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*Nick Jarrett (right), Coordinator of Robotics and Advanced Manufacturing, helps student Henry Gegorski, program a FANUC LR Mate 200i at Terra State (Fremont, Ohio).*

## Building Ohio's Future Workforce



**John R. Kasich**, Governor

### Governor's Office of Workforce Transformation

**Ryan D. Burgess**, Director



## Governor's Executive Workforce Board

John R. Kasich, Governor of Ohio  
R. Blane Walter, Chair

### Governor's Executive Workforce Board

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University Hospitals

December 31, 2016

The Honorable John R. Kasich  
Office of the Governor  
77 South High Street, 30th Floor  
Columbus, Ohio 43215

Dear Governor Kasich,

In September 2016, you challenged the Governor's Executive Workforce Board to work with the Office of Workforce Transformation to identify ways to prepare and continuously retrain Ohioans of all ages for the jobs of today and tomorrow.

Recognizing the importance of this charge and the dynamic needs of businesses in Ohio, the Board worked with the Office of Workforce Transformation and appropriate state agencies to determine the most prominent workforce challenges and corresponding recommendations to ensure Ohio's businesses have access to a skilled and productive workforce.

Board members sought feedback from local business, education, workforce and economic development leaders and the communities they represent to provide perspective and feedback that contribute to a number of issues that are affecting employers and job-seekers alike. The recommendations presented in the report will aim to address the overarching challenges with the goal of improving growth and prosperity for companies and individuals across Ohio.

All concepts in the report were developed with the following criteria in mind: recommendations must be scalable, have a significant and lasting impact, use data and research to support claims, and be cost and budget neutral. The attached report will outline recommended solutions for your consideration as we approach the FY18-19 Executive Biennial Budget.

Together, we share the common goal of breaking down barriers to employment, training, and education in Ohio. With your support and continuous collaboration with our local businesses and communities, we were able to rise to the challenge and identify ways to make Ohio an even better place to live and work.

Sincerely,

R. Blane Walter  
Chair

Ryan D. Burgess  
Director





## ***Governor's Office of Workforce Transformation***

In February 2012, Governor John Kasich issued an Executive Order creating the Governor's Office of Workforce Transformation (OWT) with the following mission:

To grow Ohio's economy by developing a skilled workforce, promoting effective training programs, and connecting Ohio employers with qualified workers.

The Governor also established the Governor's Executive Workforce Board, comprising business leaders and workforce development stakeholders, to guide the OWT's work and ensure that business needs are at the forefront of any improvements to the system.

## ***Call to Action***

As part of his ongoing search for transformative ideas to shape Ohio's workforce, Governor Kasich challenged the Governor's Executive Workforce Board to work with appropriate state agencies to respond to this charge:

Identify ways to prepare and continuously retrain Ohioans of all ages for the jobs of today and tomorrow.

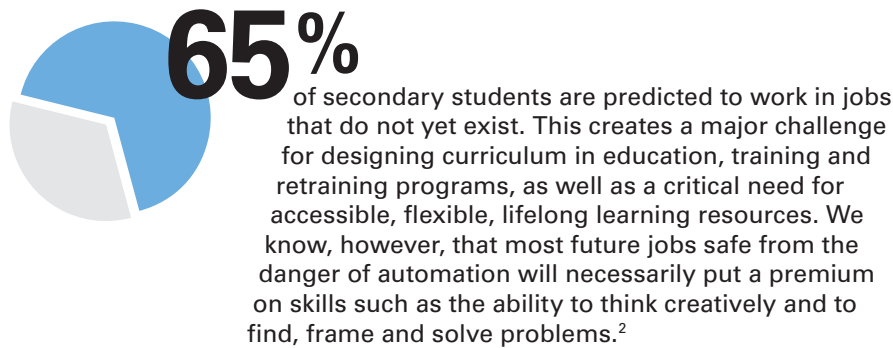
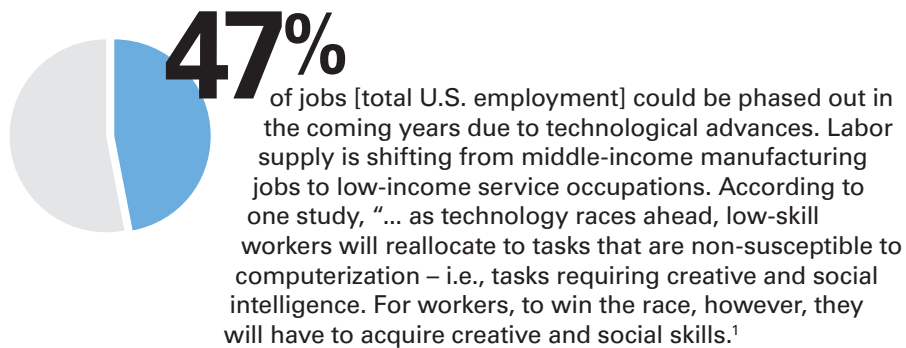
The purpose of this undertaking is to identify the most prominent challenges in early, secondary, postsecondary and adult education with the goal of identifying actionable solutions to ensure Ohio's businesses have access to a skilled and productive workforce. The near-term objective is to identify proposed actions and/or changes to be considered for incorporation into the Governor's FY18–19 Executive Biennial Budget.

