THE IDEAL CURRICULUM

Innovative, demanding and flexible curricula, and modern teaching techniques are vital if Indian educational institutions are to prepare students to face the challenges of a global society. Students cannot be educated to handle problems of the 21st century with the pedagogy of the 20th century. Unfortunately, the emphasis on so-called "professional" education in India has led to the development of narrow and inflexible curricula, which place more emphasis on imparting skills than providing an education.

Good professional education also requires an understanding of the broader context of that education but most curricula at Indian institutions ignore that imperative. This is part of a national trend, India as a nation has in its recent history, placed relatively less emphasis on liberal arts in the development of new institutions of higher learning. While many of the country's basic science and engineering institutions are internationally acclaimed, the best global universities also have strong and deep humanities and social sciences programmes.

If undergraduate education in the country is to be consistent with the world's best practices, programmes must integrate the study of liberal arts with engineering, scientific, management and other professional undergraduate programmes.

On the other hand, an increasingly technology-dependent world requires an education in which students, specialising in the liberal arts have a strong understanding of mathematics and science and their application through technology and innovation. Therefore, a seamless integration of humanities and social sciences with natural sciences and technology studies should be the foundation for undergraduate education in India regardless of whether it's "professional" or in liberal arts.

Reinventing the curricula

All curricula, whether at the undergraduate or postgraduate level and whether professional or in other subjects, should place heavy emphasis on experiential learning. Students should be required to participate in some form of experiential learning such as internships, practicums or service-learning programmes. In addition, it's important to train students in the conduct of research both within and outside the classroom/labatory setting. Critical and creative thinking and problem-solving should also be included in modern curricula. Such an emphasis on experiential learning, hands-on research and critical thinking will provide students a real-world context for their learning. This will also enable students to apply their classroom learning to problem-solving and ensure they are better prepared to enter the workforce.

Life-long careers

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Finally, at least some part of the curriculum should be devoted to developing students' leadership capabilities and a sense of responsibility. Institutions should offer students the opportunity to take courses that contain material intended to prepare them for a life-long commitment to leadership, which is grounded in values, ethics and committed to serve society.

Infrastructure as an enabler

In India and abroad also have the best infrastructure. Physical and technological infrastructure should support the academic mission of institutions and provide an enabling foundation for the realisation of the objectives of their curricula. For example, classroom design, too often ignored at Indian institutions, should foster the development of learning environments — physical and virtual spaces that inspire students and educators to communicate and collaborate to develop and share new ideas and knowledge.

Architectural and interior designs should create group, team, and individual learning spaces that: (i) support professional learning communities that enable faculty to collaborate, share best practices and integrate them into the classroom; (ii) allow students equitable access to quality learning tools, technologies, and resources; (iii) support expanded to local, national and international involvement in research, teaching and learning, in face-to-face and/or real-time/ asynchronous virtual interactions. Similarly, technology deployment on campuses should support a full range of campus activities, including: (i) teaching, learning and research (ii) student systems and services; at administrative and governance systems; and, of course, the institutions' IT infrastructure and systems. Modern infrastructure and technology are no longer nice-to-have "luxuries" but are today an integral part of the research-teaching-learning continuum.

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