

New Challenges for Workforce Development and Higher Education

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To many it may be a self-evident truism, but it is well worth starting these reflections by reminding ourselves that – because of the extraordinary social, economic, cultural, and environmental urgencies of our time – bold and critical thinking in search for constructive and sustainable solutions is the order of the day. That applies also to higher education, especially when it comes to workforce development and professional programs. There is a good case to be made for the notion that there is a new sense of higher education really having to be in front of making change, and not just being the passive recipient of inputs asking for change.

The Covid-19 pandemic has shown two important issues that have great relevance for workforce development and upskilling the labor force. First, social inequality, structural discrimination, and overt white supremacy in our society have become even more pointed, visible, and urgent than they already were before. Indeed, the United States is in the midst of an immense economic and social crisis. Statistics are important, but I everybody can go look those up for themselves. What needs to be stated, however, is that everybody who feels it, knows it! Cars lining up for miles for the distribution of food do not lie either. Systemic inequality and discrimination have always existed in education, but now more than ever education is becoming the frontline where inclusion has to be modelled and equality has to be achieved. The second issue is: in the midst of the Covid-19 pandemic colleges and universities have gained a new appreciation for their own potential for change. With the urgency of moving almost the entire curriculum online in just a matter of weeks, a new sense has been gained of their ability to change rapidly and fundamentally the ways they approach the important work of teaching and preparing students for a successful life and sustainable careers. There is also a new-found respect in wider society for the hard work done by our teachers and educators at schools, colleges, and universities. That is a good thing, and an opportunity to effect further change. People are beginning to see that – as an African proverb goes – “when the rain falls, it doesn’t fall on one roof alone,” and that we are all together in this.

In the following I want to briefly highlight three related topics:

- 1) Demography as an opportunity and the question of choices
- 2) Aligning teaching and learning to changing dynamics in the economy
- 3) Support for faculty and students

I. Demography as an opportunity and the question of choices

Community colleges serve a much higher number of students from underrepresented racial and ethnic groups and lower-income backgrounds than four-year colleges do. They are engines of opportunity supporting social mobility and the health of the U.S. economy. Still, they are vastly under-funded and even unfairly stigmatized as institutions. Some of this may be corrected by the example and influence of the new First Lady, Dr. Jill Biden, who has been and proudly intends to stay active as a community college professor. But at this point, apart from Wisconsin, every state in this nation provides much more public funds to four-year colleges than it does to community colleges. Four-year institutions receive about \$17,500 in revenue per full-time student, while two-year colleges get almost exactly just half of that – about \$8,700.¹ That choice is a policy mistake. Because of the populations community colleges serve, they have more students than four-year colleges with disproportionate needs who benefit more from costly services such as robust academic advising, child care, and even help with basic needs including food, transportation and housing. Students who fall into these categories are a growing demographic, and as the current health crisis is making abundantly obvious, in many ways – as it were – they are the very backbone of this country. Community colleges are projected to enroll most of the postsecondary students from these racial, ethnic, and social groups. For college leaders and education policy advocates it is therefore incumbent to clearly articulate these issues to the public and lobby political decision-makers that they become more responsive to them.

Community colleges will have to be the first ones to answer the call for change to inequality and discrimination in higher education. It is not – and has never been, in my view – acceptable that African-American undergraduates who begin their higher education at two-year public institutions earn degrees at rates more than 15 percentage points lower than their white peers. So, there is urgent work to be done here that squarely rests with college administrators, faculty, and staff. We owe this to these students. A lot can be achieved in a culture of care, encouragement, support, accountability, high expectations and firm standards.² So, for institutions of higher education the focus must be on having a student-ready college rather than a college-ready student. But how and what exactly needs to be done? Fortunately, there is a growing body of research helping us to reflect and think of promising alternative perspectives and approaches to that work.

