



DOI: <https://doi.org/10.38027/ICCAUA2026EN0218>

Architecture Pedagogy for Tomorrow: Speculative Practices in Design Studios

* ¹ Neha Nair

¹ School of Architecture, Anant National University, Ahmedabad, India

¹ E-mail: neha.nair@anu.edu.in

¹ ORCID: <https://orcid.org/0000-0002-2057-7814>

Abstract

Received: 17.04.2026
Revised: 19.06.2026
Accepted: 01.07.2026
Available online: 10.07.2026

Copyright © 2026 by the author(s).
All rights reserved.

This article is published under an open-access model and is made available in accordance with the terms of the Creative Commons Attribution 4.0 International Licence (CC BY).



The publisher maintains a neutral stance concerning jurisdictional claims in published maps and institutional affiliations.

This article has been selected and peer-reviewed for publication in this journal as part of the 9th International Conference of Contemporary Affairs in Architecture and Urbanism, held on 7–8 May 2026 in Istanbul, Türkiye.

Architecture holds a long-standing history, encompassing language, typology, scale, materiality and meaning, and evolving across geographies and timelines. The parameters shaping the built world are redefined with every shift in the social-political, cultural, technological and environmental realities. Architectural practice is at the cusp of operating beyond the built environment. With this continuous shift in practice, architectural education has an important role in shaping architects as future-ready. The time demands that architecture education embrace this ambiguity. The fluid nature of the future of architectural practice can be answered by speculative pedagogical approaches to ensure that an imaginative, iterative and experimental process of thinking and evolving a design intent is cultivated. This paper assesses the studio exercises from architectural studios conducted by the author within a theoretical framework and analyses the learning outcomes in this context.

Keywords: Speculative Pedagogy; Architecture Education; Architecture Futures; Collaborative Pedagogy; Interdisciplinary Practices.

1. Introduction

Architecture is a complex discipline that extends beyond the physical built environment. An architect must be familiar with the knowledge of environment, history, technology, politics, economics, law, and psychology. Over time, these domains have undergone significant transformation, shifting from an agrarian way of life to the Industrial Revolution, and now into the Fourth Industrial Revolution. The impact of these transformations is reflected in the built environment for a long period in history. Today, architects stand at a cusp of navigating between their role as designers of the physical world and creators of the virtual world.

In this context, a critical question emerges: whether the architect of today and tomorrow is adequately prepared to engage with and respond to these transformations, since architects are no longer bound to the physical world, but have extended their roles to the virtual one. Architectural education is an important type of education that requires attention and continuous development due to the continuous change in the nature of architectural practice (Ghonim & Eweda, 2019). Architectural practice is no longer limited to the buildings and the urban and rural scale. Today, the built has transended the physical world and is in discussion and practice in the virtual world. Important academic institutions also discuss the role of architecture in the intergalactic space. This raises a concern regarding contemporary architecture pedagogy, questioning whether it equips the architects of tomorrow to absorb, adapt and evolve with these transformations.

1.1 Problem Statement and Research Gap

Architectural pedagogical tools and systems, their relevance to not only time, but also how they inform the practice has always been scrutinised. Current discussions about architecture pedagogy of tomorrow often focus on new frameworks or advocating specific teaching-learning models to establish their relevance. While these perspectives are valuable, it is also important to critically review, assess and evolve the time-tested methods. The paper, hence, identifies assessment of pedagogical practices as a means to evaluate the preferable modes of informing a time-relevant teaching and learning experience.

This paper enables a discourse to re-examine and recalibrate existing approaches, and integrate new practices, techniques and strategies within them. Developing, experimenting, and sharing critical pedagogical approaches is becoming increasingly important in architectural education, which supposedly superposes theory and practice.

Architectural theorist Vidler (2000) states that the programs that diversify and enrich this tendency in architectural education guide raising curious and productive individuals. (Masatlıoğlu & Balaban, 2024).

1.2 Significance and Structure

Such an approach will establish a path to a holistic approach to learning that caters to both design thinking and making in the rapidly changing world. The paper shall assess the learning outcomes of design studio exercises, conducted by the author, as an individual tutor or with a co-tutor, against the theoretical framework discussed in the research conducted by Ashraf M. Salama and Peter Holgate in their paper, *Where Critical Inquiry, Empirical Making, and Experiential Learning Shape Architectural Pedagogy in 2025*. Using a series of exercises conducted by the author across years and semesters, an assessment against the adopted framework allows a check on the contribution of each exercise in the design studio. This assessment is an important step to review the pedagogical practice and realign the exercises as not mere steps to reach the final design, but as building blocks that enable a process driven studio pedagogy from a product driven pedagogy. This is an important need of the hour, where architectural education is not longer limited to buildings as the final product. The paper will hence examine how design studio pedagogy can integrate interdisciplinary and reflective methods, and primarily, the speculative nature of the design process to address the pressing discourse in contemporary teaching practices.

