

Pathways Collaborative Equity Grant

Final Report



Two Tools for
Community Colleges
to Assess and Advance
Equity Through
Guided Pathways

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Executive Summary

Since the release of *Redesigning America's Community Colleges* (Bailey, Jaggars, & Jenkins, 2015), the Community College Research Center (CCRC) has been conducting applied research on the implementation of guided pathways by community colleges and the effects these reforms are having on student success. In the process, we have developed tools and metrics that colleges can use to design, plan, and formatively evaluate their pathways reforms, including the Scale of Adoption Assessment (Community College Research Center, 2017), the Early Momentum Metrics (Belfield, Jenkins, & Fink, 2019), and, more recently, a planning tool to help colleges rethink student onboarding (Jenkins et al., 2020). With support from the Office of Community College Research and Leadership's Pathways Collaborative Equity Partners Fund, CCRC developed two new tools to help colleges examine student access, progression and success at the program and degree level, scrutinize how current college practices are shaping inequities in program access and success, and develop plans for equity-centered processes to address inequities.

Guiding both tools is a focus on programs of study. Within the guided pathways model, a program of study leads to junior standing in major or employment with family-sustaining wages. This definition of a program of study encourages colleges to rethink longstanding practices of enrolling students in transfer general studies/AA tracks, which often lead to students accruing excess credits and do not position them well for successful transfer with junior standing in a major field of interest, or in career and technical education (CTE) programs that only prepare them for low-wage jobs. Instead, we encourage colleges to consider what job and career paths, and what opportunities for transfer programs, lead to. Moreover, these tools will support colleges to consider which students are entering which

programs, and how college practices—including recruitment, onboarding, advising, and teaching—may be reinforcing the sorting of students into low-opportunity educational and career pathways and away from high-opportunity ones.

The first tool, released in June 2020 as part of a CCRC Analytics paper, *Unpacking Program Enrollments and Completions With Equity in Mind* (Fink & Jenkins, 2020), is a data template that asks colleges to enter student-level data on programs. Using these data, the tool creates treemaps that show the distribution of students across programs so users can easily see the highest enrollment programs, how students are distributed across programs (both CTE and transfer) that lead to higher and lower labor market value, and look for patterns of over- and underrepresentation in higher-opportunity programs by race/ethnicity, gender, income, and age.

The second tool, *Foregrounding Equity in Guided Pathways: A Tool for Supporting Students Into and Through Programs of Study*, is organized to prompt discussion and planning about where and how equity gaps may arise at key points in students' trajectory through college and is meant to serve as a companion to the Scale of Adoption Assessment and the Unpacking Program Enrollments and Completions with Equity in Mind tool. Together, these three tools are designed to help colleges assess their progress implementing pathways practices and use college data to explore which students are entering and completing which programs of study. The tools also critically examine what institutional practices may be contributing to inequities at the program level and how they can be redesigned to close disparities in access to and completion of high-opportunity programs



Background

The fundamental goal of guided pathways is to increase the rate at which underrepresented students earn college credentials, particularly degrees and credentials in fields of high economic value, while also closing gaps for students of color, low-income students, returning adults, and other groups with inequitable outcomes. As colleges seek to strengthen supports for students to explore options for careers and choose and complete a program of study suited to their interests and aspirations through redesigning onboarding, advising, and other student supports, colleges must first determine which programs of study students are enrolled in, consider the career and earning opportunities associated with these programs, and then examine which students are in which programs by disaggregating the enrollment data by race, gender, age, and income. With this information, colleges can then critically examine their recruitment, onboarding, advising, and teaching practices to assess how they are serving students who have been historically underrepresented and/or underserved in higher education, and how their practices might be contributing to inequitable program enrollment data that is common in many institutions.

With support from the Office of Community College Research and Leadership's Pathways Collaborative Equity Partners Fund, CCRC developed two tools to 1) help colleges examine which students are in which programs of study and to look for patterns of over- and underrepresentation across these programs that contribute to racial and socioeconomic stratification, and 2) to scrutinize how current college practices are shaping inequities in program access and success and plan for developing equity-centered processes to address these inequities. The first tool is described in a new CCRC Analytics paper titled *Unpacking Program Enrollments and Completions with Equity in Mind* (Fink & Jenkins, 2020). The second tool, *Foregrounding Equity in Guided Pathways: A Tool for Supporting Students Into and Through Programs of Study*, includes a discussion guide and series of questions to support college teams as they examine how students enter and move through programs, and how inequities in outcomes may arise as the result of college policies, practices, and procedures

Statement of the problems and significance

These tools are designed to support colleges' guided pathways redesign work in several ways. As part of our research on guided pathways, we have observed

that despite the progress that colleges have made using data to inform institutional reforms, these data are often at the institution or course levels rather than at a program and program area level. Since outcomes and economic value differ widely by program, failing to look at program-level data obscures important issues about success for students generally and for underrepresented students in particular.

