



ADVANCING
**CAREER PATHWAY
DEVELOPMENT**
IN WISCONSIN TECHNICAL COLLEGES

Final Evaluation Report

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About Equal Measure, DVP-PRAXIS, and Brandon Roberts + Associates

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EXECUTIVE SUMMARY

In 2014, the Wisconsin Technical College System (WTCS) was awarded a special U.S. Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant to advance and scale career pathways. The grant had a dual purpose of expanding career pathway development within the sixteen technical colleges and better aligning career pathway policies among state and local systems. This report focuses on the first purpose, which was the sole subject of our evaluation: the collective actions and progress of the technical colleges in advancing development of career pathways.

The \$5 million grant supported the Wisconsin Advancing Career Pathway Development initiative from 2015-2018. The majority of the grant resources were used to support a dedicated Career Pathway Coordinator (CPC) at each technical college with a state-articulated goal of “bringing career pathways forward as the best and prime model for adult learner success across the 16 technical colleges.” CPCs were expected to guide and support career pathway development in their institution.

In this final evaluation report, we provide an overall assessment of career pathway advancement in Wisconsin to address the following questions:

- » What progress did the Wisconsin technical colleges make in advancing and scaling career pathway development from 2015-2018?
- » What were the factors contributing to and challenging those efforts, and what lessons were learned?

To assess the technical colleges’ career pathway work, the evaluation team concentrated data collection at the colleges during the four-year grant period. We conducted phone interviews with CPCs in late 2015 and on-site college interviews in 2016 and 2017 with CPCs and senior college leaders. In addition, in early 2018, the evaluation team administered an electronic survey to college senior leaders, conducted on-site interviews with WTCS officials to understand their perspective on career pathway development among the technical colleges, and conducted a focus group with 12 of 16 CPCs.

COLLEGE PROGRESS in Advancing Career Pathway Development

Wisconsin’s technical colleges have embraced a career pathway strategy and model as the primary way to transform the colleges’ educational programming to better serve students and employers.

This work is perhaps the most ambitious and extensive career pathway effort in the country. It also may be the most successful to date.

The Advancing Career Pathway Development grant allowed technical colleges to build on an established career pathway vision and model as well as an existing foundation of career pathway policies and practices to take career pathway development to the next level. As expressed by college presidents, career pathways are the new norm for delivering educational programming and services in their institution.

We offer three points on the progress achieved from 2015-2018:

- » The colleges achieved significant progress in designing and establishing career pathway programs. They developed and increased the number of stackable credentials within parent career programs, thus expanding career pathway offerings across all colleges.
- » The colleges took important steps to strengthen and modify an array of college policies and practices affecting career pathway development and operations. Such actions are indicative of colleges moving to institutionalize the career pathway strategy and model.
- » The technical colleges achieved demonstrable cultural change in adoption of the career pathway strategy. This change is evidenced by the willingness of college faculty, staff, and employer partners to acknowledge the benefits of stackable credentials, the need to make career programs more accessible to multiple populations, and the importance of educational pathways and continuous learning.

Overall, these efforts and the ensuing progress represent an impressive accomplishment by the 16 technical colleges. The growth of stackable credentials within career pathway programs is notable and is likely to continue.

FACTORS SUPPORTING

College Career Pathway Development Progress

The TAACCCT grant to Advance Career Pathway Development provided the technical colleges new resources to advance career pathway development at the institutional level. Interviews with officials and staff involved in career pathway development across Wisconsin—as well as information gleaned from a 2018 senior leaders survey and the CPC focus group—reveal five factors that contributed to the progress achieved from 2015-2018.

- 1 College senior leaders and others interviewed found great value in having a single person/position responsible and available for career pathway development. The Career Pathway Coordinator was seen as the most important resource contributing to career pathway development.
- 2 The commitment and support of college executive leadership for career pathway development gave credibility to the CPCs and their work and led to college-wide awareness of career pathways as an institutional priority.
- 3 Career pathway development at the institutional level benefited from a well-established vision, model, and foundation for the concept; the collaborative work of the CPCs was instrumental in making that happen.
- 4 The engagement and buy-in of faculty, employers, and other staff broadened and deepened the support for career pathway development and solidified the idea that the model is a core approach to educational programming among Wisconsin's technical colleges.
- 5 Establishing career pathway outcome metrics brought attention to the importance of having institutional data systems that can effectively track and measure career pathway programs and student progress.

The work of the CPCs cuts across these factors. The CPCs' institutional efforts to educate and build support for career pathways as well as take the specific actions to develop pathway programs was significant. Similarly, their steps to create a self-assessment tool to guide their career pathway efforts and to strengthen institutional policies and practices to better support career pathway operations were also significant. Overall, the investment of grant resources in a dedicated college position to guide and champion career pathway development was effective and notable.

FACTORS CHALLENGING

College Career Pathway Development

The technical college efforts to advance career pathway development revealed that such institutional change requires that a wide variety of policies and practices be addressed to successfully implement such a strategy. Although, as noted above, the colleges made significant progress in a number of areas, the evaluation identified three factors that challenged and restrained career pathway development over the past four years.

- 1 College data systems were not a significant focus of attention for the career pathway development work. This limited the ability of most colleges to effectively measure and inform career pathway program development progress and student outcomes;
- 2 Colleges did not give significant attention to some key features of the career pathway model—such as developing adult career pathway bridges and addressing the support needs of pathway students—two areas that are considered important to accessing and assisting underserved adult students; and
- 3 Colleges would have benefited from establishing clearer expectations and goals for advancing and scaling career pathway development in order to better direct their efforts.

Notably, these issues are not unknown to the colleges and campus leaders expect they will be addressed as career pathway development continues within the 16 technical colleges.

CONCLUSION:

Opportunities for the Future and Lessons for the Field

As the technical colleges move forward with their career pathway development efforts, there are several *unrealized opportunities to strengthen and further advance this work*. The evaluation identified four areas based on our analyses of data from a survey of senior leaders and interviews with college staff during on-site visits. These are:

- 1) enhancing institutional actions to strengthen college policies and practices;
- 2) clarifying colleges' work on Career Pathways and Guided Pathways to complement each other;
- 3) sustaining the function and work of the career pathway coordinator; and
- 4) improving college partnerships with the local workforce system.

Of particular note is the need and opportunity to clarify the college work on the Career Pathway and Guided Pathway initiatives. The evaluation team noted in their 2016 interim report that college senior leaders had mixed understandings about the similarities and differences between the two initiatives, and 18 months later this overall finding remains salient. However, discussions with CPCs over the past year suggest an opportunity to focus on three issues of priority to both initiatives—student advising, enhanced supports for pathway participants, and program/academic roadmaps—with a goal of fostering greater collaboration and integration between the two initiatives.

The career pathway development work of the technical colleges also offers a rich set of lessons for undertaking a major career pathway initiative across a statewide postsecondary system. We offer five lessons that other state systems and colleges should consider when embarking on or participating in a similar initiative.

In the full report that follows, we provide more context and detail on the evaluation assessment. In addition, we provide background on Wisconsin's technical college system, the official definitions and characteristics of the Wisconsin career pathway model, and the 10-year history of career pathway development in the state. The appendices contain examples of college career pathway roadmaps and a brief review of growing national evidence on the value of career pathways.

- » **Make career pathway development the top priority for transforming educational programming** and ensure that senior college executives communicate that this model is the chosen strategy, and its implementation is a top priority. To reach this point, three things are necessary: 1) gain consensus at the system and college level on the importance of transforming educational programming; 2) articulate a clear vision and framework for the career pathway model and define expectations; and 3) take deliberate actions to clarify and, when possible, coordinate and align new initiatives—such as Guided Pathways—with the existing career pathway vision and work.
- » **Build a sound foundation for career pathway development and operations** and undertake the work of making fundamental changes and improvement in existing system and institutional policies and operations. These changes are required at both the system and college levels.
- » **Dedicate staff to guide the work** and accept the importance of having a champion that is empowered to engage faculty, staff, and local employers to support the career pathway development work.
- » **Plan to rely on existing resources** to sustain career pathway implementation and utilization, thus signifying that career pathways are the new norm for delivering educational programming and services.
- » **Strengthen data systems, as well as analytical capacities**, to document pathway programs and credential development, and to identify pathway participants and measure their educational progress and labor market outcomes. Such analysis can generate evidence to support continuous program improvement, as well as inform and address institutional resource and budget challenges.

INTRODUCTION

In 2007, the Wisconsin Technical College System (WTCS) began transforming its 16 technical colleges to strengthen the education and training opportunities it provided students and to better meet the skill needs of local employers. The state recognized that two important industries—manufacturing and health care—faced shortages of skilled workers across the state while opportunities for lifelong learning eluded low-skilled adults. To address these issues, WTCS embarked on a statewide Career Pathway² initiative.

Wisconsin's action embraced an emerging national effort to advance greater opportunities for adult workers to obtain postsecondary skills and credentials valued by employers. This movement, largely supported at the time by private foundations, concentrated on community and technical colleges, and focused on career pathways as a worthwhile strategy to meet this need, especially for low-skilled adults. Rigorous studies of Washington State's community and technical college occupational training programs, including short-term programs with credentials, showed positive results in employment and earnings—providing rare evidence to support national interests in career pathways.

For eight years, WTCS collaborated with the colleges to infuse a state-designed career pathway model into the educational programming of the colleges. In 2014, these efforts were enhanced through the receipt of a special \$5 million award from the U.S. Department of Labor under the Round 4 Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program. This four-year grant was dedicated to advancing and scaling career pathway development in Wisconsin technical colleges and its state system and was the only such award made in the U.S.⁵



In this final evaluation report of Wisconsin's Advancing Career Pathway Development initiative, we focused solely on the efforts of the 16 technical colleges to support career pathway development from 2015–2018; the evaluation did not assess the activities and efforts of state-level work to support college efforts. The focus on the colleges is driven, in part, because a majority of grant resources supported a Career Pathway Coordinator (CPC) at each college to lead and advance career pathway development at their institution.

We provide an overall assessment of career pathway advancement in Wisconsin, addressing these questions:

- » What progress did the colleges make in advancing and scaling career pathway development from 2015–2018?
- » What were the factors contributing to and challenging those efforts, as well as lessons learned?

To assess the colleges' career pathway work, the evaluation team concentrated data collection at the colleges during the four-year grant period. We conducted phone interviews with CPCs in late 2015 and on-site college interviews in 2016 and 2017 with CPCs and senior college leaders. In addition, in early 2018, the evaluation team administered an electronic survey to college senior leaders,⁶ conducted on-site interviews with WTCS officials to understand their perspective on career pathway development, and conducted a focus group with 12 of 16 CPCs.

We designed a framework using nationally developed indicators for career pathway development⁷ at the initiative's outset. The framework, which informed our data collection, consisted of six elements for advancing career pathway development:

1. **Commitment to a clear vision and strategy**
2. **Engagement with employers**
3. **Use of internal and external resources**
4. **Implementing institutional policies and practices**
5. **Using data and new metrics to measure student progress**
6. **Using evidence-based practices and processes**

In December 2016, we produced an interim report using these indicators. We described how the 16 technical colleges made important progress in advancing career pathway development during the first two grant years and emphasized that this progress was aided by a clear vision of the initiative, strong engagement of employers and faculty, and focused and committed efforts by the CPC. We also noted that more work on college institutional policies and data systems would be important to further advance and scale career pathways in Wisconsin.⁸

This final report is structured in five sections:

- » In **Section 1**, we provide a brief overview of WTCS and the history of career pathway development in Wisconsin, and describe the WTCS career pathway model;
- » In **Section 2**, we describe how the colleges advanced career pathways at their institutions;
- » In **Section 3**, we identify factors contributing to career pathway development in the colleges;
- » In **Section 4**, we identify factors that challenged colleges' efforts to develop and expand career pathways, and
- » In **Section 5**, we conclude the report by identifying opportunities for enhancing further career pathway development and discuss lessons that might be useful for college and system leaders, policymakers, and funders interested in pursuing career pathway development at the state or system level.

SECTION 1

Wisconsin Career Pathway History and Model

The first significant WTCS career pathway action was the establishment of the Regional Industry Skills Education (RISE) initiative in 2007. RISE was a partnership of the WTCS and the Wisconsin Department of Workforce Development; its purpose was to promote the development of adult career pathways in Wisconsin.⁹

WISCONSIN TECHNICAL COLLEGE SYSTEM AND COLLEGES

Unlike most states, Wisconsin has a dedicated technical college system composed of 16 districts serving every urban and rural community. The colleges provide educational learning and occupational skills training tailored to the career interests of students and workforce needs of local employers. Approximately 370,000 students enroll annually, with the equivalent of 84,000 full-time students enrolled in career programs.

WTCS operates under a shared governance model, with responsibility for operations and oversight shared by the WTCS Board and 16 District Boards. The WTCS System Office is the administrative and coordinating agency—implementing statewide policies and standards and overseeing the modest state funding provided for technical college programs and services. Although the 16 districts each have

The initiative was organized to pursue three goals:

- 1) develop an industry-driven adult career pathway model;
- 2) improve career pathway access for low-skilled adults; and
- 3) enact adult career pathway programs and adult basic education career pathway bridges throughout the state.

In addition, the initiative aimed to enhance collaboration between the technical colleges and local workforce groups to better address the workforce needs of workers and employers.¹⁰

During the RISE initiative (concluding in 2014) WTCS revised its policies, procedures, and funding to enable the 16 technical colleges to develop career pathway and bridge models and catalyzed piloting pathway and bridge projects. The goal was to help colleges transform their career education programming so that students could obtain skills and credentials incrementally, and have the opportunity to exit, reenter, and advance their education as appropriate. Specifically, this meant structuring or “chunking” customary career programs and curricula into embedded, shorter-term offerings that “stacked” into the overall program, whether it was a two-year associates degree, or a one- or two-year technical diploma program.¹¹

individual authority, autonomy, and local taxing powers, all operate under the guidelines and infrastructure established by the System Office, including the creation of programs, courses, degrees, diplomas, and technical credentials as well as the collection and reporting of college and student data.

WTCS technical colleges primarily offer students occupationally focused career programs, with many culminating in a two-year applied associates degree that can articulate to four-year programs in the state and the broader region. The technical colleges also offer one- and two-year technical diplomas for career programs. Finally, technical colleges will offer less than one-year programs composed of credit-based courses that can lead to a short-term diploma or certificate. As discussed later, all these programs are required to address the skill and workforce needs of local employers.¹²

Wisconsin's intent to build career pathways was part of an emerging national effort to create greater opportunities for underserved adult workers to obtain postsecondary skills and credentials valued by employers. The RISE team observed and learned from related efforts underway in states such as Arkansas, Kentucky, Oregon, and Washington, especially actions to create career pathway models on the idea of "stackable credentials" and/or "on ramps or bridges as well as to provide targeted student supports to career pathway students."¹³

Wisconsin's context and foundation for career pathways is somewhat distinct from many other states' two-year postsecondary institutions. Several features stand out:

- » Wisconsin has a distinct two-year postsecondary technical college system dedicated to providing occupational education and training to meet the needs of workers and local employers. Thus, educational programming is sector-focused and industry-driven, and is not faced with conflicting missions of technical education and skills development—as well as liberal arts transfers—that challenge many public two-year college systems.¹⁴
- » WTCS senior leaders embraced the concept of career pathways with a *specific purpose of transforming its educational programming* to better serve students seeking skills and credentials to advance in the labor market.
- » To meet the skill and workforce needs of local employers, Wisconsin technical college faculty work closely with employers; in fact, many faculty worked in the field and thus have experience in specific occupational areas. As such, colleges have strong institutional knowledge of local industry and the skill and employment pathways associated with them. The colleges are well-versed in identifying pathways and can focus on structuring educational programming to align with student and employer needs.
- » WTCS is responsible for addressing basic skill needs in Wisconsin; thus, all technical colleges receive federal adult basic education and literacy resources to serve low-skilled students and foster their movement into postsecondary programs.
- » WTCS envisioned a comprehensive career pathway model where programs could start in high school and connect with four-year colleges.