2. Architecture Education

Architecture education has been spread across the world for centuries. From apprenticeship as a learning method to a formal educational process, architecture teaching-learning has been about the ability to build structures and conduct the physical world. This canonical tradition has its roots in state-sponsored institutions and influential craft movements, most notably the *École des Beaux-Arts* in France, the Bauhaus in Germany, and Vkhutemas in Russia. These institutions laid the groundwork for design education: the *École des Beaux-Arts*, founded in the seventeenth century, focused on classical principles, drawing, and composition, while the Bauhaus and Vkhutemas redefined the role of the architect by merging architecture with art, design, craft, and industrial production under the influence of the Modernist and Constructivist movements. These models powerfully shaped architectural curricula worldwide and institutionalised a design ethos that gave primacy to formal aesthetics and artistic mastery (Salama & Patil, 2025). The deliberation is whether architectural education has been able to move beyond these landmark systems. The curricula informed by these systems hold truth and value as offer the basic tenets of architectural knowledge. The matter to evaluate is if architecture schools and architecture professors have allowed time-relevant entities to plug-in and evolve these systems to further the education system as a system, true for today and tomorrow.

2.1 Architecture Pedagogy Models

Tracing through history, multiple pedagogical models have been developed and adopted. It is crucial to highlight that these models are not replacements, but additions to the possible ways of addressing studio pedagogy. Salama suggests that although these pedagogies pave the way for ‘transformative pedagogy in architecture and urbanism’, they do not replace the conventional studio teaching practices (Salama, 2021).

Varolgüneş, İpek, & Aras (2024), highlight various pedagogical models that have been developed over time. They discussed all kinds of approaches, from a project-driven contextual problem-solving and individual work approach (Schön, 1984) in *École des Beaux-Arts* in Paris (Zanten, 1987) to an education that emphasised experimentation, interdisciplinary collaboration, and the integration of art and technology in Bauhaus (Frayling, 2007; Salama, 2021). From emphasising the design process, building technology, and formal vocabularies as major influences in an analogical model by Simmons (1978) to a participatory model explored by Sanoff (1981). Furthermore, there have been a series of models explored and experimented with, such as a pattern language methodology model by Davis (1983), the exploratory model by Robinson and Weeks (1983), the experimental model by Symes (1985), the concept-test model by Ledewitz (1985), the hidden curriculum model by Dutton (1987), interactional model by Gelernter (1988). They discuss these models to study the shift from the conventional studio to the process-oriented ones. Today, one can choose from this pool based on the intent and objective of the studio project.

The time-tested models offer immense value and offer a wholesome architectural know how. They are also proof that architectural education has evolved over time and facilitated time relevant strategies of deliberation, analysis, collaboration, thinking and making. Though it is important to note, that the rate of change in technology, expansion of the architectural realm, material innovation and tools that facilitate the design visualisation and construction are at a rate that the world has not witnessed in the past. A critical inquiry that emerges from this realization is if the architectural education and pedagogical practices have evolved at a pace to match these development. A misalignment is often observed due to multiple academic and administrative reasons that govern all institutions.

3. The Shift in Pedagogy

The reluctance of architects and architecture practices to look ahead of time was actively discussed by Le Corbusier in his book, *Towards a New Architecture* (1923), where he stated that “architects live and move within the narrow limits of academic requirements and in ignorance of new ways of building, and they are quite willing that their conceptions should remain at doves kissing one another. But our daring and masterly constructors of steamships produce palaces in comparison with which cathedrals are tiny things, and they throw them on to the sea! Architecture is stifled by custom.” The rapid technological adherence that Corbusier foresaw has grown exponentially. In light of the changing landscape of architecture, design and the built environment, with active discussions, explorations and experiments not only in the virtual world, but also in outer space, it is important to question the canonical tradition. Scholars and educators have raised fundamental concerns about its content and pedagogical processes. The primary critique was centred on the

assertion that the canonical model inadequately prepares students for the complex realities of architectural practice. (Salama & Patil, 2025)

This is not to say that architectural pedagogy must refrain from conducting studios aiming at buildability in the physical world. The argument here is not about the outcome, but rather the pedagogical approach adopted to reach the outcome of buildability. It is interesting to note that changes required in pedagogy are not just due to the advancement of technology and the introduction of artificial intelligence alone. Rather, has been a question since the late 20th century as discussed as highlighted through the various pedagogical models. Normoyle (2007) discusses that “Successful educational programs will support the learner in fully capitalising on or harnessing their creative potential. It will allow them to discover their own strategies and approaches to develop ideas and to encourage independence of thought. Achieving this in a design education program cannot be assumed. Careful consideration must be given to culture, curriculum structure, student teacher relationships, rewards and implementation strategies that will enhance student experimentation and growth.” In a more recent discussion, the role of the architects and career trajectories also highlight the importance of a shift required in the pedagogical practice. “...amidst rapid macro level changes – in student needs, technology and the world of work – to be successful into the future, higher education will need to continue to change: intelligently, and by design. Student success is no longer defined by a single measure or milestone. It is shaped by every moment of connection, growth, and opportunity across the whole learning journey. For today’s students, success might mean securing meaningful employment, launching a venture, deepening research, or finding a sense of belonging and purpose. (Salama & Holgate, 2025)

Masatlıoğlu & Balaban, 2024, emphasise the shifting role of an architect and hence pedagogy, where they say, “The architect of the 21st century is in the discovery of any need, she/he tends to bring together the components made possible by nature, sector, technology, and economy in the most appropriate way to overcome that situation. In this regard, instead of asking 'what does an architect do?', issues such as 'what should an architect think?', 'How does an architect do?', or 'How does an architectural design emerge?', gain importance. Accordingly, in a contemporary and future design studio, learning should occur through a process of understanding that involves doing by investigating, criticising, applying, analysing, synthesising, developing, evaluating, etc., in an intercrossed order.

