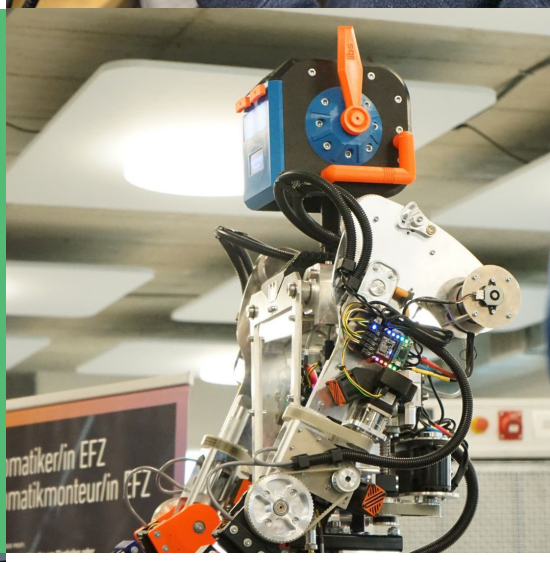
Indiana's New Career Pathway:

PREPARING MORE HOOSIERS FOR SUCCESS AFTER HIGH SCHOOL

iLAB INDIANA
STRATEGIC PLAN
EXECUTIVE SUMMARY



SEPTEMBER 2024

PREPARED BY

CEMETS iLAB
Indiana

By 2034, job openings are expected to grow in Indiana by about 107,000.[1] Combined with the approximately 150,000 job openings that exist today,[2] this projection presents a significant talent challenge for our state. While college graduates and the existing workforce will meet some of this demand, it is evident Indiana will need additional sources of talent.

A cohort of Indiana business, education, government, and nonprofit leaders has developed a model for an employer-led professional pathway that will work alongside the existing college pathway to help educate and train high school students and adults.

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1 Lightcast, Indiana Industry Table: 2024 – 2034 Jobs.
2 https://www.bls.gov/regions/midwest/news-release/jobopeningslaborturnover_indiana.htm

THE VISION:

By 2034, Indiana's education-to-workforce system will ensure every student and adult learner has access to high-quality education and training options, enabling all Hoosiers to discover their passions, reach their fullest potential, and meaningfully contribute to the economic and civic vitality of their communities. As a result, Indiana will become a Top 10 destination for employers seeking to expand existing businesses and entrepreneurs working to launch new businesses.

A PROFESSIONAL PATHWAY, A SOLUTION FOR INDIANA

As we continue to stare down the challenge of preparing all Hoosiers for rewarding careers and helping Indiana employers find the talent they need, we are constantly reminded of the roadblocks that exist today and those that lie ahead. By 2031, 72% of jobs in the United States will require education or training beyond high school. Indiana simply isn't meeting that demand.

We don't have enough Hoosiers attending – and finishing – college, and we provide limited opportunities for those who don't pursue a college degree.

It's time for another approach. A consortium drawing from Indiana business, education, government, and nonprofit sectors has found one in a model that transformed Switzerland's workforce.

We don't have enough Hoosiers attending – and finishing – college, and we provide limited opportunities for those who don't pursue a college degree.

The proposed professional pathway offers students statewide access to careers through apprenticeship experiences with employers, coupled with related secondary- and post-secondary instruction. It is a system – not a program, not a project, but a statewide system – that will prepare tens of thousands of Hoosiers for a continually changing workplace and give employers a greater opportunity to address their workforce needs. Importantly, it offers an option for people who otherwise might not see college as a viable pathway to earn competencies and skills after high school, and also have the option to seamlessly transfer to the college pathway if desired.

As Co-Chairs of the iLab Governing Committee, we address this challenge from different, albeit aligning, perspectives.

I, David, have spent decades hiring for First Internet Bank, witnessing firsthand the evolving needs of our industry. Time and again, I've seen that even experienced, college-educated professionals may lack the broad competencies required in today's dynamic banking landscape. The professional pathways model excites me because it promises to cultivate workers with versatile skills applicable across entire industries. This approach not only enhances individual career prospects and market value but also instills greater confidence in employers during the hiring process.

I, Claire, have dedicated my career to strengthening Indiana's education system. For two decades, I've searched for an approach that equips all students - regardless of their college aspirations - with the tools to thrive in our rapidly changing job market. My goal has always been twofold: empower students and provide employers with a robust pipeline of work-ready talent. When I first encountered the Swiss education and training system in 2016, I had a eureka moment. Here was a model that could revolutionize how we prepare our workforce by better connecting industry and education systems.

