STRENGTHENING OHIO’S TALENT PIPELINE
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BACKGROUND

Now more than ever, ExcelinEd and its state partners recognize the importance of state efforts to provide and expand access to high quality pathways to learners of all ages. Using Pathways Matter as a framework, ExcelinEd is actively working across the country with state policymakers, system leaders and partners to:

- Analyze their current education to workforce policy landscape.
- Identify specific areas of opportunities for cross-system policy action.
- Establish a clear set of goals and metrics for policy and program success.
- Develop an aligned plan of action – including targeted changes – that can be implemented over the next few years.

Over the past decade, Ohio has developed a robust foundation and set of policy supports in place to support learner pathways, yet there remain additional opportunities to fill gaps, expand access and strengthen learner outcomes. To help inform Ohio’s strategic priorities over the next several years, ExcelinEd and Ohio Excels engaged with numerous stakeholders and prepared the following policy brief. It includes specific recommendations that state policymakers can consider to improve learner outcomes, address workforce needs and increase learner economic mobility.

About Ohio Excels

Believing that the unique insights and experiences of business leaders should be well represented in discussions of state education and workforce policies, a concept that grew to become Ohio Excels was born in 2018. Leading that effort were former Greater Cleveland Partnership CEO Joseph Roman, Ohio Business Roundtable President and CEO Patrick Tiberi, Cincinnati Business Committee CEO Gary Lindgren, and Columbus Partnership CEO Alex Fischer. Assembling an initially small group of business leaders, they created a non-partisan coalition committed to keeping the business community’s voice at the forefront of policy discussions of education and workforce issues. Their goal: ensuring that Ohio maintains the highest expectations for preparing students to live and succeed in the Knowledge Economy.

Ohio Excels’ initial coalition began by assembling a diverse board of business leaders from across the state, developing core principles to guide their work and attracting a growing number of others from Ohio business community to join their cause. With this strong foundation, Ohio Excels was formally launched in March 2019 and the organization has quickly emerged as a leading voice at the Statehouse, bringing an informed business perspective to improve and transform Ohio’s education system.

About ExcelinEd

Launched by former Florida Governor Jeb Bush in 2008, ExcelinEd supports state leaders in transforming education to unlock opportunity and lifelong success for each and every child. From policy development to implementation, ExcelinEd brings deep expertise and experience to customize education solutions for each state’s unique needs. Focused on educational opportunity, innovation and quality, ExcelinEd’s agenda is increasing student learning, advancing equity and readying graduates for college and career in states across the nation.
The Talent Pipeline Gap

Ohio, like most states, has a widely recognized talent pipeline gap. Its businesses are experiencing significant difficulties in finding and retaining talent to meet their workforce needs. And that difficulty is hampering growth, which has large economic repercussions for the state, its economy and the goods and services that Ohioans need and depend on.

The state faces many workforce-related challenges, all of which were exacerbated by the COVID-19 pandemic. These include Ohio's aging population, slow population growth, historically low labor force participation rate and jobs-to-skills mismatch. While some of these challenges may take years to unwind, the job-to-skills mismatch is something Ohio can address now. The challenges have been growing and are real:

- In 2020, 57% of Ohio manufacturing companies say the skilled worker shortage is hampering growth.
- In 2021, 4,900 open healthcare positions were listed at the four major health systems in Columbus.
- In 2022, 72% of the state's small businesses reported trouble in filling open spots.

Additional studies have documented a growing demand-supply gap for Ohio's workforce. At present, the state has thousands of openings for registered nurses, software developers, truck drivers and electricians, among many others. In summary, like many states, Ohio has a talent pipeline problem.
The State’s Response to the Talent Pipeline Gap

The Buckeye State hasn’t been sitting still. Ohio has invested heavily in addressing its talent pipeline gap. Beginning in 2012 and encompassing multiple administrations, Ohio has strengthened its education to career continuum through many initiatives and positive outcomes. These include:

