Pearson

AI Skills for the Future

A playbook for enterprise leaders

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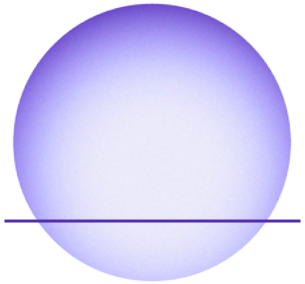
Bridging the AI Productivity Gap



How companies are using learning to go from implementation to transformational productivity gains.

As noted in Pearson's latest research, 'Mind the Learning Gap: The Missing Link in AI's Productivity Promise', workforce productivity growth in the world's most advanced economies, including the United Kingdom and the United States, has declined significantly.

AI has the potential to turn this generational shift around and push the global economy into higher productivity, creating more wealth and opportunity for people, companies and investors. By 2034, according to Pearson projections* AI-powered augmentation could add between $4.8 trillion and $6.6 trillion to the U.S. economy alone. This represents around 15% of current US GDP at the lower range. But only if learning keeps pace.

While some companies are seeing positive financial returns from AI implementation, leaders expect it will take time before they're able to harness the full potential of the technology.

** These figures are modeled projections based on data and assumptions, not a forecast.*

A Deloitte survey of executives across Europe and the Middle East, for example, found that 15% of businesses had seen significant, measurable returns from generative AI and 38% expected such returns within a year. For agentic AI, however, just 1 in 10 had seen returns and most expected it would take 1–5 years to see return from their investment. A global survey of business executives by McKinsey found 39% were seeing positive impact from AI at the enterprise level on earnings.

These results are not surprising. Learning is the missing link between the AI promise and performance.

Unlike previous waves of technological innovations, productivity gains from AI implementation require more than simply making the technology available.

Organizations must invert the old model of 'deploy technology, then have people adapt to the system'. Learning and augmentation must happen together, from the start. To capture its full economic potential, businesses must commit to equipping workers with the skills and confidence to use AI effectively. The great promise of gains in productivity from AI is not through automation, but in the augmentation of workers through learning. Making people better at what they do today – and at what they will do tomorrow – is the real prize.

People are best positioned to understand how the cognitive work they do might be automated or augmented with AI, leading to substantial and sustainable jumps in productivity.

But that understanding can only come when people gain AI fluency and have opportunities to start experimenting with the technology. Indeed, the McKinsey survey found that most companies - 62% - are still experimenting and running pilot projects.

Going from experimentation to transformation requires a strategic investment in learning to build the right AI skills across the organization.

That's where this playbook comes in. We highlight the skills knowledge workers need to work alongside AI and outline practical learning strategies grounded in Pearson's D.E.E.P. learning framework (Diagnose, Embed, Evaluate and Prioritize). These insights draw on Pearson's own AI journey and conversations with leading enterprises such as IBM, KPMG, ServiceNow, and others that are beginning to crack the code on AI implementation.

Most businesses are still asking, 'What can we do with AI?'. Organizations that implement skills-based learning aligned with business goals will find better answers to that question and find them sooner.

Skills for Enterprise AI Transformation

AI upskilling begins with understanding the organization's business goals and strategies: How is the market changing? What's the plan for growth? What are the strategic priorities of the business? Success with AI demands a radical rethinking of learning at work, where learning and augmentation must happen together, in lockstep.

> "It's no longer just the responsibility of HR – but is now central to how the enterprise thrives, ensuring the organization has the talent and skills to compete and grow. Today, the shape of the workforce and the need to reskill in the age of AI is a board-level priority, deeply connected to business strategy."

Adrian Clamp, Global Head of Strategy and Investment at KPMG Consulting

Upskilling in the age of AI has two dimensions

- First, it requires training employees at all levels in a set of interrelated AI-specific skills.
- Second, it requires people to strengthen their distinctly human capabilities, such as creativity and communication, to be successful in new and redesigned job roles that emerge as AI automates routine work and elevates human skills.

Human Skill Focus

> **"Adaptability, creativity, and human relationships will matter more than ever."**
>
> Mark Williamson, Head of People Consulting at KPMG UK

Williamson also notes that the skill of learning itself is becoming more critical. As the speed of change accelerates, a workforce that can learn quickly will become a competitive advantage. Pearson's Lost in Transition research found that more than a trillion dollars in potential economic productivity is at risk due to the learning challenges people face when transitioning between roles, organizations or different phases of their careers.

