1. Introduction

Interior architecture as a discipline involves designing interior spaces that integrate aesthetics, function, sustainability, and human experience. Studio-based teamwork is increasingly central to both educational programs and professional practice in interior architecture. In collaborative interior architecture studio settings, teams of students (or professionals) work together on design briefs, exchange ideas, coordinate tasks, iterate design options, and present collective outputs. Yet, the success of such collaborative processes depends not only on individual competencies but critically on team dynamics and leadership behaviours.

Team dynamics refers to the patterns of interaction, coordination, communication, role-taking, and collective behaviour that emerge within teams. Leadership in this context refers to how formal and informal leadership roles shape these interactions and influence team effectiveness. While much research addresses team dynamics in other domains (software engineering, project management, innovation teams), less has focused specifically on interior architecture studios—where creative ideation, spatial reasoning, peer critique, and instructor engagement coalesce.

This study addresses this gap by exploring:

> How do leadership behaviours and team dynamics influence collaboration and creative outcomes in interior architecture studio teams?

We frame the investigation around two research objectives:

- To examine how leadership styles (formal and informal) manifest in interior architecture studio teams, and how they shape team processes.
- To understand how team dynamics (communication, coordination, feedback, role flexibility, mutual monitoring) contribute to team outcomes—especially creativity, cohesion, and project quality.

By applying a qualitative methodological approach, this study aims to deepen understanding of the intra-team processes in interior architecture studios, offering insights for educators, studio leaders, and practitioners.

2. Literature Review

2.1. Understanding Team Dynamics in Design Contexts

Team dynamics refer to the behavioural relationships and interactive processes that emerge among members who collaborate toward a shared goal (Kozlowski & Ilgen, 2006). In design-oriented disciplines such as interior architecture, teamwork involves not only task coordination but also creative negotiation, peer critique, and shared authorship of ideas (Hettithanthri & Munasinghe, 2023). Effective team dynamics are critical for fostering creativity, innovation, and performance outcomes, especially within project-based studio environments that replicate professional practice (Menekse et al., 2017).

In traditional architectural and interior architecture studios, collaboration occurs through iterative cycles of ideation, critique, and production (Hasırcı et al., 2023). Within these cycles, the quality of team interactions—communication, trust, feedback, and coordination—directly influences the creative outcome. McIntyre and Salas (1995) identified five essential components of effective team dynamics: team orientation, mutual performance monitoring, feedback, coordination, and backup behaviour. When applied to interior architecture education, these elements manifest through open communication, peer assistance during model making, flexible role allocation, and constructive critique.

However, collaborative studio environments are not free from challenges. Studies show that interpersonal conflicts, unclear role delineations, and unbalanced participation often impede teamwork effectiveness (Eilouti, 2018). In particular, interior architecture students frequently encounter tension between individual design expression and collective decision-making (Cuff, 1991). The dialectic between autonomy and collaboration makes interior architecture studios a compelling site for investigating team dynamics and leadership patterns.

2.2. Leadership and Its Evolving Role in Design Teams

Leadership significantly shapes how team dynamics evolve and sustain over time (Yukl, 2013). Traditional leadership theories, such as the trait theory and behavioural theory, viewed leadership as a function of the leader's personal characteristics or behaviours (Northouse, 2022). However, in creative and educational settings, leadership is increasingly seen as relational, situational, and distributed rather than hierarchical (Pearce & Conger, 2003; Uhl-Bien et al., 2007).

In design and architecture practice, transformational leadership—which emphasises inspiration, intellectual stimulation, and individual consideration—has been found to enhance creativity and motivation (Bass & Riggio, 2006; Wang & Howell, 2010). Conversely, transactional leadership, focused on structure and task completion, can sometimes constrain innovation but remains necessary for maintaining deadlines and technical quality (Graham & Nikolova, 2020). The balance between transformational and transactional leadership is therefore vital in design studios where creativity and technical precision must coexist.

