Education & Workforce Development

Indiana well-positioned to educate its workforce

In this week’s Thought Leadership, education experts from Indiana Wesleyan University and Purdue University discuss what is necessary to deliver a meaningful education and how students of all ages can take advantage of Indiana’s diverse educational assets.

Q: Is higher education in Indiana structured to meet the demands of a fast-paced, ever-changing workforce?

Eileen Hulme: In recent decades, college tuition has outpaced wage growth, raising legitimate concerns about the economic value of a college degree and its workforce relevance. If workforce preparation alone is higher education’s purpose, then one could surmise that the institution is not properly organized. If its purpose is to increase curiosity, mental agility, critical thinking, creativity, compassion, and leadership potential, then perhaps the existing structure, while not perfect, may still be useful. The strength of the US system is in its breadth and depth. The goal is to help potential students understand the array of options and align their goals.

Dimitrios Peroulis: I think Purdue University has done a lot over the past few years to meet such demands. It is indeed true that successful businesses depend on educated, highly skilled workers. Constant learning and growing are key attributes for success, especially in our fast-paced world. Online education can be a particularly effective option in getting the necessary skills to keep up with a demanding and ever-changing job market. Online programs offered by Purdue include online and hybrid provider’s degrees in various disciplines, professional certificates, and digital badges. The programs help working professionals attain readily applicable critical skills in emerging areas such as advanced manufacturing, artificial intelligence, aviation safety and management, autonomous systems, biotech, business analytics, construction sustainability and resilience, data science, data storytelling, robotics, quantum technology, security, semiconductors, and more. And these online programs offer the same content and rigor and are taught by the same faculty who teach at Purdue’s flagship campus in West Lafayette.

Q: How can we ensure that workforce development programs are not tracking individuals into lower-wage jobs in the future?

Dimitrios Peroulis: We need to make it possible for individuals to access quality programs from top institutions, such as Purdue University, that have a focus on providing value and that work in concert with business and industry to hone this focus. Our approach is to facilitate high-value lifelong learning with a range of offerings—from webinars and noncredit courses to single-course and certificate programs—that fulfill knowledge and upskilling needs now and provide pathways to advanced degrees where desirable. Properly executed, online education can be a particularly effective option in ensuring that Indiana’s job market is high quality by building the quality workforce needed to support it. Unlike traditional learning models, online learning provides much-needed flexibility in time or place. Online learning also is a powerful tool for individuals whose early life educational opportunities may have been limited due to economic, cultural, or other barriers. To a large extent, online education levels the playing field by providing viable additional chances in life.

Eileen Hulme: National research on wages based on education and training is deceptive. Individuals entering the workforce without a degree may experience more rapid income gains, but the return dwindles over time compared to their peers with a degree. Workforce development programs, in particular, often direct individuals into careers with more immediate financial returns but with lower lifetime earnings. The knowledge needed to manage and lead often is readily available in traditional colleges. As an individual moves through their career, a college degree can support higher paying positions. To this end, the workforce development community should emphasize programs that encourage higher level analytical and relational abilities. Additionally, programs should include leadership coaching to support the development of higher-order skills, such as conflict management, cognitive agility, strategic thinking, and emotional intelligence, that are necessary for future leadership and management roles.

Q: How can people set themselves up for a good return on their educational investment?

Eileen Hulme: Anyone engaged in training and education should have clear goals from the onset. Once within a program of choice, learners should establish a strong support system—friends, family, and program staff—to navigate the inevitable peaks and valleys of the educational process. The goal is not simply to learn information but also develop the skills necessary for navigating the world. Education is more than information; it is a transformative process, designed to prepare learners for future careers and challenges in society. Moving beyond knowledge acquisition to a higher level of engagement and insight allows the individual to experience the full breadth and depth of the education experience.

Dimitrios Peroulis: If you are buying a home or a car you research the neighborhood or the mileage. You should be doing research in choosing educational programs as well. Choose quality programs offered by established institutions, like Purdue University, that are backed by a team of professionals—including expert
faculty and course designers and student success coaches—and that emphasize support for learners and student success. Seek out information on factors such as graduation and placement rates for the institution. For online programs, quality and rigor should mirror the on-campus counterpart. You also need to be aware of market trends and seek to gain skills in high-demand areas where possible. Finally, plan to keep learning. Remain curious, follow technology and other trends affecting the job market and your career field. Plan to be back in the education market in the future, because continuous learning and upskilling are now integral to our working lives.