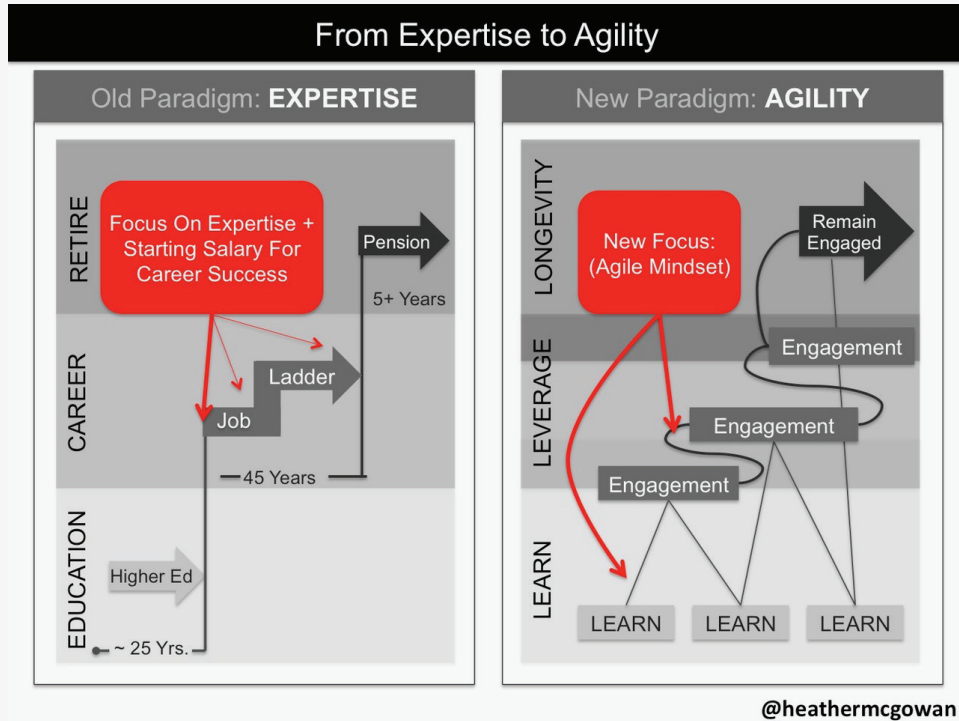
## Why Improvements Are Needed

It's commonplace when discussing public policy needs and priorities to talk of "gaps" and related "imperatives." The focus of this report is on one of the most critical gaps and one of the highest-stakes imperatives we face as a state.

### A Brave New World

Ohioans must acknowledge that we're living in a brave new world of massive, rapid and often disruptive technological change and advancement, and that the jobs of tomorrow will be increasingly technology-heavy. Many of today's jobs were not even imagined 20 years ago. Following are a few indicators of the challenge Ohio faces to make sure every Ohioan has the knowledge and skills needed to succeed in the 21st century workplace, and every Ohio business can find the skilled, adaptable workers they need to compete and thrive globally:





### The Case for Design Learning

"Design learning" speaks to a potential shift in focus for future workforce education and training, from simply transferring existing knowledge to students to focusing on the processes of entrepreneurial learning and creativity:

"The truth is that we can no longer afford to focus on graduating learners armed only with predetermined skills and (already existing) knowledge. The workforce is becoming far too global, too digital, and increasingly too self-employed. We must instead refocus on cultivating creativity, to include not only problem solving, but also problem finding and problem framing. ...

"Design learning is a nascent field that should be codified and taught in schools as a capstone to learning – beginning as early as grade school. Rather than assuming the purpose of education is simply the transfer of fixed knowledge, design learning facilitates the development of the entrepreneurial dispositions and skills necessary to adapt to rapid social and technological change. Indeed, it is our view that education has to pivot from professional training to preparing individuals to innovate within new and emerging fields.

"Education has traditionally prepared individuals for work, but work is now changing too quickly for the latest professional skills to be readily translated into curriculum. The value of design learning is that it provides the right methodology for this changing reality. More important it mirrors the iterative learning and solution building that characterizes the world of work after schooling. ...

"Rather than transferring a fixed body of language and practices from experts to amateurs, design learning focuses instead on developing a learner's capacity to explore, make sense, and craft new innovation on their search for new opportunities. In this way, design learning is a core educational literacy that prepares individuals to creatively adapt to change."

Source: Daniel Araya and Heather McGowan, "Education and Accelerated Change: The Imperative for Design Learning," Brown Center Chalkboard, Brookings, September 9, 2016

## Disconnect Between Business and Education

In a world where the majority of jobs are technology-intensive and require some level of technical knowledge and skills, career training is an even more important and more viable pathway to occupational success. However, disconnects do exist in the delivery of career education and training. For example, the New Skills for Youth Survey, a 2016 statewide poll of Ohioans conducted by the Ohio Department of Education (ODE) and drawing more than 12,000 responses, provided useful insights<sup>4</sup> on stakeholder views of career education:

- The top reason students cite for not engaging in career-focused coursework is that they don't know enough about the options available to them. Educators feel like they are providing a wide range of options to students in terms of career preparation; conversely, students and parents don't feel as though children are receiving career preparation in school.
- Many K-5 teachers do not see career preparation as part of their jobs as educators. About 20 percent of K-5 teachers do not incorporate career preparation in their lessons, with many more indicating they teach primary grades, and careers should not be part of discussion at the primary school level.
- Only 39 percent of school and district administrators agree that teachers in their schools feel confident integrating career content into their courses, and only 56 percent of teachers themselves are confident integrating career content into their courses.
- About 70 percent of parents who responded to the survey state that their students would benefit from more career-focused options in their schools; however, when educators are asked whether they think students and parents are interested in career-focused options, only 27 percent believe students are interested, and 24 percent believe parents are interested.

These projections and survey responses point clearly to a need for system-wide transformation of workforce education and training strategies and programs.

## A Need for Greater Alignment and Attainment

To win the global competition for business investment and jobs, Ohio must develop and attract individuals with knowledge, skills, competencies and credentials that meet the needs of employers, especially those seeking to fill in-demand jobs. Of particular concern is the fact that Ohio currently has a substantial shortage of working-age adults with the degrees and credentials required to be successful in the labor market – in other words, a gap between employer expectations and worker capabilities.