Within its own workforce, Pearson has identified AI, adaptability and learning to learn as the three critical power skills, according to Zoe Botterill of Pearson's Learning and Development team. Other companies are also centering human skills in their L&D strategies as part of their efforts to integrate AI.

At IBM, for example, all employees learn skills such as design thinking and agile-at-scale skills. They also earn knowledge badges in specific industries to better understand their clients. This is in addition to AI-specific skills, such as AI ethics.

> **"Human skills – judgment, ethics, communication, leadership – are becoming more important than ever."**
>
> James Cook, Senior Partner for Workforce Productivity at IBM

ServiceNow views human skills as vital as AI automates routine tasks and employees focus on strategic priorities.

> **"Curiosity, communication, agency, accountability, critical thinking – these human skills matter more now, not less."**
>
> Jayney Howson, Senior Vice President, Global Workforce Skills & Talent Readiness at ServiceNow

Individualized Learning is Vital

AI skilling isn't a one-size-fits-all program. Different companies will have different needs and priorities. And within each organization, different employees will need specific skills based on their role.

One approach is to establish a common skill base in fundamental AI skills, such as prompt engineering, AI ethics and AI judgment. Individuals in different functional areas may then dive deeper into specific skills related to their roles. A financial analyst, for example, will likely need a different set of specialized AI skills than a cybersecurity specialist.

To implement role-specific learning, many companies are turning to learning pathways and other tools to ensure that the AI training individuals receive matters to them.

> "Our skilling strategy is intentional: deep generalists (that can connect the dots), and deep AI tech specialists (that can push the frontier). Every role requires core AI fluency – prompt engineering, context engineering, responsible AI, and domain-embedded AI skills – so innovation scales safely, ethically, and with real business impact."

Thirumala Arohi, Chief Learning Officer at Cognizant

Harnessing Data

Digital credential platforms, such as Credly by Pearson, can help streamline AI upskilling, making it easier for organizations to create learning pathways for specific AI skills, for example, and providing recognition that motivates employees and boosts engagement.

There is also a growing body of data and real-world experience that shows what kind of AI skills organizations need.

Faethm by Pearson scans millions of job ads globally each month to identify how roles and critical skills are changing across industries.

Faethm (based on an analysis of more than 9,000 skills) has identified four types of AI skills:

1. **Foundational AI skills**, which are required to understand and use the technology.
2. **Specialized AI skills** that are specific to certain roles and functional areas.
3. **AI governance skills**, which are critical to manage the overall adoption and impact of AI.
4. **AI tool skills**, which are related to use of specific AI tools such as IBM PowerAI or Google's Gemini.

Once enterprises have identified which areas AI can help them most, leaders can begin to explore where they have skills gaps in essential areas. By grouping AI skills in key areas of proficiency or application, organizations can more clearly action learning that will help them address those skill gaps, ultimately moving the needle on their business objectives. This approach demonstrates a more strategic initiative than blanket AI upskilling projects across the workforce.

AI Skill Type	Definition	Examples
Foundational AI	Knowledge and competencies required to understand and use AI.	Decision making, Prompt engineering, Critical thinking, Creative thinking, Logical reasoning, Generative AI, Data Literacy etc.
Specialized AI	Knowledge and competencies required to design, build, and evaluate AI systems and applications.	LLaMa, Prolog, Large Language Models Fine-Tuning, Deep Learning, Natural Language Toolkit (NLTK), FastText etc.
AI Governance	Knowledge and competencies required to govern and manage the development, use, and impact of AI.	Data Governance, Data Security, Risk Governance, Policy Monitoring, AI Ethics etc.
AI Tool	Platforms or applications that are fundamentally driven by AI as their core operating principle (excludes products where AI is a feature).	DALL-E, ChatGPT, Gemini, Claude, Midjourney, IBM PowerAI, Amazon Lex, AlchemyAPI, TIBCO Spotfire, Synthesia, etc.

A Framework for AI Depth

While understanding the skills needed for AI integration is essential, knowing which employees need to learn what is only the start.

