

Reforming Design Education in India; Towards its Effective Utilization for National Prosperity.

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Abstract:

Design education is today fundamental to national prosperity. It is now considered a critical element of innovation strategy. Design education in India has witnessed exponential growth over the last fifteen years. The country's young population is now open to explore alternate career and design has today emerged as this much-needed option for them. From only a handful of design institutes in the country till about 2004, many new design institutes have come up in the last one and half decades. And this trend is expected to continue in the near future. As design education expands in the country, efficiencies will have to be developed and maintained to uphold standards of quality. A variety of different programs with many variables involved - institutional approaches, curriculum, area of specialization, student-faculty ratio, graduate profile, etc. creates a sense of confusion among all its stakeholders. Over and above these, there is now a growing sense of dissatisfaction among the industries with regards to the skills and capabilities of the upcoming graduates of these design schools. The curriculum needs to be revised and updated to meet the expectations of the new-age digital and innovation economy. There is an urgent need to develop a broad framework and guidelines for design education in the country. Reforming and reinforcing design education would be the right beginning for India to maximize the benefits of design.

Introduction:

Design education in India has witnessed exponential growth over the last one and half decades. Till 2004 there were only a handful of design institutes in the country. According to the report 'The Future of Design Education In India' developed jointly by the Design Council, UK and the India Design Council, there are now over 70 design institutes teaching design in India.^[1] As per this report, there are approximately 7000

qualified designers in the country and approximately 5000 on various campuses pursuing design education.^[1] The 'India Design Report'; a nationwide study on design in India, developed by the Confederation of Indian Industry, CII, puts the numbers of design programs offered today in the country at over 1500.^[2] The majority of these programs are in the area of Architecture, Fashion Design and Animation, and New Media Design. These programs are offered as Certificate Programs, Diploma Programs to Undergraduate and Postgraduate Programs. And according to the data available online, these programs are offered by over 550 institutes/ colleges spread across the country.^[3] Many of these institutes are franchises of major institutes. The duration of these programs ranges from three months to four years. By 2020, according to 'The Future of Design Education In India' report, the country will require approximately 62000 designers to cater to the potential market for the design of around INR 188 bn.^[1]

With the country's relatively young population now open to explore alternate career, design has today emerged as this much-needed option for them. For its majority middle-income group segment, education is probably the only means to meet their aspirations. Increasingly competitive environment, rising awareness, difficulty in getting formal jobs, they all push these young aspirants for higher education. With the Government's aggressive push for education and setting its target to double its gross enrolment ratio, GER, to 45% by the year 2030,^[1] more and more young population of the country will be seeking education. Design Education, an increasingly attractive sector, is thus bound to grow fast in the country in the next decade.

Innovation and Design:

The economy across the world is fast changing to the innovation economy. Innovation is now recognized as a central driver for the economic development of the country. The thrust here in India is also to encourage innovations at every stage of its economy. The government of India set up a Task Force on Innovation in the year 2016, with the view to strengthen the ecosystem of Innovation in the country and thereby further improve India's ranking in the Global Innovation Index, GII.^[4]

Atal Innovation Mission, AIM, and Self-Employment and Talent Utilization, SETU, are among the few other government initiatives that aim to encourage setting up of world-class Innovation Hubs across the country, provide support to start-ups and encourage self-employment initiatives in the country. Setting up of Incubation Centers, Innovation Centers, Research Parks, Innovation Councils, Tinkering Labs, etc. are amongst the other initiatives to foster innovation culture in the country.

Design is now recognized as a driver of innovation and a key differentiator for providing a competitive edge for products and services. Design is today crucial for the success of any business. Harnessing the power of design is thus crucial for Indian industries and for the country to move into a global economy. Realizing this increasing importance of Design in economic and societal development, the Government of India, in the year 2007 announced its National Design Policy. The policy aims in aiding and hastening the process for a “design enabled Indian Industry” that could impact both the national economy and the quality of life in a positive manner.^[5] Focusing on strengthening the quality of design education at different levels, the policy would encourage setting up of sector-specific design centers, up-gradation of existing design institutes and setting up of new Design Institutes across the country. The policy also proposes the establishment of department of design in all Indian Institute of Technologies, IITs, and all National Institute of Technologies, NITs, as well as in prestigious colleges of Engineering and Architecture. Subsequently, in the year 2009, the Government of India constituted India Design Council, IDC, for the promotion of design at various levels in the country.^[6] One of its mandates is to develop and standardize design syllabi etc. for all institutions in India imparting design education.

