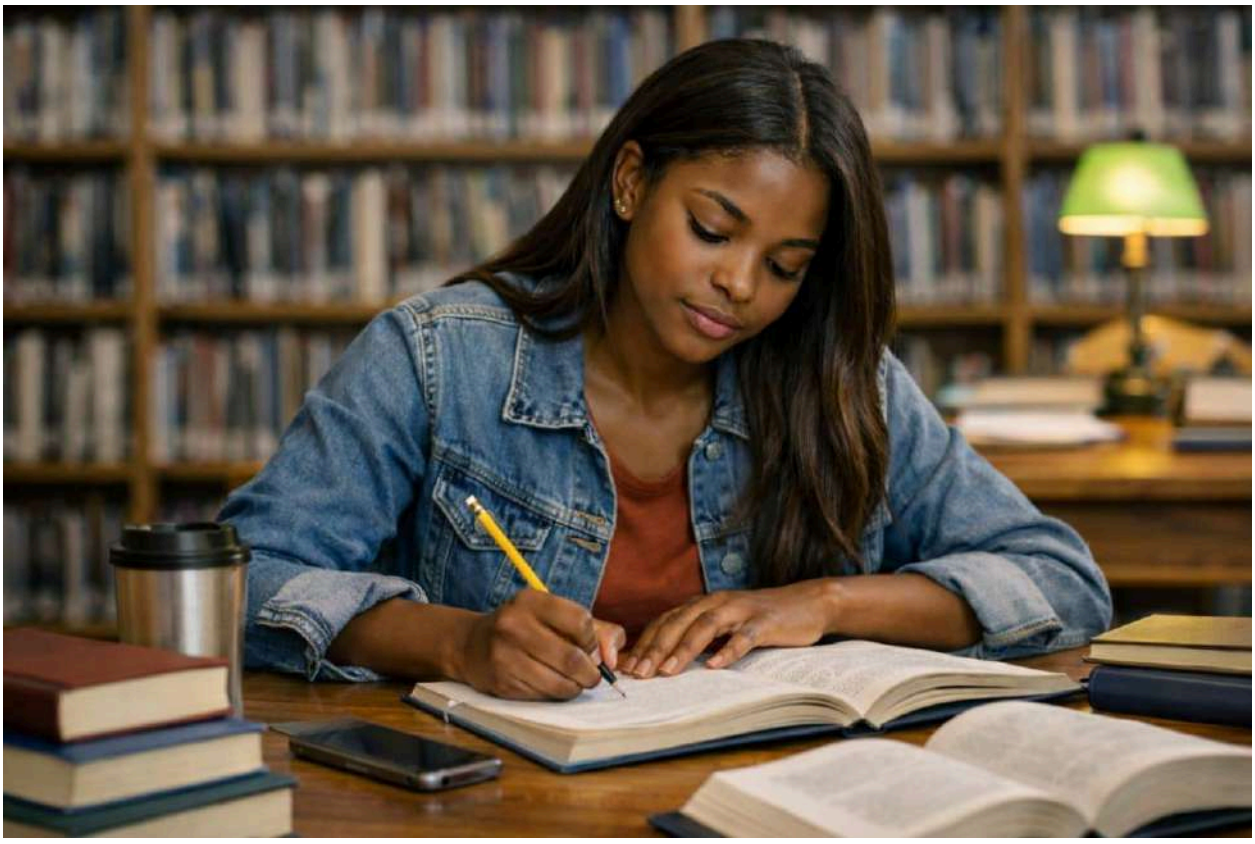
Preparing Students For Jobs That Do Not Exist Yet

by **Modupe Olufemi** *[June 2026]*



"Focused today, preparing for jobs that do not exist yet" [Generated with Co-pilot AI, June 20, 2026]

Picture this: a child sitting in a classroom today, fidgeting, doodling in the margin, half-listening to a lesson about things that happened decades ago, will likely spend most of their working life doing a job that does not yet have a name. Not because they are falling behind. But because the job has not been invented yet.[1]

