



ICCAUA Proceedings Journal

Proceedings of the international conference of contemporary affairs in architecture and urbanism-ICCAUA
Volume 9 (December 2026), 2610239

ICCAUA
Proceedings Journal
<https://journal.iccaua.com/>

Journal homepage: <https://journal.iccaua.com/>

DOI: <https://doi.org/10.38027/ICCAUA2026EN0239>

Why Architectural History Struggles to Integrate with the Design Studio

* ¹ Shalini Sheoran, ² Manoj Panwar

¹ & ² Department of Architecture, DCR University of Science and Technology, Murthal, Haryana, India

¹ Department of Planning & Architecture, DLC State University of Performing & Visual Arts, Rohtak, Haryana, India

¹ E-mail: shalinishheoran2.0@gmail.com, shalinishpa@plcsupva.ac.in, ² E-mail: manojpanwar.arch@dcrustm.org

¹ ORCID: <https://orcid.org/0009-0001-5441-2073>, ² ORCID: <https://orcid.org/0000-0001-6655-504X>

Abstract

Received: 22.04.2026
Revised: 20.06.2026
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.

The architectural design studio is located at the centre of the learning expected in the Bachelor of Architecture course. It is expected that all other subjects must inform and enrich the learning in the design studio. Architectural history is a mandatory core course in the B Arch curriculum in India. However, as the literature suggests, the lessons from history rarely reach the design studio, let alone enrich it. The paper identifies issues and barriers to integrating architectural history into the design studio and presents a literature-based examination of them. Drawing on relevant studies, the paper identifies persistent issues, including teaching methodologies, the notion of history, students' psychological issues (e.g., hesitation toward new learning), skill-related issues, language barriers, curriculum-related issues (e.g., limited pedagogical alignment), and teacher-driven issues. The literature also highlights gaps in teaching strategies that meaningfully translate historical knowledge into design thinking. By synthesising the findings, the study underscores the need for integrative pedagogical frameworks that position architectural history as an active, interpretative resource within the design studio. The authors insist that integrating architectural history into the architectural design studio will enrich the studio, especially its conceptual narratives in the design process.

Keywords: Architectural Design Studio; Architectural History; Identifying Issues & Barriers; Integrative Pedagogical Framework, B Arch Curriculum.

1. Introduction

It would not be an exaggeration to say that the relationship between architectural history and design in education has been the subject of discussion in architectural education for many decades. Hardy & Teymur state that more connections between the two should be made to ensure effective transfer of historical knowledge into present-day design considerations (1996). However, despite the mentioned necessity, the teaching of architectural history and design remained separate issues, with history remaining a theoretical subject while design was associated with studio practice. The issue was that students found it difficult to understand why historical knowledge might be relevant to the design. History is often reduced to a modern-centric add-on rather than seen as a creative source (Stewart & Wilson, 2008). Existing research highlights the misalignment among the history, theory, and design studio teachers. Curriculum rigidity and disciplinary silos are considered primary structural barriers to integrating history and design (Panwar & Sheoran, 2024). Small-scale models that foreground historical product types and design thinking rather than linear chronologies are also instrumental (Tuztasi & Koc, 2021). Pedagogical reviews highlight that history and theory remain peripheral to the core studio culture (Joseph et al, 2025).

The conversation about architecture slowly moved away from mere theoretical assumptions regarding the need for integration between history and design and turned its focus to studying the educational process of architecture itself. Modern researchers have begun examining connections between architectural education and the successful transfer of knowledge of architectural history through curriculum design, pedagogical techniques, teacher roles, and students' perspectives (Schwaen et al., 2018). The ways of promoting active learning, creating, reflection, and studio-based learning have become objects of study aimed at establishing effective integration.

1.1 Aim & Objectives of the Study

The paper aims to identify issues and barriers to integrating architectural history into the design studio.

Objectives:

- To conduct and present a literature-based examination of the issues and barriers to integrating history into the design studio
- To identify significant issues and barriers and to categorise them, for better clarity and understanding.

- To highlight that integrating architectural history into the architectural design studio will enrich the studio, especially its conceptual narratives in the design process.

2. Materials and Methods

A predominantly qualitative approach was employed, with a comprehensive literature review serving as the primary method of enquiry. Scholarly material on the relationship between the history of architecture and architectural design education was analysed to gain a clear understanding of the issues involved in integrating the two. Through the process of analysing, comparing, and interpreting these materials, various issues and obstacles related to integrating architectural history and design education could be identified and categorised into general types, such as theoretical, skill-related, teacher-related, educational methodology, psychological, and curriculum issues. In total, almost 150 academic sources, including journal articles, conference papers, books, and reports, were reviewed to develop a consolidated understanding of the factors influencing the integration of history and design studios within architectural education.

3. Results

The multiple variables contributing to the issues and barriers are identified through a comprehensive review of the existing literature and are listed below. The issues and barriers are segregated as Notional Issues, Skill-related issues, Teacher-related Issues, Teaching Methodology-related Issues, Psychological Issues, and Curriculum-related Issues. All the issues and barriers are presented along with their supporting research references. The rationality of items related to the issues and barriers was established through an extensive review of existing literature. Relevant studies and theoretical frameworks were examined to ensure that each item was conceptually grounded and aligned with prior research.

3.1. Notional Issues

Table 1. Identification of Notional Issues and Barriers towards History and Design Integration through Literature.

S. No.	Issues & Barriers	Research References
I.	Notional Issues	
	Disinterest in history	Stearns 2020; Kumar, 2018; Harris, 2018; Carr, 2011
	The notion that history is boring	Akengin & Cendek, 2017; Williams, 2019
	The notion that history is not important	Berg & Berg, 2019; Stearns, 2020; Ravitch, 2014; Hobsbawm, 1990; Davies, 2009
	Notion that design has nothing to do with history	Clark & Brody, 2009; Cross, 2011; Fallan, 2010
	History is studied in seclusion	Stearns, 2020; Levstik, 2015; Stearns, 2016; Carl, 2010; White, 1973; Burke, 2015; Klein, 2010; Collingwood, 1946; Carr, 1961; Bloch, 1953
	Notion that theory & studio are separate	Salama, 2015; Sussman & Hollander, 2014; Salama, 2008; Cross, 2006; McNally, 2011; Fallan 2014; Schon, 1983; Cuff, 1991; Groat & Wang, 2013; Ardizzola, 2013
	History is not relevant to what we create in the present or future	Cross, 2011; Howard et al., 2015; Carlgren et al., 2016; Cross, 2011; Levstik & Barton, 2011; Gardner, 2006; Carr, 1961; Russen, 2005; Sexias, 2006; Burke, 2015

(source: Authors)

The notional issues refer to the preconceived beliefs and assumptions that architectural history and theory are secluded and separate from the design studio. History is boring, disinteresting, and insignificant; neither relevant to design nor to the present or future. The Notional Issues could thus be defined as the common perception that architectural history is boring, uninteresting, and insignificant, and therefore seems to be irrelevant to apply in design, in the present or the future.