In the Indian context, traditional pedagogical methods continue to dictate design studio teaching and finds its roots in the Bauhaus. “The most traditional process in the design studio requires the design instructor to give each student a copy of the project’s brief so that they can read it and start working. This method of teaching depends on the individual student’s ability to follow the design process to submit the project. The results often require trial and error process, which reduces the level of productivity in the early stages of design process”. (Emam et al., 2019)

4. Theoretical Framework and Objectives

As discussed in the previous section, there are multiple pedagogy models that have been developed and put into practice. Each of the models has its own theoretical position and intent, and is developed to achieve a specific outcome. Salama & Holgate (2025) seek to contribute to the ongoing discourse on architectural pedagogy and offer strategies for educators seeking to encourage more effective teaching approaches. Their work also discusses the appropriation of knowledge delivery relevant to the pedagogical needs of today.

Salama & Holgate, 2025 aim to examine and establish the role of critical inquiry, empirical making, and experiential learning and how it shapes architectural pedagogy. Here critical inquiry is to enable students to successfully develop, critique, and refine their design and thought processes. Empirical making, whereby students engage in material experimentation and iterative prototyping, can enhance reasoning through tangible learning experiences. Experiential learning viewed as a process wherein knowledge is acquired through experience. This theory employs a four-stage learning cycle consisting of concrete experience, reflective observation, abstract conceptualisation, and active experimentation.

Using this theoretical framework, this study aims to achieve the following objectives

- (1) To assess design studio exercises and their implications
- (2) To map and position the role of various exercises in the learning graph of the framework.
- (3) To evaluate the relevance of studio exercises in a process-driven pedagogical approach.

The assignments are measured under the parameters mentioned in the framework. The parameters mentioned, though distinguished for studio courses and theory courses, have been collectively considered as relevant parameters of assessment. This has been deliberately done, as the author views the studio pedagogy as a delicate balance between establishing theoretical know-how and seeing it through in design translations. The exercises are designed to carefully juggle between them, allowing a richer process-driven methodology.

- Creative Thinking, Experiential Learning in Design Pedagogy
- Critical Inquiry and Empirical Making in Studio Teaching
- Process-Based Design Pedagogy
- Digital Technology and Virtual Design Pedagogy
- Inquiry-Based, Active, and Experiential Learning
- Mechanisms of Active Engagement for Introducing Design Principles
- The Built Environment as an Open Textbook
- Teaching History to Design Students: Values and Relevance

4.1 Case Analysis

The studio exercises used here for analysis under the selected framework have been conducted by the author at Anant National University, Ahmedabad, India, from 2020 to 2025 in various studios, sometimes independently or else with a

co-tutor, mentioned on a case-by-case basis. These exercises have either been smaller exercises that feed into the larger project as case studies or as the project itself. In the 10-semester (5-year) B Arch programme, they have been conducted for students across various semesters, from semester four to semester ten.

The design of these exercises have been based on either the expected learning objectives, skills of the students based on the semester, project typology or as facilitators of the learning-teaching intent of the semester, as decided by the tutor or the group of tutors. The framework identified here to review these exercises, allows a fresh lens and assessment of the role of each exercise in a holistic training of architecture students as independent thinkers and facilitators of a design intent. This assessment allows a check on how to transform architecture education from a product driven entity to a process driven entity, which has been stated as an important pedagogical shift, essential for the architects of tomorrow.

4.1.1 Iterative Thinking and Making



Figure 1. Collection of process models and final models (Student work of 2022 batch, Anant National University).

Iterative practices allow a concentrated and rigorous method of delving into a process. It shifts focus from the end product to the thought and intent of the design. It allows a meditative engagement with the intent and facilitate reviewing of one's intent and outcomes at the level of the individual, peers and the tutor.

This exercise involved 20 students engaging in an iterative activity of exploring mass, density, organisation, and orientation for a community housing project in semester four. A collective assembly of all model explorations conducted by the entire batch (Figure 1) highlights the iterative process and the rigour of work. The quantity of models facilitated a deep, engaging discussion on the fundamentals of mass housing projects. In reference to the parameters offered in the framework, the following learning objectives were met in the exercise.

- Critical Inquiry and Empirical Making in Studio Teaching
- Process-Based Design Pedagogy
- Inquiry-Based, Active, and Experiential Learning
- Mechanisms of Active Engagement for Introducing Design Principles

