

Ensuring Career Pathway Quality:

A GUIDE TO PATHWAY INTERVENTION

Participation in a high-quality Career Technical Education (CTE) program of study and/or career pathway has proven benefits for learners in the form of higher graduation rates and higher levels of satisfaction.¹ The key to achieving these results across the nation lies in ensuring that every career pathway that is offered is high quality, and include the following:

- >>> Rigorous course standards and progressive, sequenced courses, which start out broadly, narrow in specialization, and lead to an industry-recognized credential of value, where appropriate;
- >>> Secondary and postsecondary alignment and early postsecondary offerings;
- >>> Industry involvement in the design, validation, implementation and review of the career pathway structure and content;
- >>> Labor market data showing that the career pathway is in a high-demand, high-wage and/or high-skill industry sector;
- >>> High-quality instruction; and
- >>> Experiential learning, such as work-based learning and participation in Career Technical Student Organizations (CTSOs).²

If career pathways are truly high quality, learners are able to complete pathways in their career area of choice and successfully transition to the next step with outcome data validating that quality.

As labor markets shift and contexts within districts and institutions change, all career pathways — including secondary and postsecondary pathways developed by the state, district or institution — must go through a natural life cycle. All states have processes for approving new career pathways and may choose to support specific pathways through state or federal funding. While some states' processes are more rigorous than others, they generally all require career pathway providers to explain the pathway structure and course sequences and show evidence of labor market demand.

Once a career pathway has been approved and implemented, it is natural for the conditions that surround

Key Terms: Career Pathway vs. Program of Study

A **career pathway** is a sequence of learning experiences that span secondary and postsecondary systems, blend rigorous core academic and career technical instruction, offer focused career guidance and advisement systems, include high-quality work-based learning experiences, and culminate in postsecondary or industry credentials of value.

A **program of study**, a requirement under the federal Carl D. Perkins Career and Technical Education Act of 2006, is one type of career pathway. A program of study is a non-duplicative sequence of academic and technical courses that include secondary- and postsecondary-level content and opportunities for high school students to earn postsecondary credit and that culminate in industry-based credentials and/or postsecondary degrees. In many states, programs of study are the primary way learners access career pathways.

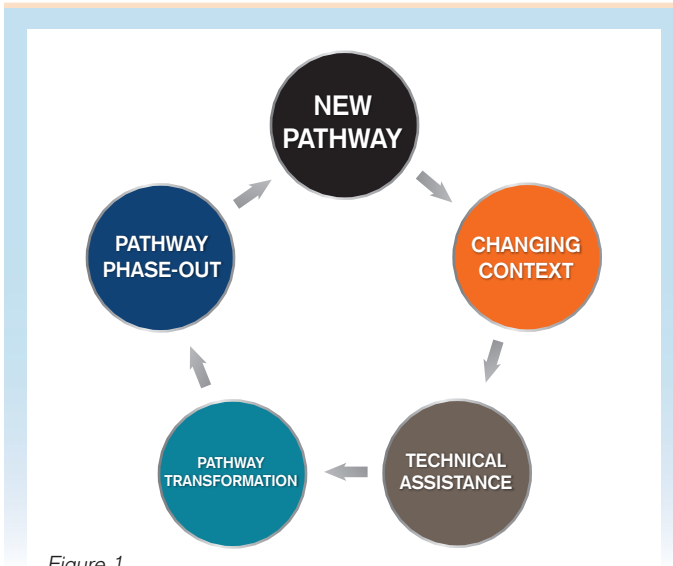


Figure 1

and support the pathway to change over time. A major employer may leave the area, or new technologies may be developed that change demand for certain careers. Instructors and other staff may come and go, along with employer partners. Student interest may vary over time, as might overall student enrollment in a school or district. At these points in a career pathway's life cycle, the state must make decisions about intervening in the operation of the pathway to ensure that learners are being well served.

Part of a state's responsibility is to ensure that public funds are directed to the career pathways that will most benefit

the learners, employers and communities they serve. This responsibility is most often exercised through regular monitoring of career pathway implementation at the state, district and institution levels; however, this process often lacks the step of determining whether specific interventions — including targeted technical assistance, full-scale transformation or program phase-out — are needed.