A second related issue is that inequities in student outcomes are the result of practices, policies, and procedures that occur throughout the student experience and are often driven by assumptions, cultural beliefs, and longstanding practices that do not serve all students well. Thus, by adding an emphasis on program-level data, and considering how current colleges' practices may be contributing to inequities in program entry and completion, colleges can plan and implement practices to support underserved populations.

The importance of program-level data

For more than a decade, community colleges have made important strides toward becoming better users of institutional data. Achieving the Dream was instrumental in this work as the initiative and then organization, working with community colleges to build a "culture of evidence" through the collection and analysis of data on student success, with a particular focus on identifying equity gaps for low-income students and students of color, and implementing strategies to close these gaps. Institution-level work on equity-mindedness and raising awareness about the importance of disaggregating student data by race and ethnicity has also been greatly advanced by Estela Bensimon at the Center for Urban Education at the University of Southern California (Bensimon, 2004, 2005; Bensimon, Polkinghorne, Bauman, & Vallejo, 2004). Through her research and the development of the Equity Scorecard, Bensimon focused national attention on achievement gaps by race and ethnicity.

More recently, as part of national guided pathways efforts, CCRC's early momentum metrics (EMMs) have also become widely used to measure institution-level trends in first-term and first-year student outcomes that are predictive of longer-term outcomes (Jenkins & Bailey, 2017; Belfield, Jenkins & Fink, 2019; Yanaguira, 2020).

These include metrics of credit completion in students' first term and first year, as well as the completion of gateway math and English and persistence from the first to second terms. In addition to the national American Association of Community Colleges (AACC) Pathways Project, several states such as Ohio, Oregon, and Texas are currently using EMMs to motivate and measure progress on guided pathways.

As a result of these and other efforts, many community colleges have become active users of institutional and course-level disaggregated data. Colleges are using data to inform decision-making and planning processes on campus, and to track enrollment, completion rates, and other student success measures. Yet the focus at many colleges on college- and course-level data on student progress and success often overlooks the equally important program- and degree-level data, which are critical as the monetary returns of community college degrees and credentials vary significantly by major and degree types. For example, an associate's degree in applied science has a higher value than an associate's degree in art (Carnevale et al., 2020). Moreover, at the program level, monetary returns from certificates are higher in construction and information technology. Applied associate degrees, meanwhile, are higher for health care and engineering technologies (Carnevale et al., 2020). Students who transfer and complete a bachelor's degree earn more than those who do not, with higher returns going to students who earn degrees in technology-intensive fields. In effect, Associate of Arts degrees only have strong labor market returns if students can transfer and earn bachelor's degrees, particularly in higher-returning fields.

This is particularly concerning given the research that shows students of color, low-income students, and women are more likely to choose majors that lead to lower-paying jobs (Carnevale, Fasules, Porter, & Landis-Santos, 2016; Castex & Dechter, 2014; Zafar, 2013). The Georgetown Center on Education and the Workforce found that African American students in four-year colleges are overrepresented in majors such as human services and social work and are underrepresented in higher paying majors, including general engineering, computer engineering, and business (Carnevale et al., 2016). Thus, to inform institutional redesign work that would lead to more equitable distribution of students across programs, it is crucial that colleges first examine which programs underrepresented students are entering and completing or not completing.



Identifying where and how inequities occur across the student experience

A second related issue is that inequities in student outcomes are the result of practices, policies, and procedures that occur throughout the student experience, from when a potential student first meets with a college representative, completes an application, or starts exploring the college website, through graduation. So, while the data tool will help colleges analyze how students are distributed in different programs over time, the second tool, *Foregrounding Equity in Guided Pathways*, will help colleges scrutinize current practices that may result in these inequities and design new ones that will lead to more equitable access, progress, and success.

This tool will serve as another resource that colleges can use alongside the Scale of Adoption Assessment (SOAA), which CCRC first developed in 2014 to convey the essential elements of guided pathways within the four main areas of the model (1. Mapping Pathways to Students' End Goals; 2. Helping Students Choose and Enter a Pathways; 3. Keeping Students on their Path; and 4. Ensuring that Students are Learning) (Community College Research Center, 2017). The SOAA is currently used by colleges to assess their progress in implementing essential pathways practices at scale and to plan next steps for implementation. For state system leaders, the SOAA also provides a way to conduct formative assessments of colleges' progress in implementing key pathways practices and to determine how to assist colleges through workshops, technical support, and other forms of assistance.