4.1.2 Decoding the Invisible

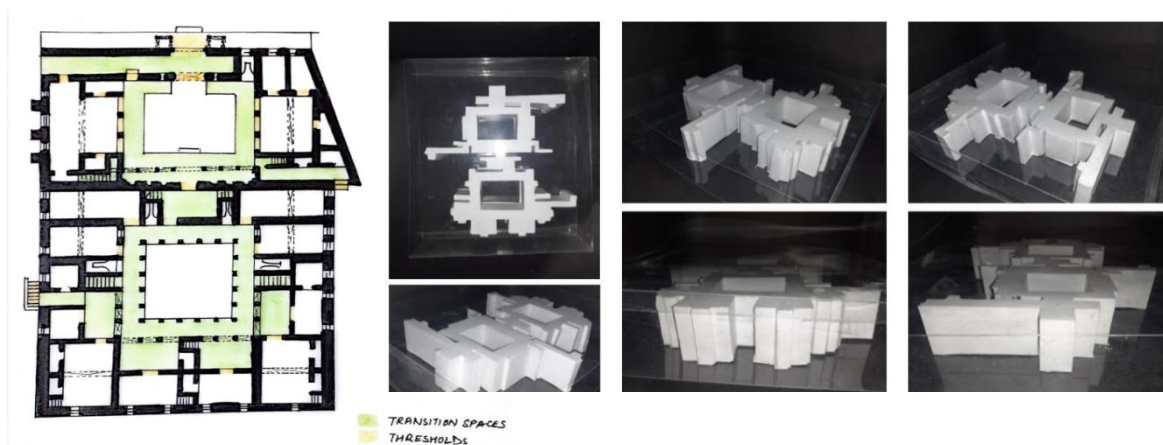


Figure 2. Assigning mass to the threshold and circulation space of a traditional courtyard house (Student work of Vatsala Lasod, Anant National University).

Intangible elements of architecture are important areas of study and play a significant role in space making. These intangible elements may be cultural and even spatial. It is often important to highlight them to analyse their role. The exercise was a part of the semester four studio in 2022, where, as a part of a community housing studio, the exercise was to study and analyse a vernacular Indian home. The student studies a typical house from Udaipur, Rajasthan. The exercise instructed the students to invert the mass of the house and showcase the spatial character of the threshold and transition spaces, which are integral to the functioning of a house (Figure 2). The following parameters are applicable.

- Creative Thinking, Experiential Learning in Design Pedagogy
- Critical Inquiry and Empirical Making in Studio Teaching
- Inquiry-Based, Active, and Experiential Learning
- Mechanisms of Active Engagement for Introducing Design Principles

4.1.3 Assemblage as an Inquiry



Figure 3. Negotiating and contextualising precedent projects (Student work of Naishargi Gupta, Anant National University).

Collages, photomontages and assemblage can be viewed as tools bringing together multiple, vivid or similar ideas and references to make a whole. Here, the idea of assemblage was explored to help negotiate between conducting relevant case studies, using them as references and contextualising them to the site of the student project (Figure 3). This exercise ensures a critical selection of relevant case studies, facilitates the understanding of scale and helps initiate a critical inquiry into the design process, while allowing multiple iterations of spatial organisation. The following parameters are applicable.

- Creative Thinking, Experiential Learning in Design Pedagogy
- Critical Inquiry and Empirical Making in Studio Teaching
- Process-Based Design Pedagogy
- Inquiry-Based, Active, and Experiential Learning
- Mechanisms of Active Engagement for Introducing Design Principles
- Teaching History to Design Students: Values and Relevance

4.1.4 Text to Design

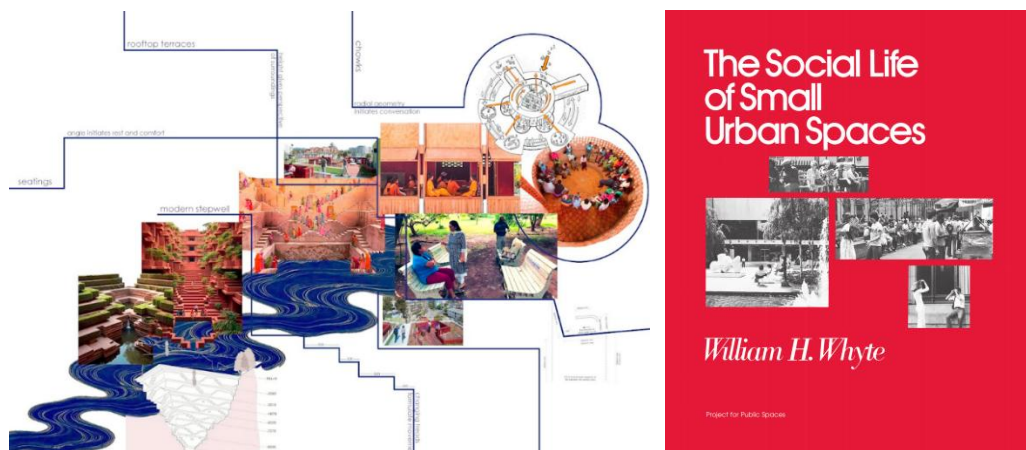


Figure 4. Appropriating textual reference to context and project (Student work of Prathma Mehta, Anant National University, *The Social Life of Small Urban Spaces* | Publications — Project for Public Spaces, n.d.).