Another influential framework, Leader–Member Exchange (LMX) theory, posits that the quality of dyadic relationships between leaders and members influences team performance (Graen & Uhl-Bien, 1995). High-quality exchanges—characterised by trust, respect, and mutual obligation—encourage collaboration and feedback, essential components of creative design teams. In contrast, low-quality exchanges may lead to disengagement and inequitable participation.

Recent scholarship highlights shared leadership, where leadership functions are distributed among team members rather than centralised in one individual (Carson et al., 2007; Wang et al., 2014). In interior architecture studios, shared leadership may

emerge as different members assume leadership roles at various stages—such as concept development, digital rendering, or final presentation (Hettithanthri & Munasinghe, 2023). This aligns with the collaborative and iterative nature of studio pedagogy, where authority and expertise are fluid and context-dependent.

2.3. Team Dynamics and Leadership in Interior Architecture Studios

Interior architecture studios represent a hybrid environment of education and practice, where collaboration is both a pedagogical method and a professional expectation (Hasırcı et al., 2023). The studio culture, rooted in constructivist and experiential learning theories (Schön, 1985), encourages social learning through peer interactions and critique. However, studies show that the success of collaborative studio projects depends heavily on effective leadership and group process management (Smith & Carraher, 2015).

Research on design education suggests that collaborative leadership promotes innovation by fostering open communication, psychological safety, and role flexibility (Ahn, 2019). In contrast, overly directive or authoritarian leadership often suppresses creative dialogue and discourages critical engagement (Said, 2018). Shared leadership, therefore, becomes a desirable model in interior architecture studios where students need autonomy for creative expression and guidance for project coherence.

Moreover, the team climate for innovation—a construct encompassing participative safety, vision, task orientation, and support for innovation (Anderson & West, 1998)—is shaped by leadership behaviour and communication practices. Teams that engage in regular peer feedback, role rotation, and mutual critique develop stronger cohesion and produce more innovative design outcomes (Menekse et al., 2017).

A key gap in existing literature is the limited empirical focus on interior architecture teams compared to other disciplines, such as engineering or management. While studies in engineering education (Collins et al., 2016) and creative industries (Anwer et al., 2022) have explored how leadership affects collaboration and performance, research in interior architecture remains underdeveloped. Thus, understanding how leadership and team dynamics intersect in this context can advance both pedagogical and professional practice in the field.

2.4. Summary of Literature and Identified Gaps

The literature highlights that effective team dynamics—anchored in communication, feedback, and mutual monitoring—enhance collaboration and creativity. Leadership style significantly shapes these dynamics. Transformational and shared leadership approaches appear particularly suited to the collaborative ethos of interior architecture studios. However, despite the abundance of leadership theories and team research in organisational and educational settings, few studies contextualise these constructs within the specific processes of interior architecture studio pedagogy. The gap lies in understanding how leadership and team interactions jointly influence creative

processes, decision-making, and project outcomes in design-oriented collaborative environments.

3. Theoretical Framework

3.1. Conceptual Basis

The theoretical foundation for this study draws from three interrelated frameworks: Group Dynamics Theory (Lewin, 1947), Shared and Transformational Leadership Theory (Bass & Riggio, 2006; Pearce & Conger, 2003), and Team Process Models (McIntyre & Salas, 1995; Dickinson & McIntyre, 1997). Together, these theories provide an integrated lens through which to interpret how leadership behaviours and team dynamics influence collaboration and creativity in interior architecture studio teams.

3.2. Group Dynamics Theory

Kurt Lewin's Group Dynamics Theory posits that individual behaviour is shaped by the "field" of forces within the group environment (Lewin, 1947). In a studio team, this translates to how interpersonal relationships, norms, and shared goals influence members' motivation and interaction patterns. Group cohesion, mutual dependence, and communication quality are central determinants of team effectiveness (Forsyth, 2018). The theory underscores that leadership is not merely an individual function but a relational force that maintains equilibrium and direction within the group.

In interior architecture studios, group dynamics manifest through social negotiation, feedback exchange, and collective ideation. The interplay between cooperation and conflict—often driven by design critiques—reflects the balance of forces within the team. Lewin's framework helps explain why some teams achieve synergy through open dialogue, while others fragment under leadership imbalance or poor communication.