These features illustrate a critical distinction for Wisconsin: *the two-year technical college system is the primary institution investing in career pathway development*. As such, the career pathway model—and approach to development and implementation—was driven from a postsecondary educational perspective.

In the years leading to 2014, WTCS undertook policy and operational actions to deploy its own resources, and to leverage external funding opportunities to support the career pathway development at the colleges.¹⁵ A major factor sustaining this work was the appointment of a new WTCS president midway through the period who intensified the prior president's support for career pathways. The new president demonstrated support by consistently articulating her vision and commitment to career pathways as an essential strategy for better serving students and businesses across the state. Her public support provided encouragement and opportunities for technical colleges to transform their educational programming.¹⁶

In addition to this public commitment were significant WTCS system changes that proved critical to fostering career pathway development. These actions involved significant resources for the technical colleges, and fostered an expanded awareness and interest in career pathways among presidents and others at the college level. And as intended, these actions established a solid foundation for system-wide career pathway development and the Advancing Career Pathway Development grant award.

A SOLID FOUNDATION FOR ADVANCING CAREER PATHWAY DEVELOPMENT

Prior to 2014, WTCS took actions in four areas to enable and support career pathway development in the technical colleges:

- WTCS officially adopted a system-wide definition of career pathways that encompassed embedded stackable credentials and bridge programs, and incorporated career pathways as a priority in the WTCS strategic plan. Furthermore, WTCS codified career pathways in its administrative rules via its Educational Services Manual (ESM),¹⁷ and revised administrative rules for the program approval and modification process to allow for embedded career pathway credentials.¹⁸
- WTCS gained new authority around 2010 to establish categorical grant areas for the distribution of state discretionary resources to colleges. With funding of \$22 million per biennium, WTCS created seven categorical areas, one of which supported the development of career pathways and bridges at \$4 million dollars annually. Four categorical areas, such as support services and core industry grants, also gave specific priority for projects related to career pathways and bridges. Local colleges competing for these resources indicated that these discretionary grant programs made it clear that projects involving career pathways and bridges were a priority for WTCS.
- WTCS moved toward outcome-based performance funding for the non-categorical state resources appropriated for the state's technical colleges. WTCS established funding metrics, several of which were designed to foster the development of career pathway bridges and embedded credentials in high demand fields. The reality that embedded credential attainment generated resources for colleges helped spur college interests in career pathways.
- WTCS and the 16 college presidents banded together as a consortium starting in 2012 to apply for TAACCCT grants. The consortium won a \$12 million grant in round two to develop career pathway and bridge programs in advanced manufacturing; its success continued in round three with a \$17 million grant to develop career pathways in information technology. Thus, as Wisconsin embarked on its \$5 million Advancing Career Pathway Development initiative, the state and colleges had already leveraged approximately \$29 million in TAACCCT consortia grants for career pathway development. A round four TAACCCT grant targeted to health care programs provided another \$15 million in college resources covering the years of 2015-2018.

WTCS CAREER PATHWAY MODEL

As noted above, Wisconsin received the only special award in the nation for advancing career pathway development.¹⁹ WTCS was well positioned to pursue this goal, and stressed in its proposal that in recent years, it worked to promote the career pathway concept and was committed as a system to bring "career pathways forward as the best and prime model for adult learner success across the 16 college districts".²⁰

In its ESM, WTCS defines career pathways as "a series of *connected education and training strategies* and support services that enable individuals to secure industry relevant certification and obtain employment within an occupational area and to advance to higher levels of future education and employment in that area."²¹ The WTCS website also stresses that career pathways offer an efficient and customer-centered approach to *training and education* by successfully articulating the appropriate secondary education, adult basic education, postsecondary education and training, career and academic advising, and supportive services to enter and progress in a career.²²

At its core, the WTCS career pathway model is built around postsecondary education and training that is composed of three major components of educational programming:

1 On-ramps or bridges into technical college career programs, which provide enhanced training opportunities for prospective postsecondary students to access career pathway programs. Such on-ramps are developed primarily for high schools, adult basic education, and English Language Learners; although efforts are underway in some technical colleges to create pathway opportunities for apprentice and non-credit postsecondary students.²³ In addition, the technical colleges are developing and applying Prior Learning Assessments to document and reward experiential learning and skills through a statewide process of Credit for Prior Learning.²⁴

2 Short-term, credit-based education and training, which means establishing credit-based **stackable credentials** within technical college career programs. WTCS developed and refined its educational programming to include “*embedded technical diplomas (ETDs)*” and “*career pathway certificates.*” An ETD is defined in the ESM as courses (forming the child program) taken from the program curriculum of an already approved degree (referred to as parent program) that, when combined, provides the learner with standardized and industry recognized occupational skills and abilities that can lead to a job. A *career pathway certificate* is a set of courses taken from the first two semesters in the program curriculum of an already approved degree or diploma.²⁵

3 Articulations agreements with four-year public and private colleges, which facilitate seamless credit transfer from specific technical college programs to a partnering institution or system, allowing for continued educational advancement along the pathway that can lead to a bachelor’s degree and higher.²⁶

Figure 1 shows how these three components form the educational structure of a career pathway program in the Wisconsin technical college system. It is a well-defined and accepted structure of educational programming and credentials that was conceptualized and articulated early in their career pathway work.

This was a conceptual model, with the goal over the next years to apply it to the educational programming of the colleges and their many career programs. With the continued support of the RISE initiative, WTCS gave concentrated attention to colleges piloting adult education career pathway bridges in select colleges.²⁷ Over the years, the model evolved to include additional pathway access points for high school students and incumbent workers, as well as new stackable credentials such as career pathway certificates.

The Advancing Career Pathway Development grant between 2015–2018 provided additional resources and opportunities for colleges to develop road maps for career pathway programs. The structure of these maps generally followed the above model, but each college developed the details of its template based on its individual needs. Wisconsin technical college career pathways maps have been recognized nationally for breadth and depth of information.²⁸

In Appendix A, we share examples of career pathway maps developed and used by several technical colleges. These maps represent what is possible for implementing the three components of educational programming. The maps also include useful information such as job and labor market data for the specific occupation or industry.

Educational programming is just one feature of most career pathway definitions. The U.S. Department of Labor²⁹ and the Alliance for Quality Career Pathways³⁰ identify other key features in their career pathway definitions, such as sector or industry focus and credentials valued by the local labor market. These and other features are part of WTCS’ career pathway model, which has various system-wide policies and procedures to guide colleges’ work.

- » **Industry focus and need:** WTCS, in the ESM, requires that all college requests to establish a new career program provide substantial “demonstration of local employment need” to ensure that college programs respond to industry needs. The process for demonstrating such need is rigorous and is beyond the traditional employer advisory committees found in many community colleges across the country. The process involves providing a comprehensive, detailed analysis of labor market information, using local, regional, or state level data. It also requires support of local employers, as well as substantive discussions with local workforce development and training providers. These policies and procedures also apply to program modifications.³¹
- » **Contextualized learning and skills development:** WTCS career programs are designed to ensure students completing education and training have the technical skills needed by employers. As such, WTCS established a Technical Skills Attainment initiative that supports the development and implementation of core technical skills assessments to ensure all career program students demonstrate industry validated technical skills upon completing their occupational program of study.³²

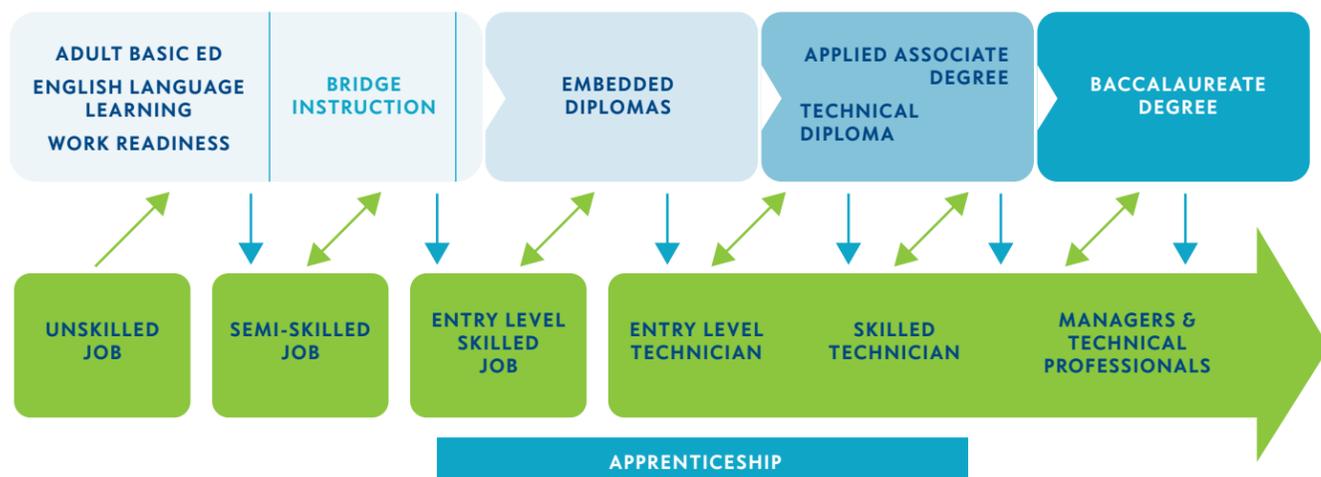
- » **Credentials valued by the local labor market:** WTCS’ commitment to stackable credentials has resulted in a formal process for colleges to develop ETDs and pathway certificates within approved career programs. The WTCS approval process requires colleges to demonstrate employer and industry need, document job opportunities at the end of each shorter-term, embed credentials, and determine the feasibility of offering the program from an institutional and student perspective.³³

Wisconsin career pathways can also encompass other elements identified nationally in career pathways definitions. In fact, the CPCs midway through the Advancing Career Pathway Development grant developed a Career Pathway Self-Assessment Tool.³⁴ This tool presents the 10 “essential elements” of the Wisconsin career pathway model, including the three components of educational programming, as well as the points noted immediately above. Other features include:

- » Offering multiple entry, exit, and advancement points along a pathway composed of credit-based courses and credentials;
- » Marketing, recruitment, and advising students on career pathway programs (e.g., via pathway maps);
- » Providing pathway participants with student services and supports;
- » Establishing processes for awarding students credit for prior learning (CPLs); and
- » Collecting and reporting student data on career pathway enrollments and progression.

Thus, as the WTCS colleges embarked on advancing and scaling career pathway development, they did so with a solid foundation for career pathway work. The colleges also moved forward with a growing body of evidence suggesting the key components of educational programming—on-ramps, bridges, and stackable credentials—could lead to better outcomes for students. [See Appendix B].

FIGURE 1: Wisconsin Career Pathways Model



SECTION 2

Progress Advancing Career Pathway Development

Wisconsin's Advancing Career Pathway Development TAACCCT grant had a dual purpose of expanding career pathway development within the 16 technical colleges and better aligning career pathway policies among state and local systems.³⁵ This report focuses on the first purpose, which was the subject of our evaluation: the collective actions and progress of the technical colleges in advancing career pathway development.³⁶

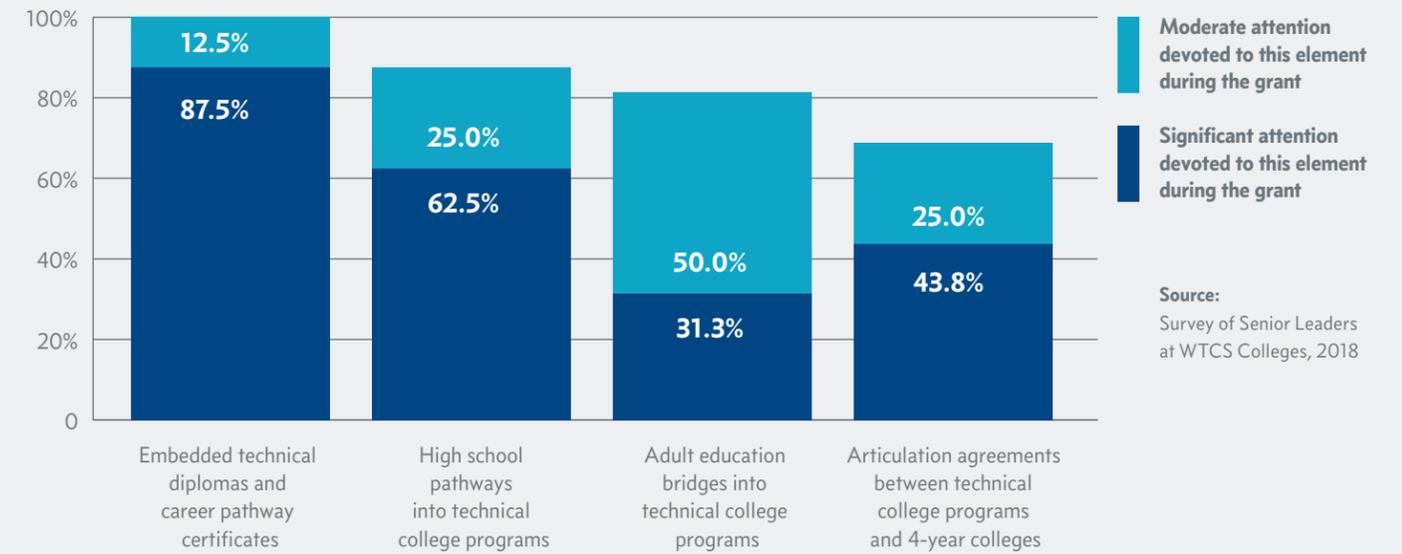
In this section, we discuss three areas of technical college progress:

- 1) creating short-term training programs and credentials;
- 2) enhancing institutional policies and practices to support career pathways; and
- 3) fostering cultural change within the technical colleges.³⁷

The evaluation team identified three findings:

- » **The colleges achieved significant progress in designing and establishing career pathway programs.** They developed stackable credentials within parent career programs, providing a solid foundation for building a more comprehensive pathway that can include bridges and articulation agreements.
- » **The colleges took important steps to strengthen and modify an array of college policies and practices affecting career pathway development and operations.** Such actions show colleges are moving to institutionalize career pathway educational programming and are an essential part of career pathway development.
- » **The technical colleges achieved demonstrable cultural change in their approach to educational programming.** This change likely was influenced by the cumulative impact of building new career pathway trainings, institutionalizing college policies to support career pathways, and the commitment of WTCS and technical college executive leaders to the state's career pathway vision.

FIGURE 2: Extent to Which WTCS Colleges Prioritized Career Pathway Educational Components



ADVANCING CAREER PATHWAY PROGRAMS AND CREDENTIALS

A look at Wisconsin's career pathway effort by the Center on Wisconsin Strategy reported that as of 2014, career pathway programs with stackable credentials could be identified in every technical college district and covered all major sectors and occupations. At that time, WTCS had approved at least 167 Embedded Technical Diplomas, and 26 CP certificates. The study further reported that Wisconsin established "an impressive statewide infrastructure for and interest and investment in career pathways," and that such an effort is not about creating "stand-alone education programs, but rather a framework of integrating education, training, and college programs and connecting directly to employer needs".³⁸

Thus, all technical colleges had a foundation for their Advancing Career Pathway Development work as the grant began. In the 2016 interim evaluation report, we found that most colleges had a common vision for career pathways, viewing them as starting "at the high school level and extending to technical college courses, credits, and credentials that articulate with a four-year college program,"³⁹ reflecting the three components of career pathway educational programming.