The flow chart in Figure 2 explores the options available to states. The option most frequently exercised is offering technical assistance or other resources to improve program quality and learner outcomes. However, if the career pathway has low labor market justification, technical assistance cannot change that situation. In that case, states have two options: Transform the career pathway into a related one with greater labor market demand and relevance, or if that is not possible, phase out the career pathway while allowing students who are currently enrolled to complete their coursework. States must have clear expectations and processes (and timelines) for each of these decisions and provide the support and options to have transitions happen smoothly.

States have multiple levers available to provide technical assistance and to transform and phase out programs. This guide will explore how states should use those levers to ensure that all learners benefit from participation in relevant, high-quality career pathways.



Figure 2

Determine if programs are high quality and aligned with labor market demand

The first step in examining career pathway quality is to gather all relevant qualitative and quantitative data available, with a focus on data related to any requirements for pathway approval (e.g., labor market alignment, early postsecondary opportunities, progressive sequence of courses, etc.), learner outcomes and equity and access.

Tip: One way to make the examination of all career pathways operating in the state more manageable is to first perform a cursory check of whether all of those pathways are still being offered. In some states, a state-approved career pathway can still remain “on the books” as an approved pathway even if it has already closed down, due to either the departure of an instructor or declining enrollment, and no longer receives state funding. States that approve CTE courses should look to see where they can remove low-quality, unused and/or redundant CTE courses from their approved list.

As states gather this information, they should examine what it conveys about the quality of the career pathway. First, and most importantly, states should determine whether the career pathway is providing high-quality, relevant outcomes for learners — i.e., is the pathway imparting the knowledge, skills and experiences learners need to enter the workforce in their field of choice and earn a livable wage while also having opportunity to access further education and training? And, are the outcomes equitable across populations or are there achievement or performance gaps for certain learners? Second, states should examine the career pathway’s design and content. Are certain programmatic elements contributing to the overall quality of the career pathway in a positive or negative way? Could the state leverage any of these elements to make career pathway intervention more effective? States can use the following questions to guide their thinking:

Relevance

>>> Does current and projected labor market data justify the continued existence of this career pathway at its current capacity?

- Does statewide or regional labor market information show that the industry in question is in demand through projected job openings and future wage growth, or can the institution show local need for the career pathway?

Quality

>>> Are learners achieving satisfactory outcomes after participating in this career pathway?

- What is the enrollment trend? Is enrollment increasing? Is it holding steady? Is enrollment mirroring the overall composition of the school or institution?
- How many learners are completing the career pathway and graduating on time?
- Within six months of completion, how many learners are enrolled in further education or training, employed full time or enlisted in the military?
- Do learners’ course-taking patterns indicate an appropriate and deliberate sequence of instruction?
- How many learners are obtaining industry-recognized credentials of value?
- Are outcomes equitable across all learner populations?

All of these data points should result in a summary of the career pathway’s reach and impact — how well learners are being served, how well the pathway is able to adjust to changes in industry expectations, and ultimately, how well learners are prepared for their next step upon leaving the pathway. States should invite relevant stakeholders, including industry partners, families, learners and teachers, to share their insights about the career pathway and its performance and relevance. Based on the analysis of the data and stakeholder input, a state can determine if intervention is required and move to the next step in this process.

This review of career pathways should happen on a regular basis over time, at least every few years if not annually. Additionally, certain events may trigger a career pathway review outside of the normal cycle. For example, if career pathway providers plan to change a certain percentage of the pathway curriculum, the state should take that opportunity to review the quality of the new curriculum.

Option 1: Celebrate and examine high-quality and relevant career pathways

Many career pathways in a state may be both high quality and relevant. These career pathways should be celebrated and rewarded. This acknowledgment both rewards the career pathway providers for their work and provides examples to other providers of what a quality pathway should look like and how it should serve learners. Below are a few possible ways to celebrate high-quality career pathways:

- >>> Feature them in a state newsletter or on the state's website;
- >>> Develop an awards program, similar to Advance CTE's Excellence in Action awards, to celebrate and reward pathways across the state and in various Career Clusters[®];³
- >>> Arrange learning tours for other pathway providers to meet with and visit high-quality pathways;
- >>> Invite providers of high-quality pathways to present at state conferences or other professional development events;
- >>> Tap providers of high-quality pathways to serve as mentors or resources for others working to develop or improve pathways in related Career Clusters; and
- >>> Use the pathways as examples when talking to the media, policymakers or other partners to demonstrate high-quality.