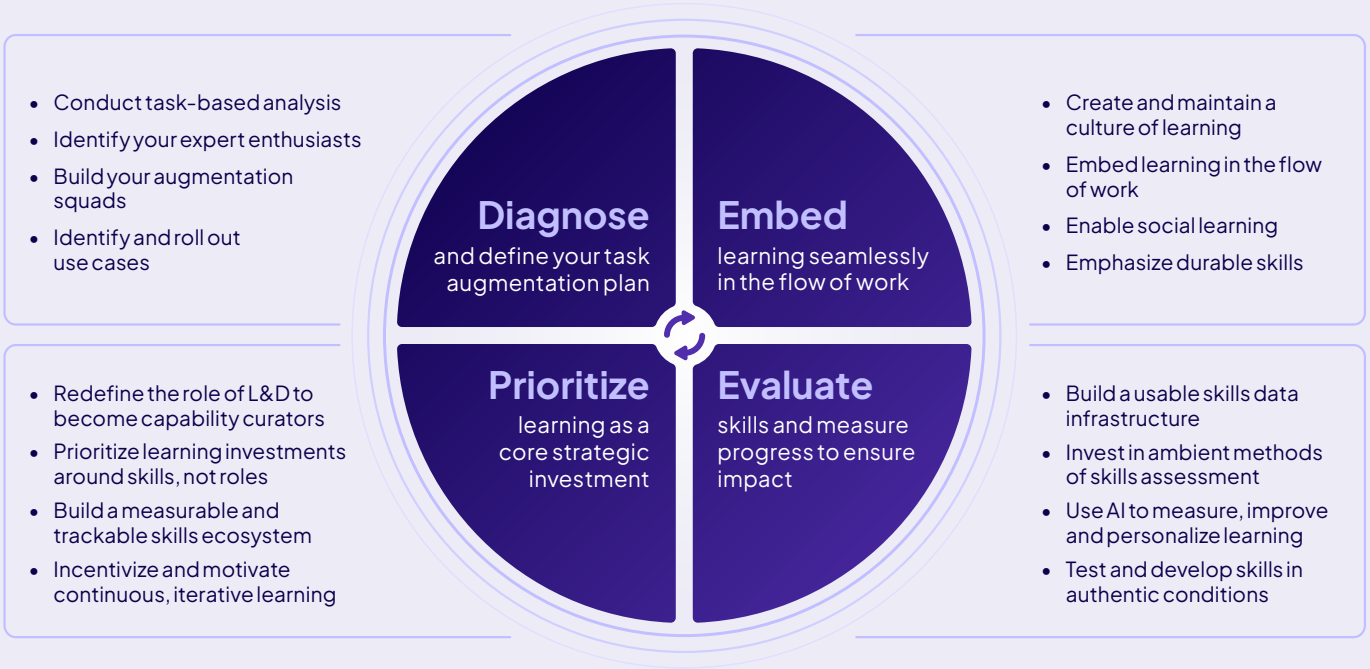
The D.E.E.P. learning framework ensures that skill needs become measurable learning outcomes that move the business forward.

Pearson has developed the D.E.E.P. learning framework to accelerate the process of automating tasks where it makes sense and augmenting workers to amplify and transform their capabilities.

The framework is designed to help organizations harness AI's full potential by enabling their workforce to figure out how to use the technology to create value.

D.E.E.P. Learning Framework

A roadmap to unlocking AI productivity through learning



Here's a look at each of the four components of the D.E.E.P. framework.

1 Diagnose and define your task augmentation plan

Flip Beltran, Director of Product at Faethm by Pearson, says successful companies prioritize thoughtfulness and overall business strategy in their AI rollouts and the accompanying upskilling and reskilling plans.

> "You're not just thinking about adopting AI because everyone else is adopting AI. You're thinking about how it can actually add value and where it can add value and optimize and make your employees' lives more efficient."
>
> Flip Beltran, Director of Product at Faethm by Pearson

During the diagnose and define process, organizations conduct task-based analysis of jobs, identify expert AI enthusiasts within the workforce, build teams focused on augmentation, and identify and roll out use cases.

The goal is to identify tasks that could be automated through AI. That enables leaders to understand how AI can free up people for higher-impact, human-only activities. This process will also identify where humans must remain 'in the loop' to ensure ethical AI use and high-quality outputs.

2 Embed learning seamlessly in the flow of work

Successful companies nurture a culture of learning championed by leaders. Learning should be embedded in the flow of work, so employees have just-in-time resources and tools when they face a task requiring a new skill - and so they get credit for that learning.

Social learning is a proven method of improving skill acquisition and recall, so companies should make learning more social to help new skills stick. And companies should emphasize human skills, such as creativity, resilience, and communications, that will always be important - or become even more important - as AI use cases grow.

3 Evaluate skills and measure progress to ensure impact

If leaders don't know what their people can do, organizations won't realize the potential gains AI represents. Successful companies are building skills data infrastructure, investing in ambient skill assessment, using AI to measure and improve learning, and testing skills in realistic conditions.

This assessment and demonstration of skills through mediums such as digital credentials is what Billy Grieco, Lead, Product Management at Credly by Pearson, says is what engages employees with upskilling in the long term.