CPCs reported toward the end of 2015 that a core focus of their work was to examine what they understood as existing career pathway programs in their colleges, with an eye toward identifying those that might warrant additional pathway actions. Many CPCs also looked at other career programs to assess whether they may be pathway appropriate. As CPCs

began to engage in career pathway development, some reported that their college considered many to most career programs ripe for pathway programs, while other CPCs noted that they focused on a manageable number of programs, emphasizing "quality over quantity."

In the interim evaluation report, we found "the most prominent action of career pathway development appears to be the establishment of embedded technical diplomas within career programs."⁴⁰ This initial finding is reinforced by data from a 2018 survey of college senior leaders that asked colleges to identify where they focused the most attention in developing career pathway educational programming (see Appendix C for Senior Leader Survey). As Figure 2 shows, 14 out of 16 technical colleges (87.5%) reported that the development of stackable credentials in the form of ETDs and pathway certificates received the most attention.

Interestingly, high school bridges received the second most attention. This was not something promoted under the TAACCCT grant, as the focus was on adult learners. Nonetheless, technical colleges have devoted significant attention to developing stronger connections with high schools, seeing younger students as an important source of enrollment because unemployment has dropped precipitously in recent years. Wisconsin also passed legislation in 2013 calling for Academic and Career Planning to start in middle school and extend into postsecondary education.⁴¹

In addition, each technical college has a dedicated career preparation coordinator, whose responsibility is to strengthen connections with local public schools. In some colleges, the career preparation coordinator and the CPC work together. Thus, significant statewide attention is given to early entry to postsecondary education pathways via numerous means, including bridges, dual enrollment, career preparation, and other innovative strategies such as moving students in high school equivalency diploma education into technical college pathway programs.⁴²

FIGURE 3:
Increase in Stackable Credentials and Parent Programs within WTCS Colleges, 2013-2017



Source: Data from the WTCS Career Pathway Scorecard, January 2018

More concrete evidence of the attention to stackable credentials is seen in annual data collected and reported by WTCS on the number of ETDs and pathway certificates with student enrollments from 2013-2017. As depicted in Figure 3, the number increased from 28 to 364 during this period and for the specific period of the Advancing Career Pathway Development grant from 232 to 364—an increase of 57 percent. Of particular note is that stackable credentials are not stand-alone, short-term trainings, but part of an officially recognized parent career program within the institution; the number of parent programs with embedded credentials increased by 42 percent during the grant period, from 170 to 241. (Many technical colleges refer to these parent programs as career pathway programs).

Credentials such as embedded technical diplomas are appealing to technical colleges, as they provide students an opportunity to gain specific skills and credentials in a shorter timeframe, and because the WTCS outcome-based funding system was modified in recent years to include student attainment of ETDs in high demand fields as a positive completion metric for colleges. Employers also find value in ETDs, as they signify that entry-level workers have achieved specific skills.

The growth of stackable credentials within career pathway programs is impressive. It is noteworthy that some colleges conducted program reviews to determine the number of career pathway appropriate programs at their college; a few colleges in their final grant reports acknowledged this approach and reported the number and percentage of those programs addressed during the grant, thus providing some perspective of scale achieved during the grant.⁴³

ENHANCING INSTITUTIONAL POLICIES AND PRACTICES TO SUPPORT CAREER PATHWAYS

During the TAACCCT grant period, all technical colleges recognized the need to enhance institutional policies and practices to support the development and operations of career pathway programs. And all technical colleges took steps based on their priorities. This action appears grounded in the understanding that career pathways are a core approach for organizing and delivering educational programming.

College actions were typically led and supported by the CPCs. In some instances, CPCs focused on a specific policy or practice issue (e.g., awarding short-term credentials) and engaged other relevant staff to address the matter. In other instances, CPCs established career pathway steering committees and work groups in areas such as marketing and recruitment, student services and supports, credit for prior learning, employer engagement, and data systems. These groups were typically staffed by CPCs.

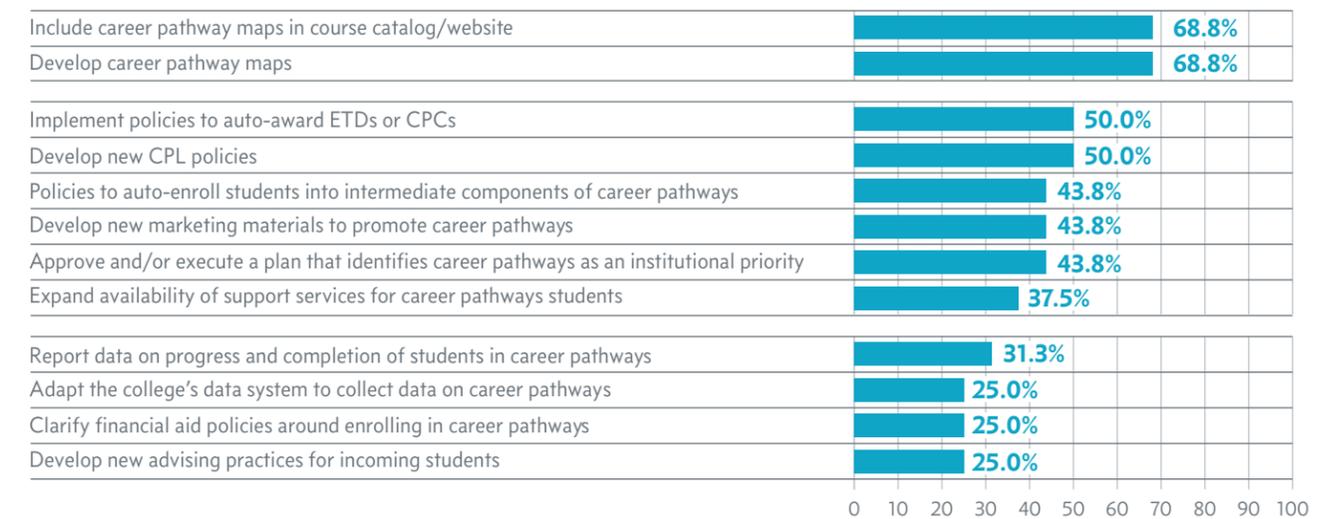
The colleges addressed a variety of institutional policies and practices. The policies included the awarding of credentials, applying CPL to pathway programs, determining financial aid, and providing student services and supports.

Practices included developing career pathway maps, incorporating pathways maps in college catalogues/websites, modifying advising practices, and strengthening data collection and reporting systems.

In the 2018 survey of senior leaders, we provided a list of 12 policy and practice items and asked colleges to indicate the attention devoted to each (e.g., significant, moderate, limited, and did not focus). In general, colleges did at least some work in each of the 12 areas.

Figure 4 depicts that 68.8 percent of the colleges gave significant attention to developing and making career pathway maps available; these were the only policies or practices to score above 50 percent. CPCs noted that the maps proved helpful to explain the concept of career pathways to faculty, employers, and local workforce officials. Other campus stakeholders recognized that maps were a valuable tool for helping prospective and incoming students, as well as college staff, in academic and career planning activities. Notably, career pathway maps became standard items on most college websites, and some colleges included maps in their marketing and recruitment materials, often as part of outreach efforts at high schools.

FIGURE 4: Extent to Which WTCS Colleges Prioritized Institutional Policies and Practices during the Grant



Source: Survey of Senior Leaders at WTCS colleges, 2018

Another notable area involves the policies and practices related to the new availability of stackable credentials, and the issue of making sure pathway students are enrolled in an official short-term program and awarded an earned credential upon completion. For example, many colleges traditionally required students to petition and sometimes pay to receive a credential. The WTCS career pathway work led colleges to modify policies to allow for auto-enrolling in credential programs and/or the auto-awarding of credentials. Doing so acknowledges that both students and employers value these credentials and addresses the reality that college funding is tied to credential attainment, including short-term embedded career pathway credentials awarded in high demand fields.

INSTITUTIONAL CULTURAL CHANGE

The career pathway concept and model is now well established among Wisconsin's technical colleges, as indicated through interviews with multiple stakeholders. Senior leaders, faculty, and local employers articulated that career pathways are the core approach to delivering educational programming at their institution. As such, many technical colleges report that career pathways are a major priority in their institution's strategic plan or other primary guiding documents.

This strategic transformation represents a significant cultural change in Wisconsin's technical college system. This change is likely a product of the cumulative impact of building new career pathway trainings, institutionalizing college policies to support career pathways, and the dedicated commitment of WTCS and technical college executive leaders to the state's career pathway vision.

In addition, when asked to identify the most important policy or practice contributing to career pathway development, several colleges identified items not on the list, such as new program development and modification of policies/processes, faculty engagement and training on pathways, and forming cross-functional college teams to address pathway issues.

Also seen in Figure 4 are the policies and practices that have not received significant attention among the colleges as of spring 2018; we discuss these results in Section 4.

Three features of this change are notable:

- 1 System and college senior leaders, as well as college deans, faculty, and staff, recognize that educational programming is structured as an integrated pathway offering short-term occupational programs with credentials. This is a big change from the prior focus on two-year degrees and the fear that stackable credentials would cause students to "job out" or leave before gaining sufficient education and skills.
- 2 System and college officials acknowledge that the technical college must continue to make postsecondary programs more accessible to multiple populations. This is particularly notable relative to providing on-ramps and other tools (e.g., credit to prior learning) to connect prospective students, whether they come from high schools, adult education, downsizing employers, or the military.
- 3 Senior system and college leaders believe—and communicate—that education and training in Wisconsin technical colleges is about educational pathways and continuous learning. The rapid changes taking place in the economy and local businesses means students and employers must continuously build upon and upgrade skills; and the technical colleges must be responsive to those needs.

SECTION 3

Factors Contributing to Career Pathway Development

Career pathway development in Wisconsin's 16 technical colleges made important advancements during the grant period of 2015-2018. As noted above, this largely involved building more stackable credentials and strengthening institutional policies to support the career pathway development and operations.

In this section, we discuss factors contributing to career pathway development during the grant period. It is important to recognize that a significant feature of the TAACCCT grant was to provide each technical college with resources to hire/support a full-time person to lead the institution's career pathway development work. Within the first year of the grant, each college CPC participated in a statewide peer-learning network convened and managed by WTCS.

The evaluation team identified five factors that contributed to career pathway development during the grant period:

- » **College senior leaders and others interviewed found great value in having a single person/position responsible and available for career pathway development.** The infusion of external funds was seen as the most important resource contributing to career pathway development.
- » **The commitment and support of executive leadership for career pathway development gave credibility to the CPCs and their work.** This commitment also helped establish a college environment and understanding among faculty and staff that career pathway work was not just a grant project, but an investment for an institutional priority.
- » **Career pathway development at the institutional level benefited from a well-established vision and model for the concept that could be clearly communicated through various tools to internal and external stakeholders.** The collaborative work of the CPCs was instrumental in making that happen.
- » **The engagement and buy-in of faculty, employers, and other staff broadened and deepened the understanding and support for career pathway development.** It also helped solidify the understanding that the career pathway model is more than a passing idea; it is a core approach to educational programming in WTCS technical colleges.
- » **Establishing career pathway outcome metrics, and reporting them at the state and college level, brought attention to the importance of measuring career pathway program and student progress.** Recognizing the need for data systems that encompass career pathways is a positive step toward building what is a critical component of an effective career pathway system.

FACTORS CONTRIBUTING TO AND SUPPORTING COLLEGE PROGRESS: 2015-2018

The TAACCCT grant to Advance Career Pathway Development provided the technical colleges with new resources at the institutional level. Interviews with officials and staff involved in career pathway development across Wisconsin, as well as information gleaned from a 2018 senior leaders survey and the CPC focus group, reveal five factors that contributed to the progress achieved from 2015-2018.

1. Career Pathway Coordinators and Their Work

Prior to the TAACCCT grant, technical colleges did not typically have staff dedicated to career pathway development. Both the TAACCCT round two and three consortium grants focused on industry sectors—manufacturing and information technology, respectively—and staff in the educational departments associated with those sectors generally guided those career pathway efforts with help from curriculum staff.

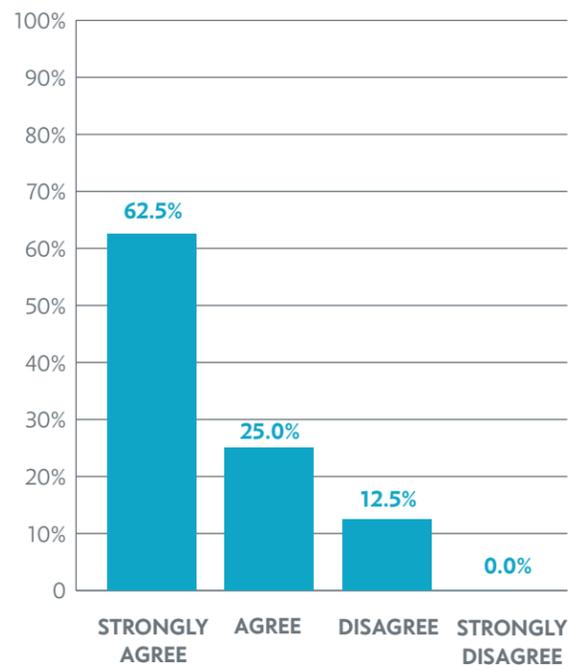
Therefore, colleges had to create the CPC position. This meant deciding where to place the position within the school, determine the work to be performed, and identify a person to fill this role. Most of the colleges placed the CPC within academic affairs or instruction (12 of 16)—in contrast to a small number of colleges that placed the CPC within student services, workforce development, or the grants department.

Placing the position within academic affairs, and in offices like curriculum development, gave the CPC access to and legitimacy with deans and faculty to examine the potential for establishing stackable credentials in career programs. Working with faculty, employers, and other college staff, CPCs assessed the need and opportunity for stackable credentials. They also ensured that the appropriate paperwork was submitted for the WTCS review and approval process. Notably, the CPC's work on career pathways encompassed all college departments and was not confined or targeted to a specific occupational area or sector.

In the college senior leaders survey, we asked about the importance of the CPC for career pathway development. As Figure 5 depicts, 85 percent of the respondents strongly agreed or agreed that the CPC was essential for scaling career pathway development.

It is also noteworthy that a handful of colleges identified “new program development” as the most important policy or practice change at the college, with one mentioning that the CPC devoted a “significant amount of time developing new pathway programs and embedded technical programs in existing programs.” The value was further represented by a comment during the CPC focus group in spring 2018 that “the CPCs were a dream come true in the effort to advance career pathway development.”

FIGURE 5:
The CPC Was Essential for Our College to Make Progress Scaling Career Pathways during the Grant



Source: Survey of Senior Leaders at WTCS Colleges, 2018

2. College Executive Leadership

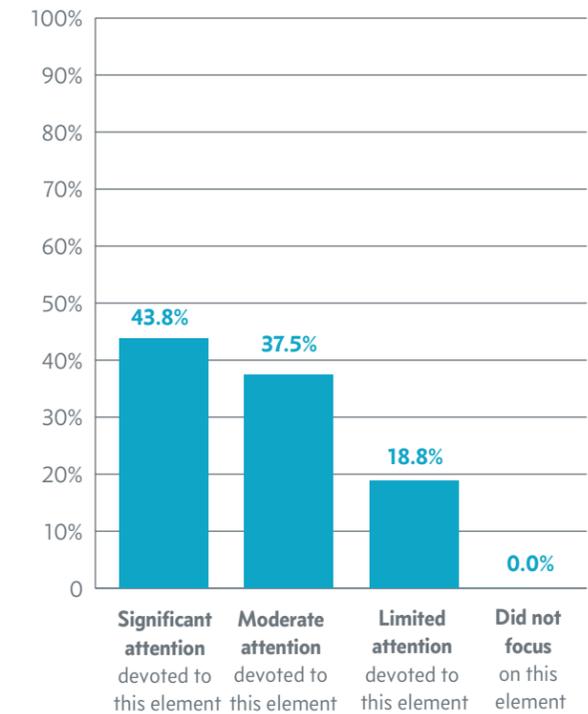
Throughout the evaluation, the team interviewed senior college leaders to ascertain their support of career pathway development. These interviews typically involved the senior vice president with ultimate responsibility for the CPC (e.g., vice president of academics or instruction), and in many instances included a brief discussion with the college president.