Option 2: Improve career pathway quality through technical assistance

Assuming there is labor market need for a career pathway and there are generally positive outcomes, states have a key role to play in supporting pathway improvement. Specifically, if a career pathway's data show that it is not meeting certain quality standards and learners are not having positive outcomes by every measure, states initially should offer technical assistance to improve the program quality, delivery and outcomes. Many states regularly provide technical assistance through the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins) and the Every Student Succeeds Act, as well as through monitoring policies and processes established by state and/or accreditation requirements.

The first step in improving a career pathway is to conduct a more thorough analysis to examine the cause of the poor learner outcomes by asking questions such as:

- >>> What standards and curriculum are being used for this career pathway? When were they last updated and validated by content experts and industry partners?
- >>> Has the career pathway been designed to lead to an industry-recognized credential? Is that the right credential for that particular region and labor market, according to available labor market information?
- >>> For secondary career pathways, are dual enrollment and early college options available and easily accessible? Are learners successfully completing and transferring with advanced credit across secondary to postsecondary institutions?
- >>> For postsecondary career pathways, do articulation and transfer agreements exist across certificate, non-credit, two-year and four-year programs? Are learners successfully transferring with advanced credit across systems and institutions?
- >>> Does the advising and learner support system allow for seamless transitions between secondary, postsecondary and career? Do learners have the information they need to make the best choices for their situation?

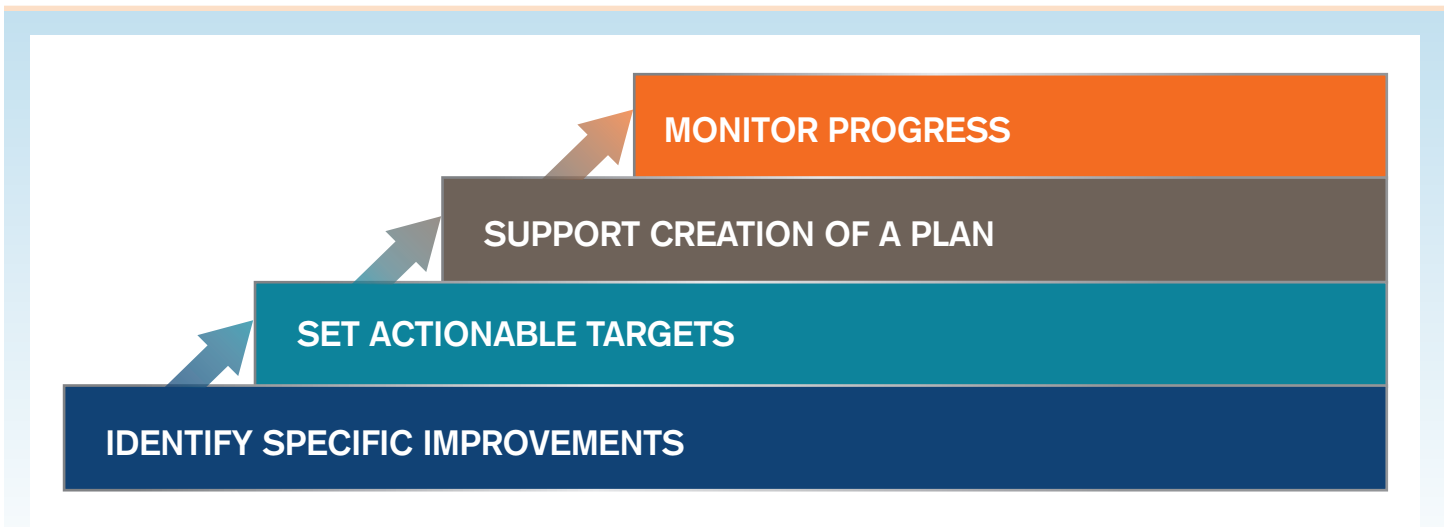


Figure 3

- >>> Are learners receiving high-quality instruction from instructors who have industry expertise?
- >>> Do learners benefit from high-quality experiential learning opportunities, including internships, apprenticeships and participation in CTSOs?

