Nelson Mandela, “can really develop unless its citizens are educated.” In the midst of today’s global pandemic, when the stakes are high and where many see public health, equity, and economic prosperity as rivals in a zero-sum, highly politicized game, Mandela’s words suggest that education is about more than employment. What is the connection between education and citizenship, between learning and living a meaningful, free life? And what role do colleges and universities play in preparing people for more than a job?

Higher education institutions are spaces where people grow as much as they learn. This distinction is important as we consider how higher education can evolve in a world where content and effective learning guides are freely available and globally accessible. Davidson College uses two phrases to capture attributes that individuals living in community must cultivate: a “disciplined, creative mind” and “humane instincts.” In the complexity of modern life, these attributes and habits of mind are as desirable as job-specific skills and domain knowledge.

The Disconnect
Entrenched systems are often slow to respond to new realities. Decades often pass before the opportunities of new technologies begin to make a pronounced impact. Higher education is not immune. Because many institutions had underinvested in digital learning before COVID-19 forced them to switch to remote teaching, they (and instructors) scrambled to offer effective digital content and learning contexts to students accustomed to in-person interactions. Colleges and universities turned to external companies like online course providers and online program managers (OPMs), some of which had already gained traction in this space. The pandemic thus highlighted the value of many edtech providers, and those traditional institutions that adapted quickly recognized the usefulness and potential of learning technologies.

Within this changing landscape, the postsecondary educational sector can expand and diversify to more effectively meet the employment aims of an increasingly heterogeneous learner population. What remains unclear is whether this new ecosystem, with its focus on jobs and reskilling, can also cultivate the human attributes that are required for a populace to sustain a vibrant democracy.

What Works?
Even before COVID-19, some higher education institutions realized their digital unpreparedness and started partnering with organizations to address these gaps. As a result, a growing number of providers, often for-profit, have entered the education sector. The solutions that they offer range from course offerings (Coursera) to capacity building (OPMs), to credentialing services. Corporations such as Google, Microsoft, and Amazon are also offering open education to reskill and retrain the existing workforce, expanding the learning ecosystem well beyond traditional colleges and universities.

From these developments, we’ve seen that learning materials can be scaled and delivered broadly online. Open educational resources such as MIT’s OpenCourseWare or Rice University’s OpenStax allow educators to use and reuse learning materials with negligible additional costs for duplicating digital copies. Likewise, instruction can be scaled. In one generation, teaching has gone from the domain of a classroom activity, with at most a few hundred students, to a global classroom that can have thousands or even hundreds of thousands of learners. Early indications suggest that some aspects of tutoring can also be automated through toolsets supported by artificial intelligence. If curriculum, teaching, and parts of tutoring can be scaled technologically, which aspects of the college/university experience remain? What does the traditional higher education experience offer that is not also accessible in online curriculum, instruction, and communities?

Dual Advances
Two related trends raise additional questions about the future of higher education. First, the list of digital learning providers has grown rapidly over the past decade as billions of dollars in venture capital have moved into the edtech sector. Second, technological advances and the growing development of knowledge have strengthened the link between continual learning and workplace advancement. As a result, career-long reskilling is crucial both for individuals and for organizations. Yet many colleges and universities have largely ignored these changing societal learning needs, concentrating instead on their traditional student populations and degree programs. When institutions do have a distance, corporate, or online learning unit that offers evening and weekend classes, these programs tend to assume the traditional course structure, degree programs, and assessment with less investment in teaching. In contrast, emerging providers now offer a range of credentialed options for individuals seeking to reskill.
Consider an employee whose job has been eliminated and who wants to develop skills to secure a role in an emerging field such as data science. A higher education pathway to competence and credentials is expensive, rigid, and slow. In contrast, organizations like Coursera and edX and companies like Guild Education provide access to certificates and degrees in faster, cheaper pathways to career advancement.

**Foundational Attributes**
Many organizations and companies can deploy new technologies to help learners acquire key skills quickly and inexpensively for the potential benefit of all. Yet what makes these programs effective—a laser focus on skills—also sidelines a set of foundational attributes critical to both long-term career success and engaged citizenship. Cultivating these attributes—which include intellectual curiosity, disciplined goal-setting, self-awareness (metacognition), creativity under pressure, integrity, empathy, and analytical agility—works best in contexts intentionally constructed to require them.

It is in this area that traditional liberal arts colleges can offer a significant contribution to an evolving postsecondary educational sector. Whereas content and powerful pedagogy are now scalable, we (meaning the postsecondary educational sector) have yet to figure out how to create at scale a meaningful context that integrates skills development and domain knowledge acquisition with less-structured educational experiences that cultivate the deeper, human attributes mentioned above. A residential college education brings together the acquisition of field-specific skills (e.g., conducting data analysis, speaking multiple languages, synthesizing new molecules) and domain knowledge (e.g., economics, history, public policy, anthropology) with experiences that cultivate foundational attributes and habits of mind. Such experiential opportunities are generally absent in today’s digital environments, which also lack the glue that holds the three components together. Skills and domain knowledge can be acquired, but without a context that integrates less-structured yet carefully curated experiences, other crucial attributes receive little attention. These distinctively human attributes underlie an ability to navigate uncertainty, to see beneath or beyond existing systems of thought, to imagine how others experience the world, and to distinguish the morally relevant from the incidental. A heterogenous democratic republic needs citizens who can ascertain the issues that matter, who can collaborate across our differences, and who can take apart and build systems (rather than working only within systems that others have created).

Consider young people’s experience today. On the one hand, connectivity to peers, family, and friends is constant. Convenient services unimaginable a generation ago are now routine and expected. Much of the world is at their fingertips: banking, entertainment, news, and global social connections. On the other hand, because information moves instantly, young people are keenly aware of all that is out of individual control. Personal accounts of tragedy unfold around the world. Increasing misinformation creates discord and fear. The juxtaposition of an increased awareness and an increased sense of helplessness cry out for analysis and action. We need to do more than manage within this world where pace and speed upend a sense of agency. How can we understand, intervene in, and reconfigure the systems in which we live?

**A Next Step**
Education for today’s digital world must include more than developing skills and acquiring domain knowledge. Foundational attributes such as a disciplined, creative mind and humane instincts should be cultivated through carefully curated experiences. While students can learn how to program online, they require additional experiences to become someone who routinely asks how and why complex systems get created and who can intervene to remake them. Traditional residential colleges and universities are not the only places where these experiences happen. These institutions are, however, distinctive in intentionally and rigorously curating a range of such experiential opportunities and consistently offering them to learners. They are therefore well-positioned to help scale what they distinctively do so well and what our democratic republic so desperately needs. A next step in building a forward-looking educational ecosystem that serves all learners may be to tap the expertise of these most “traditional” institutions. Now more than ever, a society that strives to be free and democratic requires holistically educated citizens.

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**Notes**

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