That is not a dramatic claim designed to alarm anyone. It is, increasingly, the measured consensus of

[1] Institute for the Future (IFTF) for Dell Technologies, *The Next Era of Human-Machine Partnerships: Emerging Technologies' Impact on Society & Work in 2030* (Palo Alto, CA: IFTF, 2017). The report estimated that 85 per cent of the jobs that will exist in 2030 had not yet been invented. Dell Technologies press release: https://www.prnewswire.com/news-releases/realizing-2030-dell-technologies-research-explores-the-next-era-of-human-machine-partnerships-300486894.html

researchers, economists and labour analysts who study how work changes over time. The World Economic Forum has consistently found that a substantial portion of the roles that will define the next decade of employment do not currently exist in any meaningful form. An often-cited estimate from the Institute for the Future, in a report for Dell Technologies, put the figure at 85 per cent of the jobs that will exist in 2030.[2,3]

The real question is not whether the future of work will look different. It is whether we are preparing students for the world that is actually arriving, or the one that already existed when the curriculum was designed.

"The child in today's classroom will likely spend their career in a job that does not yet have a name."

Most education systems were designed for a different era. They were built to produce workers for stable industries: people who could follow instructions reliably, master a defined body of knowledge, and fit into structures that were expected to remain more or less constant across a working lifetime. That was a reasonable thing to optimise for, given what the world looked like when those systems were built.

The world no longer looks like that. And yet the systems remain, largely unchanged, producing graduates for an economy that has already moved on.

It Is Not Jobs That Are Being Replaced. It Is Tasks.

There is a version of the automation story that goes: the robots are coming, and they are going to take everyone's jobs. It is a story that makes for frightening headlines. It is also not quite accurate.

What technology actually displaces is not jobs as a whole. It is tasks. Specifically, the tasks that are routine, rule-based and predictable.[4] If you can write down the steps in a process clearly enough for a well-trained new employee to follow without thinking too hard, you can probably automate it.

Think about what this means in practice. A lawyer who spends most of their day reviewing standard contracts faces genuine disruption to that portion of their work. A radiologist reading routine scans is in a different position to a surgeon navigating the unexpected complexity of a live procedure. An accountant running templated reports faces different pressures than one advising a client through a novel tax situation.

Every role contains a mixture of predictable and unpredictable work. What automation does is gradually hollow out the predictable portion, leaving behind, and increasingly rewarding, the messy, contextual judgment that only humans can provide.

"Automation hollows out the predictable parts of a job, leaving behind the work that requires genuine human judgment."

For educators and policymakers, this creates a specific kind of challenge. The question is not simply 'Which jobs will survive?' It is which human capabilities will remain valuable even as the technical content of almost every role shifts under our feet.

And the answer points away from content knowledge and toward something harder to teach and harder to measure: the ability to navigate situations that have not been encountered before, to work effectively with other people under conditions of genuine uncertainty, and to keep learning long after formal education has ended.

[2] World Economic Forum, *The Future of Jobs Report 2023* (Geneva: World Economic Forum, 2023). https://www.weforum.org/reports/the-future-of-jobs-report-2023

[3] Institute for the Future for Dell Technologies (2017); see note 1.

[4] McKinsey Global Institute, *Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation* (December 2017); McKinsey Global Institute, *The Future of Work After COVID-19* (February 2021).

Those are not new ideas. What is new is the urgency. The pace at which the landscape is shifting means there is less and less time for education systems to lag before the gap starts to show up in graduate readiness, organisational performance and, ultimately, economic outcomes.

The Capabilities That Hold Their Value

Once you accept that specific technical skills will keep changing, that whatever tool or platform is relevant today may be obsolete in five years, the question becomes what to build instead. What are the capabilities that do not go out of date? What does automation consistently struggle to replicate?

Research on this keeps arriving at a cluster of human capacities that seem, so far at least, to hold their value regardless of how the technical environment shifts.

The ability to solve genuinely novel problems.