Most college senior leaders had a firm understanding of career pathways, acknowledging it was a high priority of the system office and expressed their college's commitment to making career pathways a fundamental part of education programming. The exception seemed to be newer senior leaders coming into Wisconsin technical colleges for the first time.

Senior leaders identified a number of ways that reflected their commitment to career pathways. As Figure 6 shows, data from the 2018 senior leaders survey indicate all colleges gave some attention to making career pathways an institutional priority, such as including it in the college's strategic plan or guiding documents, and 44 percent reported career pathways received significant attention.

In addition, colleges reported actions to incorporate career pathways into their Academic Quality Improvement Program,⁴⁴ thus creating a formal process to examine whether various career programs were working to develop stackable credentials as well as bridge programs for secondary schools and adult basic education. Colleges also reported modifying their institutional program development process to require a determination on the need or opportunity for stackable credentials for all proposed new career programs.

FIGURE 6:
Extent to Which WTCS Colleges Prioritized Approving and/ or Executing a Strategic Plan that Identifies Career Pathways as a Top Institutional Priority



Source: Survey of Senior Leaders at WTCS Colleges, 2018

3. Clear Vision of Career Pathways and CPC Collaboration

WTCS established a solid vision for career pathway development, and the CPCs embraced and applied this framework. This provided senior leaders, faculty and staff, and local employers new to this idea with a foundation for considering and buying into the career pathway model.

Critical to building a common vision and understanding for the technical colleges was the cross-college collaborative work of the CPCs. Under the leadership of WTCS, all 16 CPCs convened regularly as a peer learner network dedicated to building a common understanding about Wisconsin's career pathway model. The CPCs shared lessons from each other's work and benefited from outside experts who provided guidance and materials to support their efforts.

Of note was the CPCs' development of a Career Pathway Self-Assessment Tool.⁴⁵ Many CPCs used this tool to guide their career pathway development work and to serve as a reference within their institution to pinpoint needed actions and track implementation progress. As noted by one CPC, "the self-assessment tool brought important clarity and credibility to the college-level work," which reflected the sense of most CPCs.

Finally, the career pathway program maps served as useful tools to communicate the structure and components of the career pathway vision. The maps are especially valuable in communicating with secondary education, employer, and workforce stakeholders.

4. Engaging Faculty, Employers, and Other Staff

In discussions with college senior leaders, they stressed that career pathway development relied on support from faculty, employers, and other college staff. The creation of the CPC and the focus on stackable credentials resulted in a process to examine career programs across the college to determine their pathway appropriateness. This process resulted in CPCs working with program deans and faculty as well as relevant employers. It also required examining program structure and curricula to determine needs and opportunities for change. As indicated earlier, the WTCS processes for developing new programs and modifying existing ones are rigorous.

CPCs reported that much of their first 12-18 months involved educating faculty and employers about career pathways and stackable credentials. The CPCs worked with interested career programs, engaging faculty and employers in the details of career pathway programming. This effort helped broaden the understanding of career pathways across the college faculty and among local employers.

The engagement with local employers is notable. As indicated in Section 2, WTCS requires significant employer input to demonstrate that college programs are addressing industry competencies and skill needs. CPCs reported that employers were particularly interested in making sure that actions to

develop or modify career programs to include short-term trainings with attendant credentials aligned with their job positions and classifications. This engagement with employers sometimes involved detailed conversations, and the history of employers' substantive involvement with the technical colleges' educational programming facilitated these efforts. Overall, CPCs reported that employers were often helpful in ensuring that proposed stackable credentials aligned with their skill and job needs.

The engagement of other college staff generally began with the development of career pathway maps. CPCs required the engagement of deans, faculty, and employers to determine the details of the maps; they also worked with other college staff to design and produce the maps, as well as with those in marketing, recruitment, and advising to put the maps to use.

In addition, halfway through the grant, most colleges took steps to examine how institutional policies and practices could better support career pathway development. The CPCs used steering committees or work groups to address these issues, thus bringing staff involved in advising, recruitment and enrollment, student services and supports, credit for prior learning, data systems, and other areas into the college's career pathway efforts.

5. Attention on Outcome Metrics and Career Pathway Data

The focus on developing stackable credentials was partly influenced by the fact that the short-term credentials of ETDs and career pathway certificates awarded in high demand fields were included in the outcome-based performance funding metric of "credential attainment." This precipitated colleges' interest in optimizing credential attainment and having a clear understanding of their ability to do so. As we noted in the interim evaluation report, this revenue incentive brought attention to the need to strengthen college data systems to support career pathway advancement.

The most significant action on career pathway outcome metrics and data came from the WTCS office dealing with research and accountability. Using Advancing Career Pathway Development grant resources, staff created the WTCS Career Pathway Scorecard approximately halfway into the grant period (see Appendix D). Through using the Scorecard, WTCS produced annual data in six areas:

- 1) transitions from secondary to postsecondary;
- 2) transitions from basic skills to postsecondary;
- 3) completions in postsecondary gatekeeper courses;
- 4) career pathway programs, completions, and progressions;
- 5) embedded technical diploma educational performance; and
- 6) embedded technical diploma employment performance.

The Scorecard presented college and state data for the 2013-2017 college program years.

The Scorecard represents a significant step in legitimizing the importance attributed to career pathway development across the technical colleges. The Career Pathway Scorecard currently focuses on stackable credentials and the students within those programs. According to WTCS officials,⁴⁶ the intent is to expand the Scorecard to include bridge programs and articulations to four-year colleges, thus encompassing the three components of educational programming. Adding these components will be an important next step that could foster increased attention to the college development of career pathway bridge programs and articulation agreements.

The Scorecard also brings attention at the college level to career pathway students' educational and employment performance. CPCs report that this has led to some college institutional researchers becoming more involved in career pathways as they recognize the need to better understand how their institutional data systems collect and report data on career pathway participants.

SECTION 4

Factors Challenging Career Pathway Development

Although the colleges made significant progress in advancing career pathway development, there were challenges affecting their progress during the four years of the grant. The evaluation team identified three factors that challenged colleges during their efforts to expand career pathways:

- » College career pathway development could have been stronger had technical colleges focused more attention on strengthening their data systems to measure and inform career pathway program development and student outcomes;
- » Colleges did not give significant attention to some key features of the career pathway model, such as developing adult career pathway bridges and addressing the support needs of pathway students; and
- » Colleges would have benefited from having clear expectations and goals for advancing and scaling career pathways.

FACTORS THAT CHALLENGED CAREER PATHWAY DEVELOPMENT

Figures 2 and 4 depicted the institutional areas to which colleges might have devoted attention as they engaged in their career pathway development work. Several areas that received modest attention are noteworthy, especially when considered in the context of discussions with technical college staff. The evaluation team identified three factors that challenged and restrained career pathway development.

1. Technical College Data Systems

The issue of career pathway data gained significant attention at both the state and college levels in Wisconsin—highlighting the importance of using student data systems to assess career pathway educational and employment outcomes, as well as to examine return on investment and equity considerations.

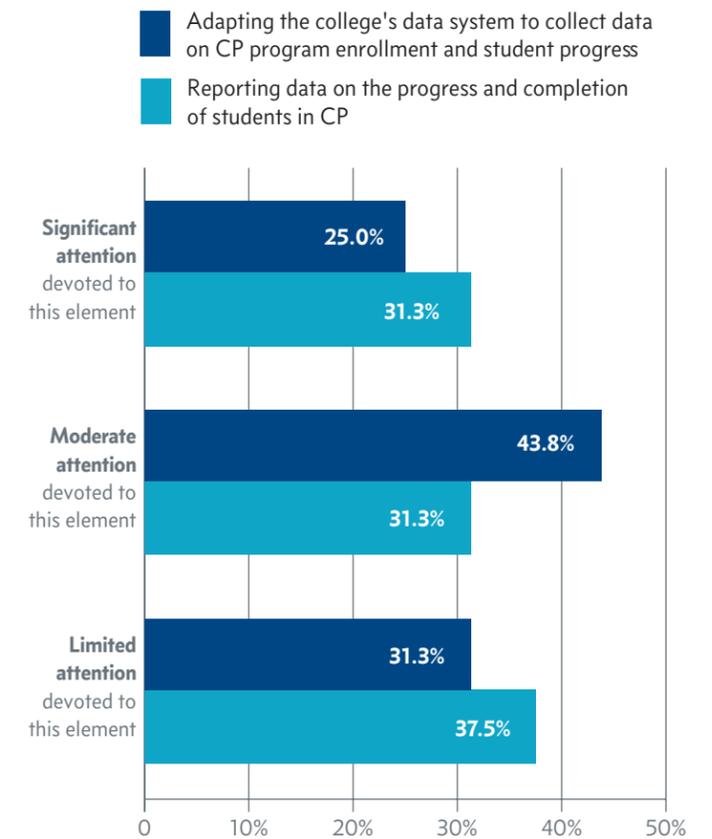
As depicted in Figure 7, the senior leaders' survey revealed that colleges gave less significant attention to their data systems and career pathway data than other career pathway policy or practice areas, with the exception of financial aid.⁴⁷ These results are consistent with the interim evaluation report, in which we noted that colleges were limited in adapting institutional data systems to collect career pathway data.

Over the past two years, colleges have increasingly acknowledged the importance of documenting the awarding of embedded technical diplomas and career pathway certificates. Colleges have also acknowledged the importance of the WTCS-provided Career Pathway Scorecard, data cubes, and other resources designed to allow technical colleges to identify pathway students and conduct institutional analyses of those students' outcomes.

Yet, interviews with CPCs and other college staff revealed that these efforts have not taken hold within their college. Broader on-site interviews further noted colleges have limited internal capacity to analyze and report career pathway student progress and completions due to the many demands on data staff; and due to the need for costly system improvements. However, many CPCs and staff expressed a desire to have college specific data and evidence that might be helpful in showing the benefits and "return on investment" of the career pathway work at their institution.

A handful of colleges have adjusted their internal data collection system to produce useful data on credential attainment. A subset of these colleges enhanced their ability to understand career pathway student progress along a pathway, as well as labor market outcomes. These actions, although not extensive, helped stimulate one important institutional policy change to auto-award stackable credentials upon attainment that several colleges have implemented.

FIGURE 7:
Extent to Which WTCS Colleges Prioritized Data-related Policies and Practices during the Grant



Source: Survey of Senior Leaders at WTCS Colleges, 2018

2. Limited Attention to Key Components of the Career Pathway Model

WTCS colleges understand that a career pathway program is potentially composed of bridges, stackable credentials, and articulation to a four-year program. And as noted earlier, supports for career pathway participants are also a significant feature of the model. Yet despite this understanding, colleges did not give substantial attention to considering all components of the career pathway model during the grant period.

On-site interviews indicated that college career pathway development, with some exceptions, does not commonly bring together staff dealing with secondary systems, adult basic skills, and articulations to consider all pathway components in developing or modifying a specific career program. Without involving staff from these systems, bridges and articulations received lesser attention than stackable credentials, perhaps resulting in modest efforts to build on-ramps or bridges into and from career programs during the grant period.

Although expanding adult career pathway bridges was not a primary focus of colleges' grant efforts, final interviews during late 2017 and early 2018 revealed one college had recently secured state Workforce Innovation and Opportunity Act (WIOA) Title II⁴⁸ adult and family literacy funds, in addition to their standard grant.

These funds were awarded to develop integrated education and training adult career pathway bridges connecting to college career pathway programs; this effort is targeted for populations with low-basic skills and provides some participants with enhanced supports.⁴⁹ More of this effort is needed if colleges are to offer full or comprehensive career pathway educational programming for all students, especially adults with low basic skills.

College career pathway development work also gave less attention to student advising and supports than other areas. As shown in Figure 4, only 25 percent of colleges gave significant attention to advising, and 37.5 percent to student support services. This limited attention is notable as student supports is a specific feature of the WTCS definition of career pathways, and advising is considered an important service for effectively operating career pathway programs.

College interviews revealed uncertainty about how to link career pathway program participants with support services outside the current student services system. It was noted by several stakeholders, and will be discussed in more detail in the next section, that the emerging technical college work on Guided Pathways⁵⁰, especially on student advising and services, could be very useful if clearly tied to their career pathway accomplishments.

3. Setting Clearer Expectations and Goals for Career Pathway Development

Researchers have documented that the goal of transforming a system to adopt an innovation or strategy—such as career pathways—and take it to scale requires articulating from the outset what it should look like at the end.⁵¹ This can mean providing specific guidance, outcome goals, and numerical targets, even if aspirational, for career pathway development at the state or college level.

The Advancing Career Pathway Development initiative was designed to advance and scale career pathway development in Wisconsin's technical colleges, yet clear goals for career pathway development and progress were not established. This lack of goals for parent programs with embedded credentials, on-ramps from adult education programming, and articulation with four-year programs, left each college to determine for itself how to approach and how far to push career pathway development.

Additionally, it is notable that the Career Pathway Scorecard established a metric for counting ETDs and the state's outcome funding process reinforced the importance of ETDs; an unintended consequence was it reinforced colleges' attention to stackable credentials, while the exclusion of a clear metric to count adult career pathway bridges may have inadvertently distracted colleges from similar attention to developing adult career pathway bridges.

Similarly, the need to address institutional policies and practices to better facilitate career pathway development became widely understood by technical colleges during the last two years of the grant. Without clear expectations or guidance in this area, colleges individually determined whether and how to approach this activity. Thus, even policy areas like auto-enrolling students into embedded credentials along an educational pathway or auto-awarding credentials once earned, were not adopted by all colleges.

Despite the notable progress toward expanding career pathways, addressing institutional policies and practices, and achieving systemwide culture change, the scale of the colleges' efforts could have benefitted from: a) concrete goals for all components of their career pathway model; and b) prioritization of policies and practices to support career pathway development.

SECTION 5

Conclusion: Opportunities for the Future and Lessons for the Field

Wisconsin's effort to transform the educational programming of its technical colleges through a career pathway model is perhaps the most ambitious and extensive career pathway effort in the country. It also may be the most successful to date.

WTCS, in collaboration with the 16 technical colleges, built a solid foundation to encourage, incent, support, and embrace career pathway development. The Advancing Career Pathway Development grant contributed considerably to the colleges' committing to develop and institutionalize the career pathway model by building consensus with faculty, staff, and employers on the value of career pathways, and by dedicating staff to make that happen. As expressed by college presidents, career pathways are the new norm for delivering educational programming and services in their institution.

As noted in Section 3, the grant investment in college career pathway coordinators from 2015-2018 is fundamental to this success. The CPCs' work in their respective institutions to educate and build support for career pathways, as well as take actions to develop pathway programs, was significant. Similarly, their steps to create a self-assessment tool to guide their work in strengthening institutional policies and practices were also significant.

The career pathway work undertaken by technical colleges with the TAACCCT grant is impressive and fulfills a key grant goal of bringing "career pathways forward as the best and prime model for adult learner success across the 16 college districts".⁵² Some technical colleges reviewed all their career programs to determine those appropriate for career pathway development, suggesting attention was paid to the goal of scaling career pathway programs within their institution.