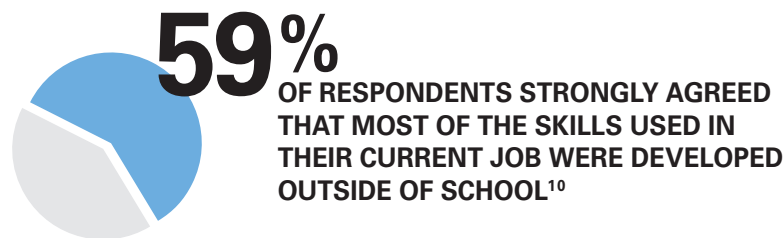
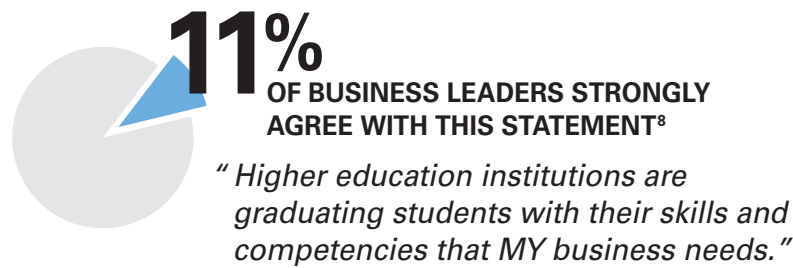
We face a large and serious challenge. According to the Georgetown Center on Education and the Workforce, 64 percent of Ohio jobs in 2020 will require postsecondary degrees or credentials.<sup>5</sup> A new Lumina Foundation report shows, however, that just 43.2 percent of working-age adults in Ohio have a postsecondary certificate or degree,<sup>6</sup> which is slightly below the nation's overall postsecondary attainment rate of 45.3 percent. To produce the number of highly skilled workers with postsecondary credentials required to meet the needs of employers, Ohio will need to produce, by 2025, an estimated 1.7 million more adults with high-quality postsecondary certificates or degrees.

It's a simple matter of supply and demand: Employers seek workers with specific knowledge, skills and competencies of value in the marketplace; unfortunately, employers tell us, many job-seekers lack those skills. This is true for large numbers of job-seekers entering the workforce, incumbent workers seeking to advance in their careers, and displaced workers whose skills may be outdated.

Consider, for example, that just 40 percent of employers believe recent college graduates are well prepared in skills critical for workplace success, including soft skills. Employers also give college graduates low scores for preparedness across learning outcomes. Students, on the other hand, think they are much better prepared for post-college success than employers do.<sup>7</sup>

**Just 40 percent of employers believe recent college graduates are well prepared in skills critical for workforce success, including soft skills.**

The disconnect between employer expectations and employee capabilities is not a new phenomenon. In 1998, for example, the Ohio Skill Gap Initiative, a joint venture of the Ohio Business Roundtable and the Ohio Department of Education, in cooperation with ACT, Inc., tested 14,000 Ohio high school graduates, using ACT's WorkKeys, and found just 1 in 14 or 7 percent ready for the workplace. In other words, we've been battling this issue for years, with unsatisfactory results.



Other more recent indicators of the expectations/capabilities disconnect include the following:

Gaps like these are widening. According to a 2016 McKinsey & Company study of more than 800 occupations, the continued growth of automation will drive substantial workforce changes over the next decade. Automation will likely result in very few occupations being eliminated entirely; however, it also likely will affect a portion of almost all jobs, in varying degrees. The McKinsey study attests that technologies available today could automate 45 percent of the activities that people are paid to perform and that about 60 percent of all occupations could see 30 percent or more of their component activities automated.<sup>11</sup>



The December 2014 Workforce Integration Task Force Report concluded that Ohioans with disabilities often lack appropriate training opportunities to acquire the skills for in-demand occupations. The Task Force recommended the State of Ohio should ensure that in-demand occupational skills training be available and accessible to all Ohioans. In the same spirit, it is the intention and expectation of the Governor's Workforce Board that each of the training programs referenced and recommended throughout this report also be broadly accessible.

Strengthening Ohio's workforce development system is perhaps the most compelling economic imperative we face as a state. At stake is nothing less than Ohio's appeal to businesses across the globe seeking to locate, expand and invest – and Ohioans' future economic opportunity, prosperity and quality of life.

**"... Based on current trends, there are potentially serious gaps in the supply of workers with the skills that will be needed to drive 21st century economies, and a growing supply of workers with more limited skills. Avoiding these imbalances (in both advanced and developing economies) and their consequences will require an unprecedented commitment to education and training."**<sup>12</sup>

### Building on Recent Successes

Under Governor Kasich's leadership, Ohio has made great strides in ensuring that Ohio students have access to high-quality career preparation resources and that that schools, parents and students are properly incentivized to take advantage of those opportunities.

The recent partnership between the Ohio Department of Education and Opportunities for Ohioans with Disabilities (OOD) whereby OOD has embedded Vocational Rehabilitation Counselors into school districts will further the workforce system's ability to connect more students with disabilities to in-demand occupations, with guidance and counseling leading students to these career pathways.

Another example of committed collaboration to narrow Ohio's "talent gap" is the work of the Ohio Department of Education, the Ohio Department of Higher Education, and the Office of Workforce Transformation to convene stakeholders from K-12, higher education, workforce development, philanthropy and community partnerships to establish a formal **Ohio Attainment Goal 2025**:

**"65 percent of Ohioans, ages 25-64, will have a degree, certificate or other postsecondary workforce credential of value in the workplace by 2025."**

It's clear that parents, educators and the business community are strongly motivated to ensure that students are prepared for successful careers. They recognize the positive changes ongoing at the state level and appreciate efforts to create a seamless, aligned system where students are prepared for their career paths, whether those paths include college degrees, industry credentials, apprenticeships, military enlistment, or a combination.