Working together and with a broad array of Hoosier leaders and experts, we have studied the Swiss system's basic tenets and analyzed its impact. We have discussed its challenges and opportunities with our peers here in Indiana and our counterparts in Switzerland. We have talked with Swiss employers, employees, economists, and academics.

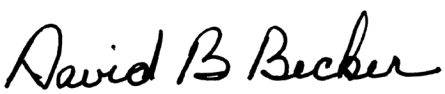
Two-thirds of Swiss high school students participate in this system, and we have been delighted to speak with some of them. Enthusiastic about their experiences, they impressed us with their poise and capabilities, their zeal for the experience, and their certainty about their futures. They gave us hope for what this approach could mean for Indiana's young people.

We know that Indiana's education system has, in recent years, been scrutinized and analyzed, tweaked and tinkered with, in countless ways. We understand that employers and educators often have different priorities in their work with youth. We acknowledge that change is not easy.

But we also know that we cannot continue to do the same thing and expect to get different results. We believe we have aligned on a proposed system design that will move us toward a better future for our young people, employers, educators, and economy.

As you'll read in these pages, we are not proposing this system without deep consideration of how it would work in Indiana. Already, some 150 Hoosier business, education, government, and nonprofit leaders are deeply involved in designing and implementing a data-driven structure and actionable next steps. We have already learned from several youth apprenticeship pilot programs across the state and see a clear path forward for establishing a statewide system that builds upon the many excellent programs, institutions, and assets we have in Indiana.

Now we invite you to join us in implementing a new approach, one that can prepare Hoosiers for meaningful, good-paying careers and develop the foundation for a robust and sustainable economy for Indiana.



David Becker
Chairman & CEO,
First Internet Bank

Claire Fiddian-Green
President & CEO,
Richard M. Fairbanks Foundation

EXECUTIVE SUMMARY

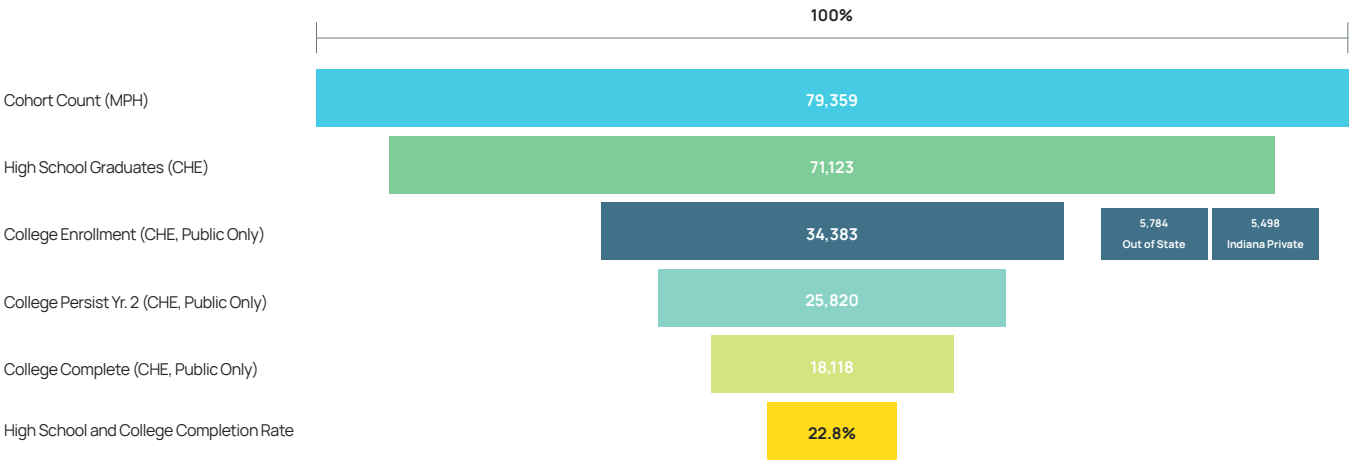
THE NEED

As our nation's economy continues to evolve at the most rapid rate in its history, jobs require increasing levels of educational attainment to keep pace with advancements in industry. Yet, despite significant investment by both the public and private sectors, too few Hoosiers are connecting with education and training opportunities that prepare them for careers.