Validation of the notional issues through literature review:

- i. The Precedents in Architecture authors explore how to sustain engagement in architectural education by thoughtfully integrating history into contemporary practice through a conscious awareness of historical precedent. By identifying and applying established patterns and motifs in research, the aim is to reveal core archetypes that inform and guide the creation of innovative architectural forms (Clark & Pause, 2021).
- ii. In the book Understanding Architecture, the authors interpreted history as a disciplined effort to interpret the past critically. The practice of history is inherently dynamic, not fixed. The authors emphasise that the present, "the history unfolding before our eyes," actively shapes our perception of the past. Knowing the past helps us

understand how we got to where we are now and provides practical knowledge of the creation and use of built environments (Conway & Roenisch, 2005).

- iii. The main idea of the talk, 'Think like a Historian, imagine like a Designer', is based on the connection between the historical process and physical spaces which have been developed and used by humans. It is argued that studying history allows one to learn much about the creation and use of built environments, demonstrating that historical thinking is inherently linked to developed spaces.
- iv. In addition to being cultural and historical evidence, ancient monuments are sources of information on architectural techniques, sustainable design practices, and engineering skills (Sarkar & Agrawal, 2022). By studying their spatial planning, material use, and symbolic expressions, present and future societies can adopt these principles to contemporary challenges in design, conservation, and community identity (R. Jigyasu et al., 2013; Jain & Garg, 2004). Historically, architecture evolved in harmony with nature, using local resources and climate-responsive designs to ensure resilience and balance. Reintegrating these time-tested principles can guide sustainable urban development for future cities (Das et al., 2019; Gupta & Singh, 2010; Kaur & Luthra, 2022). Examining the contextual factors, building practices, and traditional understanding of architectural design highlights the importance of integrating planning processes (Ila Gupta, 2023).

3.2. Skill-Related Issues

Table 2. Identification of Skill-related Issues and Barriers towards History and Design Integration through Literature.

S. No.	Issues & Barriers	Research References
II.	Skill-related Issues	
	Student's Language Barrier	Suwartono et al., 2020; Silverman, 2010; Kaplan, 1966; Vygotsky, 2014; Andrade, 2006; Cummins, 2000; Schleppegrell, 2004
	Teacher's Language Barrier	Mudaly & Singh, 2018; García-Sánchez, 2016; Baker, 2016; Cummins, 2000; Vygotsky, 1978
	Level of understanding	Hein & van Dooren, 2019; Boudah, 2014; Tomlinson & Moon, 2013; Brugar, 2012; Brugar, 2016
	Teacher's inability to draw, sketch or make models	Prangma et al., 2009; Hein & van Dooren, 2019; Schon, 1985; Lawson, 2006; Cross, 2006; van Dooren et al., 2014
	Student's inability to draw, sketch or make models	Evans & Aldoy, 2016; Evans & Aldoy, 2016; Lawson, 2006; Cross, 2006; Schon, 1985; van Dooren et al., 2014
	Lack of various 'tools' in teaching	Tarman et al., 2019; van Dooren et al., 2014; Hein & van Dooren, 2019; Salama, 2015
	Lack of reading habits	Abid et al., 2023; Amin & Bakhsh, 2021; Liswaniso & Mubanga, 2019; Owusu-Acheaw & Larson, 2014

(source: Authors)

Skill-related issues refer to limitations in the linguistic, cognitive, visual, and pedagogical abilities of students and educators that hinder effective teaching and learning. These include language barriers, difficulties in comprehension, inadequate reading practices, limited proficiency in visual communication methods such as drawing, sketching, and model-making, and insufficient use of diverse teaching tools. The skill-related issues could thus be defined as challenges arising from limitations in language proficiency, comprehension, reading habits, and visual representation skills, which affect the communication and understanding of architectural knowledge.

Validation of the skill-related issues through literature review:

- i. Previous meta-analytic studies have shown that second-language learners often struggle with comprehension even when decoding skills are sufficient, due to the underlying spoken language weakness (Spencer & Wagner, 2016).
- ii. The study indicated that the students found it difficult to express ideas using English. The results have also shown that language barriers affect students' academic performance (Suwartono & Akter, 2020).
- iii. When English second language learners are exposed to resources that they can relate to, meaningful learning occurs (Mudaly & Singh, 2018b).
- iv. The lack of reading provokes deficiencies that make learning difficult, such as poor vocabulary and poor command of the language. Broader reviews highlight that language proficiency plays a central role in students'

academic adaptation and psychosocial adjustment. More recent empirical work has also linked language barriers directly to lower motivation and engagement among students.

3.3. Teacher-Related Issues

Teacher-related issues refer to challenges arising from an educator's subject knowledge, enthusiasm, motivation, and ability to inspire students. When teachers themselves appear disengaged, insufficiently prepared, or lack interest in the subject, students are bound to struggle to develop meaningful engagement with the course of history. This also creates a wide gap towards history and design integration. Teacher-related issues could thus be defined as aspects towards shaping a teacher's knowledge, motivation, enthusiasm, and ability to engage and inspire students in the learning process.

Table 3. Identification of Teacher-related Issues and Barriers towards History and Design Integration through Literature.