Machines are extraordinarily good at solving well-defined problems. They are considerably less good at working out what the actual problem is when no one has defined it yet. The capacity to look at a messy, ambiguous situation where the information is incomplete, the stakeholders disagree, and the right framing is not obvious and navigate toward something useful: that remains stubbornly difficult to automate.[5,6]

Emotional intelligence and the ability to work with people.

Collaboration, negotiation, empathy, the ability to read a room, the capacity to manage a relationship through a difficult moment – these emerge from something deep in human social experience that current AI systems can simulate but cannot genuinely inhabit. In a world where technical skills are increasingly commoditised, how well someone works through other people becomes one of the most important differentiators.

Creativity that crosses boundaries. Not the mystical variety. The applied kind: the ability to bring together ideas from different fields, to see connections that others miss, to produce work that carries genuine originality rather than sophisticated recombination. AI can remix and optimize within existing frameworks with increasing skill. Genuine conceptual rupture, the kind that actually changes what is possible, still looks like a human specialty.

Critical thinking and the ability to evaluate information honestly. This has always mattered. It matters more now, in an environment flooded with synthetic content, algorithmically curated feeds and increasingly convincing misinformation. People who cannot evaluate evidence, identify assumptions, or hold their beliefs at a calibrated distance from what they want to be true are not just less effective professionals. They are vulnerable in ways that carry real costs.

Learning how to learn. Perhaps the most important capability of all. Not any particular body of knowledge, but the metacognitive agility to figure out what you need to understand, to build it efficiently and to transfer it to genuinely unfamiliar situations. In a landscape where the technical content of a role may change substantially every few years, this is not a soft skill. It is the skill that makes all other skills possible.

Why the Current System Was Not Designed for This

[5] Richard Susskind and Daniel Susskind, *The Future of the Professions: How Technology Will Transform the Work of Human Experts* (Oxford: Oxford University Press, 2015).
[6] Frank Levy and Richard J. Murnane, *The New Division of Labor: How Computers Are Creating the Next Job Market* (Princeton, NJ: Princeton University Press, 2004).

Here is an uncomfortable truth about most education systems: they are working exactly as designed. The problem is that they were designed for a world that no longer exists.

The architecture of formal education standardized curricula, content-based assessment, year-by-year progression through a fixed body of knowledge - was built for industrial stability. It was designed to produce people who could follow instructions reliably, recall prescribed information accurately, and fit into stable structures without requiring too much individual judgment. In that context, it worked reasonably well.

What it was not built to produce is people who are comfortable with ambiguity, capable of divergent thinking, skilled at navigating genuinely novel problems, or oriented toward continuous self-directed learning. Those capabilities were not the point. They were, if anything, a mild inconvenience in a system built around compliance and recall.

"Teachers optimize for what appears in examinations. Students learn to pass tests. Institutions measure completion. The metrics, designed for one world, distort preparation for another."

The assessment problem is the clearest symptom. When the thing being measured is recall of prescribed content, that is what the whole system bends toward. Teachers focus on what will appear in the exam. Students learn to pass the test rather than develop transferable competence. Schools compete on qualification outcomes rather than graduate readiness. The metrics are not wrong, exactly. They are just measuring the wrong things for the world graduates are entering.

And access, while improving, remains uneven in ways that risk compounding inequality. Those with resources increasingly access more adaptive, skills-focused education. Those without continue through systems that credential without developing. The gap between those two experiences is not merely educational. It shapes what the next generation will be able to do.

What Actually Needs to Change

The shift that is needed is not primarily about updating the content of what is taught. Content will always need updating, and that work should happen. But the deeper change is structural: a move away from knowledge as the unit of educational value and toward capability as the thing education is actually trying to build.

A useful frame, adapted from the transferable competencies literature, distinguishes three layers of what education should be developing.

Foundational literacies, mathematical reasoning, communication, digital fluency and scientific understanding are the non-negotiable floor. Nothing sophisticated develops reliably without them. They are not the endpoint. They are the platform for everything else.

