Coaching the Coach: A Digital Autoethnography of Generative AI in Teacher and Leadership Preparation

Christopher Dignam [1] [*], **Amy L. Kelly** [2], **Candace M. Smith** [3]

[1] Governors State University, 1 University Parkway, Illinois 60484, United States, 0009-0007-3185-4825
[2] Governors State University, 1 University Parkway, Illinois 60484, United States, 0009-0002-2972-8655
[3] Governors State University, 1 University Parkway, Illinois 60484, United States, 0009-0006-2545-6479
Corresponding author: Christopher Dignam (cdignam@govst.edu)

Article Info

Abstract

The study examines how generative artificial intelligence (GenAI) functioned as a coaching partner in three education preparation courses for future teachers and educational leaders. The courses included early childhood lesson planning, research writing in teacher preparation, and school improvement planning in educational leadership. A digital autoethnographic design guided the work, relying on student reflections, AI transcripts, and faculty reflections to understand how coaching interactions shaped thinking across programs. The design enabled instructors to examine their own positionalities while interpreting the digital records of student reasoning. Students reported gains in clarity, confidence, and alignment as they revised their work with AI supports. Several students noted that reflective questioning encouraged them to explain their decisions and refine their instructional or leadership plans. Others expressed caution when AI suggestions did not match their intentions or preferred frameworks. Faculty observed that the transcripts revealed misunderstandings and areas of growth that were not visible in traditional assignments. Recommendations for educator preparation emphasize the value of introducing AI coaching after students create their own drafts, requiring documentation of prompts, modeling reflective questioning, and preserving student agency. The study offers guidance for programs seeking to integrate GenAI as a reflective partner while supporting ethical engagement and professional judgment across the licensure spectrum.

Introduction

Generative artificial intelligence (GenAI) has created new expectations for faculty in higher education, particularly for instructors responsible for preparing future teachers and school leaders. Students arrive with varying levels of confidence and skill when engaging with AI tools. Some approach AI with hesitation, while others lean on it without understanding how to use it in an ethical or educationally sound manner. We recognized a need to guide students toward reflective and responsible engagement, especially in courses where professional reasoning, stakeholder awareness, and instructional clarity form the core of the learning experience.

Our work emerged from a shared effort across two undergraduate and one graduate course. Each course addressed a different dimension of educator preparation. One course centered on school improvement planning in an educational leadership program. Another focused on lesson planning, instructional alignment, and developmentally appropriate practice in early childhood education. A third concentrated on research writing, academic development, and the formation of a clear written voice grounded in peer-reviewed scholarship. We designed activities where GenAI served as a coaching partner rather than a producer of student work. Our intent was to examine how students interacted with AI when guided to use it as a structured support system.

We approached this study through digital autoethnography, which allowed us to draw from our professional histories while analyzing student artifacts, AI transcripts, and our own faculty reflections. Our backgrounds shaped how we introduced AI in our courses and how we interpreted the interactions that followed. One of us brought decades of experience as a principal and superintendent, with a focus on authentic school improvement processes that rely on long-term stakeholder collaboration. Another area of expertise includes early childhood pedagogy, field supervision, and instructional planning. The third brought experience in teacher preparation, research writing, and instruction on academic integrity. Our combined perspectives positioned us to observe how AI coaching influenced learning in varied contexts.

Each course introduced GenAI through clear guardrails. Students wrote drafts, summaries, outlines, and objectives before consulting any AI tool. Students documented their prompts and responses and reflected on how AI guidance shaped their thinking. The coaching tools asked clarifying questions, identified gaps, or highlighted areas needing revision, yet never replaced student writing. We emphasized the development of reflective habits, instructional reasoning, and ethical decision-making. Students engaged with AI through revision, questioning, and analysis rather than through automated production of content.

The school improvement planning course offered students the opportunity to engage with AI as a stand-in for stakeholders who would traditionally participate in a months-long planning effort. The tool asked questions, surfaced overlooked perspectives, and encouraged students to consider the needs of teachers, staff members, families, and community partners. The lesson planning course used AI to clarify learning objectives, strengthen instructional steps, and align assessments with intended outcomes. The research writing course relied on AI as a guide for coherence, focus, and conceptual understanding, particularly for students learning to connect theory, practice, and peer-reviewed sources. Across all three courses, AI served as a reflective partner that supported

student reasoning.

Our decision to examine these activities together stemmed from our shared interest in how GenAI might shape professional formation in teacher and leadership preparation. Faculty across higher education are seeking practical and ethical ways to incorporate AI into their courses. Policies alone cannot teach students how to evaluate AI responses or recognize when AI guidance conflicts with professional expectations. We sought to understand how students used AI to strengthen their work, when they questioned its guidance, and how their reflections revealed their developing understanding of their roles as future educators and leaders. We also sought to understand how our own teaching practices shifted as we reviewed the chat transcripts and student reflections.

Our study offers insight into how thoughtfully designed AI coaching can enhance reflective learning. Students reported that AI helped them clarify instructional goals, reconsider their assumptions, and identify areas that required stronger alignment. Some students resisted the tool or questioned its usefulness, which offered additional insight into their learning needs and their comfort with emerging technologies. Faculty noted that AI interactions revealed student misunderstandings that might have remained hidden in traditional assignments. These insights informed our instructional decisions and broadened our understanding of how to support students in programs that prepare educators for complex professional responsibilities.