Institutional leaders should heed the following principles: 1) know your students, understand the obstacles to their success, 2) adopt and adapt responsive policy and practice, and 3) scale and institutionalize continuous improvement.³

Knowing your students includes having color-conscious conversations. Administrators of all stripes should not shy away from such conversations, but pro-actively invite them and be prepared to lead them. They should also not be reluctant to surround themselves with people who have a deep understanding and appreciation of these issues. At the institutional level, it really begins with the quality of data collection at enrolment, and even the kind of relationships

built before that. When advising students, collect significant and telling information. But it also means knowing the communities our students are from. Meeting and engaging community leaders and representatives is therefore crucial. Having good data is just the beginning, though. Meaningful data need to be matched to policies and practices in the college which may pose real obstacles to student success – e.g., issues like inaccurate placement systems, scheduling of classes at times inconvenient for working students, late registration penalties, or required multi-course and multi-semester developmental education sequences. Then, there must be tough conversations and decisions made about how to break down these built-in obstacles. And once policies have been adopted, they ought to be subject to regular review and systematic assessment.

One particularly promising change that has in recent years helped to significantly improve student success is the introduction of *Guided Pathways* approaches. *Guided Pathways* is a comprehensive reorganization and realignment of the entire enrolment process, advisement, and the academic program structure with the goal to provide very clearly defined and prescribed choices for students to pursue their preferred course of study from enrolment to graduation. Where this has been done well, it has shown extraordinarily great promise in terms of retention and graduation rates. Having more students become more successful in less time is not only important for students themselves, but for a college as an institution. It saves students money, gives them greater confidence that their investment is worthwhile, and it has the potential to increase the student population and with it the income base for the college. Generally speaking, *Guided Pathways* provides less choices for students to switch between programs or take unnecessary courses, but at the same time it provides much improved advisement before and during enrolment, and also better calibrated student support throughout – all of which leads to higher student success.

Some may not appreciate the notion of giving students less choices in their course of study at the college. After all, choice and freedom of choice are generally considered as American as apple pie. But there is another way to look at all this freedom of choice and realize that it has a darker underside. There is a way to realize that – for various reasons – the provision of many choices actually *produces* social inequality.⁴ So, *Guided Pathways* actually streamlines the cafeteria approach of choices, bundles them in career communities (or meta-majors), maps them out clearly to specify course sequences, progress milestones, and program learning outcomes, and provides better aligned academic support (such as remedial courses fully in tune with the student's major). The effect is that students know much better from the beginning what they need to do to prepare for a career and further education and training in their field of interest. In cases where *Guided Pathways* has been done well it has led to impressive improvement in student success rates. At Indian River State College in Florida, for example, the two-year graduation rates climbed by between 10-13% in a matter of just four years.⁵

Let me finish this section with a few words regarding access to community college. Recently, there have been growing calls for college loan forgiveness, eliminating tuition, and opening access to college in general.⁶ No surprise here; the economic consequences of the pandemic have hit community college students and would-be students particularly hard. This is not only about the ability to take online classes, but much more basic issues such as job loss, home insecurity, or food insecurity, to mention just the most significant. While community colleges, in particular, are committed to empowering every member of the community through open enrollment, the question of no tuition across-the-board is a difficult one with already low state funding continuously shrinking (looking at it on a more selective basis may be easier to do). However, there is a strong case to be made for being especially protective of programs such as Pell Grants. Thus, according to a study by Teachers College, each \$1,000 of Year-Round Pell grant funding per student increases the likelihood of associate degree completion by 2.2 percent.⁷

But there is also a case to be made for more outreach and casting a wider or better net when it comes to student recruitment. That may mean becoming more intentional about extending creditable college-level courses into local high schools, for example. It could – and really should – also include extending higher education to prison populations, where Pell Grants would be a true win-win investment.⁸ It may include stretching established academic and financial rules, like waiving certain fees or parts of students' tuition, or changing the semester format.⁹ Some of this has legal implications and will have to be considered very carefully. Ultimately, what will keep institutions resilient is the quality of care they demonstrate on a daily basis – which starts with basics such as providing emergency relief, and goes all the way to more personalized advisement and other services, and very intentional communication with students. Not every problem is solved by throwing money or other resources at it. A lot of what we are trying to accomplish can be achieved by repurposing job roles and trying to create new efficiencies.

