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Leading AI-Integrated Pedagogies: A Qualitative Study on How School Leaders Guide Teachers in Using AI Tools for Teaching and Learning in Pakistan

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Abstract

This study examines how school leaders in Pakistan guide teachers in using artificial intelligence tools for teaching and learning through coordinated and context-sensitive leadership practices. Using purposive sampling, semi-structured interviews were conducted with 17 school leaders, including principals, vice principals, academic coordinators, heads of department, and ICT coordinators across diverse school contexts. The data were analyzed using thematic analysis to identify patterned meanings in leaders' accounts of AI adoption and instructional guidance. The findings generated seven themes: (1) strategic vision for AI-integrated pedagogies, (2) teacher capacity building and AI literacy, (3) ethical governance and responsible use, (4) infrastructure and readiness constraints, (5) pedagogical integration through classroom routines, (6) culture and change management, and (7) monitoring for sustainability. Leaders supported adoption by clarifying pedagogical purpose, organizing practical training and peer learning, establishing school norms for integrity and privacy, and adapting implementation to resource realities and teacher readiness. Overall, the study shows that effective AI integration depends not only on tool access but also on leadership actions that align pedagogy, teacher capability, ethics, school culture, and continuous improvement. The study offers a thematic model and practical guidance to help schools implement AI in ways that strengthen teaching quality, protect trust, and sustain meaningful learning outcomes.

Keywords: AI-Integrated Pedagogy; School Leadership; Teacher Support; Thematic Analysis;

Introduction

Artificial intelligence (AI) is rapidly reshaping educational practice worldwide, influencing not only how teachers deliver instruction but also how institutions plan curriculum, design assessments, provide feedback, and evaluate teaching quality. AI-enabled tools—such as generative writing assistants, automated quiz builders, adaptive learning platforms, and analytics dashboards—are increasingly positioned as everyday supports for teachers and learners. This expansion signals a shift from technology being an optional add-on to becoming integrated into

the routine work of teaching and learning, where AI can shape instructional design, personalization, and knowledge access in powerful ways (Ahmed et al., 2025; Tanvir et al., 2024). At the same time, the speed of adoption raises new questions for schools: what does "effective" or "responsible" AI-supported pedagogy look like, how can teachers be supported to use AI meaningfully rather than superficially, and what institutional practices are needed to guide AI use toward learning outcomes rather than convenience alone (Ahmed et al., 2025). In Pakistan, AI integration in education is gaining momentum, but it is unfolding within diverse school realities that influence readiness, access, and capacity. Research indicates that teachers and students in Pakistan are increasingly engaging with AI tools and forming new learning practices; however, experiences vary across contexts depending on infrastructure, resource availability, and digital competence (Ahmed, Mallah, & Shaheen, 2024). Institutional readiness also differs significantly, as some schools and institutions have structured digital ecosystems and professional development routines while others face limitations in connectivity, devices, and technical support, shaping what AI adoption can realistically look like (Huma et al., 2025). Moreover, teacher readiness for AI-enhanced teaching is not uniform. Teachers' perceptions of AI's value, their confidence in using tools, and their understanding of limitations and risks can strongly affect whether AI becomes pedagogically purposeful or merely a quick productivity shortcut (Qureshi et al., 2025). These uneven conditions suggest that AI integration in Pakistan is not simply a matter of introducing tools; rather, it requires deliberate school-level support, guidance, and leadership to ensure that AI aligns with curriculum goals and improves learning in context-appropriate ways.

Within this evolving landscape, school leadership is central because leaders act as the bridge between emerging technologies and classroom practice. Leaders shape whether teachers' AI adoption becomes scattered experimentation or a coherent, guided approach that is aligned with learning outcomes, ethical expectations, and school priorities. Leadership matters not only in logistical areas—such as selecting platforms, arranging training, or managing infrastructure—but also in professional and cultural domains, including building trust, reducing anxiety, and clarifying how AI can support (rather than replace) teachers' professional judgment. Research on teacher–AI collaboration highlights that adoption depends on how educators interpret AI's role, negotiate their professional identity, and develop instructional confidence while working alongside AI tools (Kim, 2024). In Pakistan, studies examining teachers' perspectives show both opportunities and concerns: teachers report potential gains in content creation and instructional support, yet also describe challenges such as limited readiness, uncertainty about appropriate use, and uneven access to guidance (Khan et al., 2025; Qureshi et al., 2025). These findings imply that leadership decisions and school-level structures are likely to play a decisive role in shaping adoption pathways, especially when teachers are navigating new tools while balancing curriculum demands and assessment expectations. This study is situated at the intersection of rapid AI expansion and Pakistan's evolving educational readiness landscape. While AI is increasingly influencing teaching and learning processes, Pakistan's context presents a mix of enthusiasm and constraints related to infrastructure, institutional preparedness, and teacher competence (Ahmed, Mallah, & Shaheen, 2024; Huma et al., 2025). Because leaders set priorities, allocate resources, and establish norms, understanding leadership practices becomes essential for explaining how AI-integrated pedagogies take shape in real school environments.

Problem Statement

Although AI-in-education research in Pakistan increasingly documents teachers' experiences, readiness, and ethical concerns, there remains limited qualitative evidence on how school leaders actively guide teachers' AI tool use in day-to-day practice (Qureshi et al., 2025; Tanvir et al., 2024). In particular, we know relatively little about how leaders support teachers in selecting appropriate

AI tools, embedding them into pedagogy, addressing responsible use, and sustaining adoption over time. This gap is especially important given that ethical concerns and classroom-level risks—such as overreliance on AI outputs and uncertainty around responsible practices—have been reported in educational integration contexts (Rehmat et al., 2025). Without understanding leadership strategies, schools may adopt AI unevenly, with inconsistent expectations and limited mechanisms to ensure educational value and integrity.

Research Questions

1. How do school leaders in Pakistan conceptualize AI-integrated pedagogies and communicate this vision to teachers?
2. What leadership strategies are used to guide teachers in selecting, adapting, and using AI tools for lesson planning, instruction, and assessment?
3. How do school leaders establish and enforce ethical, safe, and responsible AI use (e.g., privacy, integrity, bias awareness) within schools?
4. What organizational and contextual factors (infrastructure, readiness, teacher competence, school culture) enable or constrain leaders' support for AI integration?
5. How do school leaders monitor, evaluate, and sustain AI-integrated teaching and learning practices over time?