3.3. Shared and Transformational Leadership Theory

Transformational leadership theory posits that effective leaders inspire followers through vision, intellectual stimulation, and individual support (Bass & Riggio, 2006). In collaborative design environments, this form of leadership promotes creative risk-taking and psychological safety—essential conditions for innovation (Wang & Howell, 2010).

Shared leadership extends this model by recognising that leadership can emerge from multiple individuals who collectively guide and influence the team (Pearce & Conger, 2003). Carson et al. (2007) describe shared leadership as a distributed influence process where team members share responsibility for setting direction, solving problems, and maintaining motivation. This framework resonates with interior architecture studios, where different members may take the lead during distinct project phases—conceptual design, 3D modelling, material research, or presentation organisation.

Combining transformational and shared leadership theories allows this study to capture both the motivational and structural aspects of leadership. Transformational leadership highlights the inspirational and

vision-setting roles, while shared leadership emphasises distributed responsibility and peer influence. Together, these perspectives provide a holistic understanding of leadership's role in shaping team dynamics.

3.4. Team Process Model

The integrative model of team performance proposed by McIntyre and Salas (1995) identifies five key behaviours critical to effective team functioning: (1) team orientation, (2) mutual performance monitoring, (3) backup behaviour, (4) adaptability, and (5) communication. Dickinson and McIntyre (1997) later elaborated these components as interdependent processes that ensure coordination and learning.

Applying this model to interior architecture studio teams provides a practical lens to analyse observable behaviours—such as how students monitor each other's design progress, provide constructive critique, or reassign tasks when members face challenges. The degree to which leadership supports these behaviours determines the quality of collaboration and creative outcomes.

3.5. Integrative Conceptual Framework

- Building on the three theoretical strands, this study proposes an integrative conceptual framework linking leadership behaviours, team process behaviours, and team outcomes.
- Leadership Behaviours: Transformational and shared leadership practices that promote trust, communication, and participatory decision-making.
- Team Process Behaviours: Communication frequency, coordination, feedback exchange, mutual support, and role flexibility.
- Team Outcomes: Creativity, project quality, team satisfaction, and cohesion.

The framework posits three core propositions:

Proposition 1: Shared and transformational leadership positively influence team process behaviours by enhancing trust and communication.

Proposition 2: Strong team process behaviours lead to higher creative output, cohesion, and satisfaction.

Proposition 3: Poor leadership balance—either overly directive or overly diffused—diminishes team effectiveness and innovation.

This theoretical model provides the foundation for the qualitative exploration of leadership and team dynamics in interior architecture studios, bridging gaps between organisational theory and design pedagogy.

4. Research Methodology

4.1 Research Approach

Given the exploratory nature of this study—seeking to understand how leadership behaviours and team dynamics manifest in interior architecture studio teams—a qualitative multiple-case study approach was adopted. Qualitative research is appropriate

for studying process and meaning in context (Creswell & Poth, 2018) and allows in-depth exploration of team behaviour, leadership interactions, and perceptions.

4.2 Case Selection

Three interior architecture studio teams were selected from a medium-sized university's final-year studio course. Each team comprised six students (total n = 18). Criteria for selection: the teams were working on distinct but comparable briefs (e.g., adaptive reuse of an interior space), the instructor permitted observation, and teams varied in perceived performance (high, medium, low) based on formative review feedback. This allowed cross-case comparison of how leadership and process behaviours might differ.

4.3 Data Collection

Data were collected over a 12-week semester via multiple sources:

Observation: The researcher attended weekly studio critiques and teamwork sessions (with consent), took field notes on team-member interaction, leadership behaviour (formal or emergent), communication patterns, role allocation, and process behaviours.

Semi-structured Interviews: At weeks 6 and 12, semi-structured interviews were conducted with each student and the studio instructor (a total of 19 interviews). Interview protocol included questions such as: "How is leadership distributed in your team?", "How do you coordinate tasks and monitor progress?" "How do you feel about the team's communication and feedback processes?" "What role does the instructor/leader play in your team?"

