Towards Qualitative Reform of Architectural Education in India

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ABSTRACT

This essay attempts to explore the higher education scenario in India, looks at the evolution of architectural education, its current state, identifies several issues that require immediate attention and discusses the need for qualitative reform. It inquires into what 'quality' is in higher education and also in architectural education. The essay raises questions that need thorough inquiry which could lead to the possible measures for quality improvement in transforming architecture colleges into the 'Centers of Excellence'.

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Introduction

Rapid and very often uncontrolled urbanization has exposed several challenges that our cities are facing today. The poor and thoughtless buildings crowding our cities have led to the irreversible destruction of our environment, ecosystem, social structure and cultural heritage. Architects of today and tomorrow need to be aware of these challenges and be prepared to bring in the change required to make our environments livable for the present and the future generations. In this, architectural education plays a significant role in shaping young minds with sensitivity for environment and humanity.

After 15 years of practice in the profession, I assumed the role of a full-time faculty at a college in the University of Mumbai. Over the last 6 years in academics, I have had the opportunity to visit many colleges and have observed that there are several fundamental issues in architectural education that need a deeper analysis.

The current architecture scenario is facing several challenges like the shoddy state of practice, unethical and unprofessional architects, inferior pay scales etc. A worrying development is unemployability of graduates who are often found to be disinterested or disengaged and possessing mediocre skillset. These challenges highlight the gap between academia and practice and raise questions about the quality of architectural education. This essay is an effort to look into the current challenges of higher education in India and especially the state of architectural education. It traces the evolution of architectural education in the country and throws some light on issues that the institutes face in today's era. It focuses on the quest of achieving desired quality in architectural education and highlights the need to transform colleges into the 'Centers of Architectural Excellence'.

Higher education scenario in India

India has seen a huge growth in higher education in the last two decades. This growth is mainly driven by private sector initiatives. Pawan Agarwal (2006) points out that there are genuine concerns about many of these private institutions being substandard and exploitative. "Despite its impressive growth, higher education in India could maintain only a very small base of quality institutions at the top. Standards of the majority of the

institutions are poor and declining." Some basic problems that higher education in India faces include "inadequate infrastructure and facilities, large vacancies in faculty positions, poor quality faculty, outmoded teaching methods, declining research standards, unmotivated students, overcrowded classrooms and widespread geographic, income, gender, and ethnic imbalances" (Agarwal, 2006).

Additionally, as a degree education is often inadequate to provide employment with a respectable salary in India, the fresh graduates feel the need to go abroad for further education and better quality of life. Several parents are thrown into the stressful situation where they see no option but to invest their life's savings into their ward's education abroad. According to a latest 'Higher Education Abroad' report by consulting firm RedSeer, the number of Indian students opting for higher education abroad has grown from "440,000 in 2016 to 770,000 in 2019 and is set to grow further to roughly 1.8 million by 2024, resulting in an increased overseas spending on higher education" (Business Standard, 2021). This points to the urgent need for qualitative reform of higher education institutes in India. The architecture stream is no exception to these problems. There is a need to look into how architectural education evolved in the country.

Evolution of architectural education in India

India has a huge legacy of spectacular architectural monuments that were built over many centuries by different dynasties who were connoisseurs of art, craft and architecture. "There were master craftsmen who were architects, builders and sculptors but there were no schools of architecture. The traditional knowledge of building was passed on from one generation to another through apprenticeship" (Dua & Chahal, 2014). The first school for formal education related to architecture in Asia was a department in Sir J.J. School of Art, established in 1913, as there was a need for draftsmen in Colonial India. It metamorphosed into formalizing architecture education as a five-year bachelor's course and became the Sir. J.J. School of Architecture in the University of Mumbai in 1952 (Sir JJ College of Architecture).