Design Education in India:

Till early 2000, there were only a handful of design institutes in the country. Amongst them was the National Institute of Design, NID Ahmedabad and Industrial Design Center, IDC, IIT, Mumbai. NID was the first design institute set up by the Government of India in the year 1961.^[7] This was set up as an autonomous national institution for research, service, and training in Industrial Design and Visual

Communication. The recommendations by the famous American architect couple Charles and Ray Eames compiled under the now famous 'The India Report' formed the basis for setting up of NID. *"We have been asked by the Government of India to recommend a program of training in the area of design which would serve as an aid to the small industries. We have been asked to state what India can do to resist the rapid deterioration of consumer goods within the country today"* is how Eameses have explained in the report, the context for commissioning the project.^[8] *"The report focuses on India's tradition and a philosophy that is familiar with the meaning of creative destruction and stresses the need to appraise and solve the problems of our times with tremendous service, dignity, and love,"* wrote Pupul Jaykar, noted writer on Indian craft tradition, in her tribute to Charles Eames. Proposing Designer to be a bridge between tradition and modernity, the report recommended a problem-solving design consciousness that links learning with actual experience. Towards this, the report recommends *"that without delay there be a sober investigation into those values and those qualities that Indians hold important to a good life, that there be close scrutiny of those elements that go to make up a "Standard of Living"."* The institute would strive 'to create an alert and impatient national conscience – a conscience concerned with the quality and ultimate values of the environment' suggests the report.^[8] The report recommends the size of the institute to be small and to maintain one to one ratio of faculty to students. In the year 2014, NID was declared 'Institution of National Importance' by the Act of Parliament.^[9] It now offers programs at UG, PG and Ph.D. levels in nineteen different design streams, through its three campuses.

The Industrial Design Center, IDC was set up in the year 1969.^[10] Conceived as part of the Indian Institute of Technology, IIT, Bombay, the outcomes of its education and research programs are expected to gain strong technological support to actualize the solutions developed. It began its academic programs with Industrial Design and now offers programs in five design streams. Over these last two decades IIT, Delhi, IIT, Kanpur and IIT, Guwahati have also set up Department of Design, DoD, offering programs in Design at the UG, PG and Ph.D. levels. School of Planning and Architecture, SPA, Delhi is also among the first few institutes offering programs in

Design. Besides these, state-specific Craft Design Centers, CDC, have been set up in different parts of the country. Recently All India Council for Technical Education, AICTE, issued a notification making it mandatory for the colleges and institutes planning to introduce a bachelor of design, B.Des, and master of design, M.Des programs to get its approval.^[11] Set up as a national level apex advisory body, AICTE works towards the coordinated development of a technical education system in the country.^[12] While NID is under the ministry of Industries & Commerce, IITs are part of the ministry of Human Resource Development, Government of India.

In the year 2014, the Ministry of Human Resource Development, MHRD, Government of India, initiated an exercise to develop a “Design Manifesto”.^[13] The manifesto advocates design as an overarching framework, to create opportunities for holistic education especially for the engineering and technology institutes, thereby steering their education and research towards social goals and economic aspirations. It proposes the education processes of these institutions of technology to be based on design pedagogy to encourage critical reflection, imagination, and empathy through inter-contextual and inter-disciplinary learnings. The manifesto recommends design education to be structured within these technical institutions and anchored as an autonomous field of study so as to percolate design thinking into their various disciplines and expertise. The manifesto further advocates.. *“Design must be seen as an epistemological concept, not just a technical, or even a cognitive or perceptual training involving a limited skill set.”* *“In the Indian context”,* the manifesto states, *“grounding and centering of national development goals and challenges in design education and research will provide a powerful impetus to innovation, entrepreneurship and policy systems.”*^[13]