By 2031, 72% of jobs in the U.S. will require education or training beyond high school.[3] Indiana faces a shortfall in meeting this demand with only 39% of adults 25 years and older holding an associate degree or higher. Indiana's current college enrollment rate is 53%[4] and college completion rates are persistently low, with only 47% of students graduating on time and 67% graduating within six years.[5] On average in Indiana, less than 40% of each high school cohort graduates from high school and earns a college degree.

For example, in 2013, there were 79,359 Indiana students in the high school graduating class. Of those students, only 89.6% graduated. Of the students who graduated, only 48.3% enrolled in a public Indiana college or university. After the first year, 25% of those students did not move on to year two and only 22.8%, or 18,118, students from the 2013 graduating class completed a two- or-four-year degree at a public Indiana institution.[6] Another 11,282 students enrolled in college out-of-state or in a private Indiana institution, but even assuming a 100% completion rate, the total high school and college completion rate is only 37%.

High School Cohort Advancing to Graduation from High School & Indiana Public Postsecondary Education (2012-13 All Indiana Students)



3 Georgetown University Center on Education and the Workforce, After Everything: Projections of Jobs, Education, and Training Requirements through 2031.
4 Richard M. Fairbanks Foundation, Community Data Snapshot.
5 Indiana Commission for Higher Education, Indiana College Completion Report 2023.
6 Business Equity for Indy, Racial Gaps in the Education-to-Workforce Pipeline and Indiana's Opportunity to Close Them.

Recognizing that the college pathway alone cannot meet our talent needs, momentum has been building in Indiana to create a professional education and training pathway.

This low educational attainment affects both Indiana employers and individuals. Employers are unable to find the talent they need to grow their businesses and individuals enter the job market without the skills employers seek, limiting their career opportunities and earnings potential. While the college degree pathway will always offer one critically important solution to this challenge, it is not designed to meet the needs of all students or employers.

Recognizing that the traditional college pathway alone cannot meet our talent needs, momentum has been building in Indiana to create a professional education and training pathway where employers and educators work together starting in high school to develop skilled talent.

An employer-led professional and education pathway – where employers identify in-demand occupations within their industries and the related competencies, partner with educators to develop curricular content, and deliver on-the-job education and training – enables employers to play a leading role cultivating the talent needed to meet their evolving workforce needs.

Implementing this new pathway requires establishing a statewide system to ensure students in every community can access it, and that the competencies they gain result in a formal credential recognized by both employers and the higher education system. Together, the existing college pathway and new professional pathway can operate as part of a comprehensive education and training system that engages the vast majority of Indiana's high school students.

THE BLUEPRINT FOR THE FUTURE

Indiana's journey to develop a professional pathway began in 2017 when leaders from K-12, higher education, business, and government began learning about the Swiss **vocational and professional education and training, or VPET**, system. The Swiss VPET system – consisting of VET programs for youth and PET programs for experienced learners – is considered the world's gold standard for educating youth and fulfilling labor market needs. Sixty-five percent of Swiss high school students participate in a VET program as preparation for a career. Below is a simplified graphic of the VPET system using U.S. terminology for ease of communication with Indiana stakeholders. While this is not the terminology used in Switzerland, we believe it helps describe at a high level the new learning pathways Indiana must work to build.