We present this digital autoethnography to contribute to the growing conversation on AI in higher education. Our work highlights how GenAI can function as a partner in reflective practice when introduced through clear expectations, ethical guidance, and structured support. We do not propose AI as a replacement for human mentorship or instructional leadership. We instead offer an account of how faculty and students engaged with AI coaching tools across three distinct courses and how these experiences informed our understanding of learning, teaching, and leadership preparation in an evolving educational landscape.

Literature Review

Generative AI in Higher Education

Generative artificial intelligence has expanded rapidly across higher education, prompting new questions about student use, instructional expectations, and institutional readiness. Students are increasingly turning to AI tools for clarification, ideation, and academic support; however, their skills and assumptions vary considerably. Akpan et al. (2025) found that students often experiment with conversational and generative systems, with some relying heavily on them despite having a limited understanding of the accuracy limitations or disciplinary expectations. These patterns raise concerns about uneven AI literacy and the need for structures that support ethical and informed engagement.

Faculty responses mirror this complexity. Many instructors express uncertainty about balancing innovation with academic integrity, particularly as students encounter hallucinated content or overly confident AI claims. Passmore and Tee (2024) emphasized that AI's ability to synthesize information at scale demands intentional guidance so learners can recognize when AI output is incomplete, inaccurate, or misaligned with academic

standards. Gardner et al. (2024) similarly observed that students benefit from clear expectations when using conversational avatars, especially when these tools are framed as support for revision, feedback, or conceptual clarification rather than shortcuts for completing assignments.

Broader conceptual frameworks extend these discussions beyond the classroom. Hybrid intelligence research positions AI as a collaborator that can amplify human insight when paired with expert judgment. Mao et al. (2023) demonstrated that co-creative systems encourage iterative reasoning and more deliberate decision-making processes, which parallel the cognitive work expected in academic development. Tan (2023) further argued that GenAI functions most effectively when understood as part of a partnership model built on mutual augmentation rather than replacement. These perspectives offer higher education a way to situate AI not as a disruption to academic norms but as an emerging reflective tool that can be integrated into disciplinary thinking.

Work on AI coaching reinforces this potential. Terblanche (2024) reported that AI-supported coaching environments promote clarity, self-regulation, and deliberate performance, suggesting applications for academic programs that emphasize reflective competence. Passmore and Tee (2024) likewise positioned AI coaching as a mode of guided development that can strengthen reasoning when paired with ethical safeguards. Research in educator preparation offers an additional anchor: teacher coaching remains one of the most effective interventions for improving instructional practice, and its value is well established across contexts. Kraft et al. (2018) demonstrated the impact of coaching on professional learning, offering a conceptual foundation for exploring how AI might support similar forms of structured guidance within higher education settings.

Together, these studies highlight key considerations for institutions integrating GenAI: students require opportunities to evaluate AI-generated suggestions; faculty must articulate clear expectations for responsible use; and AI tools function most effectively when positioned as partners that support rather than replace cognitive work. Such conditions align with emerging faculty practices that aim to help students engage with AI deliberately, document their interactions, and refine their reasoning through structured dialogue.

AI as a Coaching/Reflective Partner

Reflective practice scholarship highlights the importance of structured questioning, guided dialogue, and deliberate inquiry in strengthening professional reasoning. Mathew et al. (2017) described reflective practice as a purposeful process in which teachers analyze their decisions, evaluate their assumptions, and connect theory to instructional realities. Marshall et al. (2022) expanded on these foundations through a comprehensive review of factors that enable effective facilitation of reflection, noting that reflective growth depends on intentional scaffolding, supportive facilitation, and environments where learners can examine their thinking without fear of judgment. Their synthesis emphasized the need for prompts that foster deeper interpretation and create space for iterative meaning-making. These elements align closely with peer coaching approaches. Soisangwarn and Wongwanich (2014) found that peer coaching enhances reflective capacity by promoting collaborative dialogue, sustained feedback, and opportunities for teachers to articulate and refine their instructional judgments.

Higher education is increasingly applying these reflective structures to GenAI tools. Gardner et al. (2024) reported that conversational AI systems can guide learners through revision cycles, prompt clarification, and strengthen alignment between goals and reasoning when used within intentional academic guardrails. Akpan et al. (2025) noted that students often use AI to test emerging interpretations or clarify areas of uncertainty; however, they benefit from explicit guidance that helps them distinguish between helpful insights and misleading or inaccurate suggestions. These findings align with the processes described in reflective coaching literature, where growth stems from thoughtful engagement rather than passive consumption.

Coaching research further demonstrates the value of guided inquiry and structured feedback in adult professional learning. Passmore and Tee (2024) demonstrated that AI coaching systems facilitate reflective development by enabling users to surface inconsistencies, consider alternatives, and evaluate interpretations with greater intentionality. Terblanche (2024) emphasized that AI-assisted coaching strengthens clarity and performance when learners remain active evaluators of the dialogue rather than deferring uncritically to AI-generated suggestions. These dynamics parallel the role of a human reflective coach, where prompts, questions, and feedback cycles help learners deepen their reasoning.

