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Re-orienting Education at UDCT

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Out of the plethora of successful alumni that our great institute exhibits, in today's day and age the name of Mukesh Ambani, the multi billionaire is a household name. A proud and successful alumnus of ICT, Mukesh Ambani has impacted each of our lives under the products that are made and sold under his

name. His humbling yet powerful words still resonate through the pathways of ICT, creating a stepping stone for the next generation of ICTs trailblazers. In 2000, he gave back to his institute in the form of an article written by him in the Bombay Technologist. It speaks of how education in these new decades should be approached and the new ways that need to be adopted to mold the future of both ICT graduates and our nation. Following is an excerpt of the same:

Education in the twenty-first century will be relevant and meaningful only if it is related to the vision for India for the next 25 years. This is especially true for education in Chemical Technology. Within that perspective, UDCT should reorient its education, contributing significantly towards the realization of the national vision. As we plan for the future of this outstanding center of excellence, it is our responsibility as products of this great institution to ensure that UDCT responds to the rapidly changing times creatively and confidently. In the context of the global trends the four aspects are:

Educational Content

The most exciting opportunity for the chemical industry is in life sciences. The life

science industry is slated to grow from 19 billion US dollars to 43 billion US dollars by

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2010 (1.7 trillion dollars in 2015). In the twenty first century biology combined with rapid advances in the computers and miniaturization will be used as a foundational science. Breakthrough will be at the intersection of biology with other fields of science and engineering fields resulting in biomedicine, bioengineering, biotechnology and bioscience. Along with life sciences, environmental concerns still prevalently branded with the chemical industry have to be changed. This world is in the initial stages of a transition to a social and industrial mode of production, based on clean technology. This is an important challenge. From the very outset, an institution like UDCT must sensitize the students to the growing concerns of society.

Education Process

The education process has been shaped to the dictates of the disciplines of knowledge; somewhat in isolation from social needs. There is a growing realization that this should change. The success of an educational institution will be determined not only by how many B.Techs, M.Techs and PhDs they turn out, but will be judged by the contribution they make to the social and economic progress of the country. To reorient education to social dictates and market needs calls for a fundamental change. This will mean periodical market research based planning process, market

value weighted performance assessment of faculty, greater participation of practicing professionals and a strong linkage with the industry. Education process oriented to social needs has great inherent benefits. It will ensure continuous improvement in the course design and content, better linkage between industry and academia resulting in more confident graduates.

Education Delivery

The delivery of education is moving towards providing learning in an anytime, anywhere framework. We will see a major change in teaching methodology. Emphasis will shift from teaching to learning and from delivery of information to student achievement and competency.

Problem based learning and undergraduate research based learning will become an important component of pedagogy. The faculty will be called upon to shift their role from a teacher to being a mentor, coach and guide; to change from lecturing, to creating participatory learning experiences.

Culture

Culture in an educational institution plays a very important role. It shapes the everyday thoughts, beliefs, commitments, and decisions of students. Education in our country is steeped in a feudal and isolated

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culture. Institutions are bogged down by a myriad of rules and regulations that offer a little freedom for creativity and innovation for both students and teachers.

Leading educational institutes like UDCT should nurture a climate that creates spring boards for businesses in an academic setting. This would mean that educational institutions must provide latitude for their faculty to pursue market led research as well as encourage them to seed commercial value. Thus, institutes of learning have to create a culture and climate that promotes creativity and innovation.



"Let UDCT be a mode provider of excellence in learning in the chemical science."

"Let it continue to replenish and renew the human resources in this critical area."

"Let it be a catalyst in the resurgence of the economic transformation of Indian society."

To read the rest of the article, refer to "The Bombay Technologist, 2000".