Reading is an important aspect of architectural pedagogy. They offer design intents and positions, theoretical standings and multiple perspectives of the built realm. In the Indian context, western readings are often the source of theorizing architecture. The rift between a western perspective and the Indian scenario is often a matter of concern. The exercise was designed to review the text identified to support the studio and contextualise it with relevant spatial imagery. The idea of the was to be able to situate readings in one's own context and studio to extract deeper and relevant meanings. The applicable parameters are:

- Critical Inquiry and Empirical Making in Studio Teaching
- Digital Technology and Virtual Design Pedagogy
- Inquiry-Based, Active, and Experiential Learning
- The Built Environment as an Open Textbook
- Teaching History to Design Students: Values and Relevance

4.1.5 Documentation as an Inquiry

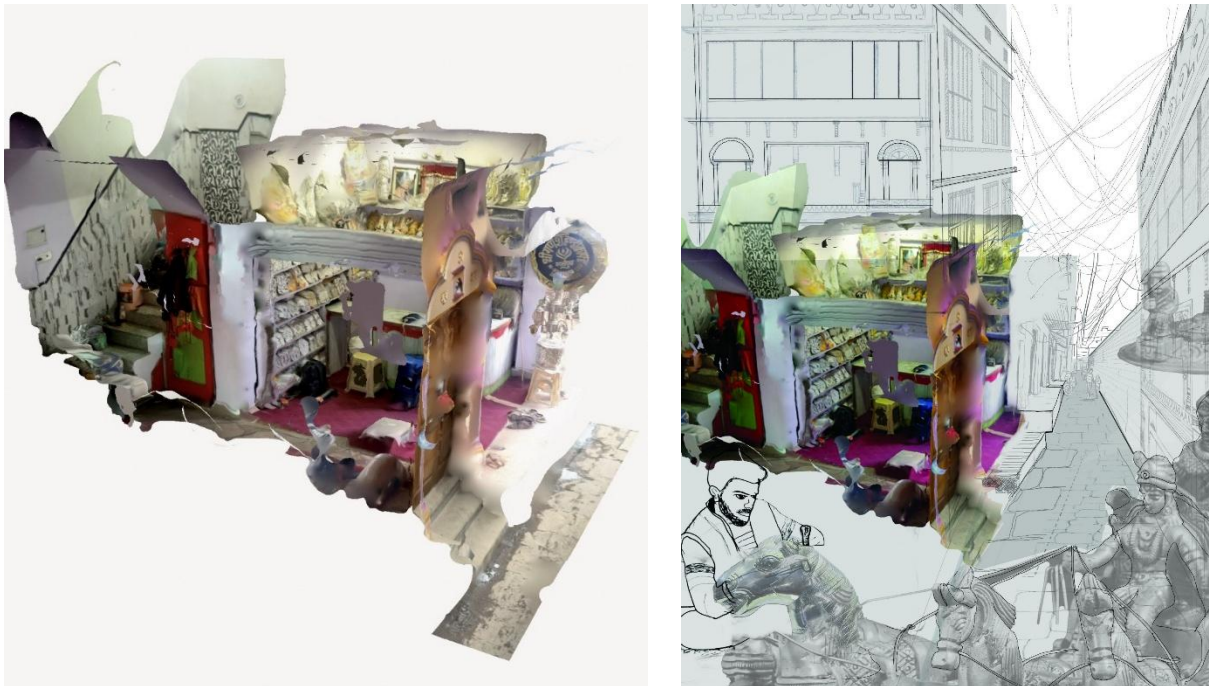


Figure 5. Documentation through Lidar Scanning Technique and application (Student work of Hardik Garg, Ishika Bhatt and Jhils Patel, Anant National University).

Use of age relevant technology is crucial and often ignored in pedagogical decisions. It has been observed that the gap between familiarity of students with updated technology and the hesitance of tutors and facilitators with these tools limits the possibilities of any study. A middle ground between the value of traditional methods and the possible extension of learning through advanced tools is an important pedagogical exploration. The exercise encouraged the use of Lidar to document the case instead of conventional drawing or sketching methods. The outcome helped situate the case in various scenarios and helped build a narrative around the site and the case. The applicable parameters are

- Critical Inquiry and Empirical Making in Studio Teaching
- Digital Technology and Virtual Design Pedagogy
- The Built Environment as an Open Textbook
- Teaching History to Design Students: Values and Relevance