- **Governor’s Office of Workforce Transformation** — improved cross-agency coordination of workforce opportunities and initiatives⁶
- **TechCred** — assists employers in upskilling current and future employees through technology-focused credentials⁷
- **DataOhio** — a data hub to help policymakers make data-informed decisions about workforce initiatives, among others⁸
- **Industry Sector Partnership grants** — support for the operation of partnerships among education, employers and training providers to address workforce needs⁹
- **Individual Microcredential Assistance program** — assists low-income, underemployed or unemployed individuals to participate in a training program and earn a credential¹⁰
- **OhioMeansJobs.com** — a fully redesigned portal for Ohio jobseekers and employers, including SkillsMatch, a tool that allows jobseekers to upload their resume and select skills to match with potential job opportunities¹¹
- **Innovative Workforce Incentive program** — provides $13.5 million in grants to school districts to establish new programs for students to earn industry-recognized credentials¹²
- **Choose Ohio First** — a grant program to help keep Ohioans in state by supporting scholarship programs in STEM¹³
- **High school graduation requirements** — updated to allow students multiple methods to demonstrate competency¹⁴

This list is impressive and not even exhaustive. Simply put, Ohio’s state leaders have prioritized growing the state’s economy, strengthening its talent pipeline and investing in career pathways.

What do we mean by career pathways? Career pathways typically refer to a sequential and progressive set of coursework, experiences and credentials that:

- Span both secondary and postsecondary education, as well as work-based contexts
- Are closely aligned with industry standards and demand
- Prepare learners not only for entry to a specific job, but also continued advancement over time¹⁵

In summary, career pathways are not just credentials or coursework or work-based learning but instead are all of it.
NEXT STEPS FOR STRENGTHENING OHIO’S TALENT PIPELINE

While Ohio has invested heavily in strategies to address the state’s talent shortage, the state in many ways still lacks the critical data to answer important questions about the success of its many initiatives. Critical outcomes data across education to workforce systems are either missing or disconnected. This is data that could help policymakers and the public make more informed decisions about the quality and success of its many career pathways.

At present, Ohio does not know what happens to learners who choose certain pathways versus others. For example, do learners who choose pathway options in K-12 go on to earn a valued postsecondary credential? Do they go on to find a sustainable wage occupation? Or do they pursue “dead-end” pathways that lead to low-wage, low-skill jobs and little economic security?

To address these shortcomings in data and to further strengthen the state’s education to workforce pathways, Ohio’s leaders and policymakers can consider four recommendations for policy change:

1. **Evaluate the “return on investment” of career pathway programs.**
   Ohio can consider conducting a full return on investment analysis (ROI) of its K-12 and postsecondary career pathway programs. This evaluation would check for program alignment to current workforce needs, quality and value to learners, and equitable access to these opportunities for all learners.

2. **Identify, increase access, and promote high-quality career and technical education pathways.**
   By leveraging the ROI analysis findings, Ohio can make better informed decisions about its current career pathway offerings. For example, critical outcomes information about career and technical education (CTE) can be used to expand career pathway offerings where business needs are not being met; shutter programs that are not aligned to workforce needs or provide little or no value to students; and identify best practices for programs to copy and scale to reach more students.

3. **Revise career pathway funding to focus on high-value programs of study and reward student success.**
   The state could strengthen its funding of career pathways to support higher-value programs of study and reward programs that produce successful student outcomes. While the state has made some improvements to its career pathway funding model to address cost variances across programs,16 more work needs to be done to ensure that schools are offering higher-value career pathways to students by elevating programs of study linked to middle- or high-wage jobs.

4. **Strengthen industry credential lists to prioritize high-value credentials.**
   While Ohio has prioritized learner attainment of industry credentials, the current offerings are spread out across multiple lists and vary in both alignment with employer demand and overall value to learners. The state can strengthen its industry credentials and incentive programs by consolidating credential lists wherever possible and emphasizing a greater weight on wage potential alongside workforce demand.
Details on the Four Policy Recommendations

The policy recommendations identified above support the next evolution in Ohio’s quest to provide 1) individuals with the skills they need to succeed and 2) the future workers that Ohio employers desperately need. To support state leaders considering these changes, ExcelinEd and Ohio Excels have included a deeper look at each of the four recommendations.

RECOMMENDATION 1:

Evaluate the “return on investment” of career pathway programs.

The ROI Analysis

To better understand the value to students and the return on the state’s investments in career pathways, Ohio should consider conducting a biennial ROI analysis for quality and equity of career pathway programs at the K-12 and postsecondary levels. The goal is to ensure that all learners have access to higher skill, in-demand, middle- or high-wage occupations. The ROI could be directed through an executive order of the Governor or through legislation (or both), with the ROI completion by the end of December 2023.