S. No.	Issues & Barriers	Research References
III.	Teacher-related Issues	
	Not an inspiring teacher	Patrick, et al., 2000; Keller, et al., 2014; Fried, 2001; Palmer, 2007; Day, 2004; Kumar, 2018
	Teacher's lack of knowledge	Hein & van Dooren, 2019; Patil & Bhatia, 2016; Keyvanian, 2011; Li, 2018; Shulman, 1986; Shulman, 1987; Grossman, 1990; Kumar, 2018
	Teachers are not motivated	Ertmer et al., 2012; Day, 2004; Richardson & Watt, 2010; Skaalvik & Skaalvik, 2011; Fried, 2001; Scott, 2013
	Teacher's lack of interest in teaching HOA	Kumar, 2018; Day, 2004; Fried, 2001; Palmer, 2007; Richardson & Watt, 2010; Skaalvik & Skaalvik, 2011

(source: Authors)

Validation of the teacher-related issues through literature review:

- Fostering a supportive institutional culture that values the teaching of architectural history and providing resources, recognition, and opportunities for collaboration among faculty members to promote a positive teaching environment are vital (Hargreaves & Fullan, 2012).
- Encouraging teachers to engage in research and scholarly activities related to architectural history and education, and supporting faculty research can deepen their expertise and passion for the subject, leading to more effective teaching (Deci & Ryan, 2000; Deci & Ryan, 1985; Boyer, 1990).
- Showing genuine passion and enthusiasm for the subject matter through teachers' passion for the subject can inspire students and enhance their interest in historical topics (Frenzel, 2014).
- It is possible that the history teacher at the school level is often someone who has not studied history or enjoyed it. So, despite a shift in historiography, older perceptions and notions of the subject continue to affect pedagogy (Kumar, 2018).

3.4. Teaching Methodology-related Issues

Table 4. Identification of Teaching Methodology-related Issues and Barriers towards History and Design Integration through Literature.

S. No.	Issues & Barriers	Research References
IV.	Teaching Methodology-related Issues	
	Teaching Methodology	Levstik & Barton, 2015; Barton & Levstik, 2004; van Drie & van Boxtel, 2008; Seixas & Morton, 2013; Hein & van Dooren, 2019
	Inability to see the learnings for Architectural Design from History	Straaten et al., 2015; Hein & van Dooren, 2019; Rusen, 2005; Seixas & Morton, 2013; Carr, 1961
	Sticking to tried & tested methods of how things work or don't work	Salama, 2008; Gür & Durmuş, 2015; Hein & van Dooren, 2019; Swenarton, 1987
	Scepticism to experimentation	Patil & Bhatia, 2016; Sussman & Hollander, 2014; Rogers, 2003; Schon, 1983; Salama, 2015; Cross, 2006

	Ability to present/communicate help understand the architectural design better	Al-Hamidat, 2007; Kowalczyk, 2020; Boujaoudeh, 2019
	The ability to sketch/draw/create models helps to understand the architectural design better	Nguyen, 2015; Cross, 2006; Lawson, 2006; Schon, 1985; van Dooren et al., 2014; Hein & van Dooren, 2019
	Study tours/ Site visits can enhance subject knowledge	Eiris Pereira & Gheisari, 2017; Mills & Treagust, 2003
	Re-engage students in the learning process	Sharma, 2016; Kahu, 2013; Mcinnis, 2001; Hand & Bryson, 2008; Kuh, 2009; Zepke & Leach, 2010; Trowler & Trowler, 2010

(source: Authors)

Teaching methodology-related issues refer to challenges arising from how architectural history is taught, especially when theory remains disconnected from design. Theory subjects largely rely on conventional lecture-based approaches and thus provide very limited opportunities for experimentation, visual communication, hands-on learning, or direct engagement with the built environment. Such teaching and pedagogical approaches are bound to reduce students' ability to relate the historical knowledge to architectural design and limit their active participation in the learning process, making them passive information receivers. Thus, teaching methodology-related issues can be defined as barriers arising from inadequate teaching approaches that limit the connection between history and design and restrict experiential, visual, and hands-on methods that facilitate deeper learning, such as sketching, model-making, presentations, and site visits.

Validation of the Teaching Methodology-related issues through literature review:

- Examining the courses of history and theory of architecture and the way knowledge is transmitted in several schools of architecture reveals that functional and human aspects are not emphasised by history and theory teachers (Salama, 2008a).
- The Re-Thinking the Architectural History Course in Architectural Education authors said that, "This has immense impact on architectural education: architectural education as a whole, but especially the conduct of studios and the delivery of history course definitely require significant reconstruction" (Gür & Durmuş, 2015).
- It is evident through the various education policies referred to in the study that each of them underscores a 'Paradigm Shift' in the education system and calls for reforms with relation to integration, critical thinking, enquiry-driven and becoming more experiential. The education policies also emphasise the development of innovative teaching-learning methods for new-age learning.
- Schwaen et al. (2018), in Bricks and Books: Reinventing the Teaching of Architectural History and Theory, state that architectural education should evolve from conventional lectures. They advocate for making, crafting, and reflection in education to contribute actively to the learning process.

3.5. Psychology-related Student Issues

Table 5. Identification of Psychology-related Student Issues and Barriers towards History and Design Integration through Literature

S. No.	Issues & Barriers	Research References
V.	Psychology-related Student Issues	
	Students are not motivated	Dağgöl, 2013; Hadjiyanni and Zollinger, 2010; Kahu, 2013; Zepke & Leach, 2010; Howard et al., 2021
	Students' lack of interest in learning the HOA	Hein & van Dooren, 2019; Özgüleş et al., 2020; Li, 2018; Hadjiyanni & Zollinger, 2010
	Historic information fails to inspire students	Hardy & Teymur, 1996; Hancock, 1986; Hein & van Dooren, 2019; Habraken, 2006; Kostof, 1985
	Lack of enthusiasm and energy to learn 'anew'	Ardizzola, 2018; Schon, 1983; Salama, 2015; Hein & van Dooren, 2019; Zevi, 1978
	Hesitance to 'new learning discoveries' as it requires extra work	Clark & Pause, 2021; Rogers, 2003; Schon, 1983; Salama, 2015; Ardizzola, 2018; Hein & van Dooren, 2019

(source: Authors)

Psychology-related student issues are attitudinal and motivational barriers that affect students' willingness to engage in learning history. The issues include barriers such as a lack of interest, low motivation, limited enthusiasm for new knowledge, reluctance to invest additional effort in novel learning experiences, and difficulty finding personal relevance

or inspiration in the subject. Thus, Psychology-related student issues could be defined as those arising from a lack of perception, motivation, interest, or relevance, and from reluctance to engage with new or demanding learning experiences, which hamper inspiration and enthusiasm towards new learning discoveries.