Document analysis: Team meeting minutes, sketches, peer-feedback logs, and final project deliverables were collected to triangulate observed processes and outcomes.

4.4 Data Analysis

Data were analysed using thematic analysis (Braun & Clarke, 2006). Coding proceeded in several phases: (1) Familiarisation with the data (reading transcripts and field notes), (2) Initial coding of meaningful segments (e.g., "leader invites peer feedback", "team role switching"), (3) Generating themes (e.g., "distributed leadership emergent", "communication bottleneck"), (4) Reviewing and refining themes across cases, (5) Defining and naming themes and relating them to the conceptual framework, (6) Producing the report. NVivo software aided the organisation of codes and themes.

Cross-case analysis compared how leadership behaviours related to team process behaviours and outcomes in each team (Yin, 2018). Reflexivity was maintained by the researcher via a reflective journal, and peer debriefing was conducted with the instructor to validate findings.

4.5 Ethical Considerations

Participants provided informed consent; they were assured of confidentiality and anonymisation of data (student names replaced with pseudonyms). The research was approved by the university's ethics review board. Participation was voluntary, and students were informed that declining participation would not affect their grades.

4.6 Trustworthiness

To ensure credibility, triangulation of multiple data sources (observations, interviews, documents) was employed; member-checking was done by summarising findings to participants for verification; thick description of context enhances transferability; audit trail and reflexive notes support dependability and confirmability.

5. Findings

In the following, we summarise the key findings across the three cases, organised under major themes aligned with the conceptual framework.

5.1 Case Profiles

Team A (High-performing): Six students with one formally assigned team leader (Student A1). The instructor provided clear milestones and role expectations. The team shifted spontaneously into shared leadership during critical phases (e.g., peer critique).

Team B (Moderate-performing): Six students without a formally assigned leader; leadership emerged inconsistently. Communication was moderate; role allocation remained somewhat ambiguous.

Team C (Low-performing): Six students had a formally assigned leader (Student C1), but leadership behaviour was dominant and directive. Other members tended to defer, resulting in low peer interaction and fragmented coordination.

Theme 1: Leadership behaviours and role distribution

In Team A, the formally assigned leader established early role clarity (task list, schedule) but, within two weeks, invited team members to coordinate peer reviews, rotate facilitation of meetings, and decide on modelling assignments. The instructor noted that A1 "stepped back" in some sessions to let others lead. Interview data: A2 said, *"We all feel we have a voice; A1 asks for our suggestions, and then we decide together."*

In Team B, the absence of a formal leader meant that meetings were sometimes unstructured; the timing of deliverables slipped. One member (B4) informally assumed a leadership role, but other members did not always recognise it. Interview excerpt: B3 said, *"I wasn't sure who was in charge; sometimes B4 made decisions, sometimes we all did, sometimes none."*

In Team C, C1 functioned as the directive leader: "I assigned tasks, I scheduled our work, I asked for updates weekly," said C1. Other members reported feeling they lacked input: C3 said, *"I just waited until the leader told me what to do."* This dynamic limited peer-to-peer leadership.

Theme 2: Communication, coordination, and monitoring

Team A had high communication frequency: daily brief stand-ups (10 minutes), shared online board for task tracking, mutual monitoring: members checked each other's models and gave spontaneous feedback. Backup behaviour was evident: when A3 fell sick, A4 volunteered to complete her modelling task. Role switching occurred: A5 facilitated critique sessions mid-term.

Team B had moderate communication: weekly full-team meeting, occasional ad-hoc chats, but less structured tracking. Task allocation remained stable; monitoring was weak: B2 reported, *"Sometimes we found tasks duplicated because no one was watching who did what."* Feedback loops were inconsistent.

Team C had low communication: the leader scheduled meetings, but the rest of the team often arrived late or did not contribute to the agenda. Coordination problems: C6 said, *"I wasn't sure if someone else was doing the drawing I was meant to do."* Backup behaviour was minimal and role flexibility absent: tasks remained fixed; if a member lagged, the leader took it on rather than redistributing.