During the last several years, CCRC has continued to make improvements to the SOAA based on feedback from the field, from partners, and from our research. One of the challenges we observed with the SOAA is that while it is designed to help colleges consider how far the institution is toward scaling a practice, it did not explicitly encourage colleges to reflect on how practices were affecting the student experience.

Another request from colleges and state systems was to make equity more explicit in the SOAA. Accordingly, in the state of Washington, we worked with a group of “change facilitators” (college-based practitioners who are providing guided pathways coaching to Washington colleges) to add several equity questions, since the state has made closing equity gaps an explicit part of its student-success agenda. In the fall of 2018, again with input from practitioners in Washington, CCRC released an updated version of the SOAA that includes “equity considerations” in each practice area, so that colleges could begin discussing and articulating connections between pathways reforms and equity goals. These questions were included in each of the four practice areas and were written to help initiate or advance conversations about whether and how institutional practices may be having a differential impact on historically under served groups. By asking these questions, CCRC hoped that colleges could leverage their pathways work to close equity gaps by identifying and addressing causes of inequity, removing systemic barriers, and focusing design decisions and resource allocation in ways that more effectively address the needs of under served groups. Accordingly, this second tool is explicitly designed to help colleges consider not only which student pathways these practices are affecting, but also when and how they are affected.

Purpose and overview of the tools

These tools are intended to complement and support the data and planning work that colleges are already engaged in as part of their guided pathways redesign. The Unpacking Program Enrollments and Completions with Equity in Mind data tool is designed to highlight the importance of looking at which students are in which programs of study. While guided pathways reforms are focused on whole-college institutional redesign, the goal is to ensure that students are entering and completing programs of value that lead to transfer, with junior standing in a major or a job that pays a family-sustaining wage.

The second tool, *Foregrounding Equity in Guided Pathways: A Tool for Supporting Students into and Through Programs of Study*, is a planning tool for colleges that want to examine where inequities occur throughout the student experience, from entry through completion. It challenges college teams to reflect on some of the root causes of practices that lead to inequitable student outcomes. We encourage teams to reflect on institutional cultural beliefs, which are often not explicitly articulated, that often anchor the “business as usual approach.” Then, based on their assessment of current practice, we provide space for teams to identify next steps that will move them closer to developing practices that will support equitable outcomes, determine what additional data or information are necessary to develop a clearer picture of how current practices may be contributing to inequities, and decipher what steps would most appropriately address barriers.



Development of the Tools

The development of both tools was informed by our research as well as by feedback from colleges and partners.

Tool #1: Unpacking Program Enrollments and Completions with Equity in Mind

The analyses that colleges are helped to conduct using this tool (and described in the CCRC Analytics paper) were developed in partnership with the Washington State Board of Community and Technical Colleges. In the summer of 2019, using student-unit record data, CCRC developed a Tableau tool that enabled Washington State college teams to examine their program-level data. To facilitate colleges' use of the tool, we developed a workshop during which teams could explore their data and begin discussions around three main questions:

1. What programs are our students currently enrolled in?
2. What opportunity does each program lead to in terms of further education (e.g., transfer to bachelor's programs or bridges into more advanced workforce credentials) and/or immediate job prospects and earnings? Which programs lead to greater or lesser opportunities?
3. Is student representation proportionate across programs? Which subgroups of students (by race/ethnicity, gender, socioeconomic status, and age) are underrepresented in higher-opportunity programs?

Regarding the first question, we learned from our analyses using the Washington State data that students are highly concentrated in only a few programs, and that the majority of students are in general Associate of Arts or Associate of Science degrees, high school dual-credit or dual-enrollment programs, or are missing program information. Table 1 in the Unpacking paper provides an example of how student enrollments are distributed across programs (see Fink & Jenkins, p. 3). This pattern is not uncommon across colleges nationwide. The next step was to consider where each program leads; that is, does it lead to a lower- or higher-opportunity career? To categorize workforce programs, we used a classification system developed by the Washington State Board of Community and Technical Colleges in 2015 that includes the following categories and associated hourly wages: Workforce: Low (less than \$14 per hour);

Workforce: Medium (between \$14 and \$17.55 per hour); and Workforce: High (more than \$17.55 per hour) (Washington State Board for Community and Technical Colleges). Transfer programs were also categorized as being “structured” or “unstructured” depending on whether they were designed to help students transfer with junior standing in a particular major or not. Finally, the tool enabled colleges to look for patterns of over- and underrepresentation across these different types of programs.

