MICHAEL M. CROW became the 16th president of Arizona State University on July 1, 2002, leading an institution that combines academic excellence, inclusiveness to a broad demographic, and maximum societal impact—"a model he terms the "New American University." Under his direction, the university pursues teaching, research, and creative excellence focused on the major challenges of our time, as well as those central to the quality of life, sustainable development, and economic competitiveness of Arizona and the nation. He has committed the university to sustainability, social embeddedness, and global engagement and has championed initiatives leading to record levels of diversity in the student body. He is co-author of the book *Designing the New American University* (2015).

Earlier this year, EDUCAUSE President John O’Brien sat down with Crow for a wide-ranging conversation covering numerous topics including student success, technology changes in recent years, institutional transformation at scale, cooperation within higher education, personalized learning, and analytics.

Innovative Cooperation, at Scale:

**AN INTERVIEW WITH MICHAEL M. CROW**
**John O'Brien:** I was thinking this morning about your “No More Excuses” EDUCAUSE Review interview from four years ago, in which you explained that the use of analytics at ASU was being driven by the objective of student success—not only student success institutionally but student success nationally. You talked about how all of us in higher education should “focus on our own performance and the need to enhance student success. There are no more excuses.” For a lot of us, this was a watershed moment in thinking about student success. Would the excuses be different today, in 2016? Would the solutions be different?

**Michael M. Crow:** The big thing that would be different in 2016 is all of this hesitancy about the integrated, aggregated tools—both software and hardware—that we now have available to us. These tools have moved so far forward that they are now unbelievably powerful in changing student outcomes. They can extend. They can expand. They can enhance. They can individualize. They can do all these things that even a few years ago they couldn't do. You hear people saying: “It's too hard. It's too expensive. We can't do that.” The fact is that they don't want to do that—it's all excuses. We need to get about the business of integrating technology-based learning platforms as enhancements of our faculty and enhancements of our instructional environment.

**O'Brien:** In 2012, did you foresee some of the current environment of technology opportunities in these systems?

**Crow:** I don't know that I foresaw the details, but certainly the trend. The trend is the Internet of Things, with everyone wearing a supercomputer on or near their body. That supercomputer—which is then enhanced by other devices, other tools, and other mechanisms—can deliver knowledge and insight. This empowering platform can take individual faculty members or individual departments and “amp them up” in terms of outcome.

**O'Brien:** Are there technologies that you think might change the game again in five years?

**Crow:** There is an integrated set of technologies that I think could enhance learning through what we’re calling education through exploration. These are game-based learning platforms that can be used for base or core types of programs. The ASU Center for Education Through eXploration (ETX) is developing a series of ways of teaching science through exploration, for example by exploring for habitable planets (HabWorlds). All the data, all the planets, all the science is real. Students learn the tools of science, the means of science, and the questions of science through the act of exploration. By the time students are done, they have mastered what they need to know at the freshmen college level for biology, chemistry, or physics.

**O'Brien:** In your earlier “Solve for X” presentations, you talked about universities as being moonshot factories, a place where moonshot ideas and learning platforms can be constructed. But you also talked about “blowing up” sixty-eight academic disciplines at ASU, which may be a menacing idea to some in higher education.

**Crow:** The United States has always been a country of big ideas and unbelievable aspirations. Universities have been an empowering mechanism. They've produced the people. They've produced many of the ideas. But as we encounter complexities and issues in our social systems, our technological systems, and our environmental interface, we need to ensure that the moonshots, the big solutions, can still come out of the ideas generated by the teaching, learning, and discovery environment of universities. To get there, you have to be willing to be disruptive and to be non-replicative.

**O'Brien:** Why aren’t the departments at different institutions wildly different? We should be offering students various pathways for learning while retaining the grounding knowledge. Moonshots are possible through highly differentiated logics and highly differentiated thinking—not through replicative bureaucracies that all follow the same pattern and structure and implement the same plans and strategies. That's not what we need.