A high-quality ROI analysis of career pathway offerings would allow the state to:

1. Determine the alignment of career pathway offerings with employer demand;
2. Evaluate student participation and outcomes associated with each career pathway program;
3. Understand how well the state’s career pathway offerings are delivering on federal, state and local investments;
4. Develop strategies and recommendations to improve the alignment and quality of career pathway programs to increase access and successful outcomes for all students; and
5. Inform the public about the availability, quality and student outcomes of career pathway offerings in their communities.

With this information, policymakers and state/local leaders can make informed decisions to ensure all learners can access – and succeed in – high-quality career pathways.

The ROI analysis would serve as the state’s North Star by which programs of study and career pathways are evaluated. The ROI also would help the state identify where it is missing critical data to evaluate student success. Moreover, it sets the data-informed guardrails for high-quality pathways, funding and associated credentials embedded within pathways.

Addressing Gaps in Data

Currently, the state is missing some of the larger story on its education to workforce continuum. Ohio doesn’t connect student outcomes in K-12 through postsecondary to the workforce. Without this specific data, the state does not know how well its secondary career pathways link to postsecondary education or jobs supporting entry into the middle-class or beyond – or whether they are simply dead ends.

The state also struggles with an accuracy issue with the data it now collects. For example, for purposes of accountability reporting on CTE districts, Ohio relies on school district surveys of its students. These may include scrubbing social media or relying on family or friends to know what happens to CTE concentrators after they graduate or leave school. With an ROI analysis and the component data sets, student surveys could be an exception rather than the rule for purposes of determining post-placement outcomes. Additionally, the ROI would allow the state and the public to see student outcomes by each program (if there is a sufficient cell size), rather than a report that combines all programs into a single post-program placement or postsecondary rate.
Here is one example: Are students completing a construction pathway at a high school and hired into a related position at a construction company making specified wages? The state doesn’t know. Without this data, it is difficult for Ohio to evaluate the success of its CTE pathways in terms of actual student outcomes. The evaluation rubric is missing key data about student success. Therefore, the state may not be making the best data-informed decisions about its strategic investments into CTE programs of study. And students and parents would not have the type of information to evaluate program/pathway quality for purposes of selection.

**RECOMMENDATION 2:**

Identify and Promote High-Quality Career and Technical Education Pathways

Armed with the ROI analysis, the state can align career pathway programs with higher-demand, higher-skill occupations linked to middle- to high-wage jobs that reflect the state’s economic and workforce priorities. This can be achieved by expanding career pathway offerings where business needs are not being met; culling programs that are not aligned to workforce needs or that provide little or no value to students; and identifying best practices for programs to copy and scale to reach more students. Without the ROI analysis, the state is unlikely to know whether it is investing in dead-end pathways that do not provide upward economic mobility and a ticket to the middle class and beyond.

While the state’s Quality Program Standards for CTE programs\(^\text{18}\) does ask administrators, faculty and advisory committees to collect and review labor market data for program alignment, it is missing a focus on wages (likely due to data limitations discussed above). Accordingly, while program reviews are focused on certain outputs, such as credential attainment and placement rates, it fails to include important student outcomes such as full-time versus part-time employment, employment in field or actual wages to ascertain whether the program leads to economic security.

Similarly, while the state’s quality program standards and CTE Program of Study Assurances\(^\text{19}\) emphasize vertical linkages of secondary programs with postsecondary programs, which is a critical factor in high-quality CTE programs,\(^\text{20}\) the state is missing the data and analysis to know whether this is happening in practice for students. For example, the state’s Top Jobs List includes a significant need for home health aides, licensed practical nurses and registered nurses. From an economic perspective, these are not equivalent jobs. A home health aide earns a median salary of $23,000, while a licensed practical nurse earns a median salary of $46,000. A registered nurse earns a median salary of $68,000. Considering that a median salary of $23,000 equates roughly to an $11 per hour pay range, half of those home health aides in Ohio are earning even less.

Consider these questions: Do students in allied health and nursing pathways go on to higher-wage medical roles, such as licensed practical nurse or registered nurse, or are they stopping at the home health aide level? The state does not reliably know. Further, would a district better help students by focusing on a dual enrollment licensed practical nurse or registered nurse program? The state and districts do not know. ROI data could help answer these questions and, in the process, define and support high-quality career pathways.