To introduce the tool and the importance of conducting program-level analyses, we conducted a series of two workshops with the Washington colleges. The first workshop was held in August 2019 and included 12 Washington State colleges. Then, in November 2019, we conducted a similar workshop with all 34 colleges. At both workshops, we walked the college teams through a series of exercises with the data tool and provided them with a series of guiding questions to structure their team discussions. These questions are included in the Unpacking paper (see Fink & Jenkins, pages 11-12).

In the workshops, the colleges used a Tableau tool created by CCRC using the Washington student-unit record data. However, to make these types of analyses accessible to all colleges, we created an Excel tool. To use this tool, colleges can import their student-level data and create the same treemaps and tables that are described in the Unpacking paper. By organizing student enrollment data by program, the tool encourages colleges to shift their focus from institutional- or student-level outcomes to program-level outcomes, which is the key level of analysis for guided pathways. The tool is designed to prompt colleges to look critically at which programs lead to strong transfer and labor market outcomes, and what groups of students are under- and overrepresented in these programs.



Tool #2: Foregrounding Equity in Guided Pathways: A Tool for Supporting Students Into and Through Programs of Study

As previously described, the purpose of this second tool is to assist colleges in interrogating how current practices may contribute to inequities, what cultural beliefs may be anchoring practices that do not serve all students well, and how practices can be changed to close disparities in outcomes.

We encourage colleges to use this tool to examine junctures in the student experience and ask, “Why do these inequities exist? What conditions, mechanisms or processes does evidence suggest are at the root of it?” (Irons, 2019). The tool is organized to prompt discussion and planning about where and how equity gaps may arise at four points in students’ trajectory through college: connection, entry, progress/completion, and advancement. For each of these areas, the tool asks colleges to develop a goal or series of goals that address practices or policies that may be giving rise to equity gaps. These goals should align with an institution’s strategic plan and mission so that the work is embedded into institutional culture.

Our aim in developing the Foregrounding Equity tool was to build on the work that we previously described to make equity more explicit in guided pathways redesign efforts and in the Scale of Adoption Assessment. In the fall of 2019, a year after first developing the SOAA equity considerations, we met with the change facilitators in Washington again to brainstorm ideas for furthering the work to include equity in the guided pathways model and the SOAA. At first, we had envisioned developing a series of questions that would be included in the SOAA, but as we further considered this idea and talked through it with the change facilitators, we decided to create an additional tool that focused more on the student experience in terms of access to and completion of programs of study within the guided pathways framework. To do this, we built a planning tool that walks college teams through a series of prompts and questions for each stage of the student experience, including:

1. College’s goals
2. Current practices that hinder goals
3. Current practices that support goals
4. Institutional cultural beliefs supporting current practice