Conceptual models of human-AI partnership extend these insights. Mao et al. (2023) demonstrated that hybrid intelligence frameworks encourage iterative reasoning and more deliberate exploration of complex problems, reinforcing the view that AI can amplify reflective work when paired with expert judgment. Tan (2023) similarly positioned GenAI as a partner that enhances analytic processes through co-creative engagement, stressing that effective use depends on learners interpreting and evaluating AI contributions rather than adopting them wholesale.

The broader evidence base for coaching in teacher development provides additional grounding for AI's emerging role. Kraft et al. (2018) found that coaching improves instructional effectiveness through cycles of targeted feedback, focused inquiry, and refined analysis. Each of these mechanisms mirrors the functions that GenAI can serve when integrated into reflective academic tasks with clear expectations. Structured AI prompts can encourage learners to revisit assumptions, consider overlooked dimensions of their work, and strengthen alignment between intent and action, paralleling the guidance traditionally offered in expert coaching.

Across these strands of research, reflective growth is rooted in sustained inquiry, responsive prompting, and opportunities to articulate and evaluate one's reasoning. Generative AI tools, when framed as partners in reflective analysis, can support these processes by introducing questions, surfacing gaps, and encouraging more deliberate consideration of complex academic and professional tasks. Connections between long-standing reflective practice traditions and emerging AI-mediated coaching illustrate how higher education can integrate AI in ways that strengthen professional judgment rather than diminish it.

Academic Integrity, Ethics, and Transparency

Concerns related to accuracy, citation integrity, and ethical engagement remain central as GenAI becomes more

visible in higher education. Akpan et al. (2025) found that students frequently rely on conversational AI systems without thoroughly evaluating the accuracy of the responses, which can lead to the dissemination of inaccurate information or unsupported claims. Their study emphasized the need for explicit guidance that teaches students how to verify AI-generated content, question the system's assumptions, and compare AI output to disciplinary standards. Passmore and Tee (2024) similarly argued that the effectiveness of AI-assisted learning depends on transparent documentation of prompts, user decisions, and the rationale behind revisions made in response to AI suggestions. Their analysis emphasized that ethical engagement requires not only honesty about when AI is used but also clarity about how it shaped the learner's thinking.

Institutional and instructional guardrails play a key role in addressing these challenges. Gardner et al. (2024) observed that structured expectations reduce student uncertainty and promote responsible use, particularly when instructors establish boundaries around when and how AI tools may be consulted. Their findings highlighted the importance of transparency practices such as documenting interactions, citing AI contributions, and reflecting on the accuracy of generated suggestions. Terblanche (2024) added that AI coaching systems must be introduced with ethical safeguards that prevent overreliance and encourage users to maintain judgment over the reasoning process. When students treat AI feedback as authoritative rather than interpretive, the risk of misalignment with academic or professional norms increases.

Scholarly perspectives on human-AI partnership provide a framework for understanding these ethical demands. Tan (2023) described GenAI as a co-agency system that requires users to navigate responsibility for interpreting, validating, and contextualizing output. Their work emphasized the need for learners to maintain awareness of AI's probabilistic nature and its potential to generate plausible but inaccurate responses. Mao et al. (2023) further developed this point by demonstrating that hybrid intelligence systems necessitate human oversight to ensure that machine-generated insights align with expert judgment and domain-specific standards. Their analysis reinforces the notion that accuracy, verification, and transparency are essential components of ethical AI use.

Concerns related to academic integrity extend into teacher education and leadership preparation. Kraft et al. (2018) demonstrated that coaching supports instructional improvement when feedback is credible, evidence-based, and grounded in clear professional expectations. This evidence base offers an indirect rationale for treating AI-generated feedback with caution unless learners can verify the accuracy of its claims. Mathew et al. (2017) and Marshall et al. (2022) emphasized that reflective practice depends on honest engagement with one's own thinking and transparent documentation of the reasoning that informs professional decisions. These expectations align with the documentation and accountability practices necessary for the ethical integration of AI in academic settings.

Reflective coaching models offer additional insight into how ethical considerations can be embedded into AI-supported learning environments. Soisangwarn and Wongwanich (2014) found that peer coaching strengthens reflective judgment when participants articulate their rationale and confront gaps in their explanations. Similar habits are needed when students engage with AI tools. Ethical use requires students to maintain responsibility for validating suggestions, documenting the reasoning behind revisions, and ensuring that AI responses do not substitute for the intellectual work expected in professional preparation programs.

Across these lines of scholarship, ethical and transparent use of GenAI depends on practices that foreground verification, documentation, and critical evaluation. Higher education programs that incorporate AI within reflective and instructional tasks must ensure that students develop the ability to assess accuracy, identify limitations, and maintain ownership of their reasoning. These expectations align with longstanding standards of academic integrity and reinforce the need for AI to function as a support for learning rather than a means of bypassing essential cognitive work.