**Crow:** I talk about scale as intellectual scale. It is breadth and differentiation. In aggregate, public colleges and universities (in particular) should have a breadth and a depth that we don't presently have. We should be covering not only the waterfront, but the waterfront and then some: our intellectual positionings, our levels and types of engagements, our problems being tackled. We could then have a higher probability of producing broader learners, master learners, as...
well as a higher probability of solving some of these very, very intractable problems. We do that not by replication but by a scaling of ideas, a broadening of the scope of the overall public higher education enterprise.

**O’Brien:** Is there anything unique to public higher education institutions that either limits them or creates challenges when they try to scale up?

**Crow:** Public colleges and universities are dedicated to what I call the public value outcome. That is, they have to respond to the needs of the people. They can’t scale to the size that they want to be, acquire the resources to do that, and then say they’re done. That’s what a private college or university is able to do. The public college or university has to find a way to right-size what it is doing to fit the community that it serves. But at the same time, public institutions must be responsive to market demands and market forces. That’s the unique intersection that public colleges and universities must navigate.

**O’Brien:** You are the president of a public research institution with 80,000-plus students. What about a private college serving 1,000 students or a community college serving 20,000? Will what works for your institution work for them?

**Crow:** I think it’s all the same. ASU is an aggregation of tiny programs, small colleges, and medium-sized colleges. We have schools with 500 students. We have colleges with 25,000 students. The issues and the dynamics are all the same: the desire to individualize, the need to innovate, the demand to introduce technology. What goes on in our School of Music is different from what goes on in our School of Sustainability, which is different from what goes on in our school of Human Evolution and Social Change, which is different from what goes on in our College of Public Service and Community Solutions. All of those deans, directors, and faculties have to build unique pathways within their units. It’s no different.

**O’Brien:** I suspect some people have an image of you and ASU moving from one success to the next. What about the times when your plans didn’t go well or when you faltered?

**Crow:** Every day is humbling. We’ve done things where the experiment didn’t work. We’ve done things where the educational outcomes suffered because of what we tried. We’ve had many defeats. But we continue to launch many change trajectories. The hope is not that all of them will work but, rather most of them will work. We’re not shooting for a perfect outcome, because that’s not attainable. We’re shooting for measurable difference. We’ve nearly doubled our four-year graduation rate. We admit A students and B students, roughly 50-50 for incoming freshmen. We’re trying to raise the incoming performance of all these students, regardless of their high school outcomes and performance, but this has been an unbelievably challenging process for us. In terms of our performance, we’re compared with schools that admit only A students. Some public institutions admit only A+ students or students with a 3.9+ weighted GPA. We decided not to go down that path, because we think this is above the level necessary for college success. But trying to make this work, across the breadth of our students’ incoming academic ability, has been difficult. Some lessons have been painful, some successful.
O’Brien: What about personalized learning?

Crow: I’m a big believer in the work of Howard Gardner, a Harvard psychologist, about different types of intelligence. I can see it in my children. I can see it in my siblings. I can see it in everybody. We learn differently. We think differently. We have different types of intelligence: analytical intelligence, emotional intelligence, tactile intelligence, spatial intelligence, verbal intelligence—the list goes on. There are certain things everyone should know, but how those things are learned needs to be personalized and individualized around the way someone learns. We’ve found that through adaptive learning platforms, we can change math outcomes, physics outcomes, chemistry outcomes, economic outcomes. We have become very focused now on trying to create as many opportunities as possible for the individualization of learning. People resist this unbelievably powerful, personalized, individualized learning base that allows us to learn in the way that we need to learn, and I don’t understand why. We need to get to the point where students are working on three majors and studying two languages in addition to undertaking real projects and having a job. That can’t happen without a tremendous enhancement of the learning environment.

O’Brien: This “tremendous enhancement” involves change. These days the news media and the public discourse are already very concerned about the drastic changes in higher education.

Crow: The public dialogue is, I think, largely reflective of the anxiety surrounding the rate of change and the direction of change. We’ve come to realize that what we thought of, for decades, as the need to push higher educational outcomes has now become more than an aspiration of families to enhance social mobility. It has become an imperative, a necessity for economic adaptation. The world is continuing to evolve into a more complex economy, one increasingly driven by knowledge and technology and morally driven by new gateways to the middle class on a global scale. These new, global middle-class workers are replacing U.S. middle-class workers. The latter, highly productive, had been able to raise a family and build a community. All of that is now gone.