As the technical colleges move forward with developing career pathways, there are several opportunities to strengthen and advance this work. We discuss those opportunities in the first part of this concluding section. We then share lessons that others might consider as they move to advance career pathway development in states, systems, or colleges.

OPPORTUNITIES FOR THE FUTURE

During the evaluation, we identified factors that likely will be important to technical colleges' future efforts to advance and scale career pathway development. Two data sources informed the identifications of these factors: responses from the senior leaders survey and observations from interviews during on-site visits. The four factors are: 1) supporting institutional actions; 2) clarifying work on Career Pathways and Guided Pathways; 3) sustaining career pathway work and staff; and 4) enhancing partnerships with workforce system.

Supporting Institutional Actions

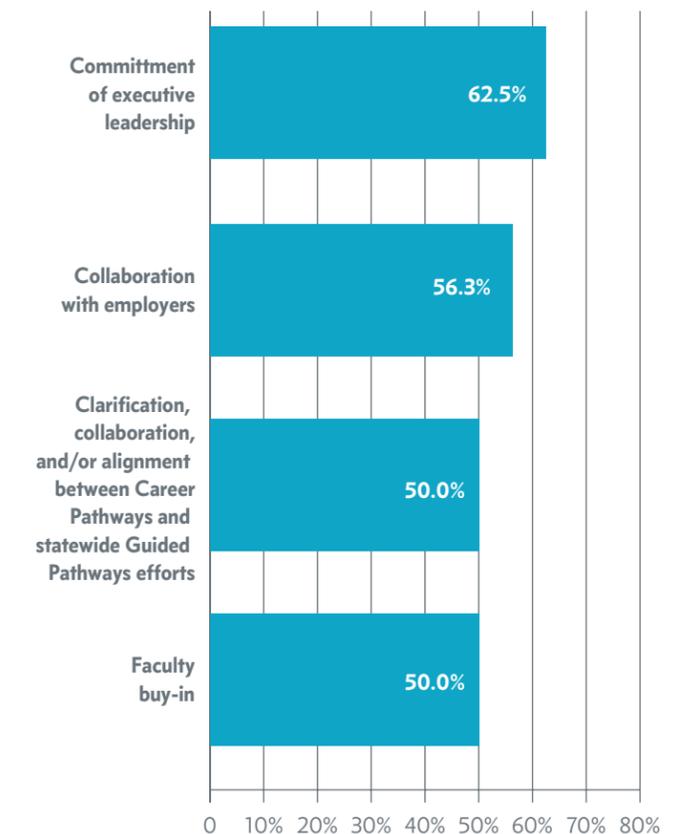
The senior leaders survey asked colleges to identify factors important to future career pathway development. Figure 8 depicts four factors (out of 12) deemed essential by 50 percent or more of the colleges for future career pathway development. Two things are notable.

First, three of these factors were also considered to contribute to career pathway development during the grant period (see Section 3). Not surprisingly, college executive leadership is the highest rated factor (62.5%), as Wisconsin technical college presidents have significant authority to set the goals and strategies for their institution. And as noted previously, the 16 college presidents have played an important role in collectively taking actions that support career pathway development. The second most significant factor is employer collaboration, perhaps reflecting the degree to which college senior leaders see employers as a fundamental constituent of the college education and training programs and as essential partners in their operations.

Second, these four factors are internal to the leadership and operations of the institution. This is in contrast to other factors offered, such as external resources; policies from other state entities like public instruction, workforce and economic development; and policy and incentives from WTCS.

These results do not suggest that external factors are unimportant; rather, they reflect an understanding by college leaders that their ability to further advance career pathway development is dependent on their internal actions. And as discussed below, sustaining those internal actions depends on the institution's ability and willingness to prioritize resources for staff to continue that work.

FIGURE 8:
Key Factors Important for Future Career Pathways
Development



Source: Survey of Senior Leaders at WTCS Colleges, 2018

Clarification and Collaboration on Career Pathways and Guided Pathways

As indicated in Figure 8, the colleges identified that addressing issues associated with the recent WTCS initiative to promote guided pathways is one of the most essential factors for future career pathway development.

We raised this issue in the interim evaluation report, citing that WTCS embarked on career pathways many years before the “guided pathways”⁵³ movement was conceptualized and operationalized in the broader field. Interviews with senior leaders revealed that there were mixed understandings about the similarities and differences between the two initiatives, and it was important to pay attention to the emergence of the guided pathway movement and its influence on the statewide goals to scale and align career pathways among all technical colleges. Eighteen months later, those sentiments and the overall finding remain salient. However, discussions with CPCs over the past year suggest there is opportunity to treat Career Pathways and Guided Pathways initiatives as complementary.

This opportunity is driven by the overall assessment of the evaluation that the Wisconsin career pathway initiative is well on its way to transforming educational programming within the technical colleges—thus providing clear, structured, and visibly represented roadmaps for students. Importantly, the availability of transparent pathways and proactive guidance for students to enroll and progress along these pathways aligns with a fundamental goal of Guided Pathways.

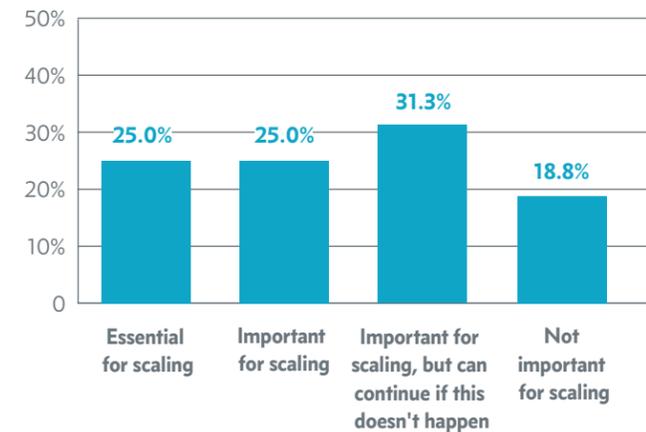
Moreover, senior college leaders noted they have yet to devote sufficient attention to strengthening student advising and supports in their career pathway actions. The Guided Pathways initiative’s focus on improving student advising and support strategies represents an opportunity for colleges to connect or integrate this work with their career pathway efforts.

Sustaining Dedicated Career Pathway Work and Staff

The technical colleges will be challenged with the departure of external resources that fuel and support career pathway development. These resources include the TAACCCT grant for Advancing Career Pathway Development, as well as other grants over the past four years that supported career pathway development.

A primary component of advancing career pathways is the role of the career pathway coordinator. We noted throughout this report that the CPC position was deemed the most valuable factor for career pathway development over the past four years. Figure 9 shows when we asked senior leaders about sustaining the position after the grant, the support was mixed; a finding that is consistent with colleges’ final grant reports. About half of the colleges reported that the CPC position was being sustained while other colleges indicated that the function would be sustained by folding CPC responsibilities into another position. Thus, the CPC function would not be supported full-time.

FIGURE 9:
Importance of Sustaining CPC after the Grant



Source: Survey of Senior Leaders at WTCS Colleges, 2018

It is possible that colleges believe progress made in establishing stackable credentials mitigates the need for a full-time coordinator. However, despite considerable progress, much work remains—especially around on-ramps to career pathways, articulation with four-year programs, and revamping advising and support services. It will be critical for colleges to have dedicated staff with responsibility for this ongoing effort to strengthen institutional policies and practices as needed for effective career pathway programs.

The current WTCS president has spoken publicly on the issue of sustaining the career pathway work, acknowledging that the initiative had reached the point where colleges needed to implement sufficient bridges and pathways to meet student needs. In doing so, the president noted that more resources would be required, but indicated that relying on external grants or “braiding funding” from other sources was not the answer either. Instead, colleges must consider their own institutional resources in creating a demand or market for bridges and pathways. Once employers and agencies (e.g., human services, vocational rehabilitation, and workforce training) are convinced of the value of career pathways, they would be more likely to invest in or pay for bridge and pathways services.⁵⁵

Enhancing Partnership with the Workforce System

In addition to support from WTCS, the state workforce development system is a primary partner for Wisconsin’s career pathway development initiatives. A clear expectation of this partnership is that it would lead to important working relationships at the local/regional level between technical colleges and workforce groups on career pathway development.

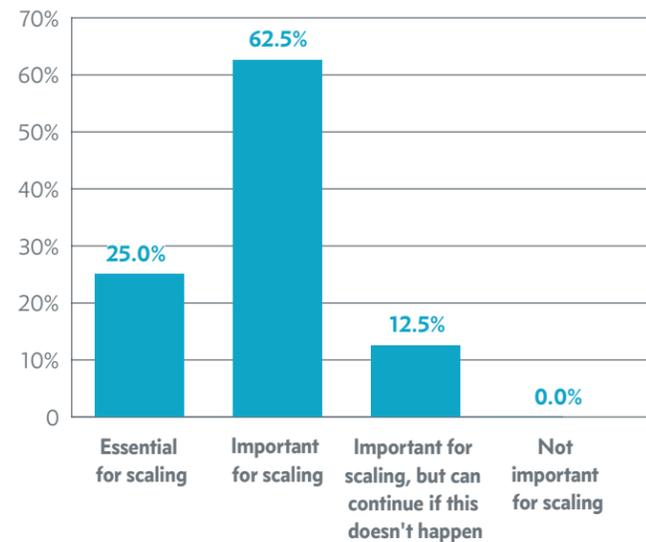
As noted in Section 2, WTCS requires colleges to engage local workforce groups and training providers in the development of their career programs. Technical colleges, however, reported modest engagement with local workforce groups in their career pathway development efforts. The primary engagement for career pathways is relational and generally revolves around sharing information. The potential for intermediary workforce groups to serve as conduits from educational institutions to local employers for guidance on career pathway development is narrow in Wisconsin, as technical college faculty and staff have historically worked directly with local employers involved in their career programs.

In discussing this issue with CPCs, it seems that expectations for career pathway development partnerships are limited to these relational activities. Although most reported awareness that the 2014 WIOA legislation gave high priority to locally supported workforce groups to engage in and support career pathway and integrated education and training strategies,⁵⁶ most CPCs were unsure of what this could mean for their colleges in terms of career pathway development and advancement.

Missing from career pathway discussions are opportunities for workforce groups to make referrals to adult bridges and stackable credential programs. This opportunity also could mean co-enrolling students in WIOA Title I and II, thus making training and support resources available to participants. Such actions could help generate a pipeline of low-skilled adults and perhaps stimulate more bridge programming. In addition, workforce groups can help finance the development of career pathway programs. As noted earlier, at least one college has taken steps to secure specific WIOA Title II funds to develop a bridge program for a targeted adult population; which was done in partnership with local workforce groups. Other opportunities should exist given the 2016 federal commitment to career pathways across multiple agencies and programs. One example would be working with vocational rehabilitation to ensure that people with disabilities have access to career pathway programs.⁵⁷

There appears to be support among college senior leaders for addressing this issue. In the senior leaders survey, we asked about factors important to continuing career pathway development over the next three years. As shown in Figure 10, a strong majority of technical colleges—87.5 percent—indicated that collaboration with workforce groups is important or essential.

FIGURE 10: Importance of Workforce Collaboration for Scaling Career Pathways



Source: Survey of Senior Leaders at WTCS Colleges, 2018

LESSONS FOR THE FIELD

Wisconsin's career pathway effort is expected to advance and evolve. The extensive work over the past years informs a rich set of lessons for undertaking such a major initiative across a 16-college postsecondary system. We offer five lessons that other states and systems may consider when embarking on a system-wide career pathway development initiative.

1. Make career pathway development the top priority for transforming educational programming.

Many strategies and models have been offered to transform educational programming in two-year postsecondary institutions; career pathways are among them. Central to Wisconsin's career pathway progress has been the consistent and clear message from senior executives that a career pathway model is the chosen strategy, and its implementation is a top priority. To reach this point, three things are necessary:

» **First**, gain consensus at the system and college level on the importance of transforming educational programming. This includes both system-level and college staff with responsibility for programs and curricula; the allocation of institutional resources; professional development; and data collection, measurement, and reporting. For career and technical programs, engaging local employers to get their insights and support for a new approach to educational programming is also critical.

- » **Second**, articulate a clear vision and framework for the career pathway model and define expectations. The technical colleges operated with a clear vision and framework for career pathways. While the vision and framework evolved, the idea of stackable credentials and bridges remained central, and guided the work of the technical colleges. Such a vision and accompanying work is best supported with clear expectations and numerical goals, so that progress can be monitored and the degree of transformation assessed.
- » **Third**, take deliberate actions to clarify and, when possible, coordinate and align new initiatives with the existing career pathway vision and work. At this point in time, the most prominent new national initiative is Guided Pathways. In Wisconsin, the goals of both initiatives are similar as are operational features such as student advising, support services, and academic pathways with transparent roadmaps. It is important that executive leaders act to ensure these two similar initiatives are aligned and seen as complementary, rather than competing, efforts.

2. Build a sound foundation for career pathway development and operations.

The experience of the technical colleges shows that progress requires significant actions to foster and support the work, and involves fundamental changes and improvement in existing system and institutional policies and operations. Notable, and perhaps most important, were system program approval and modification processes that facilitated and supported the development of stackable credentials. In addition, actions to make career pathway development significant in system resource allocation policies accentuated the importance of the work. Likewise, colleges must examine their institutional setting, giving attention to addressing the needs of all students, including underserved populations as well as strengthening a variety of policies and practices such as student recruitment, enrollment, advising, supports, and the award of credentials.

3. Dedicate staff to guide the project and engage stakeholders for support.

The TAACCCT career pathway grant was designed to support college career pathway development, with a specific intent to fund college staff dedicated to guiding and conducting this initiative. The CPC at each college was a highly valued resource for explaining, supporting, and executing pathway development. This was particularly important relative to gaining faculty support, as their buy-in to the concept was critical to institutionalizing the model. The dedicated CPC position provided the time and knowledge to work with them in a hands-on way.

The CPC also helped engage and involve other college staff through steering committees and work groups. Finally, CPCs played an important role in gaining the support of local employers. *The CPC role and effort was indispensable to the colleges' success and illustrated the importance of having staff to champion such an effort.*

4. Seek external funds, but plan to rely on existing resources.

The technical colleges were fortunate to obtain significant external resources to support the start and progression of the career pathway initiative. This fortune was not luck, but a reflection of tangible commitment to pursue a long-term system change initiative—as evidenced by the decision of college presidents to solicit TAACCCT grants for rounds two, three, and four as a consortium focused on career pathway development.

Perhaps soon, given current budget challenges, the colleges will further expand the use of institutional resources to sustain career pathway implementation and utilization, thus signifying career pathways are the new norm for delivering educational programming and services.