Reflective Interpretation

Autoethnography provides a methodological foundation for examining how learners and faculty interpret their interactions with GenAI tools. The reflective questioning, revision cycles, and iterative reasoning described in AI coaching research closely mirror the interpretive processes at the center of autoethnographic inquiry, where individuals analyze their experiences to understand their own professional growth. Austin and Hickey (2007) position autoethnography as a method that treats memory, personal narrative, and cultural context as meaningful forms of educational knowledge, supporting examination of how individuals interpret their actions within evolving environments. Cooper and Lilyea (2022) add that rigorous autoethnographic work depends on clarity of purpose and thoughtful engagement with personal artifacts, conditions that align naturally with the transcripts, reflections, and instructional materials generated through AI-supported coaching. Together, these perspectives establish autoethnography as a coherent approach for analyzing how educators navigate emerging tools, such as Gen AI, that shape reflective and instructional reasoning.

Teacher development literature highlights the value of autoethnography in reconstructing experience through reflective interpretation. Pinner demonstrates how teachers revisit practice episodes to uncover shifts in understanding and refine their instructional reasoning over time (Pinner, 2018). Canagarajah illustrates the long arc of professional learning by tracing how global mobility and linguistic negotiation inform a teacher's evolving practice and identity (Canagarajah, 2012). Each study demonstrates how autoethnography provides educators with a space to name tensions, trace changes in their beliefs, and articulate the internal processes that guide their work when engaging with GenAI.

Identity-oriented approaches expand the reach of autoethnography by foregrounding the personal and cultural forces that shape teacher and leadership preparation. Yazan (2019) argues that teacher education benefits when identity is treated as a central analytic focus, particularly for educators navigating race, language, and institutional expectations. Vellanki and Prince (2018) extend this perspective through a collaborative autoethnography of transnational teacher educators, showing how collective reflection surfaces shared questions of belonging and representation while preserving individual voices. These identity-centered accounts demonstrate how personal narratives can illuminate the broader social and institutional contexts influencing teacher development.

Digital autoethnography builds on these foundations by incorporating multimedia artifacts, interactive elements, and nonlinear pathways for presenting experience. Dignam's work in STEAM and leadership education demonstrates how digital platforms enable researchers to curate program designs, leadership decisions, and

instructional exemplars as data that readers can engage with directly (Dignam, 2023). His framework demonstrates how digital environments capture the complexity of educational work through visual materials, narrative commentary, and user-driven exploration. Dignam's treatment of reflective practice complements this perspective, noting that digital tools preserve artifacts in ways that reveal the iterative nature of personal and professional learning.

Further connections emerge through Dignam's examination of cybernetics, where feedback, interaction, and adaptation serve as guiding concepts for understanding human–technology relations in education (Dignam, 2024). Within that frame, digital autoethnography supports GenAI meaning-making through dynamic exchanges among artifacts, reflections, and user interpretations. Such environments mirror the recursive processes central to reflective teaching and provide methodological grounding for studying how educators engage with emerging tools for analyzing their interpretations of experiences, forming professional identities, and navigating complex instructional and leadership demands.

Teacher Preparation, Lesson Planning, and Instructional Design

Teacher preparation programs rely on deliberate support structures that help novices move from intuitive planning to intentional, well-aligned instruction. Mok and Staub (2021) showed through a meta-analysis that coaching, mentoring, and supervision have a small but significant positive effect on preservice teachers' instructional skills, including lesson planning and clarity of instruction. Their analysis highlighted the importance of cognitive modeling, where cooperating teachers and supervisors make planning processes visible and explicit for novices. Such modeling gives preservice teachers access to the reasoning that underlies decisions about objectives, sequences, and explanations, rather than exposing them only to finished lesson plans. Evidence from this meta-analysis reinforces the view that planning skills develop most effectively when novices receive guided opportunities to analyze and rehearse decision-making with a more experienced partner.

Instructional coaching models further emphasize the importance of structured professional dialogue. Wang (2017) described a teacher-centered coaching model in which teachers begin by reflecting on their own practices and work with a coach to identify goals, examine classroom evidence, and develop action plans for instructional growth. Coaching in this model is a demanding cognitive task, requiring attention to nonverbal cues, trust, and the careful design of questions that extend the teacher's thinking. Hui et al. (2020) similarly examined instructional coaching structures and identified a coaching cycle that includes pre-observation conferences, classroom observations, post-observation conferences, and an additional intervention stage. Their qualitative study emphasized that structuring coaching conversations is crucial to refining teaching practice, with coaches utilizing conferences to clarify focus areas, connect feedback to evidence, and support sustained improvement. Research on in-service teacher coaching further indicates that such cycles enhance instructional quality when feedback is focused, frequent, and tied to observable practice (Kraft et al., 2018). Together, these strands of work present coaching as an intensive but powerful mechanism for strengthening planning and instructional reasoning.

Playful learning research introduces complementary expectations for lesson design in teacher education and early

childhood teacher education. Boysen et al. (2022) reviewed playful learning designs and noted that, although playful approaches are frequently associated with motivation, creativity, and collaboration, connections to curricular learning goals are often described only in general terms. Their scoping review emphasized that preservice and early childhood teachers must learn to design learning environments that are both engaging and anchored in clearly articulated aims and outcomes. Playful learning in higher education, therefore, requires future teachers to integrate open-ended, exploratory experiences with explicit statements of purpose, progression, and assessment. That design challenge aligns closely with expectations in contemporary teacher preparation, where candidates are asked to justify how each activity supports specific learning targets and developmental needs.