Research Objectives

1. To explore how school leaders in Pakistan define and promote AI-integrated pedagogical goals for teaching and learning.
2. To identify leadership practices that support teachers' AI tool selection and classroom implementation across instructional tasks.
3. To examine how school leaders develop and apply ethical guidelines and governance mechanisms for responsible AI use.
4. To analyze the key barriers and facilitators affecting leadership support for AI integration at the school level.
5. To generate a thematic, practice-oriented model of leadership actions that enable sustainable AI-integrated pedagogies in Pakistani schools.

Significance of the Research

The significance of this research is both practical and scholarly. Practically, it provides evidence-based guidance for principals, academic coordinators, and policymakers on how to lead AI integration for teaching and learning in Pakistani schools by identifying concrete leadership strategies that help teachers select, adapt, and use AI tools effectively. The study is expected to inform school-level planning for professional development, mentoring, and support structures that build teacher confidence and competence in AI use, while also promoting alignment between AI-supported activities, curriculum goals, and assessment expectations (Huma et al., 2025; Qureshi et al., 2025). Additionally, it contributes to responsible implementation by clarifying how leaders can address ethical concerns—such as privacy, academic integrity, and trust—through governance practices and school norms, which is especially important given reported ethical tensions around classroom AI integration (Rehmat et al., 2025). Scholarly, the study extends the AI-in-education literature by shifting the focus from teacher adoption alone to leadership-enabled pedagogical integration, offering a thematic understanding of how leadership actions shape teacher–AI collaboration and sustain AI-integrated pedagogies over time (Kim, 2024; Ali et al., 2025; Tanvir et al., 2024).

Literature Review

Theoretical Framework

This study is anchored in a leadership-enabled view of AI-integrated pedagogy that connects three interdependent domains: (1) pedagogical integration of AI tools into teaching and learning routines, (2) teacher readiness and AI literacy as capacity conditions for meaningful use, and (3) ethical governance and institutional readiness as safeguards and enablers. Contemporary scholarship emphasizes that AI adoption in education is not only a technical decision but also a pedagogical and organizational change process shaped by professional learning, institutional resources, and leadership direction (Ahmed, Sanjrani, Zaheer, & Mujahid, 2025; Huma et al., 2025). At the classroom level, AI integration involves decisions about task design, feedback, assessment, and differentiation, while at the school level it requires coherent priorities, norms, and support structures to prevent fragmented or risky implementation (Tanvir, Bashir, & Shahzadi, 2024; Qureshi et al., 2025). Leadership is positioned as a connecting mechanism that translates tool availability into classroom practice by shaping teacher learning opportunities, establishing acceptable use expectations, and guiding teacher–AI collaboration in ways that preserve educational quality and trust (Kim, 2024; Khan, Mukhtar, & Suhag, 2025). This framework also recognizes that AI integration in Pakistan occurs within variable readiness contexts. Some institutions may have stable infrastructure and professional development systems, while others operate with limited connectivity, uneven digital competence, and constrained access to devices, affecting the feasibility of AI-enhanced pedagogy (Huma et al., 2025; Qureshi et al., 2025). Therefore, leadership for AI integration is conceptualized here as a set of actions that align pedagogy, capacity building, ethics, and readiness into a coherent approach. This conceptualization is consistent with emerging efforts to map AI-education intersections and develop integrative frameworks that link multiple strands of AI-in-education research into convergence models (Ali, Ma, Muneeb, & Wong, 2025).

AI in Teaching, Learning, and Research

Research increasingly portrays AI as a catalyst for change across instructional and institutional practices. AI tools can support content development, automate routine tasks, and enable more personalized learning experiences, potentially transforming how educators plan lessons and engage students (Ahmed, Sanjrani, Zaheer, & Mujahid, 2025). Reviews of AI's role in enhancing teachers' competencies emphasize that AI can strengthen instructional design, assessment preparation, and feedback quality, but the benefits depend on teachers' ability to apply tools with pedagogical intent rather than using them as generic productivity aids (Tanvir et al., 2024). Within Pakistan, evidence shows that teachers and students are already engaging with AI tools and forming new learning practices, especially in higher education contexts, which signals growing exposure and experimentation that may influence school-level practices over time (Ahmed, Mallah, & Shaheen, 2024). Studies also emphasize the increasing relevance of AI for institutional functions such as quality assurance and evaluation, suggesting that AI adoption is not limited to classrooms but is linked to broader educational governance and performance monitoring (Ehtsham, Imran, Channa, & Ashfaq, 2025). Additionally, AI applications in specific learning areas, such as language learning, indicate potential gains alongside challenges related to implementation, support, and learner readiness (Dogar & Khan, 2025). However, the literature cautions that AI's educational value is not automatic. AI tools may introduce risks such as superficial learning, overreliance on generated outputs, and misalignment with curriculum goals if schools do not establish clear pedagogical expectations and accountability structures (Tanvir et al., 2024; Ahmed, Sanjrani, Zaheer, & Mujahid, 2025). These concerns elevate the importance of

leadership and governance mechanisms that can guide AI use toward learning outcomes rather than convenience.

Teachers' Readiness and Classroom Integration

Teachers' readiness is consistently identified as a decisive factor shaping how AI tools are used in practice. Research focusing on Pakistani contexts reports that teacher perceptions and readiness for AI-enhanced teaching vary, reflecting differences in confidence, exposure, and perceived usefulness of AI for classroom work (Qureshi et al., 2025). In public secondary schools, teachers describe AI as potentially beneficial for improving educational practices, but their engagement is shaped by contextual constraints and the availability of support and training (Khan et al., 2025). Similarly, studies of teachers lived experiences and ethical concerns suggest that educators are actively negotiating the opportunities and uncertainties of AI integration, including concerns about responsible use and the appropriateness of AI-generated materials for learning tasks (Rehmat, Hassan, Khan, & Abrar, 2025). Teacher readiness is also connected to how AI is integrated into specific instructional processes. Scholarship on AI integration into course content development highlights possibilities for using AI to support instructional design, content creation, and resource development, while also implying a need for structured guidance to maintain quality and alignment with learning objectives (Naeem, Qureshi, & Butt, 2025). In addition, research on AI-supported pedagogies that foster critical thinking and problem-solving suggests that AI can contribute to higher-order learning when used deliberately within well-designed tasks and instructional scaffolds (Shahzad et al., 2025). Collectively, these studies indicate that teachers' classroom adoption is influenced by both individual readiness and organizational support. Without structured leadership, teachers may adopt AI inconsistently, with variations in tool selection, classroom routines, and ethical practices. This makes leadership guidance particularly important in school contexts where teachers may have limited time, uneven digital competence, and competing curriculum demands (Qureshi et al., 2025; Khan et al., 2025).