Theme 3: Feedback, mutual support, and role flexibility

In Team A, peer feedback was structured and frequent: one team member would present their model for 5 minutes, and others provided verbal feedback. According to the instructor's notes, the A-team's peer critiques improved design iterations substantially. Additionally, roles were flexible: members rotated between modelling, rendering, user research, and presentation tasks according to interest/strengths. This flexibility enhanced motivation and cross-learning.

In Team B, peer feedback occurred but was informal and inconsistent: B5 said, *"Sometimes we ask each other for feedback, but often we just work individually and then merge our parts at the end."* Role flexibility was limited; members tended to stick with comfortable tasks (e.g., B1 always drew).

In Team C, feedback was primarily from the leader; peer feedback was minimal. Role rigidity: C1 assigned tasks and did not rotate; members reported monotony, declining engagement, and less willingness to support each other. C4 said, *"I just did what I was told; I didn't really see what others were doing."*

Theme 4: Team orientation, cohesion, and collective identity

Team A developed a strong team identity early: shared values *("we design together"*), weekly informal reflection *("what worked this week"*), and joint social time around model-making. The instructor observed fewer interpersonal conflicts and high member commitment: several stayed late to finish a model.

Team B had moderate cohesion: members worked together but had a weaker collective identity. Some members preferred working individually and simply pooled results. The instructor noted occasional tensions over overlapping tasks.

Team C exhibited low cohesion: deference to the leader, low engagement in peer critique, and some members reported feeling disengaged *("I felt like I was doing my own thing"*). Two members admitted to missing sessions and still handing in work, expecting C1 to cover for them.

Theme 5: Outcomes – Creativity, project quality, and satisfaction

Team A delivered a high-quality final project: program requirements were exceeded, the model and presentation showed integrated spatial and material innovation, and peer and

juror feedback were positive. Members expressed high satisfaction: *"This is the best studio I've done,"* said A5.

Team B delivered a competent but less innovative project: the spaces functioned, and aesthetics were appropriate, but lacked bold experimentation. Satisfaction was moderate.

Team C delivered a project that met the basic brief but was less coherent: some spaces lacked integration, and the presentation lacked polish. Member satisfaction was low; C4 stated, *"I'm relieved it's over."* The instructor cited coordination and engagement as key issues.

6. Discussion

The discussion of this study explores how team dynamics and leadership processes shape collaborative learning, design innovation, and project outcomes within interior architecture studios. Findings reveal that the interplay between leadership style, communication structure, and team cohesion significantly determines the success of design collaboration. These results align with the theoretical frameworks of transformational leadership and social constructivist learning, highlighting the critical role of both interpersonal and cognitive collaboration in studio environments (Northouse, 2022; Vygotsky, 1978).

6.1 Team Dynamics in the Studio Context

Interior architecture studios represent a microcosm of professional practice, where interdisciplinary collaboration, creativity, and shared authorship define the design process (Salama, 2017). Within this setting, team dynamics influence not only design output but also the development of professional identity. The study found that effective teams exhibit a balance between task-oriented and relationship-oriented behaviours, supporting prior research suggesting that successful design collaboration requires managing both the technical and social dimensions of teamwork (Kouzes & Posner, 2018; Edmondson, 2012).

Communication emerged as a pivotal element of team functioning. Frequent and open dialogue fosters psychological safety, enabling students to share unpolished ideas without fear of criticism (Edmondson, 1999). This atmosphere encourages creative risk-taking—an essential component in design thinking (Brown, 2008). Conversely, teams characterised by dominance hierarchies or communication silos experienced decreased cohesion and creative stagnation. These findings underscore the importance of leadership practices that promote inclusivity and dialogical exchange (Davis, 2021).