Conceptual and empirical work on coaching, mentoring, supervision, and playful learning together positions lesson planning as a site where reasoning must be both supported and made visible. Preservice teachers benefit when they can rehearse instructional decisions with a coach who models thinking processes, structures feedback conversations, and situates novelty within clear learning goals (Boysen et al., 2022; Hui et al., 2020; Mok & Staub, 2021; Wang, 2017). In programs that introduce GenAI as a coaching partner, these same expectations apply. Artificial Intelligence tools can prompt teachers to clarify objectives, align activities with desired outcomes, and consider alternative explanations or representations, yet the value of such tools depends on their integration into established coaching and design frameworks. When GenAI is positioned as one component within a broader culture of reflective planning, rather than as a shortcut to completed lesson plans, teacher preparation programs can support candidates in developing the instructional judgment needed for complex professional practice.

School Improvement Planning and Educational Leadership Preparation

School improvement planning remains a central competency for aspiring educational leaders, yet many preparation programs struggle to provide opportunities that mirror the depth and duration of authentic improvement cycles. Meyers and VanGronigen (2021) found that root cause analyses in school improvement plans often lack depth, with candidates defaulting to surface-level explanations rather than examining systemic contributors. Their analysis revealed that leadership candidates benefit from structured guidance that helps them critically examine evidence, challenge assumptions, and develop plans grounded in meaningful diagnostic reasoning. Bickmore et al. (2021) similarly reported that aspiring principals who engaged in course-embedded improvement planning developed stronger conceptual clarity when they were supported through iterative feedback and opportunities to revisit early decisions. These studies indicate that well-designed coursework can replicate aspects of real-world planning when candidates engage in cycles of reflection that reveal how their interpretations evolve across planning stages.

Leadership preparation research also emphasizes the significance of stakeholder engagement in shaping improvement planning. Arzu et al. (2023) emphasized that aspiring principals develop stronger continuous improvement practices when they learn to incorporate diverse perspectives, analyze points of alignment and tension, and consider how different stakeholder groups interpret school needs. Their work demonstrates that improvement planning is not solely a technical task, but a relational one that requires candidates to anticipate responses, communicate rationales, and integrate feedback into coherent plans. VanGronigen et al. (2023) added

that the structure of SIP templates can either support or constrain this engagement. Templates that prioritize compliance tend to narrow candidate thinking, while those that emphasize analysis, evidence, and stakeholder collaboration create conditions where leadership reasoning becomes more visible.

Generative AI offers a complementary structure within leadership preparation courses by approximating the iterative questioning and stakeholder dialogue that typically occur over an extended planning timeline. When candidates interact with GenAI as a coaching tool, the system can prompt deeper exploration of evidence, surface alternative explanations, and raise questions that resemble those posed by teachers, families, or district leaders. These dynamics mirror the reflective processes emphasized in coaching models where learning arises through guided inquiry rather than directive feedback. Prior research on coaching and supervision in teacher development (Mok & Staub, 2021; Wang, 2017) reinforces the value of prompts that help learners clarify intentions and articulate their reasoning, and GenAI supports similar habits when integrated within clear guardrails. The tool encourages candidates to rehearse leadership moves, question feasibility, anticipate concerns, and analyze gaps within a compressed semester structure where authentic stakeholder committees are not readily available.

Course-based improvement planning becomes more rigorous when GenAI is used to augment candidate thinking, rather than replace it. Planning conversations with the tool support leadership dispositions associated with reflective decision-making, including situational awareness, evidence-based reasoning, and responsiveness to community perspectives. These opportunities align with the instructional conditions identified by Bickmore et al. (2021) and Arzu et al. (2023), where leadership growth depends on structured guidance that reveals how candidates interpret complex problems. When integrated purposefully, GenAI helps aspiring principals practice the analytic, diagnostic, and collaborative dimensions of school improvement planning, offering a bridge between university coursework and the multifaceted demands of leading schoolwide change.

Methodology

Autoethnography

We designed the study as a digital autoethnography. The methodology enabled us to analyze our instructional decisions, our interactions with students, and our use of GenAI across two undergraduate and one graduate course. Autoethnography offers a structured approach to examining professional judgment through memory, narrative, and reflective interpretation, and it is frequently employed to explore how educators make sense of their work within broader social and institutional contexts (Austin & Hickey, 2007; Belbase et al., 2008).

Austin and Hickey (2007) frame autoethnography as an approach that links self-understanding to wider socialization processes in teacher education, while Belbase et al. (2008) highlight its potential for catalyzing transformative pedagogy through careful examination of lived experience. Yazan (2019) further demonstrates how critical autoethnographic narrative can illuminate teacher identity development and professional agency in program settings. These perspectives position digital autoethnography as a suitable methodology for examining how faculty and students interact with GenAI coaching tools across diverse academic environments.