"Schools of architecture that succeeded Sir J.J. School of Architecture had a proclivity of technical education with construction and structures being the main focus'" (Mehta, 2006). Jaimini Mehta (2006) explains how Bengal Engineering College in Calcutta, Baroda's Kalabhavan and Delhi's Polytechnic were primarily technical institutions with a department of architecture. The Indian Institute of Technology, also offering architecture as a discipline, founded in collaboration with the Massachusetts Institute of Technology, had technical education as a priority. It was only in 1962, that Prof. B. V. Doshi, with other acclaimed professors, started a School of Architecture (CEPT) in Ahmedabad which conceived of architecture as a discipline rather than just as a branch of technology. CEPT tried to maintain its autonomy over the years and retained its ability to design its own curriculum and truly evolved into an exceptional architectural institute.

Standards of architectural education today

The Council of Architecture (COA) was established in 1972 when there were 12 architecture colleges in India. That number went up to 50 in 1991 and 177 in 2010 (Dua & Chahal, 2014). Today, to meet young India's need for higher education, hundreds of new private colleges have mushroomed. As per the COA's official website there are 471 architecture colleges in the country and 31 colleges in the University of Mumbai alone (Council of Architecture, 2022). This exponential growth is likely to continue and will add thousands of fresh graduate architects each year to the profession. Are all of these colleges able to shape competent architects who are critical thinkers, adept with building technological innovations, sensitive towards their environment, and responsible to handle the challenges that the profession faces in today's era? It is time to investigate the state of architecture colleges in a qualitative manner.

The COA specified the "Minimum Standards of Architectural Education, 2020", on their website, for colleges to maintain a certain standard of education. This lists the advised curriculum, teaching methods, infrastructure and number of faculty members with their hierarchy proportional to the intake of number of students as sanctioned by the COA. The Council also conducts regular inspections to check if the minimum standards are met. Many colleges try to achieve just the 'minimum standards' and do not focus on the 'desired' standards to impart quality education. It is often observed that several institutions do not achieve even the 'minimum standards' continuously through the year but just try to show the same to the inspectors during their visit. Flouting the rules costs such colleges fines, yet they manage to continue holding their licenses to keep on running their institutions producing more architecture graduates.

With a view to improve the quality of faculty, the COA has made the masters' degree mandatory for full-time faculty. While this has led to a reduction of experienced practitioners in academia, it has also led to the induction of many inexperienced masters' degree holders from average quality colleges. Professor Benninger (2014) says, "New teachers are barely out of college, with little knowledge of what 'a practice' is, with no site experience, and no clue of the various contractual, technical, legal and ethical issues that professionals handle". There are also no bridge courses available for new faculty members to understand the goals of the professional education, the importance of research, ways of achieving the best outcome from students through exploration of architectural pedagogy or understanding the psychology of the students. Thus, many faculty members with limited world views, and not much professional experience are delivering the curriculum in the classrooms. As long as most students are passing the muster, it is assumed that all is well.

In academia, the quality of graduates is often linked to the quality of the students entering in the first year. After their 12th standard, many students, unsure about their career choices, accidentally end up in an architecture course, still valued as a professional degree. They are immediately confronted with the reality of the strenuous coursework, perplexing connection of theory with practice and the paucity of reasoning in assessment. Ethics in academia, unfortunately, has never been a key cornerstone and blatant plagiarism has affected the quality of student work and research. With a huge number of students

appearing for final year thesis each year, the jury members end up passing many non-deserving students on the grounds of being compassionate. After graduation, several fresh graduates are not interested in working in offices because many of them have had bad experiences from their internships. Either they were made to work for free or for a pittance, yet expected to pull long hours in a sub-standard work environment.

In India, often, as college principals are busy dealing with implementation of 'Minimum Standards of Architectural Education', everyday firefighting, cost-cutting and management bidding, they do not get much time to think of the vision for education or implement the same. Instead of working on delivering quality education or developing a critical thinking culture, many leaders have chosen to tweak their evaluation system to offer students high grades in internal assessment, with a view to attract more students to their institution. However, the scenario is not all so gloomy, as there are still many good faculty members and inspirational principals who are continuously trying to achieve excellence.