At present, and without the data and analysis embedded in an ROI analysis, Ohio is uncertain as to the quality of its career pathway programs and the value to students who pursue these pathways.
RECOMMENDATION 3:

Revise Career Pathway Funding to Focus on High-Value Programs of Study and Reward Student Success

After the state has completed an ROI analysis and identified high-quality pathways, it will be strategically ready to dedicate funding to promote and support them. Ohio would benefit by considering two funding-related policy changes to support pathway completion and demonstrated learner outcomes:

1. Differentiate student career pathway program funding based on programs that are linked with higher-skill, in-demand and middle- or high-wage occupations.
2. Create program incentives, such as student completion of high-quality career pathway programs and attainment of high-value industry credentials.

Differentiated CTE Funding (Enrollment)

Ohio recently revised the way it funds CTE programs.\(^2\) As part of the new funding changes and following a transition period, CTE program funding in FY 2024 will be tiered based on specified industries. For example, programs in agriculture, construction, engineering, finance, health science, IT and manufacturing generate a multiple of 0.6230, while hospitality, human services, and transportation generate 0.5905. There are additional categories, including family and consumer science programs generating a 0.1570 multiple. The higher multiples reflect Ohio's priority industries and its most pressing workforce needs.

While the new funding model emphasizes certain programs linked to specified industries over others, the categories approach could be improved by funding programs based on their linkages to high-value occupations rather than high-value industries. Using an example discussed earlier, are students generating the same funding to the district regardless of whether completers are prepared to become a home health aide or a licensed practical nurse? The cost and value to the state and the student, respectively, could be different. A funding model that takes these considerations into account would help districts focus on programs linked to higher-value occupations, as they would also generate more funding.

To support and grow high-value career pathway programs, Ohio should tier its dedicated state funding to reward programs that are linked with higher-skill, in-demand and middle- or high-wage occupations, rather than linked more generally to industries. The state could consider factors such as the occupational growth rate, occupational openings, linkages/stackability to postsecondary programs and credentials, and a wage threshold that is tied to economic mobility toward the middle class and beyond.

Differentiated CTE Funding (Student Outcomes)

Armed with the ROI analysis, Ohio could target career pathway funding tied to student outcomes. While the base funding proposal is tied to higher-value (POS) enrollment, Ohio could add incentive funding tied to higher-value POS completion, similar to its Innovative Workforce Incentive Program that is tied to earning a credential. Credentials are just one element of a high-quality pathway, which includes but is not limited to, core academic proficiency, work-based learning experiences and postsecondary credit opportunities.\(^2\) Through some modifications of the funding formula, Ohio could add a student outcomes incentive to reward successful career pathway programs of study, based on student results.
RECOMMENDATION 4:
Strengthen Industry Credential Lists to Prioritize High-Value Credentials

Ohio should consider strengthening its industry credential lists to emphasize high-value credentials. Ohio has focused on the acquisition of credentials as a point of emphasis, from incentive funding to grants to high school graduation. However, a recent study of industry credentials at the K-12 level found that only 20% of credentials earned by students were demanded by employers. The credential lists are not usually linked to employer demand or middle- to high-wage occupations. For example:

- **63%** of credentials on the Innovative Workforce Incentive Program (IWIP), which provides incentive payments and startup grant funds to schools to offer credentials, are not currently in demand by employers.
- **68%** of credentials promoted in K-12 did not register meaningful labor market demand (found in fewer than 25 job postings statewide).

The state could strengthen its industry credential lists by:

1. **Addressing alignment of promoted credentials to focus on value to employers, students and communities.**
2. **Ensuring that industry credentials are connected to intentional pathways to college and careers.**
3. **Focusing on outcomes through connecting student experiences and credential attainment to postsecondary, wage and employment data.**

Credentials, like the programs of study in which they are embedded, would benefit from data-informed scrutiny for greater consistency in criteria for inclusion on promoted lists and financial incentives tied to these credentials, especially demand and wage thresholds. Ohio can be clearer on the purpose of these credentials and programs of study. Is the state attempting to build the economy it wants or the economy it has? If a credential isn’t worthy of incentive funding, is it worthy of the state’s investment of resources and the student’s investment of time? Currently, Ohio lacks the data and analysis to know.
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