5. Strengthen data systems, as well as analytical capacities, early in the development process.

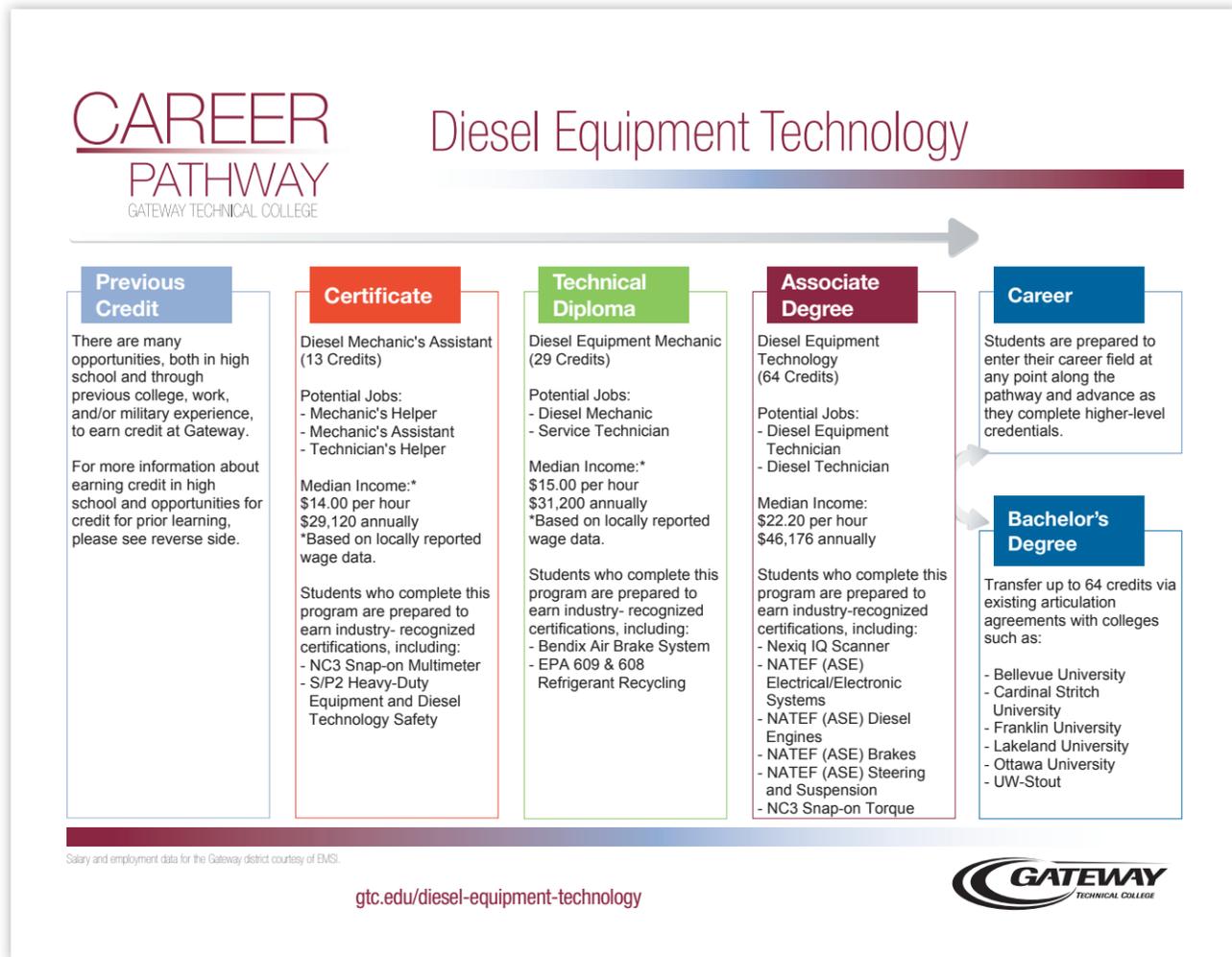
WTCS and some colleges have taken initial steps to document pathway programs and credential development, and to identify pathway participants and measure their educational progress and labor market outcomes. These efforts have stimulated an enhanced awareness of the importance of generating better data and evidence about the benefits of a career pathway model for students and employers, as well as a need to understand the value of specific components and features of pathway programs.

This type and level of evidence is important for continuous program improvement, as well as for informing and addressing institutional resource and budget challenges.

ENDNOTES

- 1 Wisconsin Technical College System, proposal to the Joyce Foundation to participate in the *Shifting Gears* initiative, July 21, 2006. The proposal was funded and the initiative started in 2007.
- 2 There are many definitions of career pathways, many of which are directed at systems other than postsecondary education. For one perspective on the recent history and evolution of career pathways see: Uvin, Johan E. "Are We on the Brink of Something Big? Reflections on the Current and Future State of Career Pathways Policy and Practice" as appears in *COABE Journal – Special Edition on Career Pathways*, June 2018, pg. 97.
- 3 The following publications, starting in 2002, report on studies and initiatives that provided an impetus for the growing interests in the community college-based career pathways at that time.
 - Allsid, J., Gruber, D., Jenkins, D., Mazzeo, C., Roberts, B., and Stanback-Stroud, R. *Building a Career Pathways System: Promising Practices in Community College-Centered Workforce Development*, Workforce Strategy Center, August 2002.
 - Jenkins, Davis. *Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy*, Workforce Strategy Center, April 2006.
 - Mazzeo, C., Roberts, B., Spence, C., and Strawn, J., *Working Together: Aligning State Systems and Policies for Individuals and Regional Prosperity*. Workforce Strategy Center, December 2006.
 - Spence, C. and Jenkins, D. *Arkansas Career Pathways Initiative: Progress Report of Activities and Outcomes during Year One*. Workforce Strategy Center, January 2007.
- 4 Jenkins, D. Page 6.
- 5 Wisconsin also received grants from all four rounds of the TAACCCT initiative. But as explained in the following citation, Round 4 also had the opportunity to receive additional grant awards on special topics, such as career pathway advancement. See: U.S. Department of Labor SGA/DFA PY-13-10, page 20, 2014.
- 6 The evaluation team sent a survey to the senior leader at each of the 16 technical colleges who has oversight over career pathway efforts. The survey included questions about the focus on career pathway development during the grant, progress made in scaling pathways through the grant, progress in institutionalizing career pathways, and potential factors that may affect career pathway development in the future. Responses were received from all colleges.
- 7 The evaluation team established a framework of indicators derived from Alliance for Quality Career Pathways report of June 2014, "SHARED VISION, STRONG SYSTEMS: The Alliance for Quality Career Pathways Framework Version 1.0". The evaluation framework encompassed six areas for attention:
 1. Commitment to a clear vision and strategy for career pathways
 2. Engagement with employers to integrate sector strategy principles
 3. Focus internal and external resources to support career pathways
 4. Implement supportive policies and procedures
 5. Use data and shared measures
 6. Implement and integrate evidenced-based career pathway best practices and processes
- 8 Valentine, J., Roberts, B., Sedlak, W., Price, D., and McGhee, R. *Advancing Careers and Training (ACT) for Healthcare: Interim Evaluation Report*. DVP-Praxis, Equal Measure, and Brandon Roberts + Associates, December 2016.
- 9 The Joyce Foundation as part of its Shifting Gears initiative supported Wisconsin's RISE initiative. See: <http://www.joycefdn.org/news/2015-shifting-gears-report-released>.
- 10 WTCS proposal to the Joyce Foundation, July 2006.
- 11 Roberts, B. and Price, D. *Strengthening State Systems for Adult Learners: An Evaluation of the First Five Years of Shifting Gears*. Chicago: Joyce Foundation. December 2012.
- 12 <https://www.wistechcolleges.org/about>
- 13 See the following publications:
 - Roberts, B., Strawn, J., and Mazzeo, C. *The Pathways to Advancement Project: How States Can Expand Postsecondary Educational Opportunities for Working Adults*. The National Governors' Association, January 2009.
 - Stephens, Rosanna. *Charting a Path: An Exploration of State Career Pathway Efforts in Arkansas, Kentucky, Oregon, Washington and Wisconsin*. Seattle Jobs Initiative May 2009.
 - Ganzglass, Evelyn. *Scaling "Stackable Credentials": Implications for Implementation and Policy*. Center for Law and Social Policy March 2014.
- 14 Some technical colleges do offer liberal arts transfer degrees directed to the four-year college system in Wisconsin. However, the Wisconsin four-year system does have 14 two-year transfer programs tied to their state's four-year colleges, serving about 14,000 students annually. See: <http://www.uwc.edu/about>
- 15 Roberts, B. and Price, D. *Building Career Pathways for Adult Learners: An Evaluation of Progress in Illinois, Minnesota, and Wisconsin After Eight Years of Shifting Gears*. Chicago: Joyce Foundation, September 2015.
- 16 Unless otherwise noted, the material in this subsection on system factors is taken from the prior cited report by Roberts and Price, titled *Building Career Pathways for Adult Learners (2015)* Endnote xv), which discusses key factors influencing career pathway development in Wisconsin, especially by WTCS.
- 17 WTCS Education Services Manual (ESM) revised 6-18-2018. (The ESM serves as the official document and guide for Wisconsin Technical College System processes and procedures related to educational services.)
- 18 Roberts and Price. *Strengthening State Systems for Adult Learners*, 2012. Page 22.
- 19 See U.S. Department of Labor SGA/DFA PY-13-10, 2014, pages 20-23, for the special provision soliciting proposals for consortium-focused career pathway advancement initiatives.
- 20 WTCS supplementary proposal to USDOL on Advancing Career Pathways, 2014, page 8.
- 21 ESM. Page 57.
- 22 <https://mywtcs.wtcsystem.edu/student-success/career-pathways>
- 23 An example of the non-credit bridge is one technical college's effort to break-apart current credit curriculum into smaller offerings that could be offered as contracted training opportunities or continuing education courses that bridged to credit-based programs. Students passing an assessment at the end of the non-credit "bridged program" would obtain advanced standing for the credit-based program. And if a student opts out of the assessment they still receive their continuing education credits, and if they decide at a later date to request the assessment they can do so through college's Credit for Prior Learning process. Citation: DuBenske, Scott, Van Doren, Toni, and Kornell, Annette. "Career Pathways in Wisconsin", as appeared in the *COABE Journal – Special Edition on Career Pathways*, June 2018, pg. 70
- 24 ESM, pages 46-47.
- 25 ESM, page 57
- 26 ESM, page 49.
- 27 Valentine, Jess Lewis. *Building Bridges in Wisconsin: Connecting Working Adults with College Credentials and Career Advancement*, Center on Wisconsin Strategies, May 2010
- 28 A U.S. Department of Education Tool Kit for Stackable Credentials Development recognizes the career pathway development work in Wisconsin, and provides a template of one technical college's career pathway for those considering developing their own career pathway maps. See: https://s3.amazonaws.com/PCRN/docs/Stackable_Credentials_Tool_Kit.pdf.
- 29 https://careerpathways.workforceegps.org/resources/2016/10/20/10/11/Enhanced_Career_Pathways_Toolkit
- 30 <https://www.clasp.org/sites/default/files/public/resources-and-publications/files/aqcp-framework-version-1-0/AQCP-Executive-Summary-FINAL.pdf>
- 31 ESM, pages 1-2.
- 32 ESM, pages 5-7.
- 33 ESM, pages 21-24.
- 34 <https://mywtcs.wtcsystem.edu/student-success/career-pathways>.
- 35 WTCS Supplementary Proposal to USDOL, page 1.
- 36 As noted earlier, the focus at the college level was driven in large part by the way grant resources were primarily allocated to the 16 technical colleges to support them to advance and scale career pathway development in their institutions and district.
- 37 The evaluation framed its work around the first two outcomes based on the information provided in the grant proposal and indicators WTCS identified for the "College Level Activity to Expand Career Pathways" document. WTCS indicators established for colleges included: a) "percent of the college's programs with WTCS approved Embedded Credentials. (Note: This should not even approach 100 percent, because not all programs are appropriate for stacked credentials)", and b) college administration, instruction, and student support department policies enable Career Pathway design and support Career Pathway learners. The third outcome is considered a result of the first two outcomes and the multi-year WTCS executive leadership on this matter.
- 38 Karana, W., Dresser, L., and Mackey, M. *Wisconsin Career Pathways: Postsecondary Education for Low-Income, Low-Skill Adults*. Center on Wisconsin Strategies, June 2015. Pages 6 and 8.
- 39 Valentine, J. Page 31.
- 40 Ibid. Page 31.
- 41 See: <https://dpi.wi.gov/acp>.
- 42 As an example, one college reports establishing a HSED program that contextualized its math, writing, and reading courses in manufacturing and added a Hand Tool course resulting in students earning credits and having access to pathways feeding directly into the WTCS approved ETDs and pathway certificates. See Dept. Public Instruction on the HSED 509 career pathway provision at: <https://mywtcs.wtcsystem.edu/wtcsinternal/cmspages/getdocumentfile.aspx?nodeguid=cfd0bed-39c4-4443-91c0-47af397c0905>.
- 43 The technical colleges provided WTCS final grant reports and some included number of career pathways established and the ETDs and credentials created within those programs; some also indicated the percent of college career programs addressed during this period. For example, one college reported that it had established 28 pathway programs that included 46 ETDs and pathway certificates; the 28 pathway programs represented 58 percent of college career programs. Not all colleges provided such data in their final report and an aggregate accounting of provided data was not available as of the writing of this report.
- 44 AQIP, or Academic Quality Improvement Program, is an action project of the Higher Learning Commission, the regional accreditation agency for Wisconsin technical colleges. Colleges identify an AQIP project central to their institution's overall success and execute it as a core component of accreditation.
- 45 <https://mywtcs.wtcsystem.edu/student-success/career-pathways>.
- 46 Interviews with WTCS officials, May 2018.
- 47 A July 19, 2018 Center for Law and Social Policy (CLASP) meeting on state career pathway initiatives discussed this issue with representatives from a number of states. It was noted that states such as Oregon, Texas and Washington have worked to address this issue by seeking to utilize the Ability to Benefit provision to support students entering career pathways thru adult basic skills bridges and Integrated Education and Training (IET) efforts.
- 48 Workforce Innovation and Opportunity Act (WIOA). (2014). Pub L. No. 113–128, Stat. 1425 2014.
- 49 Example obtained from technical colleges' final grant report for the Advancing Career Pathway Development initiative, Spring 2018. (See End Note 41.)
- 50 The concept of guided pathways is a strategy to accelerate students' college completion by presenting "courses in the context of highly structured, educationally coherent program maps that align with students' goals for careers and further education. Incoming students are given support to explore careers, choose a program of study, and develop an academic plan based on program maps created by faculty and advisors." See: <http://ccrc.tc.columbia.edu/media/k2/attachments/What-We-Know-Guided-Pathways.pdf>.
- 51 Coffman, J. "Broadening the Perspective on Scale," The Evaluation Exchange, Vol. xv, No. Boston: Harvard Family Research Project, Harvard Graduate School of Education, Spring 2010.
- 52 WTCS supplementary proposal to USDOL on Advancing Career Pathways, 2014, page 8.
- 53 Bailey, Thomas, Smith, Shanna Jagers, and Jenkins, Davis, *Redesigning America's Community College: A Clearer Path to Student Success*. Community College Research Center, April 2015.
- 54 Valentine, J. Page 32.
- 55 Roberts, B. and Price, D. *Building Career Pathways for Adult Learners*. Page 33.
- 56 Workforce Innovation and Opportunity Act (WIOA). Online at <https://www.congress.gov/113/bills/hr803/BILLS-113hr803enr.pdf>
- 57 See: https://careerpathways.workforceegps.org/resources/2016/04/27/12/12/Career_Pathways_Joint_Letter_2016

APPENDIX A: EXAMPLES OF COLLEGE CAREER PATHWAY PROGRAM MAPS



NORTHEAST WISCONSIN TECHNICAL COLLEGE PATHWAYS

MANUFACTURING

MANUFACTURING PRODUCTION

PROCESS DEVELOPMENT

2017-2018

BACHELOR'S DEGREE

ASSOCIATE DEGREE

CERTIFICATE

K12

THIS PROGRAM WOULD TRANSFER TO
University of Wisconsin - Green Bay
OR University of Wisconsin - Oshkosh

To View Complete List of College Transfers for Bachelor's Degrees:
nwtc.edu/collegetransfer

ELECTRO-MECHANICAL ASSOCIATE DEGREE
10-620-1
Total Credits: 66

\$37,437*
potential salary

INDUSTRIAL MAINTENANCE CERTIFICATE
90-462-1
Total Credits: 14

\$26,998*
potential salary

K12 COURSES TOTAL CREDITS: 18

Not all K12 credits will apply to all credentials. Your high school may offer these transcribed credits that may apply towards a higher credential.

| Catalog Number | Course Title | Credit Value |
|----------------|-----------------------------|--------------|
| 10-664-100 | Automation 1: Control Logic | 1 |
| 10-664-101 | Automation 2: Motor Control | 1 |
| 110-660-140 | DC 1: Introduction | 1 |
| 10-801-136 | English Comp 1 | 3 |
| 10-620-100 | Fluids 1: Basic Pneumatics | 1 |
| 10-809-172 | Intro to Diversity Studies | 3 |
| 10-809-198 | Intro to Psych | 3 |
| 10-620-170 | Intro to Robotics | 1 |
| 10-620-140 | Machine Wiring & Safety | 1 |
| 10-801-196 | Oral/Interpersonal Comm | 3 |

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WORK EXPERIENCE
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920-498-5444 or 1-888-385-6982

*Source: Median Salary based on NWTC Gradate Follow Up and Indeed.com, September 2017

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36

ADVANCING CAREER PATHWAY DEVELOPMENT

ADVANCING CAREER PATHWAY DEVELOPMENT

37

Human Services Associate Pathway

EXPERIENCE. SUCCESS. ONE STACKABLE CREDENTIAL AT A TIME.