There is much work to be done in terms of communicating and building resources to help families connect with pathways, help businesses connect with schools, and help teachers connect with strategies to prepare their students for careers. The recommendations contained in this report have been proposed to assist in making these connections.



## It Won't Be Easy

We need to make sure every Ohioan has the knowledge and skills needed to succeed in the workplace. This is a critical, must-have outcome for our businesses as well as for members of the state's workforce.

This creates an imperative to work together as a state to make sure businesses clearly communicate their workforce needs. Businesses must help shape training by forming partnerships with education institutions and government at all levels; playing a meaningful role in the development of curriculum, credentialing programs and work-based learning experiences; and working with education and training providers to match students with appropriate work-based learning experiences to help those entering or transitioning within the workforce get a better feel for career opportunities available to them.

Conversely, education providers, workforce development organizations, labor organizations and others must find ways to meet those employer needs. These diverse stakeholders must collaborate to develop education and training programs that will ensure a workforce capable of quickly adapting to new and evolving business needs.

**We need to change the perception of career technical education so more students see specialized skills training as a viable pathway to success in college or careers.**

In broad terms, we need a workforce development system that is not only aligned with employer needs but also with the realities of modern life and modern students.<sup>13</sup> To achieve that objective, we also will need to change the perception of career technical education so more students see specialized skills training as a viable pathway to success in college or careers.

## The Road Ahead

How well positioned are we in Ohio to respond to the workforce training challenge we face?

A diverse set of dynamics impacts our state's workforce development system. Currently, job training in Ohio is fragmented. Career and training providers, such as Ohio Technical Centers and OhioMeansJobs Centers, typically operate as silos. The broad and complex array of users with diverse needs makes it difficult to document and communicate resources and results. On top of these obstacles, the complexity of multiple agencies (at national, state and local levels) trying to address these issues adds another layer of difficulty.

We know we need to operate as an integrated, coherent system. We know we need to view our education, training and retraining programs as a centralized resource balanced with diverse, regional needs – and to provide greater visibility for the opportunities available through that resource. We know we need better occupational data, and we need to work more collaboratively to develop programs that truly meet business needs.

And, finally, we know this work needs to be a priority.

The Board shares Governor Kasich's vision of an education and workforce training system that ensures we have access to lifelong learning and the ability and flexibility to succeed in 5 to 10 jobs in a lifetime.

We understand that America has become a "knowledge nation" – and that we are moving forward, not in reverse. We are no longer making things the way we used to. Today we are making things with technology as a partner in raising productivity – because productivity is where the high value and high wages are to be found.

Through OhioMeansJobs.com, we've had some success connecting available jobs to people entering the workforce; looking ahead, we need to do an even better job of providing our entering, incumbent and displaced workers with the knowledge and skills they need to succeed, which in turn is what will help our businesses succeed.

As Governor Kasich noted in issuing his call to action to the Governor's Executive Workforce Board, what's important in the end is the value you represent when you enter the workforce. In a knowledge economy, if you have skills, you win; if you don't, you lose.

The workforce training challenge we face is about the very essence of opportunity in this great country and our great state. If we don't succeed in this quest, we'll be denying Ohio and its citizens great opportunities to move forward in a significant ways.



## Process Overview

### Work-Group Structure

The Board began its work with an exercise to identify the major gaps and challenges that exist in Ohio's workforce system today. To focus the Board's efforts, the Office of Workforce Transformation summarized the key gaps/challenges and categorized them into four groups that cross the lifetime learning continuum.

The Board then worked in groups each to develop recommendations for how to address specific gaps/challenges. To make most effective use of Board members' expertise, these work sessions were facilitated by LeanOhio staff. Subject matter experts from relevant state agencies also were on site to provide technical guidance and clarification.

Large-group discussion and several rounds of review and revision resulted in a consensus report of high-impact, high-scalability recommendations. The OWT project team, working collaboratively with board members and subject matter experts, then identified tactical initiatives that can be deployed to achieve each of the Board's recommendations. The result was this report, entitled Building Ohio's Future Workforce.

### Criteria for Recommendations

The following guiding principles directed the Board's work to identify, assess and prioritize proposed solutions:

- **Recommendations must be scalable.** The greater the capacity and potential reach of the proposed solutions, the more likely transformative change will result.
- **Recommendations must have significant and lasting impact.** Because resources are limited, solutions must deliver maximum value and pay substantial dividends.
- **Recommendations must use data and research to confirm assumptions and solutions.** The stakes are so high that proposed actions must be grounded in empirical evidence, not simply theory.
- **Recommendations must be cost/budget neutral.** Scarce public dollars require strategic prioritizing and responsible stewardship of those dollars.

### Common Themes

During the Board's deliberations on actionable recommendations for creating a more effective, efficient workforce development system, several common themes surfaced that should be noted here, as they helped frame the Board's thinking and spanned most working group topics of discussion.

- **Adopt a broader system perspective.** Board members consistently spoke of the need to view workforce education and training across a lifelong continuum. The more fully aligned, coordinated and comprehensive the various system components are, the more successful we will be in designing resources that meet the wide variety of system stakeholder needs.
- **Communicate and collaborate.** Repeatedly throughout the Board's deliberations participants pointed to examples of stakeholders' failure to communicate clearly, frequently and constructively on matters of specific needs, concerns, resources and opportunities. Most of these discussions concluded that formalizing various partnerships was one way to overcome common obstacles to maintaining ongoing meaningful dialogue.
- **Compile and share best practices and promising practices.** All working groups, and virtually all Board members, noted the vital need to do a better job of identifying, compiling and sharing documented best practices and promising practices. It was widely felt by participants that many great programs and practices exist in Ohio, and that a lack of coordinated sharing is the only thing preventing broader use and benefits across the state.
- **Repurposing existing resources.** One of the stated criteria for the Board's recommendations was that each recommendation must be budget/cost neutral. While this sometimes proved challenging in the brainstorming and discussion, Board members embraced the spirit of that specific criteria and offered many examples of where existing resources might be repurposed for greater benefit.