This analysis will provide a helpful diagnostic assessment of what technical assistance is needed. While the type and structure of technical assistance a state provides inevitably varies based on career pathway circumstances and the capacity of the state agency and regional service centers, all support should follow the same basic tenets:

- >>> Identify the specific improvements needed;
- >>> Work with local administrators to set realistic and ambitious improvement targets;
- >>> Support local administrators in developing a plan to reach improvement targets, including providing content information, data support and access to external consultants, where appropriate; and
- >>> Continually monitor the improvement process, with regular check-ins and plan adjustments, as needed.

States should also provide technical assistance on a larger scale through professional development events and resources focused on areas of common challenge, including career pathway design, industry engagement and other

implementation challenges. State conferences and events should be designed with meeting specific improvement needs as session objectives. They should also function as feedback loops between the state and local practitioners to help the state determine how effectively professional development needs are being met.

Option 3: Transform career pathways that are no longer relevant

States may also choose to transform a career pathway into a related pathway that has more relevance in the current or emerging labor market. This option is particularly effective when the career pathway in question is well designed, well run and well-staffed but no longer has sufficient labor market justification or if enrollment is declining due to lack of student interest. For example, some family and consumer sciences career pathways have transformed into health care pathways, supplying much-needed employees in the health care field. Transformation is also a great option for courses and small programs that are offered in high-demand fields but have not been fully developed into high-quality career pathways. For example, a one-off, high-quality carpentry course could be built into a full-fledged construction career pathway. This type of transformation involves expanding on a good foundational course to include more options and opportunities for learners.

Transformation in Practice

The Early Childhood Education program of study in Peoria Unified School District in Glendale, AZ, transformed from a program that primarily focused on child care to one that prepares learners for a career as a classroom leader. The career pathway began as a home economics program focused on child care. However, after working with the Arizona Department of Education and local employers, the career pathway providers improved and expanded the pathway to allow secondary students to earn a Child Development Associates industry credential, as well as certificates in CPR/First Aid and food handling, all necessary credentials to work in childhood education. As part of the pathway's transformation, the pathway now has articulation agreements that allow students to enroll with advanced standing at two- and four-year institutions. This transformation was crucial for the program to remain relevant because Arizona has a relatively low demand for day care and nursery employees but a high demand for educators.⁴

To transform a career pathway, states must first determine whether the local community, including institution leaders, families, employers and community organizations, understands the importance and necessity of the transformation. If not, the state will need to build understanding and buy-in for the transformation or it cannot happen.

States should use labor market data to show how the career pathway, as it currently exists, is not meeting employer needs and is not providing learners with an experience that will lead them to a fulfilling, high-demand career with growth potential. States should begin with key champions, such as members of advisory committees or workforce boards, who understand the importance of career pathways that are aligned with labor market needs. States can encourage those champions to be advocates with other stakeholders, including instructors, families and learners. States also can work within the district or institution to gain internal buy-in for the shift from the beginning. States should communicate throughout the process with all stakeholders so they are included in the

process and understand the career pathway is not being eliminated but transformed into something even better.

The transformation process will require support and assistance from the state and any regional service centers, particularly in providing instructors with professional development that allows them to teach content in this new career pathway. This process will not be immediate, and it may happen in deliberate phases as new courses are developed and implemented.

Option 4: Phase out career pathways that are low quality and no longer relevant

One of the hallmarks of high-quality career pathways is that they respond to the needs of the labor market and economy. To retain this characteristic, a natural part of the career pathway life cycle is phasing out programs to devote resources and capacity to new, more relevant and/or higher quality pathways. This decision is not easy for states to reach or implement; it should be done with great care and within a clearly defined and transparent process. All states should have a process for retiring career pathways that is clearly documented and includes stakeholder input and buy-in throughout. Considerations for a phase-out policy include:

Timeline

The timing and duration of program closure is a significant consideration — states should take time to build broad support for the program closure while also ensuring that the program is closed in a timely manner.