> "Unfortunately, too often [learning] is unrecognized and unrewarded at work… We've proven in many organizations that earning credentials drives people's willingness to engage with formal learning programs. For individuals, it's highly motivating to be publicly recognized for an achievement – especially if it's with an artifact like a verifiable credential that they can take with them in the future. It creates dramatic differences in how willing people are to invest their time explicitly in learning."

Billy Grieco, Lead, Product Management at Credly by Pearson

4 Prioritize learning as a core strategic investment

Organizations that fail to invest in AI learning will miss out on the transformational productivity gains the technology will drive. L&D leaders must become capability curators - understanding what the workforce can do and what it needs to do. Learning investment should be prioritized based on skills, not roles. By building a measurable and trackable skills ecosystem, employees will be more motivated to learn, and companies will better understand their capabilities and skill gaps.

To explore our D.E.E.P. learning framework in more depth, explore our report Mind the Learning Gap.

High-Powered Learning Strategies

Conversations with leading organizations have also revealed some key practices and real-world tactics that make learning stick, accelerate adoption, and help employees develop AI and human skills.

Based on the experiences of several large enterprises in technology, professional services, and other industry sectors, here are four learning strategies that can accelerate AI adoption and skill development in large enterprises.

- Tap into the wisdom of the crowd
- Make AI a 'painkiller'
- Protect time for AI learning
- Validate and verify learning as it happens

Tap into the wisdom of the crowd

No one knows how exactly AI might be best used within a particular organization or industry until someone takes the first step. Employees and leaders must experiment with AI tools, learning to think differently about their tasks and processes, and consider what new possibilities AI creates.

Some organizations are turning to early adopters and AI enthusiasts within their workforce. They're rolling out peer-to-peer learning programs that enable these AI-forward employees to share their ideas and know-how with their peers.

ServiceNow, for example, runs peer-to-peer learning sessions called 'Colabs' that are led by internal experts. Pearson has hundreds of AI ambassadors across the organization who are showing the potential of AI to coworkers and teaching them new skills.

These kinds of social learning efforts can also work at the executive level to upskill senior leaders and demonstrate how the organization supports AI-related learning.

For example, at some companies, executives share their own AI experiments with their teams. At Tata Consultancy Services, a reverse mentoring program pairs senior leaders with younger employees.

> **"Our senior leaders have a 'human copilot' and these are the Gen Z employees who are AI natives, and they have really made a phenomenal difference."**
>
> Sudeep Kunnumal, CHRO
> at Tata Consultancy Services

One of the fastest ways to prove the value of AI and win over reluctant employees is to use it to automate and streamline common, repetitive tasks. In the U.S. alone, AI has the potential to save 78 million hours a week by taking over routine, repetitive office tasks.

At Pearson, for example, an AI agent supports managers and individuals across the entire performance management cycle. It helps people shape strong OKRs, guide self-reflection, support review writing, and prepare people for meaningful performance conversations. By streamlining administrative effort while raising the quality and consistency of outputs, these tools create a more efficient, impactful experience - freeing time and attention for what matters most and reinforcing a strong, values driven performance culture. The company also uses an AI agent to assist in career coaching and another AI tool that helps people get coaching on communication tasks.

> **“Given the pace of change and the realities of modern work, it’s increasingly hard for people to make time for formal learning. Learning science tells us that the most effective learning happens through doing and reflecting in the flow of work. That’s why AI learning should be embedded directly into everyday processes – adding real value to the work people are already doing and helping them use their time and attention more effectively. AI learning works best when it acts like a painkiller – solving immediate, real work problems – rather than a vitamin which is valuable but easier to deprioritize when time and attention are scarce.”**
>
> Esin Cooper, Executive Partner, Organizational Development at Pearson

Make AI a 'painkiller'

Protect time for AI learning

Employees need dedicated time and clear encouragement to experiment with AI - even if some experiments fail. For example, Joshua Wohle, CEO of AI-skills training firm Mindstone, suggests that if employees have an hour per week devoted to formal AI training for a few weeks, that same hour could be set aside for the rest of the year for them to experiment.

Another way that leaders can encourage AI experimentation across the workforce is by sharing their own AI experiments - successful and unsuccessful. This could take the form of organization-wide communications from C-suite executives or having leaders share their own experiments during one-on-ones and team meetings.

This bottom-up learning is vital for organizations that want to innovate with AI. It creates the potential for the people closest to the work to invent new ways to make their own work more efficient and effective. It also ensures that AI enthusiasts feel their companies are 'behind' them in AI use and get the message that what they're doing is supported and should be shared with colleagues.

