The Power of Collaboration and Cooperation in a Digital World

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Thank you, President Park In-Kook, for that kind introduction.

I also want to thank Vice President and Provost Wang Bo for hosting this opening ceremony. And I extend gratitude to the forum sponsors: Beijing Municipal Commission for Education, Peking University and the Chey Institute for Advanced Studies.

Today I would like to discuss how global collaboration can shape digital intelligence and increase digital access. Furthermore, I am confident that colleges and universities are well-positioned to lead in these areas — and maximize the opportunities provided by new, transformative technologies — because we are driven by values of public service, research for the common good, and inclusive excellence.

What I mean by the term "digital intelligence" is all of the abilities that equip people to navigate and adapt to the demands of an increasingly technologically enabled world. The term encompasses digital literacy, access to remote learning, familiarity with artificial intelligence tools and everything in between. It is a concept that knows no boundaries — nor borders — and is ever expanding as humanity builds a digital future.

First, I want to set the stage by noting that computing power —which lays the foundation



for increased use of technology in society — is accelerating at an unprecedented pace. I graduated from Stanford University in the early 1970s. At that time, the only large computer on campus was an enormous IBM 360 that was housed in its own entire building.

While cutting edge at the time, the IBM 360's technology could rightfully be called primitive by our standards today. Back then, students spent hours keypunching programs onto paper cards. Those cards were then entered into a card reader. That computer job request was then listed as pending. We waited patiently for many hours, and sometimes for the entire evening, for the job to "run" and for a paper print-out of its results to be made available.

Today, college students — and all of us — walk around with supercomputers in our pockets. Each one is tens of thousands of times more powerful than the massive, room-sized early computers I encountered at Stanford.

With a few swipes, our smartphones can virtually transport people to every corner of the globe, enlarging the world we occupy while at the same time making that world feel smaller due to limitless access to information. This access can fuel curiosity and forge a deep sense of connection to people and issues that are physically quite far away.

I would like to propose three core principles that we can use as guides to navigate our engagement with digital technology and help shape its future. The first is the need for us to adopt a global perspective and cooperate to address the borderless nature of both technology and the problems we face. Next, as we expand our digital possibilities and technologies, equity must be our second principle — which includes diversity, inclusion and ethics. And finally, we must engage in research that is multidisciplinary and expand opportunities for lifelong learning.

As UCLA researchers and students around the world understand, a great number of modern societal challenges are global in nature—like infectious disease, climate change, international conflict, and economic welfare —and thus require global solutions and collaboration.



In addressing these, I have found that we can learn a great deal from students and young people, especially because they are often using new technology most frequently and harnessing it most effectively.

One example of university students around the world addressing a clear and present challenge is the Global Climate Strike movement that gained momentum in the last several years. This movement was led primarily by young activists, including many college students. Their collective digital intelligence mobilized and coordinated efforts to raise awareness about climate change and advocate for action from governments and corporations.

University students from different countries and regions organized protests, rallies, and online campaigns through social media platforms, websites and online forums. They shared information, resources and strategies for effective advocacy, all facilitated by the internet. The internet allowed these students to connect, collaborate and amplify their voices on a global scale.

The Global Climate Strike movement serves as an excellent example of how digital intelligence can unite university students worldwide around a critical issue, leveraging their collective power to drive awareness and change. While the movement's impact varied across countries, students helped create several significant changes related to environmental policies, corporate accountability, education and curriculum, conversations about climate action, grassroots activism, and connected their work with other movements. The gains made by this movement proved that creating a global coalition can advance the common good.

With that goal of furthering the common good in mind, we must remember that the digital advances and inventions that we produce can have both positive and negative impacts. This is why approaching digital innovation with the values of equity, diversity, inclusivity and ethics is critically important. We must bridge the digital divide — ensuring economic equity and facilitating access to the vast amount of information available, while making sure this information accurately conveys the experiences and ideas of all people. This is essential for effective problem-solving and making sure more people can contribute to society in a digital world.



One recent issue I have read about is bias in face recognition software. Apparently, some of the programs do not recognize darker skin colors as well as they identify lighter skin tones. This can lead to more mis-identifications with possible negative consequences, especially with regard to law enforcement. It is possible that this unfortunate outcome may have been a result of a software development team lacking diversity of backgrounds. This again reminds us of the importance of equity as a "North Star" in the creation of new digital technologies.