A total of 32 students in educational preparation contributed reflective documents for the study. The dataset included student work from three courses taught in one college of education. The first course, which focused on school improvement planning in an educational leadership program, included 12 students who submitted AI coaching logs and written reflections. The second course, which centered on lesson planning in early childhood teacher preparation, included 10 students who submitted revised lesson plans, ChatGPT transcripts, and reflective commentaries. The third course, which addressed research writing and academic development, included 10 students who contributed AI-assisted writing logs, revision notes, and reflections. The students were enrolled in various licensure pathways, and their reflective documents served as records of their reasoning during AI coaching interactions. Scholars of autoethnography emphasize that such artifacts, narratives, and transcripts can function as legitimate sources of data for examining professional growth and reflective practice (Austin & Hickey, 2007; Belbase et al., 2008; Pinner, 2018).

The three courses differed in their purposes, assignments, and program expectations, which shaped the ways students engaged with AI coaching. These differences created a varied dataset that reflected the instructional aims of each program and the types of reasoning students demonstrated within their licensure pathways. Autoethnographic work on teacher development shows that examining experiences across multiple settings can surface patterns of identity negotiation, shifts in understanding, and evolving interpretations of practice (Pinner, 2018; Yazan, 2019). Our methodological choice aligned with that orientation. Digital autoethnography enabled us to connect our professional histories as educators, administrators, and faculty with the student artifacts generated in each course, allowing us to study how GenAI coaching influenced learning and how those interactions informed our own interpretations of teaching in an environment where AI is increasingly visible.

Table 1. Course Contexts, Assignments, and Data Sources

Course / Professor	Program Area	Assignment Using AI Coaching	Student Data Sources	Faculty Data Sources
School Improvement Planning	Educational Leadership	School Improvement Plan development with AI coaching for stakeholder analysis and strategy alignment	AI prompt logs, chat transcripts, written reflections, SIP drafts and revisions	Written faculty reflections on leadership preparation, student reasoning, and AI-supported alignment
Lesson Planning and Instructional Design	Early Childhood Education	Lesson plan revision activity using AI coaching for objective clarity, modeling, vocabulary use, and assessment alignment	Revised lesson plans, AI coaching transcripts, reflective commentaries	Written faculty reflections on developmental practice, objective writing, and instructional clarity
Research Writing and Academic Development	Teacher Preparation	Research paper refinement with AI coaching focused on structure, reasoning, and integration of peer-reviewed sources	AI-assisted writing logs, revision notes, reflective statements, research drafts	Written faculty reflections on academic integrity, student voice, and conceptual understanding

Digital Autoethnography

Autoethnography centers the researcher as a participant in the study. Digital autoethnography extends this approach into technology-mediated spaces (Austin and Hickey, 2007; Pinner, 2018; Yazan, 2019). Our work occurred in courses where AI tools were integrated through structured activities, documented interactions, and reflective practices. Students engaged with AI through transcripts, journals, and written reflections, which created a digital trail that supported systematic analysis. Faculty also produced written reflections that helped document our instructional intentions and our responses to student experiences. These combined materials provided a full view of the learning process from both perspectives.

We engaged in digital autoethnography because each of us brought different professional identities, responsibilities, and disciplinary expectations. One course focused on school improvement planning within an educational leadership program. Another centered on lesson planning and early childhood instructional design. A third emphasized research writing and academic development for preservice teachers. The structure of our collaboration provided an opportunity to study AI coaching across diverse learning environments with varying student populations. Our positionalities influenced how we interpreted student engagement and the meaning we derived from AI interactions.

Participants and Setting

The study took place at a public university where students enrolled in undergraduate and graduate programs in teacher education and educational leadership preparation. Participants included students who completed assignments involving AI coaching tools and students who elected not to use AI after reviewing the assignment expectations. Participation in the research study was conducted in accordance with institutional review board approval and required informed consent. Students were not identified in any of the reports of the findings. Data included student lesson plans, school improvement planning artifacts, research writing assignments, AI prompt logs, chat transcripts, and reflective statements. Faculty reflections served as a second layer of data, contributing to the analytic process.

We analyzed the data through an iterative, thematic process. Each instructor reviewed student work from their own course and noted patterns related to student decision-making, instructional reasoning, research writing, or resistance to AI. We then met to discuss emerging themes across the three courses. We wrote analytic memos that helped clarify how our observations aligned or differed across contexts. Faculty reflections were revisited throughout the process to refine our interpretations and to identify how the integration of AI shaped our instructional perspectives. We organized themes by focusing on student engagement, the influence of AI on instructional decisions, and faculty learning that emerged from reviewing digital interactions.

Ethical Considerations

Ethical considerations guided each stage of the study. We emphasized transparency in AI use and asked students

to document their prompts, summarize AI responses, and explain how they accepted or rejected AI guidance. These documentation procedures helped maintain academic integrity and supported our commitment to reflective learning. We also considered our influence on student behavior. Our positionalities as instructors shaped the expectations we communicated and the supports we offered. We reflected on these influences throughout the study and incorporated them into the digital autoethnographic record.

Professional Practice

The methodology provided a way to examine teaching and learning in an environment where AI is becoming part of instructional practice. Our analysis drew from student artifacts, AI interactions, and faculty reflections, which allowed us to understand how GenAI supported or challenged professional preparation. The approach aligned with our desire to study AI coaching through an instructional lens and to consider how the experience shaped our own views as teacher educators and leadership faculty.