Validation of the Psychology-related Student issues through literature review:

- i. As articulated by the authors of *Precedents in Architecture*, the epistemological depth of historical understanding that emerges from this mode of inquiry demands a substantially greater scholarly investment than the comparatively superficial engagement entailed in histories limited to the enumeration of names and dates (Clark & Pause, 2021).
- ii. By not considering history as just a form of history but seeing history as a way of generating ideas and meanings, history can actually be used as inspiration for good design practices. Though in most cases, studio courses commence through the research and analyses of different themes, which in many cases also include historical references, in the authors' cases, history is seen as something that sets the context but not as something that inspires the designs (Sewell & Johnston, 2019a; Sewell & Johnston, 2019b).
- iii. As stated by Mohammad Gharipour, who is a member of the Society of Architectural Historians (SAH) Data Project's Advisory Committee, history plays an important role. Mohammad Gharipour says that history is an important aspect of the identity of every current culture. However, in architectural studies, the importance of history has often been overlooked, particularly regarding how historical knowledge has shaped architectural practice (Dreller, 2020). History may help in understanding architectural designs as responses to geography, weather, craftsmanship, and materials informed by indigenous knowledge (Verma & Brar, 2020; Jagatramka et al., 2021).
- iv. According to the author in *How to Look at Architecture*, previous architecture buildings were modern constructions when they came into being. Such buildings need to be evaluated with regard to the thinking that led to them, since this way of thinking continues even now. In studying architectural history, it is necessary to examine the motives and objectives of previous architects rather than the final structures they constructed (Zevi, 1974).
- v. Heritage comes with many different definitions depending on the societies that claim it. It varies because of the different ways in which they relate to the past. The ongoing discussion between the East and West demonstrates the variety in how cultural heritage is defined, understood in relation to past, present, and future generations (Jigyasu & Jigyasu, 2023).
- vi. It would be important for there to be a change in the paradigm when forming the story and the reception of the story by the students of design, especially in the architectural courses (Sinha, 2014).
- vii. In the article *Bricks and Books: Reinventing the Teaching of Architectural History and Theory*, the authors suggest an innovative approach to learning which goes beyond mere assimilation. They underscore the significance of the act of 'making', of being crafters and reflectors in architecture history and theory courses by seeking to enable students to shift from being mere recipients of information to becoming actively involved in the process of learning (Schwaen et al., 2018).

3.6. Curriculum-related Issues

Table 6. Identification of Curriculum-related Issues and Barriers towards History and Design Integration through Literature.

S. No.	Issues & Barriers	Research References
VI.	Curriculum-related Issues	
	The HOA curriculum does not allow integration	Milic & Mitchel, 2021; Patil & Bhatia, 2016; Li, 2018; Hein & van Dooren, 2019; Salama, 2008; Salama, 2015; Hardy & Teymur, 1996
	The Architectural Design curriculum does not allow integration	Saghafi, 2020, Hein & van Dooren, 2019; Gelernter, 1988
	History is too theoretical; its practical aspects are missing, and hence fail to connect to Design, which is a studio/practical subject	Sinha, 2014; Hancock & Kostof, 1986; Hein & van Dooren, 2019
	Most of the History that we study has been written by Western authors who did not have any cultural understanding of the Indian or South Asian environments. Hence, decolonising the HOA syllabus is required	Baweja, 2014; Blackburn & Wu, 2019; Moncrieffe, 2020; Fregoso Bailón & De Lissoyov, 2019; Sharon, 2018; Vlies, 2021; Bozdogan, 1999
	History is taught chronologically, whereas Architectural Design is taught as per built-form typology	Stewart & Wilson, 2008; Hein & van Dooren, 2019; Li, 2018; Saghafi et al., 2015; Kumar, 2018; Mehta, 2006
	The curriculum of HOA & Architectural Design do not relate to each other	Way, 2020a; Way, 2020b; Bendre & Holey, 2022; Ju & Kim, 2021

(source: Authors)

Curriculum issues are structural misalignments in architectural education that limit meaningful connections between architectural history and the architectural design studio. The issues include the separation of theoretical and studio-based subjects, differing pedagogical frameworks, limited opportunities for curricular integration, and the continued reliance on historically dominant narratives that may not adequately represent local and regional perspectives. Curriculum issues may be defined as those arising from the lack of interconnection of history and design within the architectural curriculum, and the continued dominance of curricular structures and historical narratives that do not adequately support contextual and culturally diverse learning.

Validation of the Curriculum-related issues through literature review:

- i. In the research paper, Sir Bannister Fletcher: pillar to post-colonial, “But it was the Fletchers, in their fourth edition of 1901, who formally introduced the Non-Historical Styles. Thus, it is affirmed the classic colonial position of ‘Others’ as being ‘non-historical’ - not just outside history and civilisation, but genetically predetermined to inferiority”, and hence stresses the need to decolonise the syllabus (McKean, 2006).
- ii. The challenges associated with defining specific architectural styles and analysing the transitions between styles represent foundational disciplinary issues within the field of architectural history (Leach, 2010).
- iii. The study of architectural history in India has predominantly focused on formal composition and the chronological development of styles (Sinha, 2014).
- iv. The study, Teaching Global Architectural History, illuminated how global architectural history was being taught worldwide, particularly within accredited architecture programs in the English language. 65% of institutions covered the widest possible historical timeframe, from prehistory to the present day, and 70% of respondents reported organising the course content primarily on a chronological basis (Thompson, 2017).
- v. In classroom settings, architectural history is often detached from cultural, mythological, political, and societal contexts. It is typically presented through a nineteenth-century British scientific framework and categorised into discrete periods with defined stylistic characteristics (Hosagrahar, 2002).
- vi. Teaching of architectural history needs to be reconceptualised as more than just a “knowledge dump” from instructor to student. The focus should be more on the methodological tools to help students read and interpret buildings than on making them memorise lists of buildings and architects. This shift might help reaffirm our value within studio culture in architectural institutions (Littmann Mar, 2021).
- vii. It is suggested that intuitive and creative work conducted in design studios should be complemented by critical analysis. History should be examined not merely as a sequence of facts, but as an experiential process connected to the development of those facts. Similarly, theory should be understood not as an abstract, unchanging principle, but as a framework for interpreting historical events as a system of reciprocal relationships in which each element, whether permanent or temporary, functions in relation to the others (Mehta, 2006).
- viii. Also, this section deals with issues such as the possibility of presenting history through linear chronological narratives or regarding history as an “operative conception of the past” (Morgenthaler, 1995).
- ix. Emergent academic literature provides models through which architectural buildings can be studied over time, and this allows studies which transcend stylistic, cultural, or building types (Essawy, 2017).
- x. There are several assumptions about history – one is that history is just about battles and kings and timelines. Another assumption is the constant inclination to compartmentalise Indian history into three eras – ancient, medieval, and modern history. Such assumptions narrow the scope of understanding of India’s rich and complex past to the point where we cannot appreciate history (Kumar, 2018).
- xi. Going beyond the usual categorisation of the history of styles as the usual means of organising the discipline of architecture, history can be seen as a resource that can add meaning and richness to architectural design (Clark & Pause, 2021). Precedents in Architecture provides a tool for analysing the relationships among architectural works, regardless of era or place, allowing critique to transcend style, culture, or type. Another study emphasises that architecture encompasses much more than its visual aspects or aesthetics (Nath & Sethi, 2024).
- xii. Precedents in Architecture also states that approaching history solely as an academic exercise, either as a means of situating ourselves within a temporal continuum or as a scholarly accumulation of past knowledge, can constrain architects’ understanding to mere names, dates, and stylistic recognition. By examining the interstices and underlying connections between historical styles, history can instead serve as a rich source of inspiration and insight for architectural design.
- xiii. History studied in the academic sense of seeing our place within a continuum, or in the strictly scholarly sense of knowing the past, can limit our knowledge as architects to little more than names, dates, and style recognition. Seeing between and beyond the layers of historical styles, within which architecture is generally categorised and presented, can make history a source of enrichment for architectural design.
- xiv. A study of architecture that disregards its historical context risks producing detrimental outcomes. Therefore, revising the architectural history curriculum should begin with an explicit redefinition of its objectives (Gür & Durmuş, 2015).