4.1.6 Interdisciplinary Inquiry and Participatory Methods

User Feedback

Real-time feedback from pedestrians on site

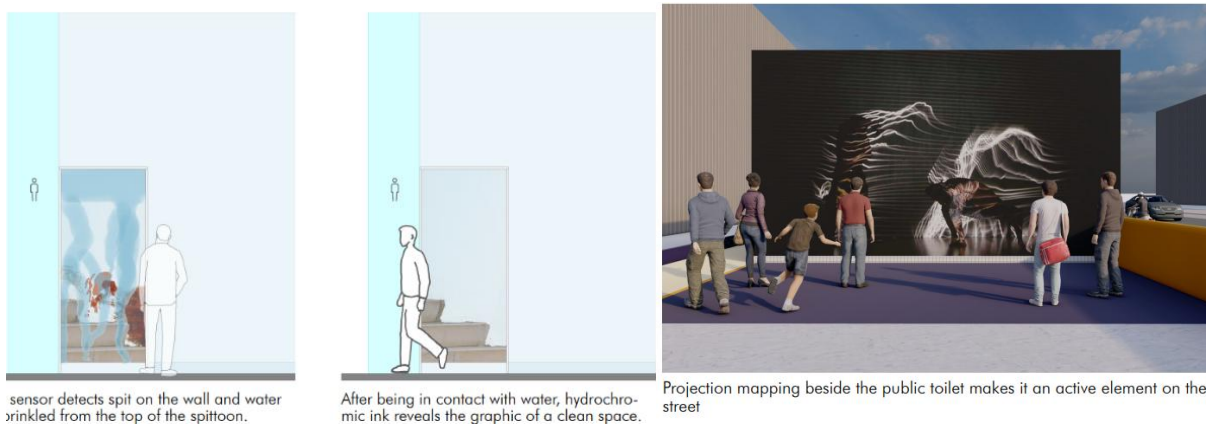
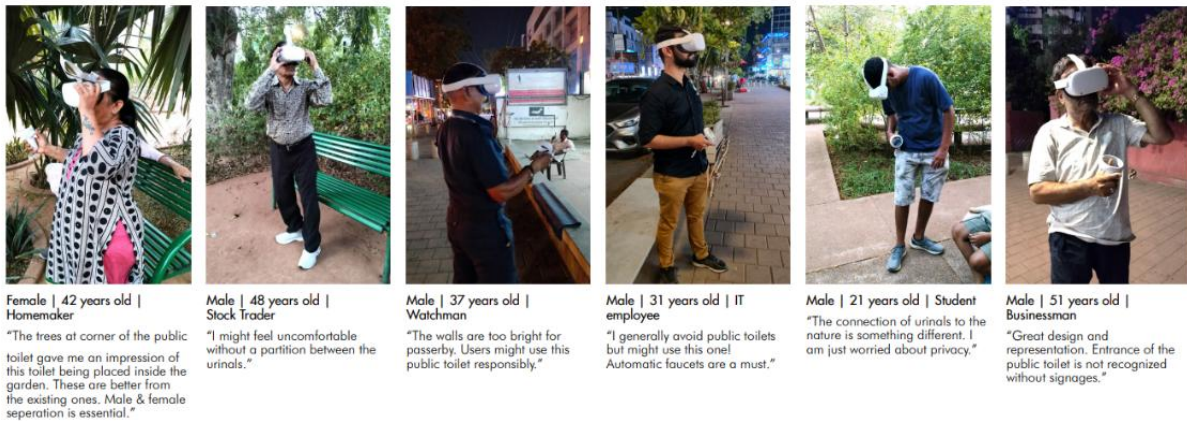


Figure 6. Participatory approaches to review design nudges (Student work of Vatsal Vora, Anant National University).

With expansion of design education not just within the design field but also across disciplines, it is important to acknowledge the value of interdisciplinarity as a learning tool. This project's core lies in the interdisciplinary explorations between architecture and interaction design. Using interaction design strategies as 'nudges', the project examined if public toilets could be an integral part of the urban landscape, instead of the shunned element on Indian streets. The parameters applicable here are -

- Creative Thinking, Experiential Learning in Design Pedagogy
- Digital Technology and Virtual Design Pedagogy
- Inquiry-Based, Active, and Experiential Learning
- The Built Environment as an Open Textbook

4.1.7 Learning from Mistakes



Figure 7. Using participatory tools for design feedback (Student work of batch 2022, Anant National University).

Case studies often use ideal examples as a benchmark of learning. With the realization, that the value of the best is best appreciated when one realises strategies that do not help conduct a livable environment, an exercise was formulated to learn from mistakes. The studio exercise involved a collaborative method of generating a ‘stamped’ neighbourhood without any cues and analysing it against the layers of accessibility, approach, proximity and others. This method allowed a critical review of the ‘mistakes’ that the case offered. This method of interpreting a case allowed the appreciation of ideal examples better. The parameters applicable are -

- Creative Thinking, Experiential Learning in Design Pedagogy
- Critical Inquiry and Empirical Making in Studio Teaching
- Process-Based Design Pedagogy
- Inquiry-Based, Active, and Experiential Learning
- Mechanisms of Active Engagement for Introducing Design Principles

4.1.8 Recording Impressions

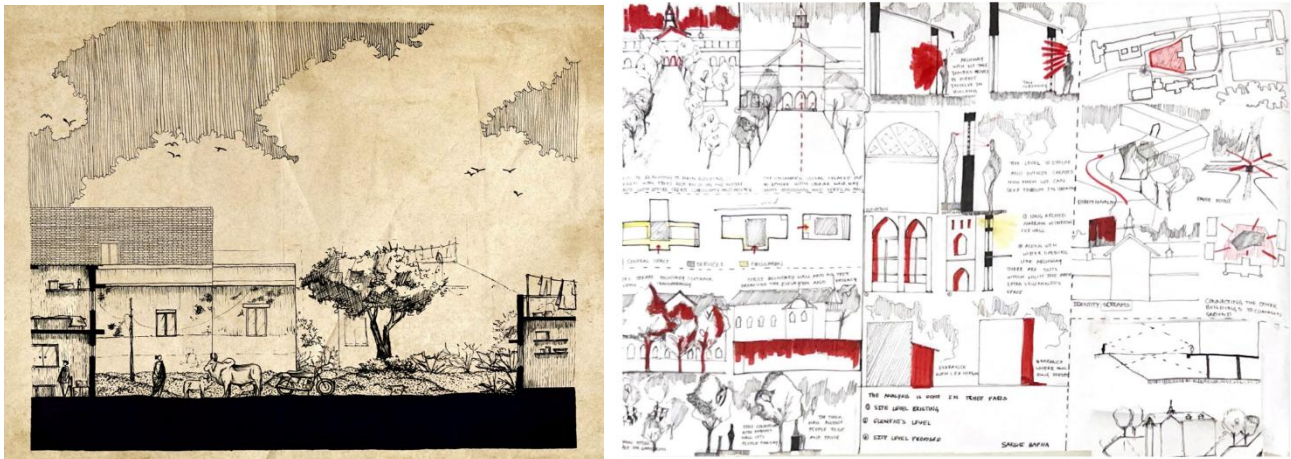


Figure 8. On-site record keeping tools (Student work of Alek Jain, Sakshi Bapna, Anant National University).