Our varied professional backgrounds shaped how we interpreted the student work and the meaning we made from the AI coaching interactions. Each instructor viewed the digital records through a different lens, informed by disciplinary training, program responsibilities, and prior experience with teacher or leadership preparation. These differences added depth to the analytic process and strengthened the collaborative nature of the digital autoethnography. Table 2 outlines these positional influences and clarifies how our distinct perspectives contributed to the interpretation of the data and the development of the themes that follow.

Table 2. Faculty Positionalities and Analytic Contributions

Faculty Member	Professional Background	Course Taught	Positional Influence on Analysis
Christopher Dignam	Former principal and superintendent; faculty in educational leadership	School Improvement Planning	Interpreted AI coaching through experience with authentic improvement cycles, stakeholder engagement, and alignment of goals and strategies
Amy Kelly	Early childhood educator and field supervisor; expertise in instructional design	Lesson Planning and Instructional Design	Focused on clarity, developmental appropriateness, objective writing, modeling, and the alignment of lesson components
Candace Smith	Former principal and teacher educator with expertise in research writing and academic integrity	Research Writing and Academic Development	Examined student reasoning related to structure, theory, voice, and coherence while attending to ethical and reflective writing practices

Findings

Five themes emerged from our analysis of student work, AI transcripts, and faculty reflections across the two undergraduate and one graduate course. The themes reflect the varied ways students engaged with AI coaching tools and the insight faculty gained from reviewing the digital interactions. The findings illustrate how GenAI supports reflective thinking, reveals areas of confusion, encourages alignment, prompts ethical reasoning, and shapes faculty understanding of student learning.

Our positionalities shaped the way we interpreted the student work and the meaning we made from the AI coaching interactions. Each of us entered the study with different responsibilities, disciplinary histories, and expectations for professional preparation. These backgrounds influenced the instructional decisions we made, the questions we asked, and the patterns we noticed as we reviewed the digital records. Table 3 provides an overview of these positional influences, illustrating how our varied experiences informed the analytic process. The table also illustrates the value of collaborative autoethnography, since the differences in our perspectives strengthened the depth and clarity of the findings that follow.

Table 3. Themes and Representative Student Evidence

Theme	Core Idea	Representative Student Evidence
AI prompted clearer thinking and stronger alignment	Students refined objectives, clarified reasoning, and improved structural alignment when guided through reflective AI questioning	"I thought that I had a solid objective, but after reviewing it again, I could see where I needed to improve."
Students varied in engagement, depth, and confidence	Levels of comfort and persistence differed; some engaged deeply while others hesitated or used AI selectively	"I felt so defeated at times, but the prompts and questions were encouraging and helped me rethink my plan."
AI revealed gaps in foundational knowledge	Coaching transcripts surfaced misconceptions about objectives, theory, alignment, and stakeholder focus	"I realized that I needed to clarify what success looked like before I could build the rest of the lesson."
Ethical considerations shaped student decision-making	Students evaluated accuracy, trusted preferred frameworks, and explained acceptance or rejection of AI guidance	"I chose not to use the AI suggestions because they felt misleading, and I wanted to revise the plan my own way."
Faculty gained insight into student thinking through digital records	AI transcripts allowed instructors to observe student reasoning and revision processes not visible in final submissions	"I could see misunderstandings that would have been hard to detect from the final drafts."

Theme 1. AI Prompted Clearer Thinking and Stronger Alignment

Students in all three courses reported that AI coaching helped them clarify their objectives, refine their reasoning, or strengthen the structural components of their assignments. Learners in the early childhood lesson planning course frequently noted that the tool revealed gaps in the clarity of their objectives. One student wrote that "I thought that I had a solid primary objective but after re-reading what I wrote, I was able to see where I could improve". Another stated that the tool strengthened their instruction and helped them "really think about how I am going to embed the vocabulary".

Students in the school improvement planning course described similar experiences related to alignment and stakeholder focus. The AI tool prompted them to reconsider how their strategies supported the root causes identified in their analysis. Students in the research writing course reported that the tool helped them examine how their thesis, outline, and sources connected to one another. Faculty across the courses noted that the tool made areas of misalignment more visible and encouraged students to revisit the foundational components of their assignments.

Theme 2. Students Varied in Engagement, Depth, and Confidence

Students approached the AI coaching tools with different levels of confidence and persistence. Some engaged in extended dialogue with the tool and documented multiple rounds of revision. One student, in her lesson planning reflection, wrote that she had "felt so defeated at times" but found that the prompts and questions were "very insightful and encouraging" as she worked through the revision process. Another student reported that the tool provided "the most help for my plan" and made them think more carefully about how each step connected to the instructional goal.

Other students engaged only briefly or with hesitation. One student noted that they "did not want to make too many changes in paper" and therefore chose not to rely on the AI guidance. These varied responses helped faculty understand how students approached new technologies and how comfort level influenced the depth of engagement.

Theme 3. AI Revealed Gaps in Foundational Knowledge Across Contexts

AI transcripts exposed misconceptions and areas of confusion that might not have been evident in final submissions. Students in the early childhood course struggled with measurable learning objectives, and the AI tool prompted them to review the degree and condition components of their objectives. One student remarked that they recognized their need to revise because they "wanted to teach the children more than one word" and needed to clarify what "success" looked like in the lesson.

