



SETTING A COURSE FOR SCIENCE AND LIBERAL ARTS

AN INTERVIEW WITH FADI P. DEEK

INTERVIEWER FOR
NJIT MAGAZINE:
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FADI P. DEEK is acting dean of NJIT's College of Science and Liberal Arts (CSLA). He is also professor of information systems and mathematical sciences, and director of the interdisciplinary program in information technology.

NJIT Magazine: From your perspective, what has been especially significant about the evolution of CSLA since it was founded in 1982?

Deek: CSLA has come a long way since it emerged as an academic unit that didn't even have an official name. Some just spoke about the Third College, a place to house programs that didn't fit into either of the university's two units that existed at that time — Newark College of Engineering and the School of Architecture. Today, in addition to having a name, we have strong degree programs from the bachelor's through the doctoral level and a thriving research agenda.

In many respects, we're much like the typical college of arts and sciences found at comprehensive universities — but with a very important difference. We are strengthened by a special relationship with Rutgers-Newark, literally across the street from NJIT. Most schools need to allocate much more of their resources to languages, the visual arts, performing arts and so on. We have the

advantage of tapping into the arts programs at Rutgers, just as they can tap into our science programs. This allows us to focus on areas of strength and expertise strategic to NJIT's mission. For example, our complementary Division of Biological Sciences, housed in the Department of Mathematical Sciences, builds on NJIT's strength in mathematical biology and biomedical engineering and is essential for planned programs in bioinformatics.

NJIT Magazine: What do you see as CSLA's greatest strength?

Deek: I believe our greatest strength has been, and will continue to be, the delivery of an excellent general education curriculum — in mathematics, the sciences and humanities — to all NJIT students. As part of a technological research university, we teach students to think analytically, question incisively and communicate effectively, thereby providing them with intellectual foundations that will be vital regardless of what they decide to do. Our students get the best of quite a few worlds.

NJIT Magazine: One of your strategic priorities is encouraging coherence, or synergy, at NJIT. Can you expand on this concept?

Deek: Building on shared interests, particularly through emerging themes in teaching and research,

will result in important synergies. Consider the biological sciences, for example. Individually, our mathematical sciences, physics, and chemistry and environmental science departments, with NCE's biomedical engineering department, have research initiatives and academic programs or courses in this area. There is strong interest in health-care issues on the liberal arts side too, as seen in the humanities and the response to our health-care communication certificate. We also have a track in the history of medicine and public health. We can capitalize on these shared interests through common research and joint grant proposals, and through shared programs. I think it's fair to say that CSLA has taken a lead here, emphasizing how all can benefit from moving in a common direction when it's appropriate. Our strategic hiring plan clearly reflects this.

Our environmental science and policy group is another example of tapping key synergies. Immediately after coming to CSLA in 2003, I realized that the policy sciences division, then part of a combined humanities and social sciences department, was actually a strong environmental research group. After talking to the faculty in both departments, we brought the policy group into the Department of Chemistry and Environmental Science, greatly enhancing the department's overall capabilities. The change also helped to refocus the role of the humanities department, which has its own unique responsibility for the university's general-education requirements, as well as their academic programs in communication, and in science, technology and society.

NJIT Magazine: We understand that increasing enrollment in CSLA is another strategic priority. How do you plan to accomplish this?

Deek: CSLA programs attract excellent students who have outstanding profiles, with their average SAT scores being among the strongest in the university. But our enrollment numbers are not what we would like them to be, and we are taking steps to address this issue.

We are now more aggressive about communicating the strengths of CSLA to prospective students. Having our top faculty participate in university recruiting events and speak at high schools is part of our strategy. We are also working to attract more undergraduate transfer students — for example, by offering a smooth transition for qualified applicants from New Jersey's community colleges to complete their education at NJIT.

Additionally, we will offer distinct career-oriented and pre-professional options in all our programs, including pre-medical and pre-law tracks. It's a reality that highly qualified, highly motivated students are attracted to programs that offer the best potential for career success. They also know that a broadly-based undergraduate education with a strong emphasis on technology is a significant advantage in getting into medical or law school.

Another exciting development is our new teacher-certification option, which we offer in cooperation with Rutgers-Newark. The program is quite flexible, and our students can obtain New Jersey teacher certification at the same time as they are completing their degrees. I'm confident that this will attract more students to CSLA.

NJIT Magazine: What are your plans for strengthening research at CSLA?

Deek: Expanding CSLA research is a dual-track plan — building on current strengths and promoting new collaborations. At present, some of NJIT's most successful research programs are based within CSLA. Our solar and terrestrial physics initiative attracts the largest amount of federal funding of any program within the university. With respect to the quantity and quality of grants, mathematical sciences and physics are definitely in the forefront of research at NJIT. Again, however, collaboration is the key to even greater success in the future. While our research groups do well individually, we know that working together not only within CSLA and NJIT, but with institutions beyond our campus, will lead to more opportunities for everyone involved — and to much bigger pots of funds.

NJIT Magazine: What is your vision for CSLA five years down the road?

Deek: My vision is that CSLA will be widely recognized for a student body strong in numbers and quality, for conducting research that benefits society and, most importantly, for our focus on imparting foundational knowledge and skills. There will be many more revolutions in science and technology. But the fundamentals — the ability to think clearly, to articulate one's ideas, to work with others — will always be at the heart of any revolution that the future brings. ■

The College of Science and Liberal Arts:
<http://csla.njit.edu>