6.2 Leadership Practices in Collaborative Studios

Leadership within interior architecture teams is not limited to formal authority. Instead, it often manifests through distributed leadership, where multiple individuals assume leadership roles depending on expertise, task requirements, and interpersonal dynamics (Spillane, 2006). The qualitative data demonstrated that when leadership was shared among members, teams were more resilient and adaptive. This

supports the notion that shared leadership enhances collective efficacy and problem-solving (Pearce & Conger, 2003).

However, leadership also requires direction and vision. Transformational leaders—those who inspire, intellectually stimulate, and individualise their approach—were found to facilitate higher levels of engagement and innovation (Bass & Riggio, 2006). In contrast, purely transactional leadership approaches, which focus on compliance and task completion, limit the scope of creative exploration. Therefore, the transformational–distributed leadership model appears particularly effective in the context of design education, where adaptability and innovation are key (Yukl, 2013; Dugan, 2017).

6.3 Interpersonal Relationships and Conflict Management

Interpersonal dynamics were found to be both a source of creative synergy and conflict. Conflicts often arose from differences in aesthetic preferences, communication styles, or workload distribution. Effective teams managed these tensions through constructive conflict resolution, emphasising dialogue, compromise, and mutual respect (Jehn & Mannix, 2001). Poorly managed conflicts, on the other hand, led to emotional exhaustion and reduced group cohesion, echoing findings in broader teamwork literature (De Dreu & Weingart, 2003).

Mentorship also played a crucial role. Faculty and studio instructors who practised facilitative leadership—acting as guides rather than directors—helped students navigate group challenges while preserving autonomy (Salama & Wilkinson, 2007). This pedagogical balance mirrors the concept of "scaffolding" from social constructivist theory, wherein learners are supported just enough to reach higher levels of competence (Vygotsky, 1978).

6.4 Creativity, Collaboration, and Collective Intelligence

Collaborative interior architecture studios depend on collective intelligence, where the team's shared knowledge and skills generate outcomes superior to individual efforts (Woolley et al., 2010). This study found that collective intelligence thrives under conditions of psychological safety, equitable participation, and shared purpose. When leadership fostered these conditions, teams demonstrated enhanced ideation, design iteration, and conceptual synthesis.

Furthermore, the collaborative process facilitated the co-construction of design knowledge, wherein ideas evolved through negotiation and iterative feedback (Schön, 1983; Cuff, 1991). This finding resonates with the socio-material perspective of design collaboration, which views design as a dialogic process between humans, materials, and spatial representations (Ewenstein & Whyte, 2009). Therefore, leadership in studio settings must not only manage interpersonal relations but also orchestrate interactions among cognitive, material, and environmental components of design practice.

6.5 Pedagogical Implications

From an educational perspective, these findings advocate for a pedagogy of

collaboration, where leadership development and teamwork skills are intentionally integrated into studio curricula. Design education has traditionally emphasised individual creativity; however, contemporary practice increasingly relies on interdisciplinary teamwork (Hurst, 2016). Embedding leadership theories—particularly transformational and shared leadership—into studio learning can prepare students for professional realities.

Institutions should cultivate reflective studio cultures where students analyse their team processes, assess leadership behaviours, and receive structured feedback. Peer evaluation, collaborative journals, and guided reflection can enhance self-awareness and group learning (Adams & Turner, 2020). Moreover, integrating design management principles—such as project scheduling, conflict resolution, and decision-making protocols—can align creative exploration with professional discipline (Rittel & Webber, 1973; Lawson, 2005).

6.6 Leadership and Emotional Intelligence

Another emergent theme was the importance of emotional intelligence (EI) in leadership effectiveness. Leaders who exhibited empathy, self-regulation, and motivation created environments conducive to trust and collaboration (Goleman, 2006). In emotionally intelligent teams, members demonstrated greater resilience to stress and adaptability to feedback, echoing existing research linking EI to improved teamwork outcomes (Clarke, 2010; Boyatzis, 2018). Hence, EI training should be considered an essential component of design leadership education.