3.7. Key Findings

Significant issues and barriers which deter the history and design studio integration were found to be:

- i. Notion of history
- ii. Skill-related and language issues
- iii. Teacher-driven issues

- iv. Teaching methodology-related pedagogical issues
- v. Psychology-related student issues, and
- vi. Curriculum-related issues

Most authors agree that history is underused as a creative resource in the design studio. There is broad agreement that history can most enrich design through local context, typology, climate responsiveness and material culture & continuity. There was strong agreement that there are few curricularly embedded ways to integrate history into the design studio. There is limited pedagogical alignment between history and design courses. Student- and teacher-based notions and psychology also hinder integration. A history-integrated design studio would add more value and enrichment to the design process. Challenges arise from outdated or disconnected teaching methodologies.

4. Discussion

Six literature-backed issues were identified regarding the integration of history and architectural design. The literature highlights gaps in teaching strategies that meaningfully translate historical knowledge into design thinking. The study underscores the need for integrative pedagogical frameworks that position architectural history as an active, interpretative resource within the design studio. The authors insist that integrating architectural history into the architectural design studio will enrich the studio, especially its conceptual narratives in the design process.

The design studio is central to the education of an architect, not only in India, but around the world. And history and theory, even though sometimes termed core, are actually sidelined as supplementary courses. History theory teachers and architectural design teachers operate with different levels of rigour and visual experimentation, making integration difficult without an appropriate pedagogical structure. Curriculum reforms often segregate history into separate silos, and assessments rarely acknowledge history-informed design concepts. A deeper, more framed role for history is suggested by several authors. Some also suggest that history is a design-adjacent discipline that supports more than just typological thinking.

Empirical studies, including student surveys, find that history is highly perceived as relevant in the early years. But the same integration is not visible in the design studios. The same is widely noted in the research literature. Existing research partly attributes the exclusion of history from the design studio to its teachers. The problem of non-integration of history with the design studio is both epistemic and organisational. History theory teachers and design studio teachers often lack shared language and pedagogical aims (Stewart, 2008). Limited time, separate evaluation criteria, and the absence of a requirement for history in the design studio pose significant structural challenges (Joseph et al., 2025). It can be inferred that history is underused as a creative resource in the design studio. There is also broad agreement on contexts in which history can most enrich design, yet few institutes have this embedded in their curricula (Panwar & Sheoran, 2024).

5. Conclusion

The literature reviewed for the study suggests that the challenges and issues associated with teaching and learning the history of architecture and its integration with the design studio extend beyond a single factor and emerge from the interaction of notional, skill-related, teacher-related, teaching methodology-related, student psychology-related, and curricular issues. Throughout the research, a problem is commonly found in the disconnect between the two – architectural history and design studio practice – which hinders the student's ability to see how important their knowledge of history may be in the present design process. It is also important to note that motivation, instructional methodology, visual and experiential learning, and the teacher's ability to make connections play roles in this.

A number of research articles have raised issues with the conventional curriculum, which views history as theoretical rather than practical, in relation to studio-based learning. Current research articles emphasise the need for innovations in pedagogy and curriculum reforms, in which the approach to teaching is expected to integrate both the history of architecture and design education. The literature suggests a need for an educational model that integrates multiple disciplines and encourages active learning by linking history with design education. It should be noted that while the current literature provides detailed explanations of the six problems mentioned, it does not address them as a single interconnected whole.

There is a dire need for integrative pedagogical frameworks that position architectural history as an active, interpretative resource. Moving history from a passive subject to an active tool within the studio context is the need of the day. Bridging the gap requires addressing psychological, notional, pedagogical, curricular, student-related and teacher-related barriers simultaneously. Future research may focus on evaluating integrated teaching frameworks and exploring contextually relevant approaches, including those informed by the diverse and non-Western architectural histories. Also, the issues and barriers could be further categorised as structural, epistemological, and pedagogical frictions and further delved into.

Acknowledgements

The authors have no acknowledgements to declare.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Conflicts of Interest

The author(s) report no conflicts of interest.

Data Availability Statement

All the relevant data is presented in the study. Any other data pertaining to the study is available from the corresponding author upon reasonable request.

Institutional Review Board Statement

Not Applicable

CRedit Author Statement

Corresponding author: Conceptualisation, Methodology, Writing of the original draft. Co-author: Supervising, review & editing. All authors have read and approved the final manuscript.