## Recommendations

**Problem Statement 1: A disconnect exists between school curricula and relevant, practical workplace skills, resulting in a gap between worker capabilities and employer expectations.**

### Recommendation 1A: Promote Local/Regional/State Collaboration

Promote collaboration of local chambers of commerce, regional economic development groups and JobsOhio with community colleges, Ohio Technical Centers and K-12 to align with the job demands of Ohio businesses.

- Require the Ohio Department of Higher Education, in collaboration with the Ohio Department of Education, to report annually to the Ohio General Assembly on Ohio's progress toward achieving the Ohio 2025 Attainment Goal of 65 percent of adult-age workers attaining affordable college degrees, industry certificates or other credentials of value to Ohio employers.
- Require the Ohio Department of Education and the Ohio Department of Higher Education to efficiently increase the articulation of career-technical education programs.
- Require the Office of Workforce Transformation to collaborate with JobsOhio to ensure that OWT strategies are closely aligned with specific occupations and competencies required by employers in JobsOhio's targeted industries.



### Recommendation 1B: Require Schools to Offer Project-Based Learning

Require middle schools, high schools, community colleges, Ohio Technical Centers and universities to work with local businesses to offer project-based learning experiences that give students opportunities to solve authentic, real-world business problems.

- Require the Ohio Department of Education and the Ohio Department of Higher Education to work collaboratively with Ohio's major business organizations – Ohio Business Roundtable, Ohio Chamber of Commerce, Ohio Contractors Association, Ohio Manufacturers' Association, Ohio Council of Retail Merchants, NFIB-Ohio, and the Ohio Farm Bureau – to create a strategic plan for increasing project-based learning and develop professional development programs that address how to build authentic, real-world, project-based learning into the curriculum.

### Recommendation 1C: Establish Regional Workforce Career Explorations and Counseling Collaborations

Establish regionally based Workforce Career Counseling Collaborations that make career counseling services available to middle school and high school students.

- Require the Ohio Department of Education, in coordination with the Ohio Department of Higher Education, to develop a Regional Workforce Career Counseling Collaboration model in which the JobsOhio Network, local chambers of commerce, local school districts, local businesses and others build county-level partnerships that provide career services to students. These services may include



job shadowing and internship experiences, career exploration activities, and problem-based curriculum developed around local employer needs. This will help ensure that students are placed in the best possible program, matched to their career interests and abilities, so they will be more likely to succeed. Washington County's Building Bridges to Careers program is a model of a collaborative program that provides robust career experiences to students in a cost-efficient manner by bringing together multiple school districts and employers.

**Problem Statement 2: Educators are unsure of how to engage the business community regarding in-demand occupational needs, and businesses often are unclear about the best ways to share their workforce needs with educators and to engage them in identifying talent matched to businesses' needs and expectations.**

#### **Recommendation 2A: Increase Business Representation on Local School Boards**

Increase efforts to establish and collaborate with local business and industry.

- Require local school boards to appoint three non-voting, ex officio members who represent local business interests.

#### **Recommendation 2B: Require School Leader Engagement**

Require school district superintendents and other district leaders to participate in local chambers of commerce and other business organizations and partnerships.

- Update current tools for evaluating school district superintendents to include engagement with area businesses as a performance metric.
- Revise Ohio's new school counselor standards to include engagement with businesses as a performance metric.

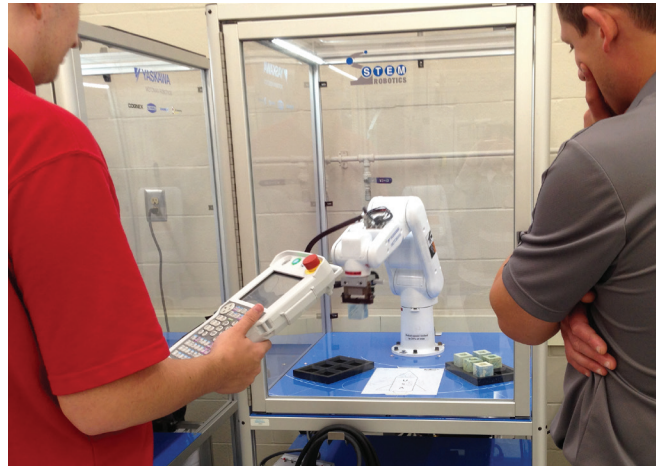
**Problem Statement 3: Students do not have adequate opportunities for "work-based learning."**

#### **Recommendation 3A: Expand Business Engagement Opportunities**

Increase business engagement opportunities with schools through student internships, co-ops, job shadowing, mentoring, tutoring, recognized apprenticeships and other opportunities for work-based learning.

- Promote and encourage the growth of successful programs such as Columbus's Christo Rey High School that integrate four years of rigorous college preparatory academics with four years of professional work experience through a "Corporate Work Study" model.
- Create a formalized "broker" position to help drive collaboration among local stakeholders, which could include local Chambers of Commerce and/or other economic development organizations.
- Require the Ohio Department of Education, in conjunction with the Governor's Office of Workforce Transformation and representatives from business organizations, to create an oversight body/process to review and update, annually, the approved industry-recognized credential list required for graduation.
- Encourage all school districts to review their Ohio Credit Flexibility plans to identify additional opportunities for integrating meaningful, work-based learning experiences and internships/co-ops. By connecting learning to real-world situations and future jobs, credit flexibility can increase students' interest in school and motivation to learn.