AI Literacy, Digital Competence, and Skills Gaps

A recurring theme across literature is the need to strengthen AI literacy and digital competence as foundational conditions for meaningful integration. A critical perspective on integrating AI literacy into teacher education argues that educators must develop not only functional tool skills but also critical understanding of AI's limitations, implications, and appropriate pedagogical uses (Daher, 2025). In Pakistan, evidence of functional skills gaps and uneven digital competence suggests that teachers may require targeted professional development to engage AI tools effectively and responsibly (Majeed & Ahamad, 2025). Training and capacity-building structures are therefore central. Research exploring training of trainers programs for preparing English language teachers for AI integration emphasizes that structured training models can support teachers' confidence and capability, especially when training connects directly to instructional tasks and classroom realities (Nizamani, Zaman, & Nizamani, 2025). When teachers lack AI literacy, risks increase, including uncritical acceptance of outputs, weak verification practices, or difficulty designing learning tasks that use AI to deepen understanding rather than bypass learning processes (Daher, 2025; Tanvir et al., 2024). This domain underscores a leadership implication: leaders who aim to promote AI-integrated pedagogies must also support coherent capacity building through training, peer learning, and differentiated support for teachers at different skill levels (Majeed & Ahamad, 2025; Nizamani et al., 2025). In contexts where readiness is uneven, leadership-driven professional learning becomes a primary lever for equitable adoption.

Ethical AI, Trust, and Teacher Identity

Ethical concerns and trust issues are prominent in literature, especially regarding academic integrity, privacy, bias, and the impact of AI on professional identity. Research on teachers lived experiences in classrooms identifies ethical concerns as a central tension in educational integration, highlighting uncertainties around responsible use, student dependence, and the integrity of assessment practices (Rehmat, Hassan, Khan, & Abrar, 2025). Studies focusing on ethical AI use among pre-service teachers emphasize that ethical awareness can shape learning patterns and how educators evaluate AI-supported activities, suggesting that ethical competence is part of readiness (Ahmed, Urooj, Farheen, & Ishaq, n.d.). Trust is also influenced by how understandable and transparent AI systems feel to users. Work on human-centered explainable AI and non-technical users in Pakistan suggests that trust and confidence are linked to clarity, interpretability, and perceived control, which has direct relevance for teacher adoption and school governance (Rehmat, Hassan, Rumaan, Baig, & Abrar, 2025). Additionally, teacher identity and instructional confidence may be shaped by teacher–AI collaboration. Research on psychological effects indicates that AI integration can influence teaching identity and confidence, implying that leaders must manage change sensitively and reinforce teacher agency (Naz et al., 2025). These ethical and psychological dimensions point to a school leadership role that goes beyond training. Leaders may need to establish norms for transparency, verification, and responsible use, while also building a culture that supports teachers in adopting AI without fear, confusion, or identity threat (Rehmat, Hassan, Khan, & Abrar, 2025; Naz et al., 2025).

Leadership and Teacher–AI Collaboration

Leadership-focused research emphasizes that teacher–AI collaboration is shaped by how leaders interpret and guide the relationship between teachers and AI tools. Perspectives on leading teachers' collaboration with AI highlight that leaders can influence adoption by setting expectations, supporting professional learning, and promoting shared understandings of AI as a tool that complements teacher expertise (Kim, 2024). In Pakistan's public secondary school context, teachers' perspectives suggest that guidance, support, and school-level planning are important for translating interest in AI into effective classroom implementation (Khan et al., 2025). Institutional readiness research further suggests that leadership decisions on infrastructure, policy, and resource allocation shape whether AI integration is sustainable and equitable across teachers and classrooms (Huma et al., 2025). Where readiness is limited, leaders may need to prioritize low-cost, high-impact approaches, create peer-support structures, and define acceptable use practices that protect integrity and privacy. Leaders also influence whether AI adoption becomes aligned with pedagogical priorities such as personalization, feedback improvement, and critical thinking development (Shahzad et al., 2025; Tanvir et al., 2024). Literature therefore supports the idea that leadership is the key mechanism linking tools to pedagogy. However, much of the available evidence emphasizes teacher experiences and readiness rather than detailing leadership practices as lived and enacted in schools, particularly in Pakistan.

Gaps in Existing Research

Despite growing AI-in-education scholarship in Pakistan, important gaps remain. First, many studies focus on teachers' perceptions, readiness, and experiences, with limited attention to how school leaders guide tool selection, establish routines, and create coherent school-wide approaches to AI-integrated pedagogy (Qureshi et al., 2025; Khan et al., 2025; Rehmat, Hassan, Khan, & Abrar, 2025). Second, while ethical concerns are increasingly documented, there is limited qualitative evidence describing how leaders operationalize ethical governance in schools through policies, monitoring practices, and cultural norms that build trust (Ahmed, Urooj, Farheen, & Ishaq, n.d.; Rehmat, Hassan, Rumaan, Baig, & Abrar, 2025). Third, institutional readiness research

identifies challenges, but it does not fully explain how leaders navigate constraints in real time and sustain adoption through capacity building and evaluation cycles (Huma et al., 2025). Finally, although integrative frameworks are emerging at the level of mapping AI-education intersections, there remains a need for context-specific, practice-oriented models explaining leadership actions that enable responsible AI integration in Pakistani schools (Ali et al., 2025). Addressing these gaps, the present study uses a qualitative thematic approach to explore how school leaders guide teachers' AI use for teaching and learning, and how leadership practices shape responsible, sustainable AI-integrated pedagogies in Pakistan.