References

- Abid, N., et al. (2023). Relationships among students' reading habits, study skills, and academic achievement in English at the secondary level. *Frontiers in Psychology*, 14.
- Al-Hamidat, S. A. (2007). The role of architectural representation in enhancing design communication and understanding. *International Journal of Architectural Research*, 1(2), 85–98.
- Amin, I., & Bakhsh, A. (2021). A case study on reading habits of university students. *Journal of Social Sciences Advances*, 2(2), 70–73.
- Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education*, 5(2), 131–154.
- Ardizzola, P. (2013). Architectural design education through history of architecture: The lesson of Bruno Zevi.
- Ardizzola, P. (2018). History will teach us everything: Bruno Zevi and the innovative methodology for future design. *Esempi di Architettura*, 5(1), 5–11. <https://doi.org/10.4399/97888255150531>
- Baker, C. (2016). *Foundations of bilingual education and bilingualism* (6th ed.). Multilingual Matters.
- Barton, K. C., & Levstik, L. S. (2004). *Teaching history for the common good*. Routledge.
- Baweja, V. (2014). A pre-history of green architecture: Otto Koenigsberger and tropical architecture, from princely Mysore to post-colonial London. *Historical Studies in the Natural Sciences*, 44(4), 451–482.
- Bendre, A., & Holey, S. (2022). Integrating architectural history and design studio: A pedagogical framework for architectural education. *International Journal of Architectural Research*, 16(3), 421–438.
- Berg, C., & Berg, C. W. (2019). Why study history? Why study history? An examination of undergraduate students' notions and perceptions about history. <https://www.researchgate.net/publication/335224815>
- Blackburn, W., & Wu, P. (2019). Decolonizing architectural education: Reflections on race, knowledge and curriculum reform. *Charrette*, 6(1), 45–60.
- Bloch, M. (1953). *The historian's craft* (P. Putnam, Trans.). Manchester University Press. (Original work published 1949)
- Boudah, D. J. (2014). *Conducting educational research: Guide to completing a major project*. SAGE Publications.
- Boujaoudeh Khoury, K. (2019). Effective communication processes for building design, construction, and management. *Buildings*, 9(5), 112.
- Bozdoğan, S. (1999). Architectural history in professional education: Reflections on postcolonial challenges to the modern survey. *Journal of Architectural Education*, 52(4), 207–215.
- Brugar, K. A. (2012). Empowering students through history: The Giver as a metaphor and preparation for studying history in the secondary classroom. *The History Teacher*, 46(1), 85–94.
- Brugar, K. A. (2016). Teaching social studies/history to elementary school students through a discipline-specific approach. *Journal of Education*, 196(2), 101–114.
- Bryson, C., & Hand, L. (2007). The role of engagement in inspiring teaching and learning. *Innovations in Education and Teaching International*, 44(4), 349–362. <https://doi.org/10.1080/14703290701602748>
- Burke, P. (2015). *What is the history of knowledge?* Polity Press.
- Carlgren, L., Rauth, I., & Elmquist, M. (2016). Framing design thinking: The concept in idea and enactment. *Creativity and Innovation Management*, 25(1), 38–57.
- Carr, E. H. (1961). *What Is History? (First)*. Vintage, Macmillan
- Chakrabarty, D. (2000). *Provincializing Europe: Postcolonial thought and historical difference*. Princeton University Press.
- Clark, H. & Brody, D. (2009). *Design Studies: A Reader*, Berg Publishers. <https://books.google.co.in/books?id=Zy3Id2S4g6AC>
- Clark, R. H., & Pause, M. (2012). *Precedents in architecture: Analytic diagrams, formative ideas, and partis* (4th ed.). John Wiley & Sons.
- Collingwood, R. G. (1946). *The idea of history*. Oxford University Press.
- Collins, M., & Stearns, P. (2020). *Why Study History? (1st ed.)*. London Publishing Partnership. Retrieved from <https://www.perlego.com/book/1468230/why-study-history-pdf>
- Cross, N. (2006). *Designerly ways of knowing*. Springer. <https://doi.org/10.1162/074793601750357196>
- Cross, N. (2011). *Design Thinking*. Berg Publishing Plc. <https://doi.org/10.5040/9781474293884>
- Crysler, C. G., Cairns, S., & Heynen, H. (Eds.). (2012). *The SAGE handbook of architectural theory*. SAGE.
- Cuff, D. (1991). *Architecture: The story of practice*. MIT Press.
- Cummins, J. (2000). Language, power and pedagogy: Bilingual children in the crossfire. *Multilingual Matters*.
- Dağgöl, G. D. (2013). The reasons of lack of motivation from the students' and teachers' voices. *The Journal of Academic Social Science*, 1(1), 35–45. <https://doi.org/10.16992/ASOS.13>