On-site recording of first impressions, context, activities, physical character, architectural details, and flora and fauna are common tools of any architectural study. This tool has withstood the test of time and is an important tool for all design education. The mediums of record keeping could be varied from perspective drawings to text and from schematic diagrams to detailed sections. It acts as a primary tool for reflections and discussions.

The parameters applicable are –

- Critical Inquiry and Empirical Making in Studio Teaching
- Inquiry-Based, Active, and Experiential Learning
- The Built Environment as an Open Textbook

5. Conclusions

In the early semesters of architectural education design studio exercises are often designed in a sequence to inform the next steps as a slow progression. It helps break down the whole process into smaller parcels for effective comprehension and applicability by the students. The sequence, complexity and even the number of exercises may vary as per the course objectives, nature of project and the semester in which they are conducted. In most cases, the need for smaller exercises reduces in the higher semesters, as students are expected to have acquainted themselves with such process of design ideation and classroom hours are dedicated to discuss larger issues of the urban and architectural scale. Considering this process of designing a studio, the hidden intents, meanings and results of such exercises are not a matter of active discussion or consideration. They often remain hidden agendas of course objectives and outcomes. The previous chapter allows a thorough qualitative check on the impact of each method / exercise as used by me in various design studios conducted over the years. A methodology as such allows a reflective analysis on not only the impact of each exercise but also the intent and inclination of the tutor. The framework offered parameters of assessment that reviewed the intent and outcome of each mode of inquiry and concluded in following observations-

- (1) Creative Thinking, Experiential Learning in Design Pedagogy: 4 out of 8 methods facilitated creative thinking and experiential learning. The exercises collectively, hence, facilitate the means of creativity and innovation, a trait always sought after in architectural education and practice. Out-of-the-box thinking and hands-on problem-solving enhance the student’s ability to address complex design challenges. (Salama & Holgate, 2025) This is crucial to have in the changing landscape of architectural practice, where, due to the advent of artificial intelligence and the metaverse, architects' roles have expanded beyond building in the physical world. Architects, when trained right, could have an advantage of seamless integration of various built and virtual using technology and interdisciplinary prowess.
- (2) Critical Inquiry and Empirical Making in Studio Teaching: 6 out of 8 methods ensured that the students successfully developed, critiqued, and refined their thought process while engaging in material experimentation and iterative prototyping, which can enhance reasoning through tangible learning experiences, making empirical learning an essential tool of studio pedagogy. (Salama & Holgate, 2025). The majority of

exercises focused on using the iterative process and the medium for self-critique and reflection of the design decisions. Iterative processes offer increased engagement with the process of design, and the sense of responsibility that this offers towards one's decision is exponential.

- (3) **Process-Based Design Pedagogy:** A process-driven design approach shifts the focus from the end product to the act of design. A process-based design pedagogy is a structured studio-teaching approach that was developed to integrate process into design learning. (Salama & Holgate, 2025). 3 out of 8 methods discussed in this paper actively engage in this methodology as a teaching-learning tool. This not only shifts focus to design thinking but also impacts the student-teacher and student-student engagement. This provides an active studio environment and makes peer-learning a norm.
- (4) **Digital Technology and Virtual Design Pedagogy:** 3 out of 8 methods discuss the value in using digital tools and virtual design methods. This is beyond the conventional use of digital tools to make drawings, but these tools are active mediums of the design process. Advancements in digital tools have transformed architectural education, enabling students to engage with virtual simulations, parametric modelling, and computational design. Electronic learning and digital pedagogies can facilitate collaborative and interactive learning experiences beyond traditional studio and classroom settings. (Salama & Holgate, 2025). The use of these tools in the cases has been able to facilitate conventional methodologies and provide more engaging, iterative and quicker responses to the design thinking process.
- (5) **Inquiry-Based, Active, and Experiential Learning:** 7 out of 8 cases are examples of this method. It helps assess student progress based on the development of critical thinking, analytical skills, and experiential learning rather than the supine acquisition of knowledge. It facilitates an active learning experience and develops problem-solving skills. (Salama & Holgate, 2025). The use of this method allows students to take over the learning process and become equal stakeholders in the teaching-learning dynamics, rather than being just at the receiving end.
- (6) **Mechanisms of Active Engagement for Introducing Design Principles:** 4 out of 8 cases showcase this learning tool. Active engagement mechanisms offer imaginative ways to introduce design principles. These can involve a wide range of practices that include collaborative exercises, case-based learning, and participatory assessments. (Salama & Holgate, 2025). Here, the cases included facilitate these requirements and again put the students in a more responsible and engaging position in the studio environment.
- (7) **The Built Environment as an Open Textbook:** 4 out of 8 cases actively engaged in extending the projects from the classroom space to the real world and the communities. This helps examine socio-cultural and economic variables influencing design, and enhancing critical thinking regarding community participation in co-design processes. (Salama & Holgate, 2025). Interaction and engagement with the stakeholders, using varied tools like cinema and digital tools of active mapping of the built space, facilitates a contextual design response.
- (8) **Teaching History to Design Students: Values and Relevance:** 3 out of 8 cases delve into this parameter. The incorporation of historical analysis into architectural pedagogy can provide students with a contextual understanding of the evolution of design concepts and solutions. (Salama & Holgate, 2025). Active substitution in design pedagogy, rather than an independent theoretical study, allows contextualising scenarios and adds an analytical layer to the vivid historical context, especially in the case of India.