Validate and verify learning as it happens

Lack of time is a common barrier to training. But by embedding AI learning, evaluation and recognition in the flow of work, organizations can create a culture of learning.

With evaluation embedded in the flow of work, employers or other organizations can issue digital credentials that recognize people for skill development, even when it occurs outside formal instructional channels.

Digital badges and certifications encourage learning, increase employee engagement, and make learning a welcome part of the workday.

Google awards Skills Badges when users complete technical use cases without needing to access tips or hints for help, providing employees with immediate recognition of their skills. The badge data gives the company a clearer picture of who has what skills.

Bringing These Practices Together

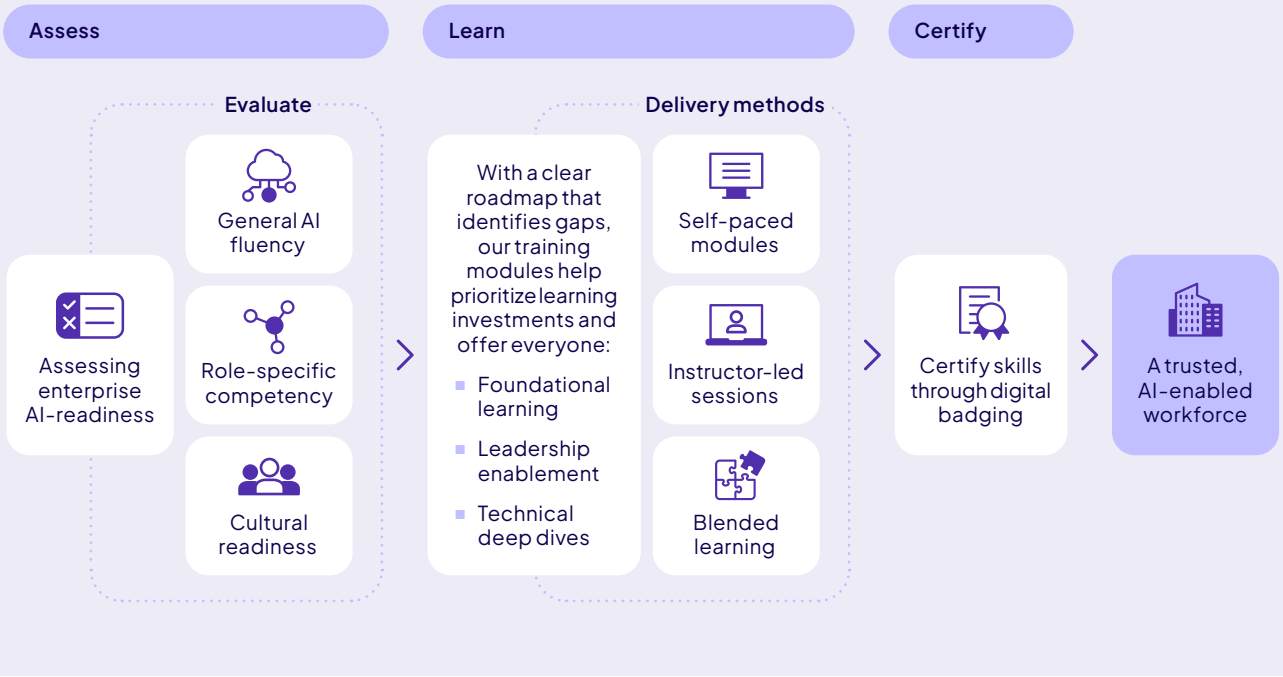
Successful AI adoption is challenging. This playbook identifies some of the ways leading companies are creating real productivity gains and generating real value.

The D.E.E.P. framework provides a systematic framework that enables large organizations to implement AI-related learning successfully.

Across these examples, one pattern stands out: organizations that succeed with AI take a deliberate, strategic approach to workforce development - creating space for experimentation, but with a clear sense of the business challenges and goals they're trying to solve.

Our three-step solution helps organizations create and sustain the learning that's necessary for organizations that want to successfully integrate AI to increase productivity and create innovative products and services.

Pearson's three-step solution: Assess, Learn, Certify



Pearson supports learning through solutions that help organizations understand readiness, prioritize learning investments, and recognize skills as they emerge.

We work with employees, employers, governments, and institutions to close skills gaps and identify, source, and develop critical talent for the future.

Ready to get started?
Close the learning gap with us.

Speak to our team to learn more

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