- Davies, M.L. (2009). *Imprisoned by History: Aspects of Historicized Life* (1st ed.). Routledge. <https://doi.org/10.4324/9780203863107>
- Day, C. (2004). *A passion for teaching*. Routledge Falmer.
- Eiris Pereira, R., & Gheisari, M. (2019). Site visit application in construction education: A descriptive study of faculty members. *International Journal of Construction Education and Research*, 15(2), 83–99. <https://doi.org/10.1080/15578771.2017.1375050>
- Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers & Education*, 59(2), 423–435. <https://doi.org/10.1016/j.compedu.2012.02.001>
- Evans, M., & Aldoy, N. (2016). Designing for creativity: Developing student visualisation and representation skills in architectural education. *International Journal of Art & Design Education*, 35(2), 218–231.
- Fallan, Kjetil. (2010). *Design history: understanding theory and method*. Berg Publishers; Bloomsbury Academic. <https://www.bloomsbury.com/us/design-history-9781847885371/>
- Fregoso Bailón, R., & De Lissovoy, N. (2019). Against the coloniality of knowledge in education: Toward a decolonial curriculum. *Policy Futures in Education*, 17(7), 1002–1015.
- Fried, R. L. (2001). *The passionate teacher: A practical guide*. Beacon Press.
- García-Sánchez, I. M. (2016). *Language and Muslim immigrant childhoods: The politics of belonging*. Wiley-Blackwell.
- Gardner, H. (2006). *The development and education of the mind: The selected works of Howard Gardner*. Routledge.
- Gelernter, M. (1988). Reconciling lectures and studios. *Journal of Architectural Education*, 41(2), 46–52.
- Groat, L., & Wang, D. (2013). *Architectural research methods* (2nd ed.). Wiley.
- Grossman, P. L. (1990). *The making of a teacher: Teacher knowledge and teacher education*. Teachers College Press.
- Gür, Ş. Ö., & Durmuş, S. (2015). Architectural education and the challenges of contemporary design pedagogy. In *Rethinking Architectural Education* (pp. 45–62). Cambridge Scholars Publishing.
- Habraken, N. J. (2006). Questions that will not go away: Some remarks on long-term trends in architecture and their impact on architectural education. *Open House International*, 31(2), 12–22.
- Hadjiyanni, T., & Zollinger, S. A. (2010). Stimulating student interest in design history classes. *International Journal of Art & Design Education*, 29(3), 289–302.
- Hamza AKENGİN, & Meltem Elif CENDEK. (2017). A Study of Students' Opinions About History Subjects in the Social Studies Curriculum. *Journal of Literature and Art Studies*, 7(10). <https://doi.org/10.17265/2159-5836/2017.10.016>
- Hancock, J. E. (1986). Review of *A history of architecture: Settings and rituals*, by S. Kostof. *Journal of Architectural Education*, 39(3), 31–32.
- Hardy, A., & Teymur, N. (1996). *Architectural history and the Studio*. London, Question Press.
- Harris, J. (2018, September 4). Historical disinterest, a values dilemma. <https://www.jonharrismedia.com/historical-disinterest-a-values-dilemma/>
- Hein, C., & van Dooren, E. (2019). Teaching history for design at TU Delft: exploring types of student learning and perceived relevance of history for the architecture profession. *International Journal of Technology and Design Education*, 30(5). <https://doi.org/10.1007/s10798-019-09533-5>
- Hobsbawm, E. J. (1971). From Social History to the History of Society. *Daedalus*, 100(1), 20–45. <http://www.jstor.org/stable/20023989>
- Hosagrahar, J. (2002). *Looking Back, Moving Ahead-History and Modernization Institutional Context: The Birth and Development of Architecture Schools*.
- Howard, J. L., Bureau, J. S., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Perspectives on Psychological Science*, 16(6), 1300–1323.
- Howard, P., Prior, J., & Danenberg, R. (2015). Making history relevant to students by connecting past, present and future: A framework for research. *Journal of Curriculum Studies*, 47(1), 1–23.
- Jadresin Milic, R., & Mitchell, C. (2021). An alternative approach to teaching architectural history: Redrawing the pedagogical boundaries between architectural history and design studio with flexible and blended methods. *FAMagazine: Research and Projects on Architecture and the City*, 56, 50–57. <https://doi.org/10.12838/fam/issn2039-0491/n56-2021/821>
- Ju, S. R., & Kim, M. J. (2021). Interdisciplinary approaches in architectural education: Bridging theory and design studio learning. *Frontiers of Architectural Research*, 10(4), 745–759.
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758–773. <https://doi.org/10.1080/03075079.2011.598505>
- Kaplan, R. B. (1966). Cultural thought patterns in inter-cultural education. *Language Learning*, 16(1–2), 1–20.
- Keller, M. M., Neumann, K., & Fischer, H. E. (2014). Teacher enthusiasm and student learning. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), *International handbook of emotions in education* (pp. 247–264). Routledge.
- Keyvanian, C. (2011). The history of architecture and architectural education. In H. Heynen & J. Crysler (Eds.), *The SAGE handbook of architectural theory* (pp. 560–575). SAGE Publications.
- Klein, J. T. (2010). A taxonomy of interdisciplinarity. In R. Frodeman, J. T. Klein, & C. Mitcham (Eds.), *The Oxford handbook of interdisciplinarity* (pp. 15–30). Oxford University Press.
- Kostof, S. (1985). *A history of architecture: Settings and rituals*. Oxford University Press.
- Kowalczyk, M. W. (2020). Techniques of visual communication in architectural presentation. *Journal of Education, Culture and Society*, 11(1), 376–388.

- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683–706.
- Kumar, K. (2018). Why history matters so much-The Hindu Why history matters so much. <https://mail.google.com/mail/u/0/?ui=2&ik=be7eaa4fc4&jsver=CH...iew=pt&search=inbox&th=1656d0e55143943d&siml=1656d0e55143943dhttps://www.thehindu.com/opinion/lead/why-history-matters-so-much/article24763484.ece>
- Lawson, B. (2006). *How designers think: The design process demystified* (4th ed.). Architectural Press.
- Leach, N. (Ed.). (2010). *Rethinking architecture: A reader in cultural theory* (2nd ed.). Routledge.
- Levstik, L. S., & Barton, K. C. (2015). *Doing History* (L. S. Levstik & K. C. Barton, Eds.). Routledge. <https://doi.org/10.4324/9781315818108>
- Li, Y. (2018). Teaching architectural history in contemporary architectural education: Challenges and opportunities. *Frontiers of Architectural Research*, 7(4), 567–576.
- Liswaniso, B. L., & Mubanga, G. N. (2019). Examining the reading habits of university students. *English Language Teaching Forum*, 16(1), 1–16.
- McInnis, C. (2001). Signs of disengagement? The changing undergraduate experience in Australian universities. Centre for the Study of Higher Education, University of Melbourne.
- McNally, M. J. (2011). *The curriculum of the school of architecture*. Routledge.
- Mignolo, W. D. (2011). *The darker side of Western modernity: Global futures, decolonial options*. Duke University Press.
- Milic, R. J., & Mitchel, C. (2021). An Alternative Approach to Teaching Architectural History: Redrawing the Pedagogical Boundaries between Architectural History and Design Studio with Flexible and Blended Methods. *FAMagazine. Ricerche e Progetti Sull'architettura e La Città*. <https://doi.org/10.12838/fam/issn2039-0491/n0-2021/821>
- Mills, J. E., Treagust, D. F., (2003). Engineering Education, Is Problem-Based or Project-Based Learning the Answer, *Australasian Journal of Engineering Education*, 1-16.
- Moncrieffe, M. L. (2020). *Decolonising the history curriculum: Eurocentrism and primary schooling*. Palgrave Macmillan.
- Mudaly, V., & Singh, K. (2018). Language: A Barrier When Teaching and Learning Business Studies. *Ponte International Scientific Research Journal*, 74(9). <https://doi.org/10.21506/j.ponte.2018.9.4>
- Nguyen, M. P. (2015). The importance of hand sketching and model making in architecture. *The Importance of Hand sketching and Model making in Architecture | MPN + PARTNERS*
- Owusu-Acheaw, M., & Larson, A. G. (2014). Reading habits among students and its effect on academic performance: A study of students of Koforidua Polytechnic. *Library Philosophy and Practice*, 1130, 1–22.
- Özgüleş, M., Kalman, M., Özyurt, M., & Şahin, S. (2020). Exploring student perceptions and experiences of different teaching and learning approaches in architectural history education: A comparative case study. *Learning Environments Research*, 24(2), 243–261
- Palmer, P. J. (2007). *The courage to teach: Exploring the inner landscape of a teacher's life* (10th anniversary ed.). Jossey-Bass.
- Panwar, M., & Sheoran, S. (2024). Analysing the state of Integration of History of Architecture with the Architectural Design in India. In *Innovative Approaches to Cultural Heritage and Sustainable Urban Development: Integrating Tradition and Modernity* (pp. 55–67). Cinius Yayınları. <https://doi.org/10.38027/N5ICCAUA2024IN0399>
- Patil, M., & Bhatia, N. (2016). An integrated pedagogy by emphasizing on history as a part of design studio. *International Journal of Research in Civil Engineering, Architecture & Design*, 4(1), 20–24.
- Patrick, B. C., Hisley, J., & Kempler, T. (2000). “What's everybody so excited about?”: The effects of teacher enthusiasm on student intrinsic motivation and vitality. *The Journal of Experimental Education*, 68(3), 217–236.
- Prangasma, M. E., Van Boxtel, C. A. M., Kanselaar, G., & Kirschner, P. A. (2009). Concrete and abstract visualizations in history learning tasks. *British Journal of Educational Psychology*, 79(2), 371–387.
- Ravitch, D. (2014). Foreword. *Teachers College Record: The Voice of Scholarship in Education*, 116(1), 1-4.
- Richardson, P. W., & Watt, H. M. G. (2010). Current and future directions in teacher motivation research. In T. C. Urdan & S. A. Karabenick (Eds.), *The Decade Ahead: Applications and Contexts of Motivation and Achievement* (Vol. 16A, pp. 139–173). Emerald.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Rüsen, J. (2005). *History: Narration, interpretation, orientation*. Berghahn Books.
- Saghafi, M. R., & Sanders, P. (2020). A comparison study of integrating theoretical and practical components of the architecture education curriculum in Iran and Australia. *International Journal of Architectural Engineering and Urban Planning*, 30(2), 147–157. <https://doi.org/10.22068/ijaup.30.2.147>
- Said, E. W. (1978). *Orientalism*. Pantheon Books.
- Salama. (2008). A Theory for Integrating Knowledge in Architectural Design Education. *Archnet-IJAR: International Journal of Architectural Research*, 2(1), 100–128.
- Salama. (2015). *Spatial Design Education*. In *Spatial Design Education: New Directions for Pedagogy in Architecture and Beyond*. Routledge. <https://doi.org/10.4324/9781315610276>
- Schleppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. Lawrence Erlbaum Associates.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.
- Schön, D. A. (1985). *The design studio: An exploration of its traditions and potentials*. RIBA Publications.

