



Pearson

Demand Driven Education

Merging work & learning to develop the human skills that matter

By Joe Deegan & Nathan Martin



About the Authors

Joe Deegan is a senior program manager with JFF, providing research and technical assistance at the intersection of postsecondary education and workforce development. He studies emerging and alternative education models that have the potential to benefit people from low-income backgrounds and other underrepresented college learners. He also provides program-level coaching to practitioners. Prior to working for JFF, Mr. Deegan managed a postsecondary bridging program that connected out-of-school youth to community college. He has taught English as a foreign language to Slovak middle and high school students as part of the Fulbright English Teaching Assistantship program. Mr. Deegan holds a bachelor's degree in English literature from King's College (Pennsylvania) and a master's degree in public affairs from Indiana University's School of Public and Environmental Affairs.

Nathan Martin is the director of Global Thought Leadership at Pearson. He brings education experience in the US and UK — in policy and technology environments, to improve learner outcomes. He has been involved with Pearson's work with efficacy, the Nevertheless podcast series and its efforts with the World Economic Forum. He has also helped lead work on Matterfund, a nonprofit project to help improve intelligence in education development and support promising education initiatives. Prior to Pearson, he worked for US and UK education foundations, directing local and national efforts to improve the effective use of digital learning. He began his career in journalism and has also worked for other education technology companies. He is based in the UK.

About Pearson

Pearson is the world's learning company. We're experts in educational courseware and assessment, and provide teaching and learning services powered by technology. We believe that learning opens up opportunities, creating fulfilling careers and better lives. So it's our mission to help people make progress in their lives through learning. [pearson.com](https://www.pearson.com)

About JFF

JFF is a national nonprofit that drives transformation in the American workforce and education systems. For 35 years, JFF has led the way in designing innovative and scalable solutions that create access to economic advancement for all. Join us as we build a future that works. [jff.org](https://www.jff.org)

Acknowledgements

This publication was made possible through generous support from Pearson.

The foundational research for this report came from interviews with experts in higher education. We are enormously grateful to all of them for sharing their time and insights. In particular, we would like to thank Tom Ogletree from General Assembly; Kalonji Martin from Nepris; Michael Bettersworth from SkillsEngine; Leslie Hirsch from City University of New York; Vivian Murinde from the London Legacy Development Corporation; Sumi Ejiri from A New Direction; and Leah Jewell, Kristen DiCerbo, and Steve Besley from Pearson.

Joe Deegan would also like to thank his JFF colleagues for their support, especially Nate Anderson, for thoughtful leadership and the initial collaboration that generated this project; Tiffany Smith, for thorough data analysis; Kyle Hartung, Stephanie Krauss, and Rebecca Wolfe, for sharing their expertise; and Carol Gerwin and Marian Prokop, for their deft editing.

Nathan Martin would like to thank his Pearson colleagues for support and feedback including Janine Matho, J.C. Considine, Luisa Gockel, Dan Mullaney, Laura Howe, and Chuck Melley.

Executive Summary

To think about the future of work, first imagine a highway.

Take Route 66 in the US, connecting Chicago to Los Angeles. Or, in the UK, the 410 miles of the A1 from London to Edinburgh. There are defined endpoints, directional signs, entrances, and exits. Millions reach their destinations via these roads. Route 66 and the A1 were fit for purpose.

Traditional routes to employment have functioned much like these roads. Conventional credentials, university degrees, and vocational training have offered defined entrances and exits for individuals looking for jobs that lead to careers. But the world of work is changing fast. The future of work will require a more flexible, dynamic, and equitable system of preparation. A map of this system may look less like a highway and more like the iconic web of circles and intersections of the London Underground.

The last five years have been marked by a flurry of research and reports trying to chart the contours of the changing world of work.¹ The Future of Skills: Employment in 2030 (published in 2017 by Pearson in collaboration with Nesta and Oxford Martin) added an unprecedented level of detail to the debate.² The study challenged alarmism over projected widespread job automation. The authors introduced a novel mixed-method approach that combined machine learning with expert human judgment to examine seven key trends affecting employment by 2030. They analyzed not only the full spectrum of technological change, but also the potential effects of globalization, demographic shifts, environmental sustainability, urbanization, increasing inequality, and political uncertainty.

The report argues that the convergence of these trends will likely result in a world of work requiring specific knowledge and skills, especially complex thinking and interpersonal capabilities. As the future of work unfolds, what makes us human is what will make us employable.

But the pathway to sustained employment will not be linear. No single job will be a final destination. Maintaining a career will require a lifetime of learning. An education system fit for this evolving world — one which will value and strengthen essential human traits — will require significant reform.

To better understand the systemic change needed, JFF, with the support of Pearson, conducted an in-depth review of the field, interviewing more than 20 education and workforce experts in the US and the UK. JFF also performed original research comparing the data from The Future of Skills with United States Bureau of Labor Statistics projections.

This report, *Demand-Driven Education*, concludes that we are on the cusp of a new wave of postsecondary education reform. The first wave focused on access — getting more people to enter higher education. The second wave focused on improving academic success — getting more students to earn certificates and degrees. These waves served as the traditional highways to employment.

Now marks the transition to a third wave — which we call “**demand driven education**” — where programs focus more strongly than ever on ensuring graduates are job-ready and have access to rewarding careers over the course of their lifetimes. Demand-driven education adapts to the needs of the learner and the employer. It responds to signals from society to ensure alignment between desired qualifications and available training.

This wave represents the convergence of the worlds of education and work, creating new intersections, pathways, and possibilities for advancement. Much like the London Underground connecting its 32 boroughs via line, train, and bus, this new wave enables learners to take multiple routes throughout their lives to multiple destinations.

Demand-driven education takes account of the emerging global economy — technology-infused, gig-oriented, industry-driven — while also striving to ensure that new graduates and lifelong learners alike have the skills required to flourish. Bringing these practices to scale will require education systems to:

1. develop and measure the specific **skills** that will be most in demand, especially interpersonal skills and complex thinking;
2. utilize dynamic and work-based **pedagogy** to grow learners' competencies, while also preparing educators to embrace new forms of teaching and learning;
3. respond to the needs of the **labor markets** to ensure continuous alignment;
4. create flexible and adaptive **pathways** to allow learners to rapidly convert learning to earning; and
5. support changes that make the entire education **landscape** function better, enabling traditional and alternative providers to participate in creating the future of education alongside industry.

This report showcases promising practices from the US and UK to suggest a forward-looking agenda for education and training, moving from uncertainty to the economic advancement of all learners. Some of the strategies we profile include:

- competency-based education, which allows learners to show what they know as soon as they know it and move quickly to the next level;
- employer and industry-led models, which radically lower the opportunity costs of education by providing further training on the job;
- the latest labor market intelligence tools and techniques, which provide educators with powerful insights into the changing skills marketplace;
- dynamic and work-based pedagogy, to instill the critical skills needed for the future of work; and
- new pathways and business models that support access and completion for learners at any point in their career and at virtually any income level.

The future of work is becoming clearer. But changes in isolated schools, postsecondary institutions, and training centers will not be enough to create a system that develops and values those uniquely human qualities in the workforce.

Shifting from a static highway to a more dynamic network of pathways to employment will require individuals, industry, and education systems to take a more active, collaborative role. The recommendations offered at the conclusion of this paper are a start.



Pearson

80 Strand
London
WC2R 0RL

pearson.com

@Pearson