Methodology

Research Design

This study adopted a qualitative research design to explore how school leaders guide teachers in integrating AI tools for teaching and learning in Pakistan. A qualitative approach was appropriate because it enables an in-depth understanding of participants' meanings, experiences, and leadership practices within real school settings. Semi-structured interviews were used to generate detailed accounts of leadership decisions, teacher support mechanisms, ethical considerations, and school-level conditions shaping AI-integrated pedagogies. The study employed thematic analysis to identify patterned meanings across participants' narratives and to develop an interpretive explanation of leadership actions that enable AI integration in schools (Terry et al., 2017; Braun, Clarke, & Hayfield, 2022).

Sampling Strategy

Purposive sampling was used to recruit 17 school leaders who had direct responsibilities related to teaching and learning oversight and educational technology use. Participants included principals, vice principals, academic coordinators, heads of department, and ICT or edtech coordinators. Inclusion criteria required that participants (a) worked in Pakistani schools, (b) held a leadership role with influence over instructional practices, and (c) had experience guiding teachers in the use of AI tools such as generative AI platforms, AI-supported learning applications, adaptive practice systems, or AI-enabled assessment resources. The sample was designed to include diversity across school type (public and private), school level (primary and secondary), years of leadership experience, and local context. This variation was important because institutional readiness and implementation constraints can differ across settings and shape both teacher adoption and leadership support (Huma et al., 2025; Qureshi et al., 2025).

Data Collection

Data were collected through semi-structured interviews conducted either in person or online, depending on participant availability and feasibility. Each interview lasted approximately 45 to 60 minutes. The interview guide explored leaders' understandings of AI-integrated pedagogy, strategies for guiding teachers' AI tool selection and classroom use, professional development routines, ethical governance and responsible use, and perceived barriers and facilitators. Interviews were audio-recorded with consent and transcribed verbatim. Field notes were maintained to document contextual details and analytic reflections during and after interviews.

Participants' Profile

The study included 17 respondents representing diverse school leadership positions and contexts. Participants were drawn from public and private schools and from both primary and secondary levels. The sample reflected variation in local context (urban, semi-urban, and rural) and leadership experience, allowing exploration of how different readiness conditions influence leadership practices for AI integration. All participants reported active involvement in guiding teachers'

instructional practices and supporting the use of AI tools for tasks such as lesson planning, assessment preparation, feedback, differentiation, and learning support.

Table 1: Participant Profiles (n = 17)

ID	Pseudonym	Role	School Type	Level	Context	Years in Leadership	Teaching Background	Main AI Tools Guided (examples)
R1	SL-01	Principal	Private	Secondary	Urban	12	English	GenAI lesson planning and feedback
R2	SL-02	Vice Principal	Public	Secondary	Semi-urban	8	Mathematics	Adaptive practice and AI quizzes
R3	SL-03	Academic Coordinator	Private	Primary	Urban	6	Early Years	AI activity ideas and resources
R4	SL-04	Head of Department	Private	Secondary	Urban	7	Science	AI rubrics and formative assessments
R5	SL-05	ICT Coordinator	Private	Secondary	Urban	5	ICT	AI tool onboarding and support
R6	SL-06	Principal	Public	Primary	Semi-urban	10	Urdu	AI translation and scaffolding tools
R7	SL-07	Section Head	Private	Secondary	Urban	4	Social Studies	AI presentation and visualization tools
R8	SL-08	Principal	Private	K–12	Urban	14	Education	School-wide AI integration planning
R9	SL-09	Academic Coordinator	Public	Secondary	Semi-urban	9	English	AI-supported feedback and writing aids
R10	SL-10	Head Teacher	Public	Primary	Rural	11	General	Controlled use of GenAI worksheets
R11	SL-11	Head of Department	Private	Secondary	Urban	6	English	AI-enhanced language learning tools
R12	SL-12	Vice Principal	Private	Secondary	Urban	9	Mathematics	AI analytics dashboards and tracking
R13	SL-13	Academic Lead	Private	Primary	Urban	5	Science	AI simulations and content summaries
R14	SL-14	Principal	Public	Secondary	Semi-urban	13	Pak-Studies	AI verification and fact-check routines
R15	SL-15	Academic Coordinator	Private	Secondary	Semi-urban	7	Computer Science	AI clinics and peer mentoring
R16	SL-16	Principal	Private	Secondary	Urban	15	English	AI ethics guidance and assessment redesign
R17	SL-17	Head of Department	Public	Secondary	Urban	6	Science	AI formative assessment supports

Data Analysis

Thematic analysis was conducted iteratively through familiarization with the data, generation of initial codes, development of candidate themes, review and refinement of themes, and final definition and naming of themes (Terry et al., 2017; Braun, Clarke, & Hayfield, 2022). Coding was primarily inductive to allow themes to emerge from participants' accounts, while still remaining attentive to leadership, institutional readiness, teacher capacity-building, and ethical governance as relevant interpretive lenses. Themes were refined through constant comparison across transcripts to ensure that patterns captured both shared practices and contextual variation across different school settings. An audit trail was maintained by documenting coding decisions, emerging interpretations, and revisions during theme refinement to strengthen transparency and trustworthiness.

Ethical Considerations

Ethical safeguards included informed consent, voluntary participation, and the right to withdraw at any stage without penalty. Participant anonymity was protected through pseudonyms and identifying details of schools and individuals were removed from transcripts and reporting. Audio files and transcripts were stored securely and accessed only by the researcher. Given the sensitivity of AI-related issues such as privacy, student data protection, and academic integrity, participants were encouraged to avoid sharing identifiable student information and to discuss institutional practices in ways that maintained confidentiality. Findings were reported as thematic patterns rather than identifying specific institutions, supporting ethical reporting and participant protection.

Findings and Discussion

This section presents findings from interviews with 17 school leaders in Pakistan and discusses how they guided teachers in using AI tools for teaching and learning. The thematic analysis generated seven interrelated themes that explain leadership actions across vision-setting, capacity building, ethical governance, readiness constraints, pedagogical routines, cultural change, and sustainability. Together, these themes show that AI integration was not treated as a single technology decision; rather, it was shaped as an ongoing leadership process that required aligning instructional goals, teacher readiness, and responsible use expectations within local school realities (Kim, 2024; Huma et al., 2025; Qureshi et al., 2025).