- Scott, D. (2013). Teaching multiple perspectives: An investigation into teacher practice amidst curriculum change. *Canadian Social Studies*, 46(1), 31–43.
- Seixas, P. (Ed.). (2006). *Theorizing historical consciousness*. University of Toronto Press.
- Seixas, P., & Morton, T. (2013). *The big six historical thinking concepts*. Nelson Education.
- Sewell, J. E., & Johnston, A. S. (2019a). Rethinking history in design education through the history of materials. Part - 1. <https://www.platformspace.net/home/rethinking-history-in-design-education-through-the-history-of-materials-part-1>
- Sewell, J. E., & Johnston, A. S. (2019b). Rethinking history in design education through the history of materials. Part - 2. <https://www.platformspace.net/home/rethinking-history-in-design-education-through-the-history-of-materials-part-2>
- Sharma JP. History as a tool kit in architecture, leap conference paper. Baddi: Maharaja Agrasen University; 2016.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4–14.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1–22.
- Silverman, R. D. (2010). Vocabulary development and instruction in young children. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds.), *Handbook of reading research* (Vol. IV, pp. 365–384). Routledge.
- Sinha, A. (2014). Architectural History in India: A Post-Colonial Perspective Envisioning a Resilient Cultural Landscape: Ghats on the Ganga, Varanasi, India View project. <https://www.researchgate.net/publication/280051731>
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029–1038.
- Stearns, P.N. (2016). *Globalization in World History* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315561370>
- Sussman, A., & Hollander, J. B. (2014). *Cognitive architecture: Designing for how we respond to the built environment*. Routledge.
- Suwartono, T., Akter, M., & Lutfiana. (2020). Overseas Students' Language and Culture Barriers towards Acquiring Academic Progress: A Study of Thai Undergraduate Students. *International Journal of Current Science and Multidisciplinary Research*, Volume 3, Issue 04. Case Study.
- Swenarton, M. (1987). The role of history in architectural education. *Architectural History*, 30, 201–213.
- Tarman, B., Kilinc, E., & Aydin, H. (2019). Barriers to the effective use of technology integration in social studies education. *Contemporary Issues in Technology and Teacher Education*, 19(4), 736–753.
- Tomlinson, C. A., & Moon, T. R. (2013). Assessment and student success in a differentiated classroom. ASCD.
- Trowler, V., & Trowler, P. (2010). *Student engagement evidence summary*. York: The Higher Education Academy.
- Van Dooren, E., Boshuizen, H. P. A., Van Merriënboer, J. J. G., Asselbergs, T., & Van Dorst, M. (2014). Making explicit in design education: Generic elements in the design process. *International Journal of Technology and Design Education*, 24(1), 53–71. <https://doi.org/10.1007/s10798-013-9246-8>
- Van Drie, J., & Van Boxtel, C. (2008). Historical reasoning: Towards a framework for analyzing students' reasoning about the past. *Educational Psychology Review*, 20(2), 87–110
- Van Straaten, D., Wilschut, A., & Oostdam, R. (2016). Making history relevant to students by connecting past, present and future: A framework for research. *Journal of Curriculum Studies*, 48(4), 479–502. <https://doi.org/10.1080/00220272.2015.1089938>
- Vlies, R. V. (2021). Decolonising history education: Historical knowledge and curriculum transformation. *History Education Research Journal*, 18(1), 1–15.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Way T. PLATFORM_Why History for Designers_(Part 1), 2020a. <https://www.platformspace.net/home/why-history-for-designers-part-1>
- Way T. PLATFORM_Why History for Designers_(Part 2), 2020b. <https://www.platformspace.net/home/why-history-for-designers-part-2>
- White, H. (1973). *Metahistory: The historical imagination in nineteenth-century Europe*. Johns Hopkins University Press.
- Williams, R. C. (2019). *The historian's toolbox: A student's guide to the theory and craft of history* (4th ed.). Routledge.
- Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education*, 11(3), 167–177. <https://doi.org/10.1177/1469787410379680>
- Zevi, B. (1978). *The modern language of architecture*. University of Washington Press.