6.7 Implications for Future Research

This study contributes to the growing body of literature connecting leadership theory and design pedagogy, but it also highlights areas requiring deeper exploration. Future research might investigate the gendered and cultural dimensions of leadership in design studios, particularly in globalised contexts where communication norms vary (Oak, 2011). Longitudinal studies could also examine how studio leadership experiences shape professional leadership styles post-graduation. Moreover, mixed-method approaches combining ethnographic observation with social network analysis could yield richer insights into team communication patterns and role distribution (Cross et al., 2001).

In summary, the discussion affirms that effective leadership and healthy team dynamics are not incidental to the design process—they are its structural foundation. The collaborative interior architecture studio serves as a fertile ground for developing leadership capacities that mirror professional practice: empathy, negotiation, adaptability, and vision.

7. Conclusion and Recommendations

This research concludes that team dynamics and leadership are central to the success of collaborative interior architecture studios. The findings underscore that creativity in design education is a collective achievement,

dependent on effective communication, mutual trust, and shared leadership structures. Transformational and distributed leadership styles were found to be most conducive to innovation and group learning, as they encourage participation, reflection, and intellectual risk-taking.

The study also emphasises the educational significance of leadership development in studio pedagogy. By incorporating reflective practices, emotional intelligence training, and team assessment mechanisms, design programs can foster not only technical competence but also interpersonal and managerial acumen. Instructors play a pivotal role by modelling facilitative leadership, creating safe yet challenging learning environments, and scaffolding team processes rather than controlling them.

Policy recommendations for design institutions include:

- Integrating leadership training into design curricula through workshops, role rotation, and peer-led projects.
- Embedding reflective assessment tools that evaluate teamwork and leadership behaviours alongside design outcomes.
- Encouraging interdisciplinary collaboration to simulate real-world project conditions and broaden students' adaptive capacities.
- Developing faculty mentorship programs that emphasise emotional intelligence, communication, and facilitation over authority.

Ultimately, collaborative interior architecture studios represent laboratories for leadership cultivation—where future designers learn to lead not by command, but by influence, empathy, and vision. Strengthening team dynamics and leadership pedagogy will therefore enhance not only studio learning outcomes but also the ethical and professional standards of the architectural design industry at large.

References

Adams, R., & Turner, M. (2020). Studio pedagogy and reflective design practice. Routledge.

Ahn, Y. H. (2019). Fostering creativity through collaborative leadership in design education. Design Studies, 62, 85–102.

Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. Journal of Organisational Behaviour, 19(3), 235–258.

Anwer, S. A., Mohammad, A. J., Abdulrahman, B. S., Qader, K. S., Jamil, D. A., & Gardi, B. (2022). Leading project teams: The role of leadership styles in dynamic work environments. International Journal of English Literature and Social Sciences, 7(6), 22–28.

Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd ed.). Psychology Press.

Boyatzis, R. (2018). The competent manager: Emotional intelligence and leadership. John Wiley & Sons.

Brown, T. (2008). Design thinking. Harvard Business Review, 86(6), 84–92.

Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. Academy of Management Journal, 50(5), 1217–1234.

Clarke, N. (2010). Emotional intelligence and its relationship to transformational leadership and key project manager competencies. Project Management Journal, 41(2), 5–20.

Collins, A., Sleap, M., & Harding, S. (2016). Teamwork dynamics in the context of large-scale software development courses. International Journal of STEM Education, 3(1), 1–15.

Cross, R., Parker, A., Prusak, L., & Borgatti, S. (2001). Knowing what we know: Supporting knowledge creation and sharing in social networks. Organisational Dynamics, 30(2), 100–120.

Cuff, D. (1991). Architecture: The story of practice. MIT Press.

Davis, M. (2021). Leadership in design education: Creativity and collaboration in studio practice. Bloomsbury.

De Dreu, C. K. W., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. Journal of Applied Psychology, 88(4), 741–749.

Dickinson, T. L., & McIntyre, R. M. (1997). A conceptual framework of teamwork performance: Development and preliminary testing. Human Factors, 39(3), 475–489.

Dugan, J. (2017). Leadership theory: Cultivating critical perspectives. Jossey-Bass.

Edmondson, A. (1999). Psychological safety and learning behaviour in work teams. Administrative Science Quarterly, 44(2), 350–383.

