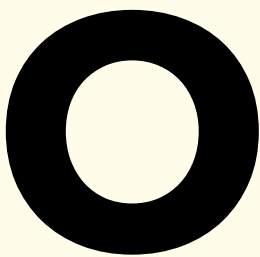




A NEW STRATEGIC VISION FOR EDUCATION AND RESEARCH AT NJIT

Q&A WITH
PROVOST FADI P. DEEK



On July 1, 2015, the NJIT community began implementing *2020 Vision – A Strategic Plan for NJIT* that will guide the university's progress over the next five years. The university will achieve its vision through five strategic priorities that will inform the development

of students, the transformation of the curriculum, the growth of scholarly research, the fostering of a global community, and the investments in human, physical and technological resources.

A driving force behind the creation and implementation of *2020 Vision* is Fadi P. Deek, who was appointed NJIT Provost and Senior Executive Vice President in June 2013 and brings a long association with the university and very diverse experiences to the job. Provost Deek first came to Newark and NJIT from Lebanon in 1983 to continue his undergraduate studies. After completing a bachelor's degree in 1985, he went on to earn a master's in 1986 and a Ph.D. in 1997, all in computing. Subsequently, he became a professor at NJIT, having served in a number of administrative roles that included director of Undergraduate Computer Science Programs, vice chair of the Computer and Information Science Department, founding chair of the Information Technology Program, and associate dean of the College of Computing Sciences. He also has served as dean of the College of Science and Liberal Arts and as interim provost and has faculty appointments in two departments: Information Systems and Mathematical Sciences.

Following are thoughts that Provost Deek recently shared with Christina Crovetto, editor of *NJIT Magazine*.

On a day-to-day basis, why is *2020 Vision* such an important initiative? For students? For faculty and staff?

It is an important initiative for the entire community. There are five different priorities in *2020 Vision*. The first is students – our most important asset. The second is learning, certainly as it relates to students but also to the faculty. While teaching is among the most important tasks that the faculty engage in, another is scholarships. So the third priority is scholarly research. All these three priorities are essentially the core business of the university. This is what we do and that is primarily why we are here.

But there is also the rest of the community, which is the fourth priority. This is not just about students and faculty, it's about everyone else who make NJIT the wonderful place it is, from helping the students learn, obtain their degrees, and get jobs to becoming alumni and successful members of our society. The community that we have built for ourselves, and that we want to continue to build, is one where every person on campus is just as important as the next in carrying out the mission of the university. And finally, the fifth priority is investment. It may seem a bit unusual to include investment as a formal priority because we all know that when you have a strategic plan you want to invest, but what we wanted to do is tie specific initiatives and projects to allocated budgets so we know that there are sufficient funds, for example, to enhance the learning environment, to carry out the faculty renewal – the hiring of new faculty – and to put in place the infrastructure necessary for the kinds of education and research that take place on our campus.



"EVERY OBJECTIVE OUTLINED IN 2020 VISION IS DESIGNED TO HELP MOVE NJIT INTO THE RANKS OF PREMIER RESEARCH INSTITUTIONS."

What further changes can we anticipate over the next year?

Students are becoming savvier about their career choices, and many more are realizing the importance of STEM (Science, Technology, Engineering and Math) education. And, as manufacturing returns to U.S. shores, there will be high-paying jobs waiting for them. Therefore, as a STEM university, NJIT will see increased enrollment. Similarly, because of initiatives we have put in place, our students will be retained in higher numbers, and they will be graduating in higher numbers as well. This is also good for our student profile because better-prepared students are attracted to STEM disciplines, which in turn will lead to even better retention and graduation rates. Just as important, we as faculty are also becoming more mindful that the way we were taught or learned is different from the way that these students learn, so we're paying attention to it, whether it's pedagogical or technological.

So, in terms of teaching and learning, I expect that we will see significant changes as well. In fact, on September 30, we launched the Institute for Teaching Excellence, a deliverable from the *2020 Vision* itself. This Institute has as its core faculty members, named earlier as master teachers, serving as the initial cohort of Fellows who will provide support and professional-development activities to other instructors. Master teachers and distinguished professors are taking on the important responsibility of mentoring new faculty as well as working with existing faculty who have a desire to explore the integration of new pedagogy and technology into their classrooms.

You can also anticipate seeing a rather unique approach that brings back together face-to-face and online learning modes. There was a time when these two approaches diverged out of necessity because the kinds of tools needed to engage in online learning

were different than what was needed in a traditional classroom. But today's instructional technology is common to both. Even face-to-face students want to access their course content on the Web, want to see rich media introduced in the learning they are engaged in, just like online students. What we want to do is be open to the idea that how students actually come into the class is just not relevant. They may be physically there or they may join the class via live streaming. We will no longer have to offer different sections for face-to-face, online or hybrid instruction. The course is simply offered and interested students will take it. They may choose to come to class in person but if, for example, a student is traveling, he or she can still get the same kind of instruction in that same class through enabling technology. And that's unique because in this model, which we call converged learning, you decide what works for you and when. If you happen to be on campus, we want you in class, but if you're not, we still want you to be in the same class but online – just tune in. We have been experimenting with such an option, the flexibility of converged learning, for a little over a year now and the early results are encouraging.

For scholarly research, we aim to achieve an increased national and international presence for the innovative, multidisciplinary and creative work carried out by our faculty and students. You can expect an intensity of activities in those domains that will lead to doubling the external research awards given to NJIT. Similarly, you can also expect to see significant investment in infrastructure – administratively, technologically and materially, for example – in support of both teaching and research. Finally, we will build on existing relations and develop new ones that will yield much closer cooperation with industry.