Design education began in the country much earlier, however initially it was in the form of industrial art, applied art and/or craft education. The Madras School of Art, one of the oldest art institute in India, established in the year 1850 in Chennai, was renamed in the year 1852 as the Government School of Industrial Arts. The school was then finally renamed as the present Government College of Fine Arts.^[14] Similarly, the Government College of Art & Craft in Kolkata was founded in the year

1854 as the School of Industrial Art. It was established with the purpose to teach the youth the industrial art with scientific methods.^[15] And Sir J.J. School of Art, one of the pioneering institutes of art and craft education in India, was established in the year 1878.^[16] Today the school offers both the undergraduate and postgraduate programs at its campus. Similarly, another institute in Patna, now renamed as Upendra Maharathi Shilp Anusandhan Sansthan, UPSAS, was established in the year 1952 as the Institute of Industrial Design.^[17] This institute focuses on the growth and development of the handicraft sector and craftsmen of the state. It conducts product development, research, and training programs throughout the year. Over the years, these and similar other institutes of art, craft and design in the country revised and evolved their programs and curriculum to suit the Indian context.

Design Education; Global Scenario:

It is now established that design and creative education is the way forward for any country to deal with the complexity of the challenges in the 21st century. Design equips people to think beyond the present and into the future. Design education today is fundamental to national prosperity. It is now considered a critical element of innovation strategy. However, as the ICOGRADA Design Education Manifesto 2011 states, *“the design practice that grew out of the industrial revolution is no longer sustainable (economically or ecologically). A new practice — one that responds to the information revolution — is emergent”*.^[18] Today’s design education, according to this manifesto, is out of date; it mostly reflects design’s origin in craftwork. *“What is worse is that change is accelerating, and design education is stuck. It has little means to move forward”* is how the manifesto reflects its anxiety.^[18] Andreas Schleicher of the OECD, in his report ‘The future of Education and Skills: Education 2030’ states that *“today, because of rapid economic and social change, schools have to prepare students for jobs that have not yet been created, technologies that have not yet been invented and problems that we don’t yet know will arise”*.^[19] He believes that the paradigm of what schools are preparing citizens for has changed irreversibly.

United Kingdom, UK, has established its capabilities in design education and design employment over the years. Design is today the fastest-growing creative industry in the UK. Its design sector employs over 350,000 people.^[20] The UK is amongst the first country to implement design promotion programs. The country is also a pioneer in design policy. However *“the government does not seem to fully appreciate the significance of design as the spine that runs through industry, innovation, and social wellbeing”* states the report ‘Restarting Britain; Design Education and Growth’ prepared by the Design Commission, UK.^[21] The report advocates for the development of a wider cross-governmental strategy about design, particularly its potential contribution to the government and society as a whole. The report further proposes for allotment of its own governmental resources. ‘A Manifesto for Design’, a report prepared by the All-party Parliamentary Design & Innovation Group, APDIG, UK argues that design must be central to its political, economic and educational systems if the opportunities of the future are to be fully realized.^[20]

Over the last few years, China has aggressively embraced design as a tool to move up in the value chain. It is encouraging its industries to transit from Original Equipment Manufacturing industries, OEM to Original Brand Manufacturing industries, OBM. China wants to change the old saying ‘Made in China’ to ‘Created in China’. And the key contributor to this plan is the development of the design sector in the country. There are now *‘1275 universities and colleges in the country with design courses producing over 300,000 design graduates per year.’*^[22] According to Beijing Design Week, there are *‘250,000 design professionals working in 20,000 design institutes and companies in Beijing and generating \$11.75 billion in business.’*^[22] While the UK and Italy produce about 20,000 designers annually, around 28,000 designers graduate from Japan. About 36,000 designers graduate in Korea while the USA produces about 38,000 designers annually.^[23]

Traditionally, design education programs were allied either with technology or with art. The programs varied tremendously between countries and reflected their cultural norms and expectations. According to the report ‘Restarting Britain; Design Education and Growth’ *“the cutting edge of design education internationally is*

interdisciplinary practice. Its success is normally attributed to a mixture of very high-quality teachers (high degree of autonomy), the high cultural value placed on education and learning, and high levels of state spending on education”.^[21] Across the world, the design education programs are now being reexamined to move towards a more inclusive and holistic approach. Also, efforts are made to bring Art and Design Education into the center of Science, Technology, Engineering, and Mathematics, thereby moving from STEM to STEAM, to help foster creativity, innovation and economic growth.