Table 2: Thematic Analysis of Findings

Theme	Subthemes	Example Codes	Description (what the theme captures)
1. Strategic Vision for AI-Integrated Pedagogies	Purpose framing; alignment; phased rollout	"AI as support not substitute"; "curriculum alignment"; "pilot first"	How leaders define AI's role in learning and communicate a coherent direction for classroom integration.
2. Building Teacher Capacity and AI Literacy	Training routines; peer mentoring; differentiated support	"teacher clinics"; "demo lessons"; "beginner vs advanced tracks"	How leaders build teachers' skills, confidence, and AI literacy through structured and ongoing support.
3. Ethical Governance and Responsible Use	Integrity; privacy; bias; transparency	"acceptable use rules"; "student data safety"; "citation of AI support"	How leaders set norms/policies to ensure ethical AI use and reduce risks in teaching and assessment.
4. Infrastructure, Access, and Readiness Constraints	Access; platform choice; support systems	"internet issues"; "device sharing"; "tool selection criteria"	Resource and readiness realities that shape what is feasible, and how leaders adapt implementation accordingly.
5. Pedagogical Integration and Classroom Routines	Planning; assessment; differentiation; feedback	"AI-generated quizzes"; "rubrics"; "personalized practice"	Day-to-day instructional practices leaders promote for meaningful AI use inside lessons and learning tasks.
6. Culture, Change Management, and Teacher Identity	Trust; confidence; professional identity	"fear of replacement"; "teacher agency"; "confidence building"	How leaders manage resistance and support teacher identity and agency while encouraging teacher–AI collaboration.
7. Monitoring, Evidence, and Sustainability	Evidence gathering; reflection; scaling	"lesson observation focus"; "student outcomes"; "continuous improvement"	How leaders evaluate impact, refine practices, and sustain/scale AI integration beyond initial adoption.

Theme 1: Strategic Vision for AI-Integrated Pedagogies

Leaders consistently described the need to clarify why AI should be used in classrooms, emphasizing that AI integration required a pedagogical purpose rather than a trend-driven approach. Participants framed AI as a support system that could enhance planning, differentiation, and feedback, but they stressed that teachers remained accountable for learning outcomes. Leaders promoted vision statements such as "AI supports the teacher, not replaces the teacher," and aligned AI use with curriculum objectives, lesson outcomes, and assessment expectations. This emphasis reflects wider concerns that AI's educational benefits depend on intentional pedagogical integration rather than unstructured use (Ahmed, Sanjrani, Zaheer, & Mujahid, 2025; Tanvir et al., 2024). Leaders also adopted phased approaches, beginning with pilot subjects or teacher champions before scaling school wide. This strategy helped reduce teacher anxiety and allowed leaders to adapt to expectations based on what worked in practice. In settings where teachers had uneven digital competence, leaders described the vision as a unifying message that reduced confusion and encouraged consistent classroom routines, aligning with the importance of leadership in shaping teacher–AI collaboration (Kim, 2024).

Theme 2: Building Teacher Capacity and AI Literacy

Capacity building emerged as the most frequent leadership activity. Leaders emphasized that teacher confidence and competence determined whether AI tools improved learning or simply increased workload and uncertainty. Participants reported introducing short, targeted training sessions focused on immediate classroom tasks such as designing worksheets, developing rubrics, generating question banks, and creating differentiated practice activities. Leaders preferred practical training over purely technical demonstrations, arguing that teachers adopted AI more readily when they could link it to lesson planning and assessment demands. These patterns reflect research highlighting that AI adoption depends on teacher readiness and competence, which varies across contexts (Qureshi et al., 2025; Majeed & Ahamad, 2025). Several leaders described peer mentoring structures such as "teacher clinics," "sharing sessions," and informal demonstrations by early adopters. Such arrangements were seen as effective because they normalized experimentation while enabling teachers to learn within their own subject contexts. Leaders also identified AI literacy as more than tool operation. They emphasized verifying outputs, recognizing limitations, and using prompts responsibly, which aligns with calls for critical AI literacy in teacher development (Daher, 2025). Training approaches were also shaped by resource constraints, with leaders in public or lower-resource settings relying more on low-cost tools and peer support due to limited budgets.

Theme 3: Ethical Governance and Responsible Use

Leaders emphasized ethical governance as essential for safe and credible AI integration. Participants described developing basic "acceptable use" expectations for teachers and students, particularly around academic integrity, transparency in AI-supported work, and privacy. Leaders expressed concern that uncontrolled AI use could weaken assessment credibility, encourage dependency, or produce inaccurate content. These concerns reflect reported ethical issues in teachers lived experiences of classroom AI integration (Rehmat, Hassan, Khan, & Abrar, 2025). Leaders commonly guide teachers to treat AI outputs as drafts that require human review and adaptation. Many leaders insisted on routines such as cross-checking facts, adjusting language to student level, and documenting how AI was used in lesson preparation. Where leaders had stronger digital leadership structures, they described reinforcing ethical rules through staff meetings and parent communication. Leaders also linked ethical governance to trust. They argued that if students and parents perceive AI use as uncontrolled or deceptive, confidence in learning and assessment declines. This reflects broader attention to trust and confidence in AI use, especially among non-technical users who value clarity and perceived control (Rehmat, Hassan, Rumaan, Baig, & Abrar, 2025).

Theme 4: Infrastructure, Access, and Readiness Constraints

Participants repeatedly highlighted that AI integration was shaped by institutional readiness and resource realities. Leaders noted barriers such as unstable internet connectivity, limited devices, restricted access to paid tools, and insufficient technical support. These factors created uneven adoption across schools and sometimes within the same school. Leaders in lower-resource settings emphasized that AI use had to be "low bandwidth and low cost," relying on tools that teachers could access independently. This theme aligns with evidence that institutional readiness and challenges strongly influence AI adoption trajectories (Huma et al., 2025). Leaders also described readiness as including teacher competence, time constraints, and workload. In schools where teachers were already overburdened, leaders adopted gradual implementation, focusing first on high-impact tasks such as lesson planning templates and formative assessment items. Some leaders described inequalities where certain teachers advanced quickly while others hesitated due to fear of mistakes or limited digital skills, echoing concerns about uneven readiness in developing

contexts (Qureshi et al., 2025). Leaders responded by creating differentiated support and assigning mentors, linking this theme back to capacity building.