Switzerland's Education and Training System

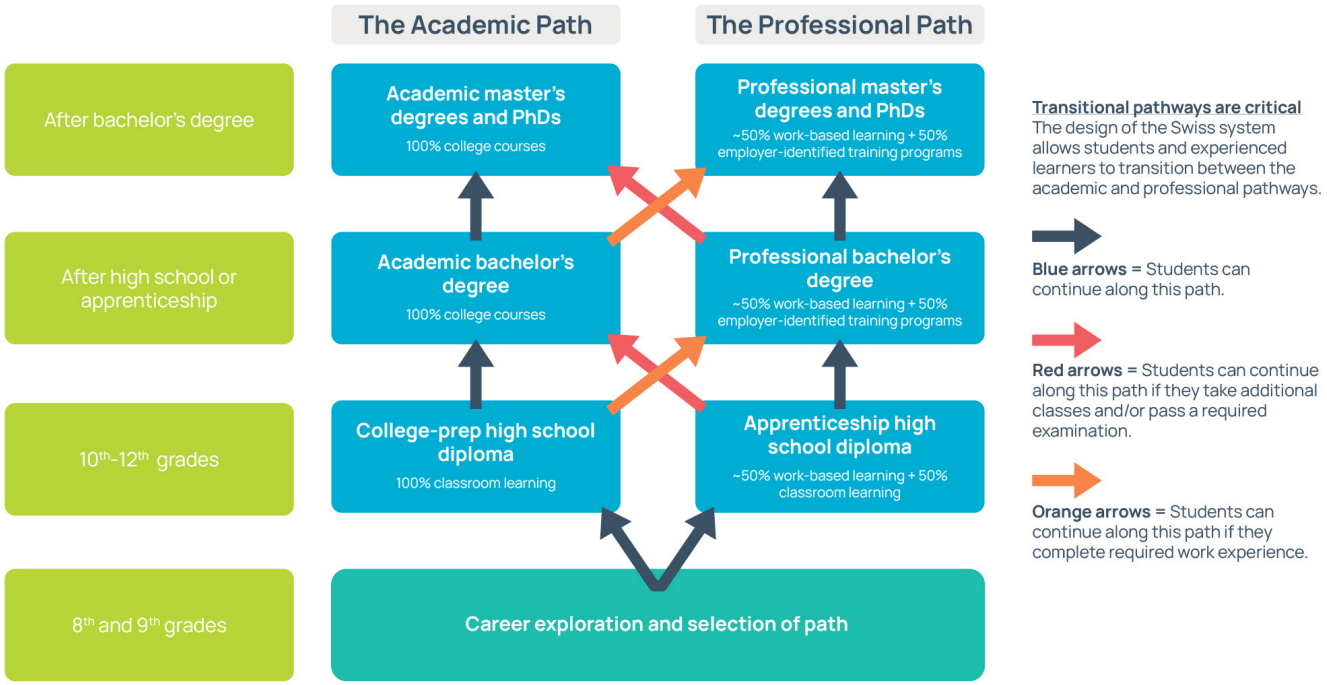


*Chart represents CEMETS iLab Indiana simplification of the Swiss VPET system. The diploma and degrees listed under the Professional Path have different terms in Switzerland and were intentionally modified for the iLab report.

Through our study of the Swiss system, we have learned that building a professional pathway in Indiana will require us to adhere to the following core principles:

Occupations must be (1) identified by a **group of employers speaking as one voice for their industry**, (2) based on **projected labor market needs**, and (3) **broad** in scope.

The **professional pathway should begin in high school with a program that combines an apprenticeship with related academic instruction**.

The apprenticeship included in the professional pathway must be a **paid, year-round experience**, with the apprentice functioning as both a student and an employee.

To maximize value for both the apprentice and employer, **the minimum amount of workplace training and working time during the apprenticeship should be 50%, and ideally closer to 65%**.

Academic instruction should differ depending upon the occupation. For example, a healthcare apprentice should study subjects such as biology and anatomy, while a banking apprentice should study math and economics.

Due to the rigorous design of apprenticeships and the time required for on-the-job learning at the workplace, high school classroom time requirements should decrease in recognition of competencies gained during apprenticeships that meet high school credit requirements. This should also allow time for apprentices to pursue extracurricular activities such as athletics.

LEARNINGS FROM PILOT PROGRAMS

Indiana's first youth apprenticeship pilot program launched in 2019. Five years later there are seven sites operating youth apprenticeship programs and two more in the planning phase. Referred to as **youth apprenticeship intermediaries**, these sites help connect employers, students, high schools, and the higher education system during the apprenticeship program. Through the work of these intermediaries, Indiana has more than 100 employer partners, 40 school partners, and 450 students participating in youth apprenticeship programs in 13 counties.

In addition to providing valuable insights into implementation successes and challenges, youth apprenticeship intermediaries and their employer and school partners have identified **the following systems barriers** preventing efforts to scale:

Lack of industry-created occupations, standards, and curriculum. Because industry doesn't speak with one voice when it comes to their talent needs, Indiana's intermediaries have worked with each employer to create customized, employer-specific apprenticeship programs. This has impeded the ability to develop a uniform set of knowledge, skill, and competency requirements for each occupation at the industry level, which is a necessary ingredient for scale.

Inflexible high school schedules. Due to high school diploma credit hour requirements, apprentices have limited time outside of the school building to work at the employer site. This negatively impacts an apprentice's ability to learn workplace skills that would enable them to do productive work more quickly, thereby reducing the return on investment for employers. As a result, employers are more likely to see existing programs as corporate social responsibility initiatives instead of a scalable talent pipeline solution.