Q: How do we know if our workforce development programs in Indiana are making a difference, and how do you measure the impact of your organization?

Dimitrios Peroulis: We need to track—and establish where necessary—key performance indicators around employability. This should be done in concert with and guidance from employers in business, industry, and government. Purdue University maintains a close relationship with employers, such as Lilly and Cummins, including developing educational programs that fill needs in their current and future workforces. Also, Purdue’s online units recently established an advisory board of high-ranking military officers to guide them in better serving active-duty personnel, veterans, and their families. Benchmarking is also important, and Purdue tracks an array of higher education rankings that consider factors related to impact, among other things. We have a dozen No. 1- or 2-ranked online master’s degree programs for example. In addition, we check in regularly with our alumni and graduates to gather feedback on how their learning experience from Purdue has translated into their careers.

Eileen Hulme: The impact of Indiana Wesleyan University is seen in our graduates who serve in critical roles across the Indiana economy. IWU has graduated more than 120,000 learners, with the majority living and earning within the state. Many of our students begin their educational journey with us as adults, seeking to better their lives and provide for the next generation. An IWU degree serves a critical role in shaping their future job opportunities, careers, promotions, and long-term economic mobility.

Q: How is your organization innovating to stay current with Indiana’s workforce needs and to anticipate future needs?

Dimitrios Peroulis: Innovation is vital. For instance, we have been working with industry to co-develop digital badges signifying completion of state-of-the-art learning for professionals who need to refine their skills but, at least to start, do not need or want a full degree. While we design our curriculum, we actively integrate industry input. These badge programs also can be leveraged in creating stackable micro-credentials, in which we offer “small learning unit” programs (down to one credit hour) that can be used effectively for professional development and certification or rolled into future degrees if desired. Flexibility is key, enabling on-demand learning where students can acquire skills and earn verifiable credentials in their areas of interest without committing to completing a full degree. We also are exploring data-based learning recommendations and adaptation, anticipating a future in which AI-driven individualized learning and assessment become norms (while addressing privacy concerns and accommodating user preferences). In addition, we are developing virtual labs to provide experiential learning opportunities, even online.

Q: How can Indiana compete with the costs for the talent to fill high-value, high-impact careers?

Dimitrios Peroulis: Indiana needs to take full advantage of the strengths it has in its major universities, which are innovation drivers and economic engines and whose scale and quality is world class. For example, Purdue University’s College of Engineering is the largest engineering college ever in the top five. Purdue’s College of Agriculture was recognized as the No. 3 college of agriculture in North America and No. 5 in the world in the 2023 QS World University Rankings. Purdue is forging private and public partnerships, both national and international, that hold the promise of making the state a wellspring of innovation in and a production center for cutting-edge fields such as biotech, high-speed communications networking, microelectronics and semiconductors, and smart manufacturing. The opportunities this produces, along with a far more advantageous cost of living than the coasts, can be selling points for keeping talent in the state. The “live-work-play” community developing around high-end firms located in the Discovery Park District at Purdue is a prime example of the many possibilities.

Eileen Hulme: Indiana should build on its strengths and avoid the temptation to become something it is not. The authentic Indiana is based on a clear set of economic priorities and an attractive community. That said, it is important for the state to think creatively about developing a diverse workforce. For example, Indianapolis and Fort Wayne should develop an under-30 city council, focused on creating an epicenter of young makers, entrepreneurs, artists, and problem-solvers. The state should incentivize recent college grads to remain in-state by reducing barriers to home ownership. On the other side of the spectrum, we could encourage lifelong learning for older adults to support workforce participation. The state could sponsor a talent retention campaign for returning successful Hoosiers, focusing on mentoring and financial investments in youth. Funding could be a draw for younger, socially conscious individuals and support the development of a sustainable food movement while revitalizing rural towns.