- Include work-based learning and post-graduation job placement metrics on the Ohio School Report Cards and require a balanced report card for college and career readiness.
- Align recognized pre-apprenticeship programs within Ohio's College Credit Plus program, add recognized pre-apprenticeship as a pathway to graduation, and add recognized pre-apprenticeship certificate attainment to the "Prepared for Success" report card measurement.
- Create awareness within the business community about subminimum wage laws applicable to students enrolled in bona fide vocational training programs.



### Recommendation 3B: Encourage Teacher Externships

Increase externship opportunities for all teachers.

- Require teachers' Individual Professional Development Plans to include teacher externship experiences.
- Require Ohio's Professional Educator and Counselor License Renewal requirements to include CEU credits earned for teacher externship experiences.

**Problem Statement 4: Parents and students lack awareness of non-four-year, postsecondary degree pathways. Persistent misconceptions and related stigmas have further limited exposure to these viable career options.**

### Recommendation 4A: Create an Annual, Statewide "In-Demand Jobs Week"

Create an annual statewide "In-Demand Jobs Week" to raise awareness among educators, students and parents of high-demand job openings, job requirements and job benefits.

- Require the Governor's Office of Workforce Transformation, in coordination with the Ohio Department of Education, the Ohio Department of Higher Education and the Ohio Department of Job and Family Services, to organize an In-Demand Jobs Week. Among the activities for this week would be in-demand job fairs or tours of companies that have in-demand occupations as a way to connect middle and high school students with prospective employers.
- Require the Ohio Department of Education to develop an "OhioMeansJobs-Ready Certificate" for high school students who demonstrate their work-readiness by successfully exhibiting to-be-determined work ethic competencies (such as teamwork, problem-solving, reliability, punctuality, etc.) validated by no fewer than three teachers and/or business mentors and attaining at least four objective competencies – including community service and technology – before graduation.

## **Problem Statement 5: Early exposure to career possibilities for parents and students is limited.**

### **Recommendation 5A: Create an E-Information and Resource Sharing Tool**

Establish a communication tool to share success stories for replication by education/training providers and to facilitate resource sharing among all stakeholders.

- Create “one-stop” web resources that are available during non-work hours or school hours, categorized by stage of life or by category (e.g., mentoring), providing state-level information for educators, families and communities, including information focused on career readiness skills and links to OhioMeansJobs.com for parents.
- Leverage the proposed sharing tool to provide resources and technical assistance for promising practices in disability inclusion through “Universal Course Design” – a set of strategies and practices that make courses more accessible for students, especially those who speak a primary language other than English, are not academically prepared, go to school part-time and lead busy lives, or have disabilities.
- Enhance and expand efforts to make students and families more aware of the practice tests for the ACT, SAT, WorkKeys and others that are available free of charge on OhioMeansJobs.com.

### **Recommendation 5B: Foster Mentoring Relationships**

Leverage existing relationships and programs to expand formal and informal, evidence-based mentoring relationships.

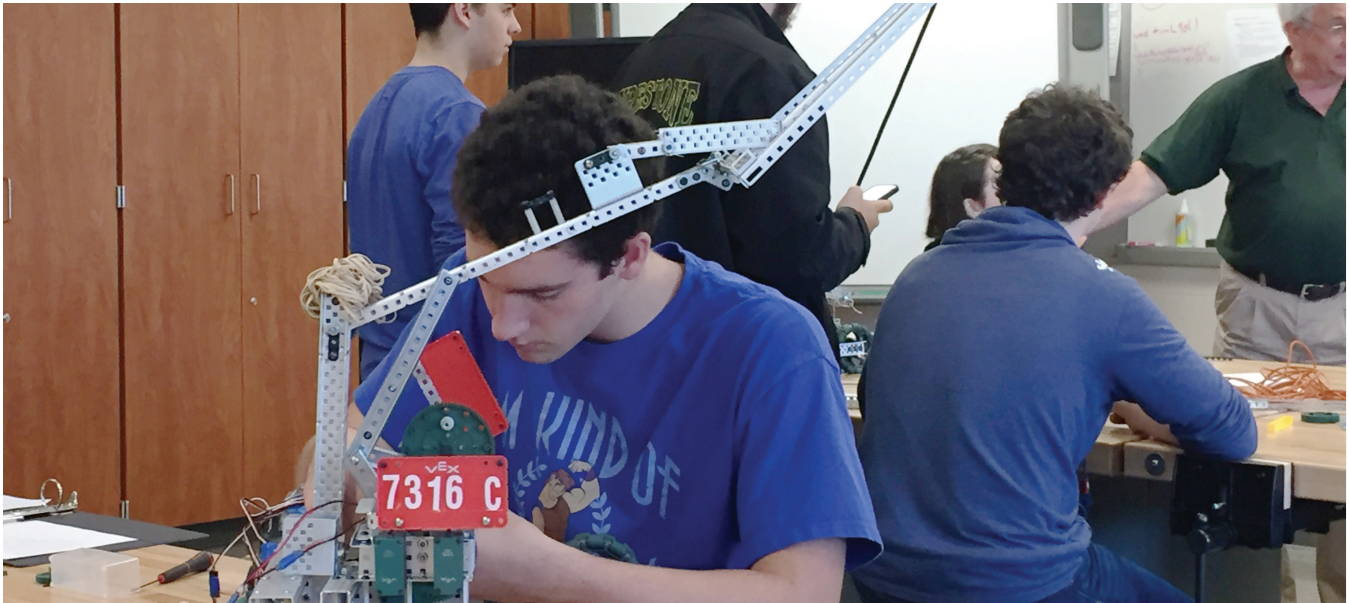
- Incorporate mentoring practices in the state’s Quality Rating and Improvement System for early education providers.
- Incorporate drug prevention messaging in schools. Part of ensuring that children are career and college ready involves sharing the importance of staying drug-free. Start Talking! is an initiative that gives parents, guardians, educators and community leaders the tools to start the conversation with Ohio’s elementary, middle and high school students about the importance of living healthy, drug-free lives. Schools should incorporate Start Talking! or other drug prevention messaging where appropriate.