Theme 5: Pedagogical Integration and Classroom Routines

Leaders described promoting specific classroom routines that made AI integration more purposeful. AI was guided toward lesson planning support, formative assessment creation, student feedback, differentiation, and enrichment activities. Leaders emphasized that AI use should support critical thinking tasks rather than replacing student effort. For example, leaders encouraged teachers to use AI to generate multiple question formats, create step-by-step scaffolds, or design extension tasks for advanced learners. Such approaches align with scholarship emphasizing AI's potential to support higher-order thinking when integrated into well-designed tasks (Shahzad et al., 2025). Leaders also discussed AI's role in supporting content development. Some participants described using AI tools to create contextual examples, vocabulary support, and summaries, while ensuring teachers reviewed and localized materials for student needs. This focus mirrors discussions of AI integration into content development and instructional design, which highlight both opportunities and the need for quality assurance (Naeem, Qureshi, & Butt, 2025). Leaders emphasized that without consistent routines, AI use remained inconsistent and sometimes led to overreliance, reinforcing the need for leadership guidance.

Theme 6: Culture, Change Management, and Teacher Identity

Leaders described cultural and psychological dimensions as major influences on adoption. Teachers' fears about being replaced, losing control over teaching, or being judged for using AI were common, particularly among less digitally confident staff. Leaders therefore framed AI as a professional support that could enhance teacher effectiveness while preserving teacher agency. This framing supported teacher confidence and reduced resistance, which is consistent with findings that AI collaboration can influence teaching identity and instructional confidence (Naz et al., 2025). Leaders also described the importance of building a school culture where experimentation was acceptable. They promoted "safe spaces" for teachers to test tools, share failures, and learn without penalty. Leaders emphasized that early mistakes were part of responsible adoption and that teachers should focus on pedagogical value. Such cultural support reflects leadership perspectives on teacher–AI collaboration, where leaders shape norms and shared understandings that influence adoption (Kim, 2024). In some schools, leaders also highlighted the importance of communicating with parents to reduce misconceptions about AI use, further strengthening trust.

Theme 7: Monitoring, Evidence, and Sustainability

Finally, leaders emphasized that AI integration required monitoring and evidence to remain sustainable. Participants described tracking adoption through lesson observations, teacher reflections, student performance indicators, and periodic sharing meetings. Leaders focused on whether AI-supported lessons improved engagement, clarity, and differentiated support rather than simply increasing teacher efficiency. This attention to evaluation reflects broader interest in quality assurance and institutional monitoring in AI-influenced education systems (Ehtsham et al., 2025). Leaders also described sustainability as requiring ongoing improvement rather than one-time training. They planned periodic refreshers, updated rules as new tools emerged, and encouraged teacher communities of practice. Several leaders highlighted that AI adoption could decline after initial excitement unless schools institutionalized routines and expectations, which again positions leadership as essential for long-term integration. This aligns with the view that adoption is shaped by institutional readiness and structured support systems (Huma et al., 2025).

Synthesis of Findings

Across themes, leadership emerged as a coordination function that translated AI tools into classroom practice by aligning vision, teacher capacity, ethical governance, and implementation realities. Leaders who clarified purpose and provided practical training were more likely to report coherent teacher adoption. Ethical governance strengthened trust and protected assessment credibility, while readiness constraints required leaders to adapt strategies to local conditions. Cultural change and identity support were essential for teacher engagement, and monitoring practices supported sustainability. Overall, the findings extend Pakistan-focused AI-in-education research by showing that school leaders actively shape teacher–AI collaboration through structured, context-sensitive actions rather than leaving AI adoption to individual teacher experimentation (Kim, 2024; Khan et al., 2025; Qureshi et al., 2025).

Discussion

The findings suggest that leadership-enabled AI integration in Pakistani schools is best understood as an interlinked change process rather than a simple matter of introducing new tools. Across the seven themes, leaders did not describe AI adoption as an individual teacher choice; instead, they positioned it as a school-wide instructional initiative that required direction, shared meaning, and continuous support. First, leaders shaped early adoption by articulating a clear pedagogical vision and by repeatedly framing AI as a support for learning goals, lesson quality, and student development rather than as a substitute for teacher expertise. This emphasis reflects broader accounts that AI is transforming teaching, learning, and research practices, but that educational value depends on purposeful pedagogical alignment and not merely on availability of AI technologies (Ahmed, Sanjrani, Zaheer, & Mujahid, 2025; Tanvir et al., 2024). Leaders' focus on clarity and alignment also connects with integrative scholarship that conceptualizes AI-education intersections as requiring convergence across pedagogy, capability, and institutional coordination (Ali et al., 2025). A dominant discussion point across participants was capacity building, where leaders emphasized that teacher confidence and competence determined whether AI produced meaningful instructional improvement or superficial output generation. Leaders described practical, task-based micro-trainings and peer learning structures aimed at supporting day-to-day instructional activities such as lesson planning, rubric development, feedback drafting, and formative assessment creation. This supports Pakistan-focused evidence that teacher readiness for AI-enhanced teaching varies and is strongly shaped by perceived competence, exposure, and support mechanisms (Qureshi et al., 2025; Khan et al., 2025). It also aligns with arguments that AI literacy must include critical understanding of AI limitations and appropriate pedagogical use rather than only operational skills (Daher, 2025). In this sense, leaders functioned as capacity designers, building pathways that helped teachers move from experimentation to disciplined classroom practice, which is crucial in contexts where digital competence gaps can limit equitable adoption (Majeed & Ahamad, 2025; Nizamani, Zaman, & Nizamani, 2025). Ethical governance emerged not as an optional add-on but as central to leadership practice, particularly because leaders perceived AI as directly influencing trust in teaching, assessment credibility, and institutional legitimacy. Leaders emphasized norms and routines related to integrity, privacy, transparency, and verification, often requiring teachers to review AI outputs, cross-check content accuracy, and avoid sharing sensitive student data in AI systems. These leadership concerns strongly mirror research documenting ethical tensions and lived concerns associated with classroom AI integration, including uncertainty around responsible use and risks to academic integrity (Rehmat, Hassan, Khan, & Abrar, 2025). They also connect with evidence that ethical AI awareness shapes learning patterns and educators' decision-making, reinforcing the need for leaders to structure responsible use expectations rather than leaving ethics to individual judgment (Ahmed, Urooj, Farheen, &