Pilot Programs by the Numbers

Indiana's first pilot program launched in 2019.

In 2024, there are:

7
youth apprenticeship intermediaries operating pilot programs

2
more in the planning phase

100
employer partners

40
school partners

450
participating students

Few transportation options. Limited time out of the high school building combined with customized apprenticeship programs impedes the ability for schools or employers to provide students with transportation. Finding transportation solutions will require consistent workplace schedules for each occupation, in which students are at the workplace for full (not half) days.

Lack of comprehensive, labor market-aligned career advising for students. Tasked with multiple responsibilities, school counselors don't have the time to provide one-on-one career counseling to every student. In addition, few counselors have access to real-time, statewide labor market projections. This makes it challenging for students to select the best education and training pathway for their desired career.

No formally recognized credential that accounts for skills learned at the workplace. Today, an apprentice's only option to earn a credential recognized by employers and the higher education system is to earn an associate degree or higher. This has contributed to students exiting their apprenticeship early to pursue a college degree, limiting the return on investment for Indiana employers.

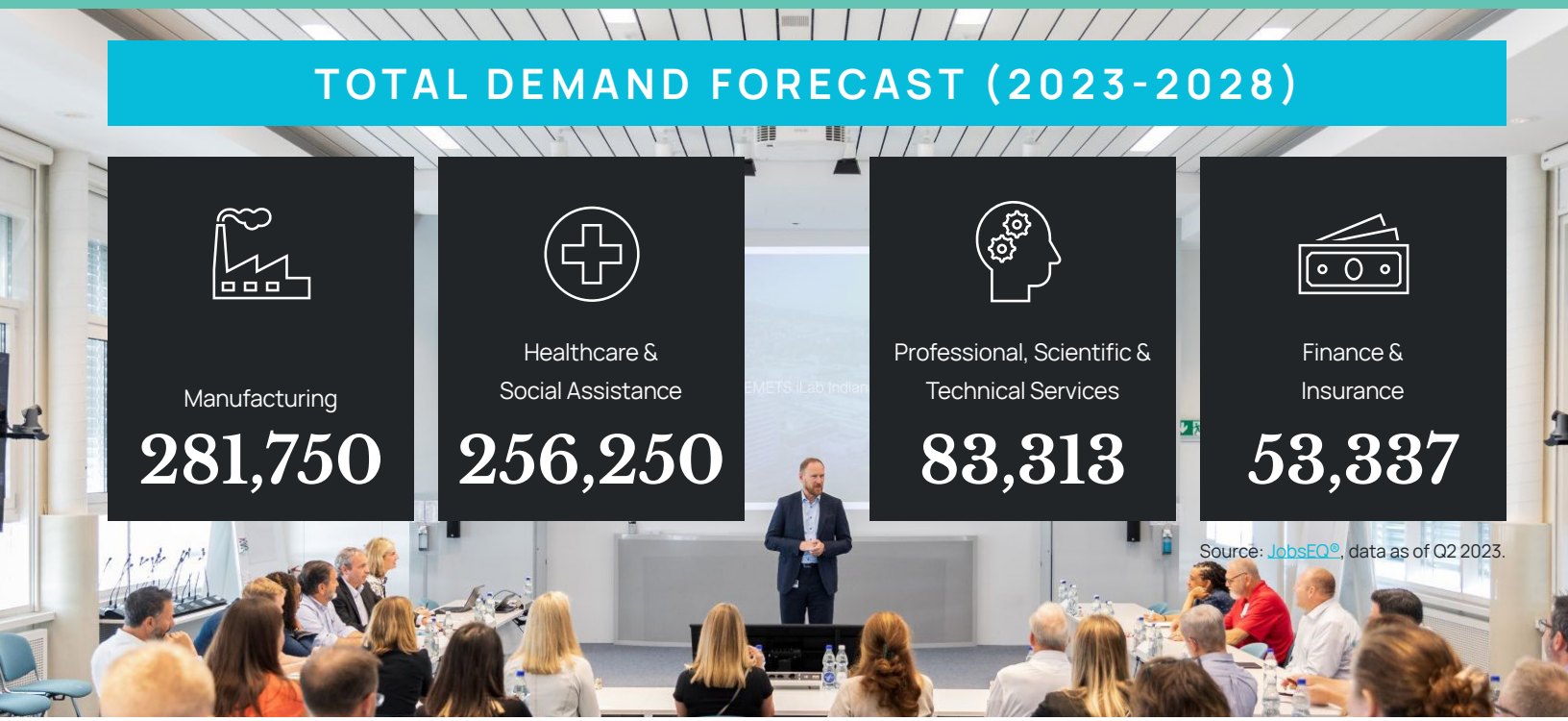
A fragmented work-based learning landscape. Indiana's current work-based learning landscape is fragmented and involves multiple education, intermediary, and government actors. This makes it challenging for employers to navigate work-based learning program options and can result in multiple entities trying to engage separately with the same employer, which is burdensome for businesses.