II. Aligning teaching and learning to changing dynamics in the economy

So far, I have made it seem as if the COVID-19 pandemic is the main reason for why we need to re-imagine higher education and workforce development. But there is an even more fundamental dynamic driving the need for change. Put simply, we are now in the middle of an economic revolution that is as consequential and far-reaching as the replacement of steam engines by electricity in the early 20th century. There is a ton of literature about it, but one interesting recent title is *Harnessing our Digital Future. Machine, Platform, Crowd*. In this book, the authors (A. McAfee & E. Brynjolfsson) demonstrate 1) how machines are getting smarter and, when supplied with big data, can learn autonomously by identifying patterns and then find more effective and efficient ways of doing things; sometimes this dynamic also comes under names like *Industry 4.0* or the *Internet of Things*; 2) Platforms by companies which don't make or own anything, but just facilitate transactions and resource-sharing are now among the biggest

companies in the world (e.g., Uber, AirBNB, Alibaba, or Facebook); and 3) The Internet makes it feasible for crowds working together to come up with better ideas than experts.

These are important trends that will shape the way things are manufactured, how information is generated and distributed, and how expertise is becoming the domain of the many, and not that of just a few. In this lies great opportunity and great risks, including very consequential ethical risks.¹⁰ From time I spent living and working in China, I have come to the conclusion that in our country we are nowhere close to having the same widespread public awareness and acceptance of these technologies as they have in many parts of East Asia, and – notwithstanding the formidable innovative capacities of MIT and Silicon Valley, as well as the entrepreneurial power of free markets – I believe we are in real danger of falling behind very rapidly. If you have ever wondered why many colleges are offering certificates or degrees with exotic new names such as mechatronics, photonics, or healthcare analytics, the rise of big data, AI, smart sensors and devices, robotics, and platforms are the reasons for that. In a nutshell, these dynamics will fundamentally change how in the course of the 21st century we will communicate, plan, produce, grow, transport, travel, distribute, care, heal, and consume.

What that means is that almost any and all academic and professional degrees need to be in touch with such changes. If colleges want to offer relevant and valuable degrees, academic leaders must find ways to continually integrate these changing technological developments into the curriculum and faculty teaching practices. This is particularly so at community colleges, which focus on preparing students for the job market, for career advancement or transfer into professional degrees. Thus, there is now even greater need for ongoing professional learning than there was before. Students, by the way, also need to wise up to these trends. One way to promote these dynamics is by building MakerSpaces – an interactive and experiential space, equipped with cutting-edge 21st century technologies such as 3D-printers and laser cutters, where students can collaboratively imagine, plan, experiment, and model innovative ideas and products, and start entrepreneurial ventures. It is also a great institutional tool to bring students from different disciplines together – computer scientists, graphic designers, economics students.

Making these skills and technologies available through credit-bearing courses, certificates or degree programs, could mean using innovative and creative approaches to pool resources between different colleges, high schools, employers, and philanthropic organizations. Creative solutions such as mobile labs or cooperative agreements among high schools to align and pool their scarce resources, close collaboration between major companies and academic programs such as between the Robotronics Technology Expert Program at Chattanooga State Community College and the Volkswagen Academy, but also known tools such as micro-credentials and electronic badges can help communities to upskill, keep them engaged with college, and do so in a more affordable way.¹¹ Many of these approaches are already in the wheelhouse of what community colleges do.

III. Support for faculty and students

There is a growing consensus among educators and administrators that in order to deliver the best possible learning experience to students during and after the pandemic, professional development for faculty and staff will be even more important than it already was before COVID-19. Solid delivery of online courses is under the best of circumstances a resource-intensive, a time-intensive, and a technology- and tech-skills intensive enterprise. Without intending to over-generalize, it is probably fair to say that in many cases students adjusted better to the transition in Spring 2020 to online learning than most faculty members did. There are several good reasons for that, and all of them point to the need for better support to faculty – all faculty and instructional staff, really.