The exercises discussed in this paper have been focused on inquiry based, active and experiential learning, further reinforced through critical enquiry and empirical making as tools of the teaching learning experience. This highlights the tutor's deliberate philosophical position that questioning and active thinking are constituents of the pedagogical position. It is important for me as a tutor, that students are active participants in the design studio, question the tasks, conduct and perform the tasks and are involved in assessing and analysing the value of the given task. The exercises are designed for the students to evolve as thinkers and not just executors of the assigned task.

The next set of parameters that follow are creative thinking, ensuring active engagement through case based learning and participatory practices and using the built environment as teaching aid. This highlights the importance of practical examples as an important teaching medium. The idea of learning what works and what does not, seems to be ingrained in these exercises making the built environment not as an contextual illustration but as a primary stakeholder in the design process.

The next set of parameters highlight a contradictory factor where process focused exercises, use of digital tools, teaching history as a means of ensuring contextual awareness seem to have received reduced focus on the design of these exercises. An important realization is the gap between the high attention paid to iterative practices but the exercises do not fully support a process inclined pedagogy, and needs careful assessment and corrective measures. The analysis also highlights an important fact of the shift in the pedagogical position of not just the teaching-learning experience but also the relationship of the teacher and the students. From an apprenticeship model, learning environments today, need to be a collaborative space not just amongst the students but also the teacher and the student. The ever-changing technology urges the design of the learning environment to be dynamic, with enough room for experiments and collective learning.

Acknowledgements

1. The author acknowledges and thanks the students of Anant National University, Ahmedabad whose works have been used to facilitate the discussion.
2. The author thanks the co-tutors (full-time and visiting) of the studio, who have helped design the exercises.

Funding, Conflicts of Interest

The author(s) report no conflicts of interest.

Data Availability Statement

No new data were created or analysed in this study; all sources are cited within the article.

Institutional Review Board Statement

Not applicable

CRedit Author Statement

Conceptualisation: N.N.; Methodology: N.N.; Writing – original draft: N.N.; Writing – review & editing: N.N.; Visualisation: N.N. All authors have read and approved the final version of the manuscript.

Reference List

- Corbusier, L. (2007). *Toward an architecture* (J. Goodman, Trans.). Getty Publications. (Original work published 1923)
- Emam, M., Taha, D., & ElSayad, Z. (2019). Collaborative pedagogy in architectural design studio: A case study in applying collaborative design. *Alexandria Engineering Journal*, 58(1), 163-170. <https://doi.org/10.1016/j.aej.2018.03.005>.
- Ghonim, M. and Eweda, N. (2019). Instructors' perspectives on the pedagogy of architectural graduation projects: A qualitative study. *Frontiers of Architectural Research*, 8. <https://doi.org/10.1016/J.FOAR.2019.01.007>
- Ledewitz, S. (1985). Models of Design in Studio Teaching. *Journal of Architectural Education*, 38(2). <https://doi.org/10.1080/10464883.1985.10758354>
- Masathoğlu, C. S. E. and Balaban, Ö. C. (2024). Reflective thinking and self-assessment: A model for the architectural design studio. *Journal of Design for Resilience in Architecture and Planning*, 5. <https://doi.org/10.47818/DRARCH.2024.V5I1118>
- Normoyle, A. (2007) Preparing Design Students for their Future Industry Profession. In Katiyar, V. S., Mehta, S., & National Institute of Design. (2007). *Design education: Tradition and Modernity: Scholastic papers from the International Conference, DETM 05*. ISBN No. 81–86199–57–8
- Salama, A. M. (1995). *New Trends in Architectural Education: Designing the Design Studio*. .
- Salama, A. M., & Burton, L. O. (2023). Pedagogical Traditions in Architecture: The Canonical, the Resistant, and the Decolonized. *Traditional Dwellings and Settlements Review*, 35(1), 47–72. <https://www.jstor.org/stable/27273582>
- Salama, A. M., & Holgate, P. (2025). Where Critical Inquiry, Empirical Making, and Experiential Learning Shape Architectural Pedagogy. *Encyclopedia*, 5(3), 129. <https://doi.org/10.3390/encyclopedia5030129>
- Salama, A. M., & Patil, M. P. (2025). The Socius in Architectural Pedagogy: Transformative Design Studio Teaching Models. *Architecture*, 5(3), 61. <https://doi.org/10.3390/architecture5030061>
- Varolgüneş, F. K., İpek, S. & Aras, S. (2024). Enhancing student learning in architectural design studios: A pentagon and DEMATEL-based study on new learning components and interaction dynamics. *International Journal of Technology and Design Education*, 35. <https://doi.org/10.1007/s10798-024-09953-y>
- Vidler, A. (2000). Diagrams of Diagrams: Architectural Abstraction and Modern Representation. *Representations*, (72), 1–20. <https://doi.org/10.2307/2902906>