Gender Disparity

In recent years, it has also been observed that there is a greater number of female full-time faculty members than males and it is well-known that the opposite is true in practice. Why are increasing number of women taking up teaching profession, with a clear lack of interest in practice? Prof. Madhavi Desai (2014) attributes this trend to the increased number of women students; "…from two or four in the 1940s to 50% to 80% of intake today. In spite of this fact, the number of women in professional practice drops substantially to about 15% to 17%". Well-known reasons for women's plight in practice include: long work hours in offices – much beyond 8 hours a day, strenuous site work dominated by ill-mannered male workers, non-availability of designated toilets on construction sites or even in the offices, site visits demanding outstation travel at odd hours etc. Many employers outrightly avoid hiring women architects as they may take leaves possibly required for family reasons. With reference to this, an academic job may seem more appealing than practice. Do women have a greater interest in academia or is it only the deep patriarchy within our society that makes them believe that teaching as a profession is better suited for women? What effect will it have on the quality of architectural education, when faculty have little or no professional experience or ties with the practice of architecture? There doesn't seem to be much thought given to these questions.

Search of quality in architectural education worldwide

The degrading quality of our built environments, issues of rampant urban development and apathetic practice are the realities of today. And while complexities of economics play a major part in this, it is also linked to the quality of architects and quality of education they receive. Green (1994) in her book *What Is Quality in Higher Education?*, cites Dochy's quote, "Quality, like 'freedom' or 'justice', is an elusive concept. Quality is also a value-laden term: it is subjectively associated with that which is good and worthwhile"

(Dochy,1990, as cited in Green, 1994, p.12). "Assessing the quality of the main educational mission, the production of graduates, is a much more difficult and complex task. Are we mainly concerned with the quality of inputs (human and physical resources), outputs (graduates) or the process of teaching and learning itself?" (Green, 1994, p.9).

The desire to excel as an exceptional quality institute kindles the quest to find attributes of 'quality' itself. Schindler et al. (2015) in their literature review suggest four broad classifications of quality, as "purposeful, exceptional, transformative and accountable". Purposeful, where institutional products and services conform to a stated mission/ vision or a set of specifications, requirements, or standards, that is where organizational purpose drives the standard of quality. Exceptional, where the institution strives for distinction and exclusivity through the fulfillment of high standards. Transformative, where the institutions and services effect positive change in student learning (affective, cognitive, and psychomotor domains) and support transformation of personal and professional potential of the student. And accountable, where institutions are accountable to stakeholders for the optimal use of resources and the delivery of accurate educational products and services with zero defects (Schindler et al., 2015). This classification of quality based on the literature by various scholars can be further deliberated upon with reference to the architecture domain, and then consciously adopted while creating the framework for excellence of architectural institutions.

In the modern era, world over, thinkers have questioned the process of teaching and learning in architectural education. Professor Tzonis demands a better 'Framework for architectural education' in his paper (2014). He suggests the need to have strong ties between theory and practice as an integral part of the framework. He also highlights certain examples where this was tried with little success as those attempts were superficially trying to bridge the gap between theory (as taught in the form of different subjects in the classrooms or studios) and the practice (being an independent aspect or another subject in the curriculum) (Tzonis, 2014).

In an attempt to deliberate on effective pedagogies in architectural education, David Nicol and Simon Pilling have put together the pedagogical experiments of faculty members of the West in *'Changing Architectural Education: Towards a New Professionalism'* (2000). They discuss the needs of new age architectural education that makes an attempt to address the current challenges of the societies around the globe. They address several deficiencies in current education system including the underdeveloped communication and interpersonal skills, isolated studios resulting in students who are unprepared for the participative practice as they only know how to communicate with other architects (Cuff 1991, as cited in Nicol & Pilling, 2000), assessment of design as a product rather than process, lack of structure in development of self-responsibility and students having little control over their own learning making them dependent on their tutors (Nicol & Pilling, 2000). In addition to addressing these challenges, architectural education also needs to prepare students to become life-long learners to be able to take advantage of the evolving economies, technological advancements and understand, analyze and sensitively solve changing global and local issues.