Once the decision has been made to phase out a career pathway, no new learners should be allowed to enroll in that pathway. If the career pathway is low quality and will not meet the needs of learners, allowing new enrollments is harmful. The state should allow learners already enrolled in the career pathway to complete the pathway, or should facilitate the process of transferring to a different option. The state should also provide support to temporarily boost career pathway quality and access to career advising for these learners so that they are given better chances for success. For example, if a career pathway is being phased out due to low labor market demand, what can the state do to help learners find

Levers states can use to phase out career pathways

>>> Perkins monitoring

All states conduct monitoring of CTE pathways through their Perkins implementation plans. States can use these processes to identify low-quality and low-relevance career pathways and either phase out those pathways or rescind funding.

>>> State process monitoring

In addition to Perkins requirements, many states have approval and review policies and processes for career pathways that receive state funds. If these processes are rigorous, they can be used to phase out low-quality and low-relevance career pathways or at least to rescind state funding.

>>> CTE course/standards approval

When states update CTE courses and standards to keep up with industry advancements and new labor market needs, they can use that opportunity to phase out courses or programs that are redundant, low quality and/or not relevant.

employment in similar fields or in other regions of the state where labor market demand might be higher? How can the state help learners enroll in other career pathway courses related to their desired field of study to help round out their experiences? If a career pathway is being phased out due to low-quality content or instruction, can temporary external support be provided to supplement instruction?

As currently enrolled learners make their way through the career pathway, the state should work with school districts and postsecondary institutions to transfer instructors to other pathways in similar content areas, if appropriate. Assuming instructor quality was not the core issue with the career pathway being phased out, instructors should receive additional professional development as they navigate this transition to keep them engaged in the system and not

further exacerbate the CTE teacher shortage many states are facing. These personnel could also serve in other capacities, such as work-based learning coordinators or career coaches — positions for which many states are only increasing their demand.

Stakeholder engagement and buy-in

Given the complexity and sensitivity of closing down a program, stakeholder support is critical to a smooth phase out process. Specifically, states should:

- >>> Start by engaging with leaders in the district or institution and discussing the career pathway's challenges. If the state has a well-established monitoring process focused on quality and relevance, administrators should not be surprised by this phase-out, and they must be included in the decision-making process as soon as the career pathway's challenges have been identified.
- >>> Identify stakeholder champions (institution and district leadership, industry partners, etc.) in the area, and communicate with them about the importance of quality and relevance in career pathways.
- >>> Prepare a clear justification for why this career pathway must be phased out, and share it with all relevant stakeholders. Is this phase-out because of a statewide policy change or something specific to this career pathway? What data show the low quality and relevance of the career pathway?
- >>> Discuss any previous efforts to improve or transform the career pathway to show what other options have been explored.
- >>> Once a base of support for phasing out the program is in place, implement a communications plan that ensures regular two-way communication with other internal and external key stakeholders throughout the process.
- >>> Throughout the creation and duration of this career pathway, numerous partners and stakeholders were engaged in providing thought partnership, input into pathway design and opportunities for experiential learning. States should support local districts and postsecondary institutions to find new ways to sustainably engage these partners.

Support for and approval of new career pathways to fill the void

As one career pathway is phased out, the state should encourage the development of new pathways that better fill the needs of that community and labor market. The state should involve institution and district leaders in the process of choosing and celebrating new career pathways. If the state follows this process, local partners may be less resistant to phasing out career pathways because they will be able to see how those resources are used to bring better options to the community.

Ensure that the system supports only high-quality and relevant career pathways

To effectively support learners and the state overall, state leaders must be fiercely dedicated to ensuring quality and relevance in career pathways. This dedication requires a culture of commitment to quality, data-driven decisions and an improvement mindset. States should monitor, assess and support career pathways from their initial design and approval through pathway improvements, expansions, transformation, and ultimately, when the pathway is phased out. Numerous levers are available to states through state and federal policy to implement an effective evaluation system that supports career pathways but also holds them accountable for learner outcomes. Each state must decide how it can best use all of those levers in concert to maintain an effective statewide career pathways system.

Acknowledgements

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- 1 For more information, see: https://cte.careertech.org/sites/default/files/ValuePromise_MessagingCard.pdf
- 2 To explore the Policy Benchmark Tool, visit <https://careertech.org/resource/program-approval-policy-benchmark-tool>

- 3 For more information, see: <https://careertech.org/excellence-action-award>
- 4 For more information, see: https://cte.careertech.org/sites/default/files/Peoria_Final.pdf