The current social disruption is as significant as the social disruption experienced when we moved from the agrarian revolution to the industrial revolution. We’re now in this no-man’s-land, where change is occurring rapidly.
For evidence, data from the Bureau of Labor Statistics shows that employment of people with less than a high school diploma has fallen 15 percent since 2006, while employment of bachelor’s degree holders has increased 22 percent. People need to ask themselves: What do I do? How do I adapt? Am I able to change? A person’s ability to adapt is strongly linked to his/her educational platform.

Meanwhile, colleges and universities have been particularly poor at responding to this angst. They’ve seemed arrogant and/or isolated and cut off. Public institutions have not found a way to tell people: “We've got your back. We’re going to move in new directions.” I believe that some (though not all) of the negative energy that we’re getting from the legislatures around the country is justified. Our value proposition has not been enhanced, and we need to do so. But there is another, critical issue: How do we afford all of this? How do we pay for it?

O’Brien: How do we afford all of this? Has the financial anxiety around higher education created a helpful sense of urgency?

Crow: If you are an institution in an innovation mode, all adjustments to the environment help. If you are a conservator of bureaucracy, as most academic institutions are, you just hunker down and wait for the external threat to go away, hoping that things will return to the normal curve. Except that there’s no longer a normal curve. There’s no more normal. In the past we were willing to pay to take 5 percent, or even 20 percent, of the population to a college degree. I don't know how we pay for that. We must lower costs. We must find ways to do things in new ways, or we’re not going to be at the level of service that we need to be.

O’Brien: I’m curious about the faculty reaction to everything you’ve accomplished. What do faculty members say when they’re talking about all of this?

Crow: Probably the most important thing we've done at ASU is move away from a faculty-centric culture to a student-centric culture. At the core of the institution are the students, our learners; we are attempting to create an environment that will be of the greatest assistance to them. It might sound a little simplistic, but we shifted toward the idea that the university doesn’t exist for the faculty; it exists for the students and the community. Once people began to sign up and enroll around that idea, we were able to empower faculty to be designers of their own fate. They were no longer basically operatives in a bureaucratic structure that they inherited and in which they had no say over its ultimate structure or design. We said: “You design what we are. You configure how you'd like to be structured or organized. You make all that work.” That has gotten us to the point that we have approximately 85 percent of the staff and faculty supporting where we’ve come from, what we’re doing, and where we’re headed.
O'Brien: Let’s talk about faculty who resist changes.

Crow: ASU was founded in 1885 as a teacher’s college: Tempe Normal School. The name was changed to Arizona State College in 1945 and to Arizona State University in 1958. The process of becoming a research university followed, intensifying in the 1980s. By the time I arrived at ASU in 2002, we still had legacy units from all the way back in our teacher’s college days. We had other units that were attempting to become research units. Many were at odds with one another. So we went to three biology departments that were legacy units, having been built over the decades. We said: “These departments are not achieving the level of excellence that is required for our students. You’ve got a semester to come up with a better design. Clean the slate, and design whatever you want.” About 115 or so faculty were a part of this process, and they designed a brilliant idea for an integrated school of life sciences that would include philosophers, policy analysts, scientists, and ethicists all together in one school. There were no departments. Faculties could change at will. Individual faculty could move into new areas through self-designation. It was a fantastic idea, and 95 percent of the faculty agreed to the design.

Now, typically at a university, when 5 percent of faculty are opposed, the matter fails at that point. One, two, or three people could stop any change. We didn’t let it fail. We went ahead and did the design. That was the moment when people thought: “Oh, I think we can get things done here.” All the faculty who had been disempowered by the individuals who could veto anything now realized that good ideas, with a majority of support, could move forward. They understood that we would make hard decisions, that we would put resources behind those hard decisions, and that we would enable faculty to be the architects of their own future. That was in 2004.

O’Brien: How do you maintain that empowerment?

