the shifting gears initiative. *New Directions for Community Colleges, 2012*(157), 53–66. doi:10.1002/cc.20006
- California Community Colleges. (2019). *Defining work-based learning*. Retrieved from <https://www.careerexperiencesuite.org/work-based-learning>
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education, 61*(1-2), 35–47.
- Deil-Amen, R. (2011). Socio-academic integrative moments: Rethinking academic and social integration among two year college students in career-related programs. *The Journal of Higher Education, 82*(1), 54–91.
- Deil-Amen, R. (2015). "The 'traditional' college student: A smaller and smaller minority and its implications for diversity and access institutions." In M. W. Kirst & M. L. Stevens (Eds.), *Remaking college: The changing ecology of higher education* (pp. 134–168). Stanford, CA: Stanford University Press.

- Diemer, M. A. (2009). Pathways to occupational attainment among poor youth of color: The role of sociopolitical development. *The Counseling Psychologist, 37*(1), 6–35.
- Dondero, M., & Muller, C. (2012). School stratification in new and established Latino destinations. *Social Forces, 91*(2), 477–502.
- Dowd, A. C. (2003). From access to outcome equity: Revitalizing the democratic mission of the community college. *The ANNALS of the American Academy of Political and Social Science, 586*(1), 92–119.
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology, 63*, 127–148.
- Espinosa, L., Turk, J., Taylor, M., & Chessman, H. (2019). *Race and ethnicity in higher education: A status report*. Washington, DC: American Council on Education.
- Fouad, N. A., & Bynner, J. (2008). Work transitions. *American Psychologist, 63*(4), 241–251
- Galster, G. C., & Killen, S. P. (1995). The geography of metropolitan opportunity: A reconnaissance and conceptual framework. *Housing Policy Debate, 6*(1), 73–102.
- Gardenhire-Crooks, A., Collado, H., & Ray, B. (2006). *A whole'nother world: Students navigating community college*. New York, NY: MDRC.
- González Canché, M. S., D'Amico, M. M., Rios-Aguilar, C., & Salas, S. (2014). It's who you know: Leveraging social networks for college and careers. *Community College Enterprise, 20*(1), 16–33.
- Holzer, H. J., & Lerman, R. (2014). Work-based learning to expand jobs and occupational qualifications for youth. *Challenge, 57*(4), 18–31. doi:0.2753/0577-5132570402
- Jenkins, D., Lahr, H., & Fink, J. (2017). *Implementing guided pathways: Early insights from the AACC pathways colleges*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Jenkins, D., Lahr, H., Fink, J., & Ganga, E. (2018). *What we are learning about guided pathways. Part 1: A reform moves from theory to practice*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Kiyama, J. M., & Rios Aguilar, C. (2018). *Funds of knowledge in higher education: Honoring students' cultural experiences and resources as strengths*. New York, NY: Routledge.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Lerman, R. I. (2010). *Expanding apprenticeship: A way to enhance skills and careers*. Washington DC: Urban Institute.
- Luna-Torres, M., Leafgreen, M., & McKinney, L. (2017). Leveraging guided pathways to improve financial aid design and delivery. *Journal of Student Financial Aid, 47*(2), 101–110.
- Moll, L., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice, 31*(2), 132–141.
- National Survey of Student Engagement. (2007). *Experiences that matter: Enhancing student learning and success*. Bloomington, IN: Center for Postsecondary Research, School of Education, Indiana University.
- Neri, R. C. (2018). Learning from students' career ideologies and aspirations: Utilizing a funds of knowledge approach to reimagine career and technical education (CTE). In J. M. Kiyama & C. Rios-Aguilar (Eds.), *Funds of knowledge in higher education* (pp. 160–174). New York, NY: Routledge.
- Neri, R. C. (2019). *Constructing coherence in the community college career decision-making*