In terms of community, obviously NJIT takes pride in its diversity. We're often cited as being one of the most diverse institutions in the nation. That's at the student level. We want to do that at the faculty level and

The importance of *2020 Vision* is not that we have a plan. We've always had a plan, as there has to be at any complex organization like NJIT. This is the third cycle of strategic planning at our university; each is five years. But this time, I think, what is important is how this plan evolved from the community, with over 200 people working in committees involving faculty, staff, administration, board members and alumni who participated in the development of this strategic plan. It represents the wishes of the entire university and how they would like to see NJIT advance, or how NJIT will be transformed by 2020. That is the importance of the strategic plan that we now have. Not just that we have it; it's how we actually created it.

How does *2020 Vision* differ from previous strategic plans?

It differs by its process, as I have already indicated, but also by its product. For the first time, at least formally, we have a strategic plan with an almost exclusive focus on education and research. We have had important foci in earlier strategic plans, but this strategic plan sets specific key performance indicators that will be routinely measured, assessed and reported on. Every objective outlined in *2020 Vision* is designed to help move NJIT into the ranks of premier research institutions, with some being absolutely fundamental to becoming a top science and technology university including achieving ambitious graduation rates for all students; implementing a cutting-edge curriculum for educational success; supporting and facilitating faculty scholarly research; developing and retaining faculty committed to excellence in education and research; and fostering international collaborations in a diverse academic setting.

“THE ALUMNI’S VOICE WAS HEARD, AND AS A RESULT IMPACTED WHAT NJIT WILL BE LIKE AS A RESULT OF THE TRANSFORMATION THAT WILL TAKE PLACE.”

at the administrative level. We have some ambitious goals there; currently, 16 percent of our faculty are women and we would like to see this at 21 percent. But we would also like to promote the diversity that already exists, to have NJIT perhaps be seen in a better light elsewhere. For instance, because we have a very large number of international faculty, we want each of them to become an ambassador, to create connections: student connections, but also connections to other universities, to create opportunities for our students to go and learn in these countries. One of the most important deliverables of *2020 Vision* is what we call *milestone experiences*. Our students routinely engage in such experiences, including co-ops and internships. Some also participate in service learning. We would like these experiences to be anchored even more in the curriculum and their value recognized toward graduation. But there’s more, including undergraduate research which we’re intensifying, study abroad, international exposure and anything else that contributes to students’ learning and career development – it may be in the arts, it may be in music, which we are doing a lot more of on this campus, for example. I expect that now, where co-op is probably the most common, other milestone experiences will become just as common.

In general, what are the challenges of implementing the goals of *2020 Vision*?

The excitement I sense from the NJIT community about where the university is heading gives me comfort that we will realize our vision. But the magnitude of the plan seems, at times, daunting. A major challenge is for us to make sure that what we said we will do is actually being done. There is also the financial challenge. For the first time in our strategic planning, we have put in place a companion document for *2020 Vision* that focuses strictly on how we will finance our goals and the things we need to get there. We obviously spent money in earlier strategic plans, but there wasn’t a

tight linking between ideas and making them a reality in terms of allocating the needed resources. The president and the board of trustees have made a strong commitment to *2020 Vision* and allocated \$88.5 million in support of the plan. We will also need to prioritize and repurpose existing resources as well as reinvest resources that become available. The challenge is how best to do it. Take faculty renewal, a major task in our plan, as an example. Not all needed funds are new, because we expect that faculty will retire and be replaced. We have already hired 67 faculty over the last four years; all were replacements. But we also say that the faculty size will grow from its current level of roughly 280 to 345. So, I expect that we would not bring just 65 new faculty but 100 because others will also separate for a number of reasons. We understand that it is a massive task to hire 100 faculty over five years. It is an investment not only for us but them too, and we want to make sure that we all succeed.

Ensuring that all stakeholders remain on board is another challenge. We don’t want to lose the enthusiasm and energy that we managed to create for this plan during its development. We have put in place a steering committee plus five additional subcommittees, one for every priority that will coordinate and assess progress toward full implementation.

Does successful implementation of *2020 Vision* require a significant change in “institutional thinking?” If so, what needs to change, and is this happening?

The ideas in this plan rose bottom up. This is already a change in institutional thinking. It’s not as if the president or provost said, “We are going to do this.” The community said to the deans, the president and the provost, “We want to do this.” We took the written ideas and the aspirations of more than 200 people representing the entire community and we produced out of them what we called the “unified community report.” That was then followed up with additional consultations, reviews and refinements that

produced the final *2020 Vision* document without any significant additions or alterations from the top; it was all the ideas that came from the community itself. Now, the implementation of the plan is being done consistently with its development. That is a different kind of thinking.

What does *2020 Vision* mean for alumni?

I hope it means pride and confidence. Pride in what NJIT has become and will be in the future, and confidence in our collective abilities to make it happen. The alumni were engaged in the development of *2020 Vision*. In the finalization of the document, there was an assimilation of ideas that came from various stakeholders. The alumni’s voice was heard, and as a result impacted what NJIT will be like as a result of the transformation that is taking place. When I sent community reports on *2020 Vision* to everyone, I heard so often from alumni. I received beautifully written emails from people, including some who I went to school with who were proud of the plan and felt reconnected and energized. I think that is wonderful.

In any case, the outcomes of *2020 Vision* will be reported on through 2020, but there will be lasting ramifications for decades to come. We expect that NJIT will be among the top polytechnic universities in the nation. I hope everyone will be pleased, including the alumni. Certainly everyone in the community deserves thanks for making *2020 Vision* a reality. ■



Read the full report:
njit.edu/2020vision