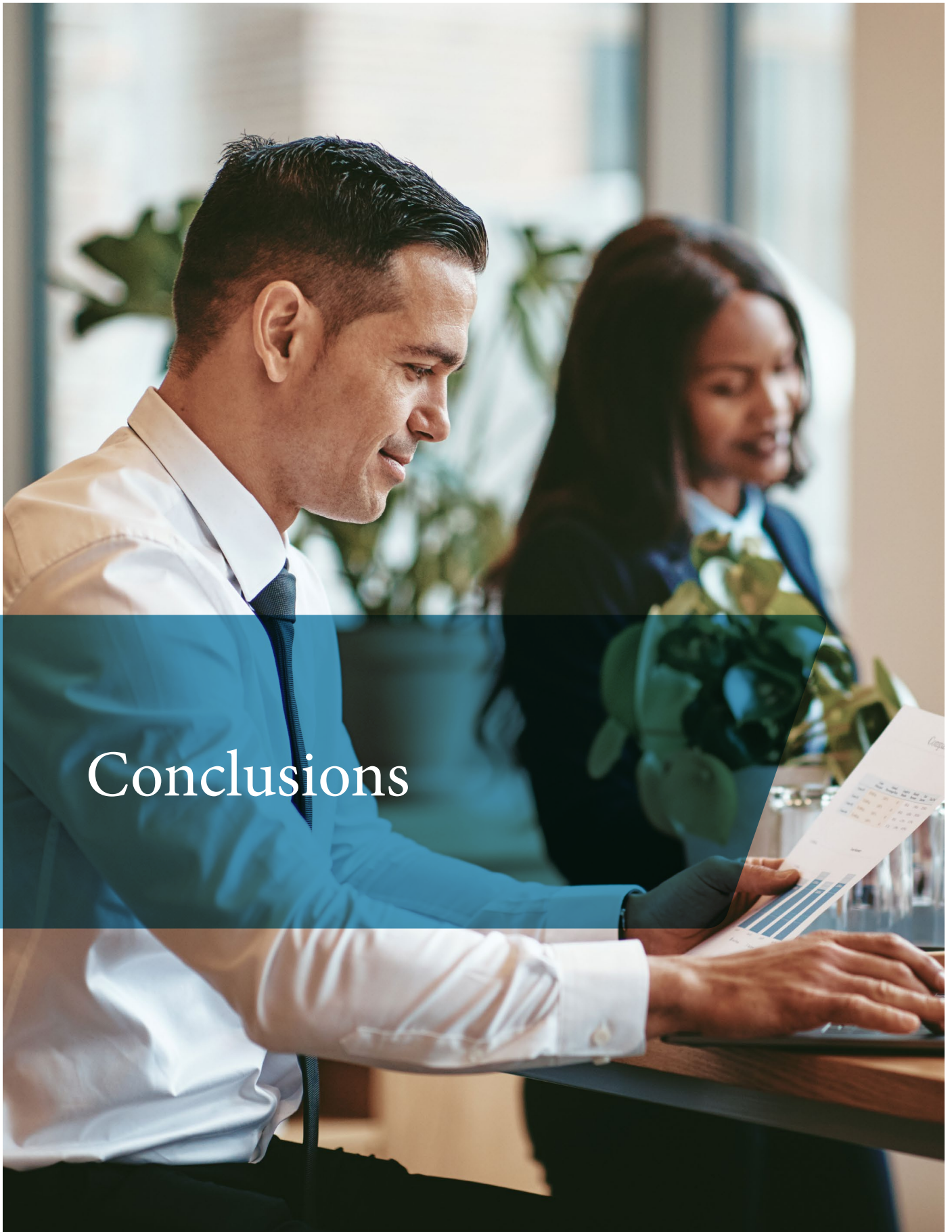
5. Taking action to identify, describe, and plan for addressing inequities
 - a. What data or further information do we need to gather or examine to understand how students are impacted by this issue?
 - b. Whose perspectives need to be included to address this issue, and who is well positioned to work together?
 - c. What near-term actions are of the highest priority and/or have the greatest potential to make a significant impact?
 - d. What individuals or which groups are responsible for next steps and what is the timeline?

To support colleges’ use of the tool, we identified pathways practices that are central to student outcomes in the four stages of students’ experience in college (connection, entry, progress/completion and advancement). The practices and issues we included in these lists are meant to be examples of some possible mechanisms that may contribute to inequities and are offered to generate thought and discussion about what factors may be at play in colleges.

As we noted in the introduction to the tool, the use of any one tool alone is not sufficient to address all factors that contribute to inequitable outcomes on campus. Institutional culture with regard to its definition of equity, faculty and staff perceptions, beliefs, biases, and stereotypes regarding minoritized students inform practice and structures within colleges. To fully explore the root causes of inequities, it will be necessary to reflect on these issues. Further, addressing campus climate and the diversity of faculty and staff at the college are critical strategies to address inequitable student outcomes.

*Why do these
inequities
exist?”*





Conclusions

Racial gaps in postsecondary attainment are well documented. The focus on structural causes of inequitable postsecondary outcomes, including poverty, racial and socioeconomic neighborhood segregation, and mass incarceration, while important, may lead community colleges to overlook causes at the institutional level, which they have the power to change (Billings, Deming & Rockoff, 2013; Duncan & Murnane, 2011). Community colleges need support to move from an awareness of gaps in degree attainment by race and socioeconomic status on their campuses to identifying mechanisms contributing to these gaps and formulating appropriate strategies to intercede.

The tools described in this report are designed to help colleges move from an awareness of equity gaps in students' outcomes to developing strategies to address the mechanisms that contribute to inequities in college practice and policies.

In the initial pilot of the data tool and discussion questions at Washington guided pathways institutes in 2019, we were encouraged by college teams' discussions that were the result of looking at program-level data and considerations about which students were in which programs, and how the college was recruiting students into these programs and supporting them to completion.

As CCRC continues to research the implementation of guided pathways and learns from the successes and challenges of colleges adopting these reforms and the states that are leading these efforts, we hope these tools will further their work and help support colleges' guided pathways reforms with an explicit focus on ensuring that student equity is considered throughout the student experience, and at multiple levels, including at the institution, program, and course level. We are grateful to the Pathways Collaborative Equity Partners funding for providing us with the resources and time to develop these two tools, with the hope that they will further the field's progress in implementing pathways at scale.

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