Community-Based Residential Facility (CBRF) Caregiver

Technical Diploma (less than one-year)

CAMPUSES Ashland, New Richmond, Rice Lake, Superior

CREDITS 2

ESTIMATED 2018-2019 TUITION \$TBD*

POTENTIAL CAREERS
Assisted Living, Memory Care, Group Homes, Transitional Housing

POTENTIAL STARTING WAGES
\$18,719 to \$45,756 Annually**

WITC 2017 GRADUATES
Employed Within 6 Months: 95%
Average Yearly Salary \$32,238 annually**

Upon successful completion, students are added to the Wisconsin CBRF Employee Registry and will receive the American Red Cross First Aid Basic with Choking Certification of Completion.

Substance Abuse Counselor Education

Technical Diploma (one-year)

CAMPUSES Ashland #, New Richmond #, Rice Lake #, Superior #
Online and Hybrid

CREDITS 27

ESTIMATED 2018-2019 TUITION \$TBD*

Financial Aid Eligible

POTENTIAL CAREERS ***

Substance Abuse Counselor - In Training, Assessment Counselor, Intake Counselor, Substance Abuse Counselor

POTENTIAL STARTING WAGES
\$12.57 Hourly / \$26,146 Annually**

WITC 2016 GRADUATES
Employed Within 6 Months: 100%

Average Yearly Salary \$30,449 annually**

*** Career Qualifications vary based on licensure application, examination and supervised practice/employment hours as specified and approved by the Wisconsin Department of Safety and Professional Services.

Program graduates will meet the educational requirements of State of Wisconsin - Department of Safety and Professional Services (DPS) approved Substance Abuse Counselors (SAC). <https://dps.wisconsin.gov/Documents/SACCurrentPreCertificationEducation.pdf>

Human Services Associate

Associate Degree (two-year)

CAMPUSES

Ashland #, New Richmond, Rice Lake #, Superior #

Hybrid

CREDITS 60

Only 33 of the 60 credits remain upon successful completion of the Substance Abuse Counselor Education Technical Diploma

ESTIMATED 2018-2019 TUITION

\$TBD*

Financial Aid Eligible

POTENTIAL CAREERS

Case Worker, Community Outreach/Support Worker, Income Maintenance Worker, Human Services / Information and Referral Specialist, Substance Abuse Counselor (with specialized field experience), Intake Worker, Prevention Worker, Residential Manager, Social Services Assistant, Volunteer Coordinator, Adult Day Care Worker, Human Services Technician, Counselor Assistant, Residential Counselor, Youth Care Counselor, Family Advocate, Activities Assistant, Visitation Worker, Program Aide

POTENTIAL STARTING WAGES

\$32,134 to \$39,647 annually**

WITC 2017 GRADUATES

Employed Within 6 Months: 86%

Average Yearly Salary \$35,891 annually**

Program graduates will meet the educational requirements of State of Wisconsin - Department of Safety and Professional Services (DPS) approved Substance Abuse Counselors (SAC). <https://dps.wisconsin.gov/Documents/SACCurrentPreCertificationEducation.pdf>

Graduates will be added to the Wisconsin Community-Based Residential Facility (CBRF) Employee Registry and receive the American Red Cross First Aid Basic with Choking Certification of Completion

BEYOND WITC

Bachelor's Degree

Lakeland University
The College of St. Scholastica
UW Eau Claire+
UW Milwaukee
UW Oshkosh+
UW Stout+
UW Superior+

Important Notes on Transferring

- The colleges listed above have developed an Associate Degree to Bachelor Degree Articulation Agreement with WITC (Colleges with a + have a transfer agreement directly related to the Human Services and/or similar programs such as Social Work, Human Services, and Human Development & Family Studies; Other Bachelor Degree programs vary); other colleges may accept WITC credits upon a transcript review.

- The Transfer Information Systems (TIS) allows students to review which WITC courses could be accepted at UW Colleges. Review website for details: www.wisconsin.edu/transfer

- If interested in continuing your education or transferring credits to other colleges, it is encouraged you talk to the Transfer Coordinator or Advisor at your transfer school as soon as you start thinking about the process.



*Tuition are not yet available for the 2018-2019 school year. If you have completed previous credits that transfer into the more advanced program, your costs may be less. Please speak with WITC staff if you have questions on how costs are determined. Tuition is an estimate and does not include any miscellaneous fees for various courses, tools, books, supplies or uniforms. Program book costs are in addition to tuition and fees and vary depending on course selection and where the books are purchased or rented.
**Wage and employment data is compiled from the 2017 WITC or 2016 Wisconsin Technical College System (WTCS) Graduate Follow-Up Report; if not available, wage data is derived from the wage data compiled through Economic modeling software int'l (Emsi) based on the WITC county region and the SOC codes assigned through the WTCS. The wage data presented is a range from the 10th to 25th percentile earnings in December 2017. Educational decisions should not be entirely based on the wage data presented as wages are subject to error and sampling bias. Some people may be hired at a lower or higher starting wage than what is reported here. Annual salaries, from Emsi data, are based on a 40 hour work week over 52 weeks (2080 hours).

APPENDIX B: GROWING EVIDENCE ON THE VALUE OF CAREER PATHWAYS

A major evidentiary boost for the Career Pathway movement came from a rigorous analysis of Washington State's I-Best basic skills "bridge" initiative in 2009. According to the study, participating students "achieved better educational outcomes and were more likely to continue into credit-bearing coursework, earn college credits, attain occupational certificates, and make point gains on basic skills tests than other basic skills students."¹ In addition, a WTCS analysis of pilot adult education "bridge" programs found similar results for participants, especially in programs serving English Language Learning students.²

More recently, a major analysis of the 10-year Arkansas Career Pathway Initiative (CPI), which emphasized student coaching and supports, found that low-income TANF-eligible students entering postsecondary education under the CPI are graduating with a degree or a certificate at greater than twice the average of their community college peers. African-American and Hispanic CPI participants are completing degrees or certificates at three and almost four times the rate of their fellow students of color. The study also showed that CPI participants are employed and earning significantly more income than matched comparison groups of similar low-income parents from their communities.³ Similarly, the Accelerating Opportunity (AO) initiative worked with community colleges to offer career pathway training to adults with low basic skills and provide participants enhanced services and supports. A multiple year evaluation found AO exerted positive impacts on the number of college-awarded credentials earned with many AO students earning more credentials while taking fewer credits, possibly indicating more efficient course taking and accelerated learning.⁴

A review of Oregon career pathways initiative showed its community colleges established hundreds of short-term, credit-based (12-44 credits) training programs called career pathway certificates, attracting thousand of students and resulting in 5,020 awarded career pathway certificates between 2008-2012.⁵

A recent Georgetown University analysis of all Oregon certificates found they were particularly valuable for workers in the early days of their careers and those from low-income backgrounds; in addition the analysis showed that highest annual median wage accrued to students obtaining career pathway certificates (\$34,200) over shorter-term and even higher-term certificates.⁶

Although some research on stackable credentials using national data sources finds that the labor market evidence on stackable credentials is (at best) modestly positive,⁷ other program studies have observed stronger outcomes, especially relative to educational progress. A 2016 study of Wisconsin technical college students enrolled in career pathway manufacturing programs with stacked credentials found that 48 percent of CP participants attained a credential, compared to 30 percent attainment for a matched comparison group.⁸ A 2017 dissertation on Wisconsin's career pathway/stackable credential efforts also found "support for the idea that stacked credential models warm up students, in that students who were enrolled first in a (one year) technical diploma do have an increased likelihood of completing an AAS, as supported in a study by Giani and Fox (2017) with similar findings in health pathways".⁹ And a recent 2018 early report on the national HPOG career pathway initiative serving low-income students found that participants' educational progress from one certificate training to another increased by seven percentage points relative to what would have occurred in the absence of the program.¹⁰

Finally, an Abt Associates review of more than 100 research studies found evidence of educational progress from career pathway programs, but indicated more research on labor market outcomes is needed to enhance the field's knowledge about the effectiveness of career pathway strategies.¹¹ The ABT review also identified areas warranting further research on whether "states, localities, and/or institutions (are) able to implement and sustain systems change to support career pathways approaches" and "at what scale can they operate".¹²

ENDNOTES

1 Jenkins, D., Zeidenberg, M., and Kienzl, G. *Educational Outcomes of I-BEST, Washington State Community and Technical College System’s Integrated Basic Education and Skills Training Program: Findings from a Multivariate Analysis*. Community College Research Center, May 2009 and also Wachen, John, Jenkins, Davis, Belfield, Clive, Van Noy, Michelle, *Contextualized College Transition Strategies for Adult Basic Skills Students: Learning from Washington State’s I-BEST Program Model*, Community College Research Center, Columbia University, December 2012.

2 Childress, L. *Wisconsin’s Regional Industry Skills Education (RISE) Career Pathways Bridges: An Evaluation of Career Pathway Bridge Programming in Wisconsin, 2012 – 2014*. Wisconsin Technical College System, 2014.

3 See: <http://www.collegecounts.us/overview/>.

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INTRODUCTION

Welcome to the ACT2 senior leader survey on career pathways. Thank you for completing this survey, which we expect will take 10-15 minutes to complete.

The survey asks questions related to the “exceeding the cap” grant to scale career pathways throughout the Wisconsin technical college system, also known as ACT2. The survey asks questions about the focus on career pathway development during the grant, progress made in scaling pathways through the grant, progress in institutionalizing career pathways at your college, and factors that affect career pathway development both during the grant and for the next three years post-grant.

This survey is confidential, and is not meant to evaluate the performance of individual colleges.

Individual responses will not be shared outside of the ACT2 evaluation team (DVP-PRAXIS LTD, Brandon Roberts + Associates, and Equal Measure). This survey is being sent to a senior leader at each of the 16 colleges in ACT2, and aggregate responses will help inform the evaluation’s final report, which will be released later this year.

This survey should be completed and submitted by the individuals who received the survey link directly from Equal Measure. Although you may wish to confer with other staff on your campus to answer selected questions, please do not forward this survey to the career pathway coordinator or other staff member to complete.

FOCUS/PRIORITY OF CAREER PATHWAY DEVELOPMENT AT YOUR COLLEGE

As part of the TAACCCT Round 4 grant to Wisconsin, the state received an “exceeding the cap” grant to scale career pathways throughout the technical college system. This portion of the TAACCCT Round 4 grant is known as ACT2.

The vision for career pathways in Wisconsin includes on-ramps into technical college programs from high school and adult education; embedded technical diplomas and career pathway certificates within technical college programs (i.e., stackable credentials); and articulation agreements with 4-year colleges and universities.

Please indicate the extent to which your college prioritized the following career pathway components during the past three years.

| | Our college devoted a significant amount of attention to this career pathway element during ACT2 (1) | Our college devoted a moderate level of attention to this career pathway element during ACT2 (2) | Our college devoted limited attention to this career pathway element during ACT2 (3) | Our college did not focus on this career pathway element during ACT2 (4) |
|---|---|---|---|---|
| High school pathways into technical college programs (e.g., dual enrollment, academies) (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Adult education bridges into technical college programs (e.g., in collaboration with your adult education division) (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Embedded technical diplomas and career pathway certificates within technical college programs (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Articulation agreements between technical college programs and 4-year colleges and universities (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Please indicate the extent to which your college plans to prioritize each of the career pathway components for the next three years.

| | Our college plans to devote a significant amount of attention to this career pathway element for the next three years (1) | Our college plans to devote a moderate level of attention to this career pathway element during ACT2 (2) | Our college plans to devote limited attention to this career pathway element during ACT2 (3) | Our college does not plan to focus on this career pathway element during ACT2 (4) |
|---|--|---|---|--|
| High school pathways into technical college programs (e.g., dual enrollment, academies) (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Adult education bridges into technical college programs (e.g., in collaboration with your adult education division) (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Embedded technical diplomas and career pathway certificates within technical college programs (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Articulation agreements between technical college programs and 4-year colleges and universities (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

We are interested in the progress your college made in scaling career pathways during ACT2. The questions on this page ask about your perceptions of scaling - specifically with regard to the development of embedded technical diplomas and career pathway certificates within existing and new technical college programs.

Per WTCS policy, an embedded technical diploma or career pathway certificate must be part of a longer-term parent program. A parent program can be an AA degree, AAS degree, or a 1-year or 2-year technical diploma.

How many parent programs are offered by your college? (A parent program is a program that awards an AA degree, AAS degree, or a 1- or 2-year technical diploma upon completion.)

*NOTE: Do **not** count more than one degree or technical diploma for any parent program. (i.e., If a program offers both an AA degree and a 1-year technical diploma, this should only count as one parent program.)*

What percentage of these parent programs has your college deemed appropriate to have embedded technical diplomas or career pathway certificates?

- 100% (1)
- 75-99% (2)
- 50-74% (3)
- 25-49% (4)
- 0-24% (5)

Of the parent programs deemed appropriate for having embedded technical diplomas or career pathway certificates, what percentage of these programs have at least one embedded technical diploma or career pathway certificate at this time?

- 100% (1)
- 75-99% (2)
- 50-74% (3)
- 25-49% (4)
- 0-24% (5)

PROGRESS IN INSTITUTIONALIZING CAREER PATHWAYS AT YOUR COLLEGE

In this section, we address a series of institutional policies and practices that may have been a focus of college efforts to scale career pathways.

Please indicate the extent to which your college prioritized the following institutional policies and practices to support the scaling of career pathways during the past three years.

| | Our college plans to devote a significant amount of attention to this career pathway element for the next three years (1) | Our college plans to devote a moderate level of attention to this career pathway element during ACT2 (2) | Our college plans to devote limited attention to this career pathway element during ACT2 (3) | Our college does not plan to focus on this career pathway element during ACT2 (4) |
|--|--|---|---|--|
| Developing new marketing materials to promote career pathways (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Developing career pathway maps | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Including career pathway maps in course catalog or on college website | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Developing new policies to award credit for prior learning for students who enroll in career pathways (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Developing new advising practices for incoming students that addressed career pathways (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Clarifying financial aid policies so students are eligible for financial aid when enrolling in any college-level component of a career pathway, including in an embedded technical diploma (8) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | Our college plans to devote a significant amount of attention to this career pathway element for the next three years (1) | Our college plans to devote a moderate level of attention to this career pathway element during ACT2 (2) | Our college plans to devote limited attention to this career pathway element during ACT2 (3) | Our college does not plan to focus on this career pathway element during ACT2 (4) |
|---|--|---|---|--|
| Implementing policies to auto-award embedded technical diplomas or career pathway certificates once a student completes the relevant courses (9) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Implementing policies to auto-enroll students into intermediate components of career pathways, such as career pathway certificates and embedded technical diplomas (10) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Expanding the availability of support services, both academic and non-academic, for students in career pathways | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Approving and/or executing a strategic plan that identifies career pathways as a top institutional priority (13) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Adapting the college's data system to collect data on career pathway program enrollment and student progress (14) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Reporting data on the progress and completion of students in career pathways (15) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

To date, what has been the most important policy or practice your college has changed to help scale career pathways? (Please write this in the space below. This can be a policy or practice listed in the previous question, or one not listed in the previous question.)