Crow: You have to change things up. We did away with regular semesters. We went to six academic modules, in three terms, for the year. We’re allowing faculty to teach courses that are seven and a half weeks long if that’s what they want to do. They can teach technology-mediated courses, or not. We’re allowing departments and schools to decide on their own. Do they want to offer online courses? Do they not want to offer online courses? We create a set of objectives and a set of design aspirations. Then we allow the genius of the faculty, the collective insight of the faculty, and the wisdom of the faculty—in each of their subparts of the university—to figure it all out. For the most part, they have gone beyond any expectation that I could ever have imagined. They are unbelievably smart, unbelievably capable, unbelievably adaptive, and most important, unbelievably committed to our students.

In addition, we set as a design aspiration the acknowledgment that we’re not going to be successful unless our students are representative of the entire social and economic diversity of our society. Thirty-five percent of our undergraduate students, close to 26,000, come from families that are Pell-eligible. We have students that reflect the entire breadth of our society. Most of our faculty are excited to be a part of an institution that has this aspiration as a mission.

Empowerment goes to the question of how you’re performing. You don’t know how you’re performing as opposed to how you might perform or how you should perform. You don’t know anything. At that point, you’re just managing the post office: yes, we’re open; no, we’re closed; this is when the mail is delivered; this is when the mail is not delivered. We really need to move universities away from the post office style of management. We’re not the post office.

O’Brien: Is there a next wave of analytics for ASU?

“Analytics is essential to the process of change. If you don’t know where you are in time or space, you don’t know how you’re performing.”
Crow: What we realize is that the biggest things that we've ever conceptualized, the biggest ideas that we've ever come up with, the biggest changes that we've ever been able to even think about—they're all in the works now. Our rate of change, our use of analytics, our use of big data, our use of tools, our use of design as a modality is accelerating within the institution. Now we're able to think about things and do things that just five years ago none of us could even imagine. I do a lot of mountain climbing. When you climb in the mountains and you get to one summit during your climb, you realize: “I'm not even at the top.” There are higher summits all around. We realize now that we're nowhere even near where we can get. We can see where we can get, but we're not near it.

O'Brien: What have you learned that you would pass on as advice to deans, provosts, CIOs, CEOs, presidents, and others working toward change?

Crow: Break out of the bureaucratic model. We've been in the mode of a railroad, on a metal track with a preset course. Get off the track, remove the metal wheels, put on the big rubber wheels, and head out over land. Do not follow others. We need unique manifestations of colleges and universities that are connected to their place and that are adaptive to the needs of their regions. I am not saying to throw out the base knowledge in language or literature or history or culture or anything like that. There's simply not enough design work going on.

O'Brien: Can this be accomplished individually by higher education institutions?

Crow: We've long had a struggle in the United States, since the time of the country's founding fathers, to build a connected set of public colleges and universities. The U.S. higher education institutions became highly competitive with one another. Although competition can be positive, I think we need more cooperation and more innovation among and between universities. One step toward this is the University Innovation Alliance, consisting of eleven large public research universities (including ASU)—400,000+ students. We have all agreed to produce more graduates (in particular from lower-income families), to innovate together, and to lower our costs. In higher education today, most colleges and universities operate as if they're not even in the same game. We need individual uniqueness for each institution, along with cooperation among and between the schools to leverage each other in every possible way.

O'Brien: What is the role of EDUCAUSE and other associations?

Crow: I think associations like EDUCAUSE should focus on facilitating innovative cooperation—which you do. Associations can encourage team engagement and set analytically based goals and objectives for institutions to work toward. In addition, networks are unbelievably important. Associations can help create an actual living, breathing, interactive network of institutional representatives. We're getting a little sense of this in the University Innovation Alliance, in which the financial aid officers work together and all the admissions officers work together, learning from each other, adapting to each other, and taking the shields down just a little bit. Associations can articulate our collective thinking, our collective wisdom, and help to establish and build these learning networks.

O'Brien: Are you ever accused of being too utopian?

Crow: I'm hopeful that we all have a utopian element in the way that we think about the future. That's called aspiration. No ideal is attainable, because human beings are imperfect. Utopia is unattainable because we are imperfect. But we can dream of a world in which any child from any family can go to a college or university and be successful regardless of family circumstance or family income, and we can dream of a world in which any person can be empowered to become a master learner and a master adapter. If we set that as our aspiration and work toward it, we will achieve a better set of outcomes for everyone.

Note

© 2016 Michael M. Crow