## **Problem Statement 6: Businesses report that entry-level employees lack basic work-readiness skills that could begin to be taught in primary education and throughout the education system and mentoring programs.**

### **Recommendation 6A: Leverage Effective Practices**

Improve leveraging of financial resources by reallocating funds to replicate existing programs that have demonstrated effective, measurable outcomes.

- Monitor new evidence-based curriculum and assessment packages (“High Scope” and “The Creative Curriculum”), which contain social and behavioral lessons and are being offered by the Ohio Department of Job and Family Services and the Ohio Department of Education to publicly funded childcare and primary education providers.
- Strengthen professional development for childcare providers, which already focuses on Approaches to Learning and Social/Behavioral standards, by linking these important standards to career readiness.



### Recommendation 6B: Formalize Career Exploration Partnerships

Formalize partnerships among businesses, communities, government and families to share and explore information about careers and how to prepare for them.

- Award extra points to childcare providers seeking a 4-star or 5-star rating in Ohio's Quality Rating and Improvement System for participating in community partnerships that engage businesses in sharing and promoting careers and exploring the kind of knowledge and skills needed to be successful.

### Recommendation 6C: Focus Early on Employability and Career Readiness

Integrate the mission of employability and college/career readiness beginning early in life.

- Include career readiness as a core component of the State of Ohio's mission and guiding principles for primary education and development.
- Require programs to embed work-readiness skills into their standards.

**Problem Statement 7: Postsecondary institutions allocate scarce and valuable funds to student remediation. This directs resources away from core programs, drives up the cost of education, and delays graduation and entry into the workforce for students.**

### Recommendation 7A: Provide Transition Classes

Provide "transition classes" to high school students with the highest need for remediation but also a strong desire to move onto postsecondary, to provide the extra instruction they need to be career-ready or college-ready upon graduation from high school.

- Consider implementing a statewide program like the Tennessee SAILS model, which allows high school seniors to complete remedial work through a blended learning curriculum developed through K-12 and higher education collaboration. The program has showed impressive results in graduating more students college-ready.
- Build on the success of programs such as Jobs for Ohio Graduates in serving the most at-risk youth in our state by helping these young people stay in high school through graduation; pursue postsecondary education; and ultimately secure quality, entry-level jobs leading to career advancement opportunities.



**Recommendation 7B: Expand Co-requisite Remediation**

Expand co-requisite remediation by allowing students in need of remediation to take credit-bearing courses, with extra support, enabling them to graduate sooner.

- Promote scalable expansion of co-requisite remediation at all of Ohio's public colleges and universities such as Wright State University and Lorain County Community College.
- Create more gateway mathematics and English courses that align to career goals and integrate workforce development and career development objectives such as programs at Rhodes State College (integrating career services in the school's Developmental Writing and English Composition courses) and Stark State College (developing alternative co-requisite remediation strategies and models for developmental courses in mathematics through the school's participation in the Ohio Mathematics Initiative).

**Recommendation 7C: Invest in Early Redirection**

Redirect students who are not progressing beyond remedial courses after a defined period of time to alternative pathways, with job-driven financial aid.

- Continue to grow programs that support early student career decision-making such as the successful collaboration between Shawnee State University, Southern State Community College and the Scioto County Career Technical Center. The Workforce Career Counselors proposed in Recommendation 1C would play a vital role in directing students to the right programs early on so remediation would not be necessary.

**Problem Statement 8: Adult retraining programs are not widely known, often duplicative, not easily accessible (time/location), and reactive (after job loss has occurred).**

**Recommendation 8A: Create a State-Level Data Analytics Infrastructure**

Enhance the existing, highly disjointed, state-level data analytics infrastructure to better coordinate work throughout the system and focus strategic initiatives on in-demand jobs and careers that are actionable on a local level.

- Enable state agencies to share data more efficiently, allowing providers to deliver a holistic approach to a jobseeker.
- Expand OhioMeansJobs.com capabilities by offering dynamic, interactive career pathways to middle school students, high school students and adult jobseekers.
- Utilize real-time demand and supply data compiled by the Ohio Department of Higher Education in fulfillment of obligations associated with State Workforce and Education Alignment Project (SWEAP) grants for aligning in-demand occupations with college curriculum and guiding jobseekers to employment opportunities for which they are qualified.
- Expand the number of in-demand occupations, as determined by the Governor's Office of Workforce Transformation, currently mapped by region and accessible via the OhioMeansJobs.com Workforce Supply Tool, to the full listing of in-demand occupations.
- Require the Governor's Office of Workforce Transformation, in conjunction with the Ohio Department of Job and Family Services, to conduct a biennial survey of in-demand occupations in Ohio.
- Require the Ohio Department of Education and the Ohio Department of Higher Education to establish design teams that leverage existing industry-led workforce partnerships to identify emerging skill needs based on predictive as well as real-time data analytics, and recommend innovations in education and training that respond to these trends.

### Recommendation 8B: Enhance Ohio's Career Transition & Training Delivery System

Create a more comprehensive, integrated, career transition and training delivery system that assists jobseekers in getting started on a career pathway, delivering short-term, non-credit adult training that integrates industry-recognized credentials, is built upon dedicated career counseling/coaching services, and positions jobseekers for moving on to the next steps in their career pathway.