Design Education; Concerns and Challenges:

Design education in India has evolved over the last sixty years. As the interests in design and also its demands are growing, new design institutes are coming up fast. These also bring with them new challenges and concerns. Increasingly there is a feeling among the design industry that today’s design graduates are not well trained, as they say, *“they are not industry ready”*. Today’s education system is delivering graduates who do not possess the skills and competencies required to go straight into a job.^[2] There seems to be a disconnect between the curriculum and present design trends. As design education expands in the country, efficiencies will have to be developed and maintained to uphold standards of quality. With a variety of different programs - in terms of their durations, specializations, curriculum, approaches, etc., now on offer, there is a strong need for some form of standardization and framework for design education in the country.

The shortage of well qualified faculty is another major area of concern hindering both the development of well-trained graduates as well as more design institutes to come up. Design education demands faculty members having both the academic and industry experiences. With its need for continuous faculty-student interaction and long working hours, design education calls for a smaller size of classes, adequate facilities, and staff support. Lack of research opportunities in the field of design and design education is another area of concern. Very few serious academic publications on design are emerging from the country. And there is hardly any platform for

design educators in the country to share and discuss their experiences and learn from each other.

'Design education scenario in India lacks opportunities for progression from bachelor's to master's level and from master's level to Ph.D. Most of the postgraduate programs are essentially after-graduate programs.'^[1] Similarly, opportunities for continuing education programs within the design industry are limited.

Conclusion:

The economy world over is now moving into the innovation economy. And design education is now recognized as an important element of the innovation strategy. Here in India also design education has now emerged as an attractive career option. More and more students are now exploring and opting for design as their career choice. From only a handful of design institutes in the country till about 2004, many new design institutes have come up in the last one and half decades. As per one estimate, there are now over 5000 students studying design in various design institutes across the country. And the country would need about 62,000 designers by the year 2020. Design education in the country is expected to witness a rapid upsurge in the next few years.

In the absence of any accreditation system in the country for design programs, most of these institutes have tie-ups with either Indian or foreign universities. These design programs range from three months duration to four years duration, and their fees per semester also vary enormously. Over and above these, their many variables involved - institutional approaches, curriculum, area of specialization, student-faculty ratio, graduate profile, etc., thereby creating a sense of confusion among its stakeholders - the students, their parents, the employers, and others. There is, therefore, an urgent need for a framework and a guideline for design education in the country.

Over the years, Indian design education has produced quality designers who have made their mark and created benchmarks for others to follow. The early design institutes evolved their curriculum to best suit the Indian context and were closely aligned with the expectations of the Indian industry and aspirations of the society. However, there is now a growing sense of dissatisfaction among the industries with the upcoming graduates of the design schools. The graduates, it is felt are not industry-ready, and their skills and capabilities are not aligned with the contemporary industry requirements. The curriculum needs to be revised and updated to meet these expectations of the new-age digital and innovation economy. It calls for an interdisciplinary and holistic approach with enough flexibility and autonomy built into the curriculum and quality of faculty members, staff and adequate infrastructure support.

The design has now established itself as an academic discipline, having its unique approaches and practices different from the ones used in the education of science, technology or humanity. Design is an epistemological concept that transcends beyond the domains of industries. It helps synthesize and translate between bodies of knowledge. Design fosters creativity and helps integrate and channelize various efforts towards positive outcomes. It helps improve the overall quality of life of the people concerned. India's unique creative and diverse culture and its variety of demands, call for broader design vision that encompasses art and craft besides technology and engineering while still rooted in Indian culture.

For the country to survive in today's fast-paced economy and move up in value chain, design and design education would form key drivers of the process. And to fully realize the country's potential and thereby foster national prosperity, the design has to be central to its political, economic and educational system. This calls for the development of a wider cross-governmental strategy with regard to design. Its now time for design in India to get the much-required impetus to realize its impact, and reforming and reinforcing design education in the country will be the right beginning in this direction.

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