About the Authors

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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.

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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.

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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. 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. 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.