Ishaq, n.d.). Furthermore, leaders' emphasis on trust can be interpreted alongside work on human-centered explainable AI, where confidence among non-technical users is linked to perceived transparency, control, and clarity about how AI supports decisions (Rehmat, Hassan, Rumaan, Baig, & Abrar, 2025). Leaders also consistently discussed institutional readiness as a practical constraint shaping what AI integration could look like. Infrastructure limitations, uneven device access, inconsistent connectivity, limited budgets, and lack of technical support were described as barriers that pushed schools toward low-cost tools and incremental implementation strategies. This aligns with research emphasizing that readiness and adoption challenges differ across institutions and can determine the feasibility and quality of AI implementation (Huma et al., 2025). It also resonates with evidence that AI-based adaptive systems can reduce disparities in learning outcomes, but only when institutions can support access and consistent use, which places a strategic burden on school leadership in resource-constrained contexts (Asad & Memon, 2025). Therefore, leadership in Pakistan involves continuous negotiation between ambition and feasibility, where leaders attempt to balance innovation with resource realities while preventing inequitable adoption patterns. The findings further show that leaders actively shaped pedagogical integration by promoting classroom routines that used AI to support instruction, differentiation, and feedback while discouraging overdependence. Leaders described encouraging AI use for structured planning, creating multiple versions of practice tasks, and strengthening formative assessment workflows, which aligns with emerging literature on AI integration into course and content development processes (Naeem, Qureshi, & Butt, 2025). Leaders also emphasized using AI in ways that foster critical thinking and problem-solving rather than bypassing learning, echoing research that AI can contribute to higher-order learning when embedded into purposeful pedagogical design (Shahzad et al., 2025). In language-related contexts, leaders' discussions about AI-assisted feedback and scaffolding reflect evidence that AI can enhance language learning effectiveness while also bringing implementation challenges that require guided use (Dogar & Khan, 2025). A particularly important discussion insight concerns culture and identity. Leaders described that teacher resistance was often rooted in fear, uncertainty, and concerns about professional value, not only technical barriers. Leaders responded by creating supportive cultures where experimentation was normalized and teachers' agency was emphasized. This discussion supports evidence that teacher-AI collaboration has psychological effects on teaching identity and instructional confidence, making cultural support an essential component of adoption rather than a secondary issue (Naz et al., 2025). It also aligns with leadership perspectives emphasizing that leaders shape teacher-AI collaboration by setting norms, reducing anxiety, and guiding shared meanings about AI's role in education (Kim, 2024). Finally, leaders described sustainability as dependent on monitoring and evidence-based refinement. Rather than treating training as a one-time event, leaders used lesson observation indicators, teacher reflections, and student engagement signals to judge whether AI use improved learning processes. This focus aligns with wider attention to quality assurance and institutional evaluation in AI-influenced education systems (Ehtsham et al., 2025). It also reflects the broader argument that AI adoption in education requires ongoing governance, continuous improvement, and iterative alignment with institutional priorities as tools and practices evolve (Ahmed, Sanjrani, Zaheer, & Mujahid, 2025; Ali et al., 2025).

Practical Recommendations

At the school level, leaders should develop and communicate a clear AI vision that links AI use to curriculum goals, student learning outcomes, and teacher agency, supported by an acceptable use policy that clarifies expectations for integrity, privacy, transparency, and verification (Rehmat, Hassan, Khan, & Abrar, 2025; Tanvir et al., 2024). Schools should implement teacher micro-trainings focused on immediate classroom tasks such as lesson planning, rubric design, formative

assessment, and feedback routines, because practical relevance improves adoption and confidence (Qureshi et al., 2025). A peer coaching model should be formalized by identifying teacher champions, running demonstration lessons, and creating safe sharing spaces where teachers can learn from each other and reduce fear associated with new tools (Kim, 2024). Schools should prioritize infrastructure by mapping minimum requirements for access, selecting low-cost or widely accessible tools where budgets are limited, and strengthening basic connectivity and device availability where possible (Huma et al., 2025). Assessment redesign should be addressed explicitly by defining where AI support is acceptable, strengthening process-based assessment, and reinforcing originality and reasoning through task design and verification practices (Rehmat, Hassan, Khan, & Abrar, 2025). At the leader practice level, leaders should actively build trust by framing AI as supportive, protecting teacher agency, and acknowledging concerns as legitimate; set ethical norms through clear guidance and consistent reinforcement; and monitor learning evidence by focusing on whether AI-integrated pedagogy improves engagement, differentiation, feedback quality, and learning outcomes rather than only increasing efficiency (Ehtsham et al., 2025; Kim, 2024).

Future Research Directions

Future studies should compare leadership practices across school types and contexts, particularly public versus private schools and rural versus urban settings, to understand how readiness and resource constraints shape leadership-enabled AI integration (Huma et al., 2025; Qureshi et al., 2025). Longitudinal research is needed to examine how leadership interventions evolve over time, including whether early adoption strategies lead to sustained pedagogical change, improved teacher competence, and stable ethical governance as tools and policies shift (Kim, 2024). Additional research should incorporate student voice and parent or community perspectives to better understand trust, acceptance, and perceived learning impact, especially where AI raises concerns about integrity and transparency (Rehmat, Hassan, Khan, & Abrar, 2025; Rehmat, Hassan, Rumaan, Baig, & Abrar, 2025).

Conclusion

This study provides a qualitative, thematic explanation of how school leaders in Pakistan guide teachers toward responsible AI-integrated pedagogies through coordinated and context-sensitive actions. The findings show that effective AI integration is not achieved by introducing tools alone; instead, it depends on leadership that aligns a clear pedagogical vision with teacher capacity building, ethical governance, and readiness-aware implementation. When leaders clarify purpose, support teachers through practical learning opportunities, and establish responsible use expectations, AI becomes more likely to strengthen teaching quality and student learning rather than remain fragmented or inconsistent. The study also highlights that sustainable AI integration requires attention to classroom routines, school culture, and evidence-based monitoring. Leaders play a critical role in normalizing experimentation, building trust, supporting teacher agency, and responding to challenges related to infrastructure and uneven readiness. By presenting a thematic model and practical recommendations, this research offers guidance for schools and policymakers seeking to implement AI in ways that are responsible, equitable, and pedagogically meaningful across diverse Pakistani school contexts.