There is a good amount of research, and many innovative and evidence-based approaches to creating better academic and professional growth for community college faculty and students. As an example of a very promising significant initiative, which also resonates with other similar initiatives (e.g., the AAC&U's LEAP Initiative), we can list the *Achieving the Dream* initiative.¹² Like many other studies, it demonstrates that engaging and supporting our students is an essential ingredient to student success. Active learning and culturally inclusive teaching-excellence strategies are key to that. High-impact practices such as First-Year Experience, common readers, ePortfolios, experiential and service learning, community-based learning and internships, as well as capstone courses are widely recognized, and in one form or another probably most colleges have at least some of these student-learning features built into or around their academic programs.

But it is one thing to roll out such a program, and another to mold it into an integral and widely adopted part of the college's teaching and learning culture. For executive members of the administration it is therefore especially important to not just advocate for such initiatives and professional development, but to pro-actively build and support them by: 1) making sure that they are appropriately resourced, 2) ensuring that they are structurally supported by policies and procedures (including recognition and reward policies), and 3) making sure that they are becoming a recognized and an accepted part of the institutional culture and *esprit de corps* among faculty, students, and staff at all relevant levels, as well as that they cohere with the Strategic Plan.

To conclude

With the enormous health and economic crisis following the COVID-19 pandemic it is no longer enough to tinker around the edges of higher education.¹³ And, with the changes upon us, in many cases we no longer have that luxury of taking semesters on end to make the changes necessary to provide the best educational experience our students need and that we owe them. Rather, university and college administrators, as well as trustees and various community

stakeholders, need to embrace a fundamental sense of unwillingness to accept the status quo and business-as-usual muddling through with the same low-risk incrementalism of the past. For many years, Facebook's company slogan was "Move fast and break things." While we should not necessarily "break things," particularly if by widely accepted consensus they ought not be broken, it is nevertheless time to see that we can and must make bold change that allows much more equitable, inclusive, and fair access for all to higher education. And: we must do so in a way that allows all to buy into this effort and realize that our students' success defines our own success as educators, education policy-makers, and as institutions of higher education.

ENDNOTES

¹ <https://www.americanprogress.org/issues/education-postsecondary/reports/2020/10/07/491242/78-billion-community-college-funding-shortfall/>.

² See e.g., <https://www.nationalacademies.org/news/2021/01/colleges-and-universities-need-campuswide-culture-change-to-better-support-students-well-being-and-address-mental-health-problems>.

³ Based on research by Nikki Edgecombe, "Demography as Opportunity," March 2019, *CCRC Working Paper No. 106*.

⁴ See <https://ccrc.tc.columbia.edu/publications/higher-education-choice-making-freedom-inequality.html>.

⁵ See <https://ccrc.tc.columbia.edu/publications/guided-pathways-community-colleges-theory-practice.html>.

⁶ See also https://www.aacc.nche.edu/wp-content/uploads/2017/10/Prioritizing_Access_Final.pdf.

⁷ <https://www.achievethegoal.org/news/17016/make-pell-a-priority-to-preserve-access-to-education-statement-from-dr-karen-a-stout-president-and-ceo-achieving-the-dream>

⁸ See <https://www.politico.com/news/agenda/2020/12/04/pell-grants-coronavirus-pandemic-442884>.

⁹ See <https://www.chronicle.com/newsletter/the-edge/2020-11-18>.

¹⁰ See e.g., <https://news.harvard.edu/gazette/story/2020/10/experts-consider-the-ethical-implications-of-new-technology/>; <https://sloanreview.mit.edu/article/a-crisis-of-ethics-in-technology-innovation/>.

¹¹ See e.g., <https://www.openaccessgovernment.org/mechatronics-education-it-takes-a-community/99702/>.

¹² See <https://www.achievethegoal.org/resource/18241/teaching-learning-toolkit-a-research-based-guide-to-building-a-culture-of-teaching-learning-excellence>.

¹³ See e.g., <https://www.americanprogress.org/issues/economy/reports/2020/10/22/492179/shambolic-response-public-health-economic-crisis-women-brink-job-recovery-stalls/>; <https://www.nationalacademies.org/news/2021/01/colleges-and-universities-need-campuswide-culture-change-to-better-support-students-well-being-and-address-mental-health-problems>.