Transferable competencies, critical thinking, creativity, collaboration, adaptability and emotional intelligence are the capabilities that hold their value across occupational boundaries and technological shifts. They are not soft skills in any pejorative sense. They are, increasingly, the hardest and most valuable skills in the economy.

Technical and domain knowledge matters, but differently than it once did. With shorter relevance half-lives, it needs to be taught alongside the habits

of mind that allow it to be updated continuously, not as a fixed body of facts that will serve a career in full.

In practice, this means learning through real problems.

Knowledge applied to authentic, unfamiliar challenges consolidates differently than knowledge tested through recall. Students embedded in genuine projects, cross-disciplinary briefs, community challenges, client-facing work develop adaptive reasoning and collaborative capacity in ways that lectures alone cannot produce.

Teaching people how they learn. Students who understand their own learning process can identify gaps, plan their own development and monitor whether something has actually landed. This is not incidental. It needs to be taught explicitly.

Making room for uncertainty. Students who have only encountered well-defined problems with known correct answers are not equipped for roles that require comfort with ambiguity. Educational environments where productive struggle is expected, where difficulty is a sign of engagement, not failure, build the psychological resilience the future of work actually requires.

Treating technology as a partner. AI and digital literacy understanding what these tools can and cannot do, and how to work with them rather than around them is itself a foundational future skill. Students who understand AI as a collaborator are considerably better positioned than those who either fear it or uncritically accept whatever it produces.

The African Opportunity: Building Differently From the Start

Africa is home to the world's youngest and fastest-growing population. By 2050, roughly one in four people on the planet will be African. That demographic reality is, depending on how it is handled, either one of the great opportunities of the coming century or one of its most significant risks.

The opportunity is real. A large, young, increasingly connected population, equipped with capabilities that the evolving global economy values, represents extraordinary human capital. The dividend, if realised, is substantial.

The risk is that expansion of access, which is genuinely happening and genuinely matters, scales a model that does not serve students well. More people going through systems that credential without developing capability is not a solution to educational underdevelopment. It is a more elaborate version of the same problem.

"Africa has something rare: the chance to build educational systems for the world that is arriving, rather than retrofitting ones built for a world that has passed."

What makes this moment distinctive is that many African nations are still building educational infrastructure, not managing legacy systems embedded over generations. That creates something rare: genuine optionality. The chance to build for the world that is arriving rather than retrofitting for one that has passed.

Initiatives across the continent that embed entrepreneurial thinking, problem-based learning and digital skills from the earliest years of schooling represent exactly this kind of structural reimagination. They are not perfect, and they are not uniformly distributed. But they point toward what it looks like to design an educational system with the actual future in mind.

The Conversation Worth Having

Preparing students for jobs that do not exist yet is not, in the end, primarily about figuring out which specific skills to teach. By the time any such list makes it from curriculum research, into teacher training, into classrooms and through to graduation, the list will have changed.

The deeper preparation is about developing a certain kind of person: someone who can encounter unfamiliar situations and make something useful of them, who can work effectively with others under conditions of genuine uncertainty, who can keep learning long after any formal programme has ended, and who can contribute to shaping what comes next rather than simply reacting to it.[7,8]

That requires different things from every part of the system. Teachers who facilitate and guide rather than stand and deliver. Students who question and construct rather than passively receive. Assessment systems that evaluate what can be applied, not merely what was memorised. Employers who invest in developing people's capacity to learn, rather than demanding that graduates arrive already knowing everything they will need.

None of that is simple. But the students sitting in classrooms right now, the ones who will staff the organisations, build the companies, and govern the institutions of the coming decades, deserve education systems that take the world seriously they are actually entering.

Preparing students for jobs that do not yet exist is not about predicting the future. It is about developing people who are equipped to shape it.

[7] Carol S. Dweck, *Mindset: The New Psychology of Success* (New York: Random House, 2006).
[8] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday, 1990); Peter Senge et al., *Schools That Learn* (New York: Doubleday, 2000).