FACTORS FACILITATING OR CHALLENGING CAREER PATHWAY DEVELOPMENT AT YOUR COLLEGE

In this section, we ask questions about factors that may facilitate or challenge career pathway development and scaling at your college.

Please indicate your level of agreement with each of the following items:

| | Strongly agree (1) | Agree (2) | Disagree (3) | Strongly disagree (4) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| The commitment of executive leadership at the college (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The sustainability of the career pathway coordinator position or function (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| External resources to support scaling career pathways (e.g., GPR or other grants) (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Faculty buy-in for scaling career pathways (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Collaboration with local and region employers on career pathways (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Collaboration as a statewide consortium of technical colleges (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Clarification, collaboration, and/or alignment between Career Pathways and statewide Guided Pathways efforts (7) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Collaboration with local workforce development agencies and partners on career pathways (8) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Policy support and incentives from the Wisconsin Technical College System (WTCS) office (9) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cross-college collaboration of career pathway coordinators or other designated staff around scaling career pathways (10) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Alignment of state policy on career pathways from Wisconsin Department of Public Instruction, Wisconsin Department of Workforce Development, and/or Wisconsin Economic Development Corporation (11) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Presidential leadership from WTCS (12) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Please indicate your level of agreement with each of the following statements:

| | Strongly agree (1) | Agree (2) | Disagree (3) | Strongly disagree (4) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Career Pathways and Guided Pathways are complementary efforts. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Guided Pathways are the new statewide priority for technical colleges. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Career Pathways and Guided Pathways are distinct and separate state initiatives. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Guided Pathways are focused on improving advising and other support services for students. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Career Pathways will be more effective once Guided Pathways are implemented. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Guided Pathways are drawing attention away from Career Pathways. (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| It is not clear how Guided Pathways and Career Pathways are connected, if at all. (7) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

APPENDIX D:

WTCS Career Pathway Scorecard

Updated 1/25/2018

| | | Fiscal Year | | | | |
|--|---|-------------|------|------|------|------|
| | | 2013 | 2014 | 2015 | 2016 | 2017 |
| Secondary to Post-Secondary | % of Public High School Graduates who Direct Enroll to WTCS Courses | | | | | |
| | % of Public High School Graduate Direct Enrollees who Enroll to District | | | | | |
| Basic Skills to Post-Secondary | % Obtained a GED or Secondary School Diploma | | | | | |
| | % of Pre- and Post-Tested Students who Make a Gain - ABE | | | | | |
| | % of Pre- and Post-Tested Students who Make a Gain - ELL | | | | | |
| | % Entered Post-Secondary Courses in Same Year | | | | | |
| | % of Students who Attain a Secondary Credential and either Enter Postsecondary Education or are Employed within One Year after Exit | | | | | |
| Post-Secondary Gate-Keeper Course Successful Completion | % Successful Course Completion - 801 Communications | | | | | |
| | % Successful Course Completion - 804 Math | | | | | |
| | % Successful Course Completion - 806 Natural Science | | | | | |
| Active Career Pathway Programs, Completions, & Pathway Progression | Embedded Credentials with Enrollments | | | | | |
| | Embedded Credential Completions | | | | | |
| | Pathway Progression | | | | | |
| Embedded Technical Diploma Performance | % Successful Course Completion in Technical Courses | | | | | |
| | % 1st Year Graduation | | | | | |
| | % 2nd Year Retention | | | | | |
| Embedded Technical Diploma Employment, Apprenticeship Enrollees, & Graduate Transfer | % Employed | | | | | |
| | % Employed Related | | | | | |
| | % Employed in District | | | | | |
| | % Graduate Transfer | | | | | |
| | Apprenticeship Enrollees | | | | | |

METRIC BUSINESS RULES

| | Indicator | Definition/Calculation | Data Source |
|---------------------------------------|--|--|---|
| SECONDARY TO POST-SECONDARY | | | |
| 1 | % of Public High School Graduates who Direct Enroll into District WTCS Courses | Percentage of district public high school graduates who direct enroll into any WTCS course one year after graduation. Only direct enrollments from public high schools within the Colleges district are assessed. Denominator: Number of public high school graduates within the College district. Numerator: Of the graduates in the denominator, the number who enroll to the College being assessed in an aid code 10, 20, 30, 31, 32, 50, 42, 47, 73, 74, 75, 76, 77, 78 course. | WTCS Portal > Client Reporting > Career Prep/Articulation > H.S. Graduates Enrolling in WTCS |
| 2 | % of Public High School Graduate Direct Enrollees who Enroll to District | Percentage of district public high school graduates who direct enroll into any WTCS course one year after graduation and enroll within the graduate's effort district. Effort district refers to the College district boundaries that the public high school resides. Denominator: Number of public high school graduates who enroll in an aid code 10, 20, 30, 31, 32, 50, 42, 47, 73, 74, 75, 76, 77, 78 course anywhere in the WTCS. Numerator: Of the direct enrollees in the denominator, the number who enroll within the high school graduates College district. | WTCS Portal > Client Reporting > Career Prep/Articulation > H.S. Graduates Enrolling in WTCS |
| BASIC SKILLS TO POST-SECONDARY | | | |
| 3 | % Obtained a GED or Secondary School Diploma | Percentage of grant enrolled students who took all GED tests or who enrolled in ASE (NRS level 6) and received a GED or secondary credential. Students must have 12 or more Basic Skills hours of service and exited the program (S4 marked as not continuing in Grant) Denominator: Number of students who took all GED tests or who enrolled in ASE (NRS level 6) Numerator: Of the students in the denominator, the number of students who received a credential of HSED, GED, or High School Diploma | WTCS Portal > National Reporting System > Table 5 - Core Follow-up Outcome Achievement |
| 4 | % of Pre- and Post-Tested Students who Make a Gain - ABE | Percentage of ABE pre- and post-tested grant students who achieved an ABE Educational Functional Level gain within the reporting year in a topic area. Denominator: Number of students who meet the following requirements within the reporting year: reported in appropriate grant; 12 or more Basic Skills hours of service; known age, ethnicity, and gender; enrolled in an aid code 73, 74, or 76 course; have a complete set of entry and exit grade levels in a topic area. Numerator: Of the students in the denominator, the number of students who achieved a standardized post-test score that places them in a higher level within the reporting year. | WTCS Portal > National Reporting System > Table 4B - Educational Gains and Attendance for Pre- and Post-Tested Participants |

| | Indicator | Definition/Calculation | Data Source |
|---|---|--|---|
| 5 | % of Pre- and Post-Tested Students who Make a Gain - ELL | <p>Percentage of ELL pre- and post-tested grant students who achieved an ELL Educational Functional Level gain within the reporting year in a topic area.</p> <p>Denominator: Number of students who meet the following requirements within the reporting year: reported in appropriate grant; 12 or more Basic Skills hours of service; known age, ethnicity, and gender; enrolled in an aid code 75 course; have a complete set of entry and exit grade levels in a topic area.</p> <p>Numerator: Of the students in the denominator, the number of students who achieved a standardized post-test score that places them in a higher level within the reporting year.</p> | WTCS Portal > National Reporting System > Table 4B - Educational Gains and Attendance for Pre- and Post-Tested Participants |
| 6 | % Entered Post-Secondary Courses in Same Year | <p>Percentage of grant students who have a HSED, GED, or High School Diploma and enroll in postsecondary courses the same year of exiting the basic skills program. Students must have 12 or more Basic Skills hours of service and exited the program (S4 marked as not continuing in Grant)</p> <p>Denominator: Number of students who have a highest credential received of HSED, GED, or High School Diploma</p> <p>Numerator: Of the students in the denominator, the number of students enrolling in a WTCS aid code 10, 20, 30, 31, 32, or 50 course or match in National Student Clearinghouse data for a College outside of the WTCS.</p> | WTCS Portal > National Reporting System > Table 5 - Core Follow-up Outcome Achievement |
| 7 | % of Students who Attain a Secondary Credential and either Enter Postsecondary Education or are Employed within One Year after Exit | <p>Percentage of grant enrolled students who exit the program and attained a secondary credential who enter postsecondary education or employment within one year after exit.</p> <p>Denominator: Number of students who exited the grant and attained a secondary credential</p> <p>Numerator: Of the students in the denominator, the number of students who enter postsecondary education or employment within one year after exit</p> | WTCS Portal > National Reporting System > Table 5 - Core Follow-up Outcome Achievement > Secondary Credential Attainment Rate |

| | Indicator | Definition/Calculation | Data Source |
|--|--|--|----------------------------------|
| POST-SECONDARY GATE-KEEPER COURSE SUCCESSFUL COMPLETION | | | |
| 8 | % Successful Course Completion - 801 Communications | <p>Percentage of 801 Communications post-secondary courses successfully completed by program students with a C grade or better (or PP grade). Only FTE generating courses within course aid codes of 10, 20, 30, 31, 32 or 50 are included. Only course records with a course completion code of 01-Pass, 02-Fail, and 04-Withdraw are included. Only course records with a known grade are included.</p> <p>Denominator: : Number of course records with an 801 instructional area that meet the above requirements</p> <p>Numerator: Of the course records in the denominator, the number of course records with a C grade or better (or a PP grade)</p> | Course Enrollment WTCS OLAP Cube |
| 9 | % Successful Course Completion - 804 Math | <p>Percentage of 804 Math post-secondary courses successfully completed by program students with a C grade or better (or PP grade). Only FTE generating courses within course aid codes of 10, 20, 30, 31, 32 or 50 are included. Only course records with a course completion code of 01-Pass, 02-Fail, and 04-Withdraw are included. Only course records with a known grade are included.</p> <p>Denominator: Number of course records with an 804 instructional area that meet the above requirements</p> <p>Numerator: Of the course records in the denominator, the number of course records with a C grade or better (or a PP grade)</p> | Course Enrollment WTCS OLAP Cube |
| 10 | % Successful Course Completion - 806 Natural Science | <p>Percentage of 806 Natural Science post-secondary courses successfully completed by program students with a C grade or better (or PP grade). Only FTE generating courses within course aid codes of 10, 20, 30, 31, 32 or 50 are included. Only course records with a course completion code of 01-Pass, 02-Fail, and 04-Withdraw are included. Only course records with a known grade are included.</p> <p>Denominator: Number of course records with an 806 instructional area that meet the above requirements</p> <p>Numerator: Of the course records in the denominator, the number of course records with a C grade or better (or a PP grade)</p> | Course Enrollment WTCS OLAP Cube |

| | Indicator | Definition/Calculation | Data Source |
|---|---------------------------------------|---|--|
| ACTIVE CAREER PATHWAY PROGRAMS, COMPLETIONS, & PATHWAY PROGRESSION | | | |
| 11 | Embedded Credentials with Enrollments | Count of Embedded Technical Diplomas and WTCS Pathway Certificates with enrollments and a reported parent curriculum. Denominator: N/A Numerator: N/A | QRP Pathway Progression WTCS OLAP Cube |
| 12 | Embedded Credential Completions | Count of completions in Embedded Technical Diploma and WTCS Pathway Certificate programs that have a reported parent curriculum. Denominator: N/A Numerator: N/A | QRP Pathway Progression WTCS OLAP Cube |
| 13 | Pathway Progression | Percentage of Embedded Technical Diploma graduates or WTCS Pathway Certificate completers who enroll in the next credential in the Pathway in the year of graduation/completion or the year following graduation/completion, find related employment, or transfer to an institution outside of the WTCS. Denominator: Number of Embedded Technical Diploma and WTCS Pathway Certificate completers Numerator: Of the graduates/completers in the denominator, the number who enroll in the next credential in the Pathway in the year of graduation/completion or the year following graduation/completion, find related employment, or transfer to an institution outside of the WTCS. | QRP Pathway Progression WTCS OLAP Cube |

EMBEDDED TECHNICAL DIPLOMA PERFORMANCE

| | | | |
|----|---|---|--|
| 14 | % Successful Course Completion in Technical Courses | Percent of technical courses within the programs curriculum successfully completed by Embedded Technical Diploma program students with a C grade or better (or PP grade). Denominator: Number of known course grades earned within the program curriculum (all grades—A, B, C, D, F, PP, W, FF, etc.) among program students in technical courses Numerator: Of the course records in the denominator, the number of successful course grades earned (numerical value of 2.0 or higher or PP) | QRP Indicator #1 - Successful Course Completion WTCS OLAP Cube |
| 15 | % 1st Year Graduation | Percent of new Embedded Technical Diploma program students who graduated from the same program within their first year. Denominator: Number of new program students who were enrolled in an FTE generating course during fiscal year 20XX Numerator: Of those in the denominator, the number of program students who graduated from the same program in the first year 20XX | QRP Indicator #3 - Graduation WTCS OLAP Cube |
| 16 | % 2nd Year Retention | Percent of new Embedded Technical Diploma program students retained to the second year in the same program or completed the program in the first or second year. Denominator: Number of new program students who were enrolled in an FTE generating course during fiscal year 20XX Numerator: Of those in the denominator, the number of program students who graduated from the same program in any of the fiscal years assessed (20XX and 20XX+1) or were reported in the same program and enrolled in an FTE generating course during fiscal year 20XX+1 | QRP Indicator #4 - Retention WTCS OLAP Cube |

| | Indicator | Definition/Calculation | Data Source |
|---|--------------------------|---|---|
| EMBEDDED TECHNICAL DIPLOMA EMPLOYMENT, APPRENTICESHIP ENROLLEES, & GRADUATE TRANSFER | | | |
| 17 | % Employed | Percentage of responding Embedded Technical Diploma graduates who reported they were in the labor force and attained employment. Denominator: Number of responding survey graduates who reported as in the labor force Numerator: Of the responding survey graduates in the denominator, the number who reported employment | QRP - Indicator #5 Job Placement WTCS OLAP Cube |
| 18 | % Employed Related | Percentage of responding Embedded Technical Diploma graduates who reported employment and are employed in a field related to their training. Denominator: Number of responding survey graduates who reported employment Numerator: Of the responding survey graduates employed in the denominator, the number who reported related employment | QRP - Indicator #5 Job Placement WTCS OLAP Cube |
| 19 | % Employed in District | Percentage of responding Embedded Technical Diploma graduates who reported they attained employment within their College district. Denominator: Number of Graduate Follow-up Survey respondents who reported employment and a location of employment Numerator: Of those in the denominator, the number who reported employment in their College district | QRP - Indicator #5 Job Placement WTCS OLAP Cube |
| 20 | % Graduate Transfer | Percent of graduates transferring to a non-WTCS 2-year or 4-year public or private college or university within 1 year of WTCS graduation. Denominator: Number of program students who graduated in academic year 20xx Numerator: Number of program students who graduated in fiscal year 20xx and enrolled at a non- WTCS 2-year or 4-year public or private university within 1 year of graduation (academic year 20xx + 1) | QRP - Indicator #4 Transfer WTCS OLAP Cube |
| 21 | Apprenticeship Enrollees | Count of apprenticeship enrollees in program aid code of 50. Denominator: N/A Numerator: N/A | Program Enrollment WTCS OLAP Cube |