We know that new technologies are having an impact on most aspects of our lives — the way we gather and process information, how we interact and communicate, methods of teaching and learning, and the ways we do our work. This means that some communities and jobs are impacted differently by these technologies. As educators, we can play an important role in not only preparing students for the digital world, but retraining those whose work is impacted by our digital innovations.

The way universities conduct and approach research will also play an important role in forming the ways we construct and build digital technologies. We must be well-informed about the potential dangers of perpetuating our own human tendencies for bias, discrimination, disinformation and hate speech into the digital world. We can aspire to make artificial and digital technology uniting forces, rather than divisive ones.

With that in mind, UCLA has established multiple initiatives and centers formed to harness human intelligence and critical thinking to facilitate the responsible use of digital technologies. One example is UCLA's Center for Critical Internet Inquiry, which investigates the social impact of digital technologies on communities and the broader public good.

Another example of our work at UCLA that helps to bridge the principles that encompass the need for equity and a multidisciplinary approach to digital technology is DataX. As we imagine the seemingly endless possibilities of the future of digital engagement, we must use our collective expertise to balance our progress with our ethical commitments.



DataX is strengthening our data science research and teaching by bringing together scientists, humanists, engineers and scholars from more than 40 different affiliations across UCLA. The work is highly collaborative and takes on complex data-driven problems, from aerospace and environmental science, to the life sciences and sociology. These projects examine the way that data impacts people and communities, explore data theory and science, and apply innovative computer applications and hardware to improve education and fight climate change. It reminds us that there is power in having strong humanities and social science scholars sharing the same campus as the scientists and engineers. This was certainly the vision when the University of California was founded, and continues with its nine comprehensive campuses. The problems we face with data management and analysis in a digital world require a wide array of perspectives and capabilities.

In addition to the need to engage multiple areas of study, the rapid rate of growth and change in digital technology requires lifelong learning that can keep pace — both with fast growth and continuous growth. Higher education institutions have the ability to offer opportunities for lifelong learning, help close the digital skills gap and enable individuals to adapt to new technologies and advancements throughout their careers.

Learning does not stop once a degree is received. At UCLA we have committed to what we call the Bruin Promise, which offers lifelong learning opportunities to our alumni across the world through continuing education and career support. We recognize that most students spend a relatively short portion of their lives on campus and will need to be re-equipped with new knowledge and skills throughout their working life and beyond. In addition to digital technology, Bruin Promise course offerings include classes in business management, current events, arts, personal and professional development and engineering. They are offered remotely for easy access. I like to say UCLA offers a lifetime guarantee, not just an exceptional education.

In the U.S., university extension programs expand the possibilities for learning even further — beyond traditional college students. UCLA Extension is one of the nation's largest and most comprehensive continuing education programs. Its resources are tailored to the needs



of working adults and lifelong learners from all over the globe, with open enrollment and evening, weekend, daytime and online courses. There are 150 certificate programs in more than 20 different fields.

Additionally, the UCLAxOpen initiative provides no-cost, online open access to educational tools and resources. Open access programs like this play an important role in providing high-quality, credible information to educators and learners throughout the world.

We live in challenging times and our ability to adapt is tested constantly. At UCLA, through our mission of education, research and service — we see the positive role we can play in shaping a better world as an exciting opportunity. Whether advancing access to information through digital tools, improving global health, advocating for climate action, working for economic equity and more, we strive to use knowledge to address pressing societal needs and cultivate an environment where diverse perspectives are welcome and people from all backgrounds can thrive.

This era of evolving digital technology and information will inevitably bring change. But the kind of change it brings depends on how we work together and what we prioritize. New perspectives are required to address the complex challenges and opportunities that new technology provides. In an era of global interconnectedness, we need each other in order to grow and advance as educators and to address the global problems we face as a society.

The future of our digital environment depends on global collaboration and cooperation, a commitment to equity, diversity, inclusion and ethics, multidisciplinary research that is focused on real-world applications, and opportunities for lifelong learning. This thoughtful, united and deliberate approach will lead to transformative knowledge that continues to evolve the way we train the next generation of leaders and workers to thrive in a digital world.

This will not be an easy task, but it is something we can accomplish together.