BUILDING A SYSTEM

To address these barriers, the Richard M. Fairbanks Foundation awarded a grant to the Center on the Economics and Management of Education and Training Systems (CEMETS) at ETH Zurich in Switzerland to engage Indiana stakeholders in an iLab (short for "Implementation Lab"). Launched in late 2023, CEMETS iLab Indiana has convened approximately 150 Indiana leaders from business, education, nonprofit, and government to learn about the necessary functional capacity that makes the Swiss system a success and translate lessons learned into practical next steps for Indiana. Importantly, the iLab is focused on creating the cross-sector connective tissue required for developing a statewide professional pathway system that can be accessed by all Hoosiers, results in formal credentials recognized by both employers and the higher education system, and creates an additional way to prepare for good careers. The iLab has initially focused on five industries – banking, insurance, healthcare, life sciences, and advanced manufacturing – where there are significant projected talent shortfalls and strong, existing executive-level support from Indiana employers for creating a professional pathway.

Launched in 2023, iLab Indiana has brought together approximately 150 Indiana leaders from various sectors to translate the success of the Swiss system into practical next steps.

The manufacturing and healthcare and social assistance industries combined represent more than 25% of Indiana's total job demand over the next five years:



THE VISION

In their effort to develop a coordinated, comprehensive education and training system serving both youth and adults, iLab Indiana members developed the following vision as their North Star.

By 2034, Indiana's education-to-workforce system will ensure every student and adult learner has access to high-quality education and training options, enabling all Hoosiers to discover their passions, reach their fullest potential, and meaningfully contribute to the economic and civic vitality of their communities. As a result, Indiana will become a Top 10 destination for employers seeking to expand existing businesses and entrepreneurs working to launch new businesses.

To achieve this vision, Indiana must develop a new, employer-led professional pathway that works alongside the existing college pathway to help educate and train high school students and adults. iLab Indiana has set an ambitious goal of scaling youth apprenticeship, the entry point to the professional pathway, to serve a **cumulative total of 50,000 students by 2034**. This equates to almost half of expected new job growth in the next decade.

The iLab has identified four priorities for immediate action. The number one priority is for **industry to speak with one voice** about its talent needs. Once industry has organized, K-12, higher education, and government partners can develop responsive systems and processes to enable programs that combine an apprenticeship with related academic instruction to scale. Outlined on pages 12-14 are the four next steps.

Priority One: Establish Talent Associations

What We Learned:

The Swiss model relies on industry associations, which enable employers to speak with one voice regarding education and training needs for each occupation. U.S. industry associations have not played the same role, which means Indiana will need to build this capacity from the ground up.

To help industry organize as one voice regarding its talent needs, Indiana must establish what iLab members refer to as "talent associations," which will select priority occupations, identify the required knowledge, skills, and competencies for each occupation, and develop the curriculum for each occupation in partnership with educators. Once industry is organized as one voice, it will be easier to address the high school schedule and transportation barriers identified by Indiana's existing youth apprenticeship pilot programs.

As part of the iLab's work, industry representatives from advanced manufacturing, banking, healthcare, and the life sciences identified existing Indiana organizations they believe could most readily assume the talent association function within their sector as this work gets off the ground:

iLab Industry	Talent Association Selection
Advanced Manufacturing	Conexus Indiana, a CICP initiative
Banking	Indiana Bankers Association (IBA)
Healthcare	BioCrossroads, a CICP initiative
Life Sciences	BioCrossroads, a CICP initiative

The iLab's insurance sub-committee members have not yet selected an entity to play the talent association role. Their focus is on recruiting additional insurance company and insurance association representatives to join the iLab, with a goal of selecting a talent association entity by early 2025.