- Require the Ohio Department of Higher Education to collaborate with key sectors in Ohio's high-demand industries as well as public colleges, universities and Ohio Technical Centers to develop and implement strategies such as prior learning assessment that support increased attainment of postsecondary credentials by adults over age 25 for careers in in-demand jobs.
- Consolidate adult education programs currently within the Ohio Department of Higher Education and Ohio Department of Education into one agency to achieve greater coordination and results.
- Consolidate funding for Adult Education programs to allow for greater flexibility among programs.
- Require Adult Basic Literacy providers to apply for eligibility in the Workforce Inventory of Education and Training No. 16-02 with the Ohio Department of Job and Family Services to coordinate training services that focus on providing short-term certifications for those who fall below postsecondary aptitudes.
- Require ABLE for adults who score below a 6th-grade level in reading and/or math on college and training program placement tests and accelerate learning that supports career pathways to in-demand jobs by setting state-level policies allowing co-enrollment in adult workforce training programs (i.e., career tech and adult diploma programs).
- Rebrand Ohio's public libraries as "Continuous Learning Centers" that serve as hubs for information about local in-demand jobs and relevant education and training resources. Additionally, bolster the Ohio Digital Library's online education resources to provide more accessible training materials to adult learners.
- Require OhioMeansJobs Centers to enter into memorandums of agreement with public libraries to facilitate collaboration and coordination of workforce development programs.
- Require uniform intake forms for adult training programs funded by the Workforce Innovation and Opportunity Act.
- Require the Ohio Department of Job and Family Services, in coordination with the Ohio Department of Education and the Ohio Department of Higher Education, to build an interactive portal within OhioMeansJobs.com that provides an automated referral service matching the job training needs of Ohio's businesses with training providers. This information would be made available to Career Technical Education, Ohio Technical Centers, and community colleges interested in bidding on providing the requested training services. Training providers who meet the needs outlined by Ohio businesses would be given priority access to the state's Workforce Revolving Loan Fund.
- Assess the impact of pilot programs that assist eligible unemployed and underemployed adults in overcoming employment barriers to the education, training and support resources they need to become skilled workers pursuing career and wage pathways – and determine feasibility of scaling up the program across Ohio.
- Encourage improvements to existing programs to increase their availability to individuals with disabilities and require that all newly developed programs are accessible to individuals with disabilities through reasonable accommodations.



### Recommendation 8C: Foster a Statewide Learning Culture

Foster a statewide “learning culture” that is responsive to a dramatically changing workplace and promotes and supports lifelong learning.

- Require the Ohio Department of Job and Family Services to scale up the Work Ready Communities initiative to state level through a statewide competition among OhioMeansJobs Centers, driving up the number of communities across Ohio that have conducted ACT WorkKeys analysis and aiding job seekers and employers alike with information that will secure better employer-employee matches and drive economic growth.
- Create incentives – i.e., reduced sentences – for eligible incarcerated individuals in Ohio to receive their high school equivalency certificates.
- Require the Ohio Department of Higher Education to compile an inventory of non-credit certificate programs at Ohio colleges, universities and Ohio Technical Centers, and redirect state funding for programs that align with in-demand jobs and integrate industry-recognized credentials, to support adult learners in acquiring the skills needed for success in in-demand jobs.
- Expand eligibility of the Ohio National Guard Scholarship fund to include apprenticeship and short-term, in-demand certificate programs.
- Require the Governor’s Office of Workforce Transformation, the Ohio Department of Job and Family Services and the Ohio Department of Higher Education to promote Western Governors University curriculum and capabilities, as well as other competency-based training resources in areas that align with Ohio’s in-demand occupations, for working adults with some college or no degree and to employers seeking educational opportunities for their employees.
- Encourage continuous learning by offering online training services, such as Udacity, and shorter-term “boot camp” trainings to quickly respond to the needs of businesses.

**Problem Statement 9: Promising practices throughout the state are inconsistently implemented.**

### Recommendation 9A: Develop methods/mechanisms for identifying, compiling and sharing best practices.

Continue to develop the Governor’s Office of Workforce Transformation’s website and social media venues in an effort to create awareness around promising practices.





## ***A United Effort to Create a Brighter Future***

Building Ohio's future workforce will be a major undertaking. It will require unwavering commitment, fresh new ways of thinking, and above all, unprecedented levels of collaboration among stakeholders. The pace and magnitude of technological change, along with the pressures and opportunities of a knowledge-based global economy, leave us with no other viable option.

If there is one thing the work of the Governor's Executive Workforce Board has revealed again and again, it's this: Businesses and educators must communicate with each other more often, more clearly and more candidly about their needs and expectations. Collaboration will be the key – to creating economic opportunity for our youth and adult workers, to strengthening the competitiveness of Ohio businesses, and to spurring economic growth and prosperity for all.

Governor Kasich charged the Board to "Identify ways to prepare and continuously retrain Ohioans of all ages for the jobs of today and tomorrow." We have embraced the Governor's charge, and we look forward to the next step in strengthening our state's workforce development system – i.e., incorporation of our proposed tactical options into the 2018–19 Executive Biennial Budget. We believe our recommendations will help ensure that Ohio businesses have access to a skilled and productive workforce, and that any improvements to the workforce development system will have business needs at the forefront.

**We believe our recommendations will help ensure that Ohio businesses have access to a skilled and productive workforce, and that any improvements to the workforce development system will have business needs at the forefront.**

Urgent action is needed for Ohio to thrive, and not merely survive, in the brave new world of global competition, technological advancement, manufacturing automation and lifelong learning. We simply cannot afford to delay.



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