

Indian Higher Education

Gets

American Wings

By GIRIRAJ AGARWAL

For the thousands of Indian students who are unable to pursue studies in the United States, there is now another way to have access to American professors while studying at Indian colleges. The e-learning project under the aegis of the Indo-U.S. Universities Network launched by President A.P.J. Abdul Kalam in December 2005 has initiated a partnership under which U.S. professors visit India for special lectures.

The aim of the project is to improve science and engineering education at Indian universities and boost the supply of world-class engineers for corporate and academic research in both countries. A memorandum of understanding to allow all this was signed in July 2005 during Prime Minister Manmohan Singh's visit to the United States.

There are 21 U.S. universities and 37 Indian institutions involved in the network. Indian participants range from big names such as the IITs at Kanpur, Mumbai and Chennai to those like Nirma University at Ahmedabad and the Government Engineering College at Thrissur. On the American side participants include Ivy League universities Harvard, Princeton, Cornell and Yale as well as the universities of Washington, Texas and Michigan. Three U.S. companies—Microsoft

Corporation, Qualcomm Inc. and Cadence Design Systems, Inc.—are also part of the initiative.

About a dozen American professors have already come to deliver lectures at Amrita University in Coimbatore, the founding Indian university in the network and the one responsible for coordination. "These lectures are telecast to thousands of students at other universities through the ISRO's (Indian Space Research Organisation) satellite Edusat," says Amrita's vice chancellor, P. Venkat Rangan. The university expects the ISRO to extend this facility to 50 more universities. Rangan, a former professor at the University of California, San Diego, Jacobs School of Engineering, adds, "The IT wave has created a shortage of good teachers in India's institutions of higher learning. This initiative will provide students at second-rung technical institutes the best professors in the world. It will give a new direction to e-learning in India."

The initiative is supported by the ISRO, the Department of Science and Technology (DST) and the Indo-U.S. Science and Technology Forum. Executive director of the forum Arbind Mitra adds, "DST's Technology Information, Forecast and Assessment Council is helping



create the core course material. Expenses are being borne by the three American companies, Amrita University and the Technology Forum."

Many U.S. universities feel that helping improve technical education in India could lead to more Indian students going to the United States for further research. Professor Bruce Wojak of Illinois University adds, "It will allow American teachers to find opportunities for research partnerships."

Rajesh Gupta, a professor at the University of California, San Diego, visited India at the launch of the network, and says, "We are at a juncture where engineering as a discipline is being redefined. At San Diego we have established multiple interdisciplinary centers. In the process we realized there is great scope for participation from Indian research and exchange of ideas in areas like automotive, information technology and biomedical. This engagement is a beginning of such an effort."

Better engineering education at second- and third-tier Indian universities would create a more tech-savvy workforce for research and

development operations in both countries. Hence the presence of the American corporate world in this educational project. Microsoft is helping Amrita University establish an international e-learning center. The company has endowed Rs. 5 million to establish the Microsoft Chair for three years. Microsoft Corporate Vice President S. Somasegar says, "We have a long-term vision and we are committed to empower students, teachers and lifelong learners." Qualcomm will take care of the needs of the University of California, San Diego, and California Institute of Technology professors visiting India. "Through our partnerships we are working to bridge the industry-academia divide. We realize the importance of grooming the next generation of technology leaders," says Qualcomm India President Kanwalinder Singh.

"In the future, universities will not be limited to the physical campus. Whatever part of the world they are in, students would prefer to listen to top-grade professors' digital lectures rather than third-rate teachers. The Indo-U.S. university network is just the right beginning," says Mitra. □



Courtesy Amrita University

Above: Amrita University in Coimbatore.

Left: Delegates from Indian and American universities with President A.P.J. Abdul Kalam at Rashtrapati Bhavan in New Delhi.