Priority Two: Establish Mechanisms for Progressing Up and Across Pathways

2

What We Learned:

Students have options in the Swiss system. Through a feature known as "permeability," a student is able to move from one pathway to another through standardized programs. For example, a student may enter the workforce after an apprenticeship experience and then pursue additional professional training, or the student could begin on a college pathway and transition to a professional pathway, all while pursuing equivalent credentials.

The iLab will establish structured mechanisms that enable learners to progress up professional pathways, and traverse across the college and professional pathways, starting in high school and continuing throughout a person's career. This will require developing credentials that recognize the knowledge, skills, and competencies gained in the professional pathway and are recognized by employers and the higher education system.

As a next step, the iLab established a Qualifications Framework Working Group. The Group will start with developing a framework for career progression to support the priority occupations identified by each of the new talent associations.

Priority Three: Design a Labor Market-Aligned Career Advising System

3

What We Learned:

In Switzerland, career advising services are delivered by local entities that operate outside of, and in partnership with, schools and companies. National standards for advising, including the qualifications of career advisors, have been established by the government, and counselors train annually to ensure they have the most up-to-date and accurate data about available occupations and career pathways.

In Indiana, career advising is expected to be conducted by school counselors who are responsible for an array of other duties, from mental health support to substitute teaching. With a ratio of one school counselor for every 519 students[7] in Indiana, schools have limited capacity to provide in-depth career advising for each student.

iLab Indiana members believe a new approach must be designed for career advising, beginning with the launch of talent associations that can identify in-demand occupations. A Career Advising Working Group has been formed to design a labor market-aligned career advising system starting in middle school that builds upon existing local and regional infrastructure and has the capacity to serve all students in Indiana.

7 American School Counselor Association, Student-to-School Counselor Ratio 2022-2023.

Priority Four: Define Clear Roles and Responsibilities

What We Learned:

As Switzerland's leaders worked to re-engineer the country's education and training system, they deliberately shifted from a fragmented, input-oriented governance structure to a coordinated, output-oriented governance structure. As part of this transition, the roles of government, employers, and educators were clearly defined within the professional pathway.

iLab members agreed that Indiana's current work-based learning landscape is fragmented and input-oriented. Members also agreed that organizing as one voice through the launch of talent associations will enable Indiana's employers to clarify the systems-level role they should play in the development and implementation of the professional pathway. Educators, too, will need time to clarify their roles, both at the K-12 and higher education levels.

iLab members will work over the next year to develop recommended roles and responsibilities and an overarching governance structure for each of the three main partners – government, employers, and educators – that will enable implementation of a coordinated, output-oriented governance system with clear standards and goals. The iLab will also develop recommended funding mechanisms to enable scale and a communications and marketing strategy to create awareness of the new pathway, and recruit student, employer, and school participants.

Additionally, the Governing Committee will work to develop recommended statewide standards for talent associations, given interest from other industries in developing a professional pathway starting in high school. The four industries that have emerged as candidates for joining the iLab are:

- Information Technology (spanning all industries)
- Construction
- Sports, Entertainment & Hospitality
- Microelectronics

NEXT STEPS

The work of iLab Indiana will continue through 2026 to oversee implementation of these four priorities in collaboration with iLab members and under the continued direction of CEMETS at ETH Zurich.

Want to learn more?

Interested leaders from education and industry who would like to join the iLab can contact iLab@RMFF.org to learn more.

Scan this QR code to read the full report. You can also view the full report on the Richard M. Fairbanks Foundation website at ilabindianastrategicplan.org.

We would like to acknowledge the following partners, as this work would not have been possible without their expertise and generous support:

- Prof. Dr. Ursula Renold and Dr. Katie Caves from the Center on the Economics and Management of Education and Training Systems (CEMETS) at the Chair of Education Systems, ETH Zurich for their expertise and guidance dating back to our initial engagement in CEMETS Institute in 2019 to iLab in 2023 and 2024.
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- Commercial Specialist Sandor Galambos with the U.S. Embassy in Switzerland and Lichtenstein for his support in making additional introductions to Swiss companies, training centers, and industry associations for our site visits.
- Noel Ginsburg, Ryan Gensler, and Erin Silver from CareerWise USA for their thought leadership in translating learnings about the Swiss apprenticeship system to our U.S. context.

Members of the iLab's Industry Committee visited Switzerland in June 2024 to learn about apprenticeships in the advanced manufacturing industry.

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CEMETS iLAB Indiana

RICHARD M. FAIRBANKS FOUNDATION

Ascend INDIANA

INDY CHAMBER