Architectural Institute as Center of Excellence and Quality Assurance

Professor Christopher Benninger in his speech at CEPT (2014), proposed the idea of the Center of Excellence, institutes that have excelled significantly in architectural education and can play the role of mentor for new colleges and support formation of excellence clusters that are intellectual networks of committed teachers. Professor Chandarvarkar (2018) expresses the need to identify the best practices of certain colleges that have excelled, which can be adopted by other institutions. This is similar to Prof. Benninger's concept of the Center of Excellence being a mentor for other architectural colleges to significantly transform architectural education in the country. Chandavarkar also highlights the urgent need to do more and address critical "policy level changes so that the way in which architectural education is managed and regulated, is reformed in order to catalyze a systemic and widespread shift toward excellence that is widespread across architecture colleges in the country" (Chandavarkar, 2018). Thus, the role of the quality assurance body is extremely important here and then it should further extend to ensure continuous and long-term mentorship by the Center of Excellence to other colleges in order to achieve excellence in architectural education.

The new National Educational Policy (2020) states that, "the most important factor in the success of higher education institutions (HEI) is the quality and engagement of its faculty." Through a suitable system of graded accreditation and graded autonomy, over a period of 15 years, all HEIs in India should aim to become independent self-governing institutions pursuing innovation and excellence. Also, measures need to be taken at all HEIs to ensure leadership of the highest quality and promote an institutional culture of excellence. (NEP, 2020). NEP also demands the multidisciplinary nature of courses; revamping curriculum, pedagogy, assessment, and student support for enhanced student experiences; high-quality research; Choice Based Credit Systems for creating flexibility and interest; quality infrastructure, vibrant campus life etc. The vision of NEP looks promising for improving the quality of India's institutions, however, will the execution of the policy be carried out in a fulfilling manner is a question. Will all the HEIs have sufficient funding to build their capacity and bring on the necessary change?

In order to ensure quality status of an institute, the National Assessment and Accreditation Council (NAAC), an institute of the University Grants Commission (UGC) for Quality Assurance in India, conducts assessment and accreditation of Higher Education Institutes. There are general criteria that have been put forth by NAAC for all higher education institutions to strive for quality education. Some architecture colleges are trying to pursue autonomy by opting for assessment by NAAC and are often perplexed by the generic assessment. Can there be special or specific criteria for raising the quality of Architectural Education? These aspirational criteria should ensure a paradigm advancement in quality through emphasis on clarity of institutional purpose; the institute's plan for achieving its goals for excellence; curriculum implementation that amalgamates teaching of cutting edge technology and theory with demands of architectural professional practice; transformative pedagogical approaches that include critical thinking for faculty and students; compulsory, frequent and rigorous faculty development programs; and high-

quality serious research to help professionals and academics deal with the critical challenges of built environment of today's era. A panel of representatives from reputed institutes from various Centers of Excellence, esteemed thinkers and practitioner architects along with NAAC and with support from COA, can come up with these criteria particularly for architecture colleges to strive for excellence.

Conclusion

There has been tremendous growth in architecture institutes in India; most of these are private initiatives and are of substandard quality. Currently, most of the architectural institutes are merely adhering to the minimum standards of education and producing graduates that lack several skills. Thus, there is an urgent need to discuss the idea of 'quality' and inquire about various parameters of quality. The fundamental framework of the architectural institutes needs to be restructured to enable students to become independent learners, researchers, thinkers and grow with thorough understanding of the challenges of practice. This will need reinterpreting the current curriculum, restructuring of the coursework and redesign of pedagogical methods. Role of the Quality Assurance bodies also needs to be tweaked to facilitate the institutes to have a vision or purpose, plan for achieving its goals for excellence, provide continuous mentorship by another superior quality institute established as a 'Center of Excellence' for quality improvement, and truly drive the faculty and students to achieve excellence.

"We need a breed of graduates who will not depend on the formulaic precedents of the past, who can think critically and innovate radically, while sensitively responding to local, global and environmental challenges" (Chandavarkar, 2018). It is possible that with some qualitative intervention and reform, we might be able to have many Centers of Excellence for architectural education resulting in better quality graduates who can thoughtfully transform the landscapes of our cities into sustainable and livable urban environments. This hope must imagine change and the qualitative reform at the fountainhead of the architecture world, that is, our academic institutions where we must collectively challenge mediocrity and lay the foundation for professional excellence. ■

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