- space* (Doctoral dissertation). University of California Los Angeles, Los Angeles, California.
- Noguera, P. A. (2004). Social capital and the education of immigrant students: Categories and generalizations. *Sociology of Education*, 77(2), 180–183.
- Oakes, J. (2005). *Keeping track*. New Haven, CT: Yale University Press.
- Porfeli, E. J., Lee, B., & Vondracek, F. W. (2013). Identity development and careers in adolescents and emerging adults: Content, process, and structure. In W. B. Walsh, M. L. Savickas, & P. J. Hartung (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (pp. 133–153). New York, NY: Routledge/Taylor & Francis Group.
- Public Policy Institute of California. (2017). *Improving college completion*. Retrieved from [https://www.ppic.org/wp-content/uploads/r\\_0917hebk.pdf](https://www.ppic.org/wp-content/uploads/r_0917hebk.pdf)
- Reyes, M., Dache-Gerbino, A., Rios-Aguilar, C., González-Canché, M., and Deil-Amen, R. (2018). The geography of opportunity in community colleges: The role of the local labor market in students' decisions to persist and succeed. *Community College Review*, 47(1), 31–52.
- Riegle-Crumb, C., & Grodsky, E. (2010). Racial-ethnic differences at the intersection of math course-taking and achievement. *Sociology of Education*, 83(3), 248–270.
- Rios-Aguilar, C., & Deil-Amen, R. (2012). Beyond getting in and fitting in: An examination of social networks and professionally relevant social capital among Latina/o university students. *Journal of Hispanic Higher Education*, 11(2), 179–196.
- Rios-Aguilar, C., & Deil-Amen, R. (2019). Taking history, funding, and current challenges into account when discussing race, ethnicity, and completion in community colleges. In L. L. Espinosa, J. M. Turk, M. Taylor, & H. M. Chessman (Eds.), *Race and ethnicity in higher education: A status report* (pp. 127–132). Washington, DC: American Council on Education.
- Rios-Aguilar, C., Jacobo, S., McLenna, D., & Zavala, C. (2018, November). *Guided pathways: Fewer choices, better outcomes? Exploring the relevance and meaning of career aspirations among students of color*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Tampa, FL.
- Rios-Aguilar, C., Kiyama, J., Gravitt, M., & Moll, L. (2011). Funds of knowledge for the poor and forms of capital for the rich? A capital approach to examining funds of knowledge. *Theory and Research in Education*, 9(2), 163–184. doi:10.1177/1477878511409776
- Rose, M. (2016, June 23). Reassessing a redesign of community colleges. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/views/2016/06/23/essay-challenges-facing-guided-pathways-model-restructuring-two-year-colleges>
- Rosenbaum, J., Ahearn, C., Becker, K., & Rosenbaum, J. (2015). *The new forgotten half and research directions to support them*. New York, NY: William T. Grant Foundation.
- Rosenbaum, J., Deil-Amen, R., & Person, A. (2009). *After admission: From college access to college success*. New York, NY: Russell Sage Foundation.
- Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling & Development*, 90(1), 13–19.
- Scott-Clayton, J. (2011). *The shapeless river: Does a lack of structure inhibit students' progress at community colleges?* New York, NY: Columbia University, Teachers College, Community College Research Center.
- Stevens, M. (2015). The changing ecology of higher education. In M. W. Kirst & M. L. Stevens (Eds.), *Remaking college: The changing ecology of higher education* (pp. 1–18). Stanford, CA: Stanford University Press.

- Stuart, R., Rios-Aguilar, C., & Deil-Amen, R. (2014). "How much economic value does my credential have?" Reformulating Tinto's model to study persistence in community colleges. *Community College Review*, 42(4), 327–341.
- Teranishi, R. T., & Bezbatchenko, A. W. (2015). A critical examination of the college completion agenda: Advancing equity in higher education. In A. M. Martinez-Aleman, B. Pusser, & E. M. Bensimon (Eds.), *Critical approaches to the study of higher education: A practical introduction* (pp. 241–256). Baltimore, MD: Johns Hopkins University Press.