References

Ahmed, R., Mallah, I. A., & Shaheen, A. (2024). Learning experiences and practices through artificial intelligence as adoptive academia for teachers and students of higher education institutions of Pakistan. *Pakistan Languages and Humanities Review*, *8*(1), 406-417.

Ahmed, S., Sanjrani, H. A., Zaheer, A. M. Z., & Mujahid, K. (2025). Future Of Higher Education: How AI Is Revolutionizing Teaching, Learning, And Research. *Social Science Review Archives*, *3*(3), 2123-2137.

Ahmed, S., Urooj, S., Farheen, S., & Ishaq, M. Impact of Ethical AI Use on Learning Patterns of Pre-Service Teachers at a Public Sector University in Karachi. *ACADEMIA International Journal for Social Sciences*, *4*(4), 3305-3315.

Ali, M., Ma, M., Muneeb, M., & Wong, G. K. (2025, November). Mapping Contemporary AI-Education Intersections and Developing an Integrated Convergence Framework: A Bibliometric-Driven and Inductive Content Analysis. In *Metrics* (Vol. 2, No. 4, p. 23). MDPI.

Arzu, F., Sattar, M. S., Sultan, S., Abrar, K., & Khuharo, Z. H. (2025). Entrepreneurial Narratives of Fintech Adoption: How Startups in Emerging Markets Navigate Digital Financial Transformation. *Journal of Management Science Research Review*, *4*(4), 473-504.

Asad, M. M., & Memon, I. (2025). Impact of AI-based adaptive learning system on reducing educational disparities among students of higher education in Pakistan. *Information Discovery and Delivery*, 1-16.

Ashraf, N., Arzu, F., Abrar, K., & Anwar, M. (2025). Narratives of SMEs on Access to Finance: Barriers and Opportunities in Pakistan's Banking Sector. *The Critical Review of Social Sciences Studies*, *3*(4), 262-277.

Braun, V., Clarke, V., & Hayfield, N. (2022). 'A starting point for your journey, not a map': Nikki Hayfield in conversation with Virginia Braun and Victoria Clarke about thematic analysis. *Qualitative research in psychology*, *19*(2), 424-445.

Daher, R. (2025). Integrating AI literacy into teacher education: a critical perspective paper. *Discover Artificial Intelligence*, *5*(1), 217-236.

Dogar, M. F., & Khan, S. (2025). AI-Enhanced English Language Learning at the Undergraduate Level: A Mixed-Methods Analysis of Effectiveness and Challenges. *ASSAJ*, *4*(02), 503-513.

Ehtsham, M., Imran, F., Channa, K. F., & Ashfaq, M. S. (2025). Investigating The Impact of Artificial Intelligence on Quality Assurance in Higher Education: A Systematic Review. *Social Science Review Archives*, *3*(4), 914-927.

Huma, T., Ahmed, S., Mahmood, W., & Afridi, A. K. (2025). AI adoption in higher education: A comparative study of institutional readiness and challenges. *Social Science Review Archives*, *3*(4), 304-312.

Khan, S. U., Mukhtar, A., & Suhag, A. K. (2025). Exploring the Teachers' Perspective Regarding the Use of AI for the Improvement of the Educational System in Public Secondary Schools of Clifton, Karachi. *Journal of Political Stability Archive*, *3*(3), 1174-1209.

Kim, J. (2024). Leading teachers' perspective on teacher-AI collaboration in education. *Education and information technologies*, *29*(7), 8693-8724.

Majeed, M. K., & Ahamad, T. B. (2025). Functional skills gap: The role of artificial intelligence and teachers' digital competence in South Pakistani Islamic schools. *EDUCARE Journal of Primary Education*, *6*(2), 127-140.

Naeem, S., Qureshi, M. A., & Butt, A. M. (2025). AI Integration Into Course Content Development. In *AI Applications for English Language Learning* (pp. 93-120). IGI Global Scientific Publishing.

Naz, Z., Ahmad, M. S., Ahmed, T., & Ullah, R. S. (2025). Teacher-AI Collaboration: Psychological Effects on Teaching Identity and Instructional Confidence. *Review of Applied Management and Social Sciences*, *8*(3), 1333-1347.

Nizamani, D. L., Zaman, G., & Nizamani, K. U. N. (2025). Exploring the Role of Training of Trainers Programs in Preparing English Language Teachers for AI Integration. *Contemporary Journal of Social Science Review*, *3*(3), 2311-2324.

Qureshi, N. M., Qureshi, F. S., Bandeali, M. M., & Akbar, S. (2025). Teacher perceptions and readiness for ai-enhanced teaching in developing countries. *The Critical Review of Social Sciences Studies*, *3*(3), 1665-1682.

Rehmat, M. A. R., Hassan, H., Rumaan, M., & Abrar, K. (2025). IT Sector Transition to Agile: Managerial Challenges and Cultural Dynamics in Pakistan's Technology Firms. *Social Science Review Archives*, *3*(4), 479-494.

Rehmat, M. A., Hassan, H., Khan, H. A., & Abrar, K. (2025). Artificial Intelligence in the Classroom: Teachers' Lived Experiences and Ethical Concerns in Educational Integration. *ASSAJ*, *4*(02), 629-645.

Rehmat, M. A., Hassan, H., Rumaan, M., Baig, J., & Abrar, K. (2025). Human-Centred Explainable AI in Emerging Markets: Trust and Confidence among Non-Technical Users in Pakistan. *Annual Methodological Archive Research Review*, *3*(10), 145-163.

Shahzad, S. A., Raza, M. M., Malhi, S. D., ul Ain, Q., & Malhi, D. K. (2025). Integrating Artificial Intelligence To Foster Critical Thinking And Problem-Solving In 21st-Century Classrooms. *Research Journal for Social Affairs*, *3*(5), 635-648.

Tanvir, A., Bashir, S., & Shahzadi, S. (2024). Exploring the Role of Artificial Intelligence in Enhancing Teachers' Competencies: A Comprehensive Review. *Global Social Sciences Review*, *9*(4), 115-123.

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook of qualitative research in psychology*, *2*(17-37), 25-35.

Zeb, S. S., Abrar, K., Saqib, S., & Rizvi, S. A. A. (2025). Economic dimensions of health protection under Sehat Sahulat Program: A qualitative assessment of urban and rural households in Pakistan. *ACADEMIA International Journal for Social Sciences*, *4*(4), 2259-2273.