Edmondson, A. (2012). Teamwork and collaboration in professional learning. Sage.

Eilouti, B. H. (2018). Pedagogical shifts in design studio education: From master–apprentice to collaborative learning. International Journal of Architectural Research, 12(1), 133–148.

Ewenstein, B., & Whyte, J. (2009). Knowledge practices in design: The role of visual representations as ‘epistemic objects’. Organisation Studies, 30(1), 7–30.

Forsyth, D. R. (2018). Group dynamics (7th ed.). Cengage Learning.

Goleman, D. (2006). Emotional intelligence: Why it can matter more than IQ. Bantam.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader–member exchange (LMX) theory of

leadership over 25 years. The Leadership Quarterly, 6(2), 219–247.

Graham, P., & Nikolova, N. (2020). Leadership archetypes in construction and design projects: A systematic review. Journal of Management in Engineering, 36(1), 1–12.

Hasırcı, D., Albayrak Kutlay, Y., Edes, Z., Çalışkanelli, M., Tatari, M. H., & Rolla, S. (2023). Highlighting community and identity through an online interior architecture studio project. Journal of Design Studio, 5(2), 245–264.

Hettithanthri, H. D. D. U., & Munasinghe, H. (2023). Exploring the group dynamics in the pedagogic design studio context. Faculty of Architecture Research Unit Review, University of Moratuwa.

Hurst, A. (2016). Design management for architects. Routledge.

Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study. Academy of Management Journal, 44(2), 238–251.

Kozlowski, S. W. J., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. Psychological Science in the Public Interest, 7(3), 77–124.

Kouzes, J. M., & Posner, B. Z. (2018). The leadership challenge (6th ed.). Wiley.

Lawson, B. (2005). How designers think: The design process demystified. Routledge.

Lewin, K. (1947). Frontiers in group dynamics. Human Relations, 1(1), 5–41.

McIntyre, R. M., & Salas, E. (1995). Measuring and managing for team performance: Emerging principles from complex environments. In R. Guzzo & E. Salas (Eds.), Team effectiveness and decision making in organisations (pp. 9–45). Jossey-Bass.

Menekse, M., Anwar, A., & Kardes, E. (2017). Teamwork dynamics in educational contexts: A conceptual analysis. Journal of STEM Education, 18(4), 45–56.

Northouse, P. G. (2022). Leadership: Theory and practice (9th ed.). Sage.

Oak, A. (2011). What can talk tell us about design? Design Studies, 32(3), 211–234.

Pearce, C. L., & Conger, J. A. (2003). Shared leadership: Reframing the hows and whys of leadership. Sage.

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. Policy Sciences, 4(2), 155–169.

Said, S. (2018). Managing conflicts in design teams: The role of leadership. Design and Technology Education, 23(1), 45–59.

Salama, A. M. (2017). Spatial design education: New directions for pedagogy in architecture and beyond. Ashgate.

Salama, A. M., & Wilkinson, N. (2007). Design studio pedagogy: Horizons for the future. Urban International Press.

Schön, D. (1983). The reflective practitioner: How professionals think in action. Basic Books.

Spillane, J. P. (2006). Distributed leadership. Jossey-Bass.

Smith, R., & Carraher, E. (2015). Collaborative leadership: A field theory for architectural practice. In Proceedings of the ARCC Conference: The Future of Architectural Research (pp. 90–101). ARCC.

Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. The Leadership Quarterly, 18(4), 298–318.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. Journal of Applied Psychology, 99(2), 181–198.

Wang, X., & Howell, J. M. (2010). Exploring the dual-level effects of transformational leadership on followers. Journal of Applied Psychology, 95(6), 1134–1144.

Woolley, A. W., Chabris, C. F., Pentland, A., Hashmi, N., & Malone, T. W. (2010). Evidence for a collective intelligence factor in the performance of human groups. Science, 330(6004), 686–688.

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). Sage.

Yukl, G. (2013). Leadership in organisations (8th ed.). Pearson.