Students in the research writing course demonstrated gaps in connecting theory, structure, and peer-reviewed sources. A student shared that they had "the hardest time explaining theories" and found the AI guidance helpful

for sorting their ideas. Students in the leadership course occasionally overlooked key stakeholder groups in their school improvement plans. AI questions often revealed these omissions and encouraged students to revisit their problem statements, goals, or strategies. Faculty reflections aligned with these observations. One faculty member wrote that the tool helped students find "consistent ways of giving feedback similar to what a class supervisor would give", which reinforced the value of the structured coaching model.

Theme 4. Ethical Considerations Shaped Student Decision-Making

Students demonstrated varying degrees of trust in the AI coaching tools. Several students appreciated the guardrails and found comfort in documenting their prompts and decisions. A few raised concerns about accuracy or alignment with their preferred frameworks. One student wrote that they chose not to use the AI tool because they found the information "misleading" and believed they could strengthen the lesson plan through other methods. Another student noted that they preferred feedback from their professor and felt more confident relying on their existing frameworks.

Faculty reflections recognized these concerns and highlighted the need for transparency. The documentation process allowed students to explain how they accepted or rejected AI guidance and why they made those decisions. Faculty also noted that student hesitations provided insight into their values, professional identity, and developing sense of ethical responsibility.

Theme 5. Faculty Gained Insight into Student Thinking Through the Digital Records

AI transcripts and reflective logs provided a view of student thinking that extended beyond traditional written assignments. Faculty reviewed moments where students reconsidered instructional decisions, revised unclear statements, or explored alternative strategies. One faculty member wrote that they saw misunderstandings "which would have been hard to detect from the final drafts of the assignments". Another noted that the AI tool made "the thinking behind the revisions visible" in ways that strengthened their understanding of how students interpreted course expectations.

The digital records also allowed faculty to compare how students approached revision, how they responded to questioning, and how they balanced AI guidance with personal judgment. These insights influenced faculty views on teaching, assessment, and the integration of reflective tools in future courses.

Discussion

The findings from our digital autoethnography demonstrate how GenAI can function as a coaching partner in undergraduate and graduate programs that prepare teachers and educational leaders. Students utilized the coaching tools to clarify objectives, examine their reasoning, and ensure alignment across their assignments. Faculty gained insight into student thinking through the digital records created during the coaching process. These insights offer guidance for programs seeking to integrate AI in ways that support learning while maintaining ethical expectations

and academic integrity.

Generative AI coaching encouraged students to slow down and examine the decisions that shaped their work. Students described moments where the tool prompted them to reconsider unclear objectives, revise instructional steps, or rethink leadership strategies. These moments reveal the potential of AI to guide reflective practice, particularly when students receive structured support and clear expectations. Reflection is a central component of teacher preparation and leadership development. AI coaching gave students a space to articulate their intentions and refine their reasoning before submitting their final work.

Student responses varied in depth and confidence, reflecting the broader landscape of AI use in higher education. Some students approached the tool with openness and curiosity. Others expressed uncertainty, hesitation, or preference for familiar frameworks. Students who declined to use the tool offered insight into issues of trust, accuracy, and personal learning preference. These varied responses highlight the importance of designing assignments that preserve student agency. When students are encouraged to accept or reject AI guidance with justification, the process supports ethical awareness and reinforces the expectation that their own thinking remains central.

The coaching tools also revealed gaps in foundational knowledge across contexts. Students who struggled with objective writing, alignment, or theoretical clarity found that AI questioning brought attention to areas they had not previously examined. Faculty noted that these revelations were often more visible in the AI transcripts than in final submissions. The coaching interactions helped uncover misconceptions that might have remained unnoticed. Such visibility is valuable for instructors, particularly when teaching courses that rely on students' ability to articulate reasoning, connect concepts, or engage in professional decision-making.

Ethical considerations played a significant role in how students approached the tools. Students documented their prompts, reflected on their decisions, and explained how they engaged with AI guidance. These documentation procedures supported transparency and gave students a framework for evaluating the quality and appropriateness of AI responses. Faculty members recognized that ethical reasoning is an integral part of professional formation. Responsible engagement with AI mirrors the expectations teachers and leaders will face in their future roles, where judgment, clarity, and accountability remain essential.

Faculty learning also emerged as a meaningful aspect of the study. The transcripts and reflections allowed instructors to observe how students confronted confusion, explored alternative choices, or sought clarification. The digital records expanded our understanding of how students approached assignments, which will shape future instructional design. Faculty noted the value of seeing the process rather than only the product. The coaching structure made visible the moments when students revised unclear statements, reconsidered their strategies, or deepened their understanding of instructional or leadership expectations.

Several implications arise from these findings. Programs preparing teachers and leaders may consider integrating AI coaching tools when the goal is to prompt reflection, clarify reasoning, or strengthen alignment. The design of

such tools should include clear guardrails, explicit expectations, and documentation procedures that support academic integrity. Faculty may benefit from reviewing AI transcripts when evaluating student work, as the records can highlight areas of misunderstanding and guide further instruction. Students may benefit from opportunities to utilize AI in a way that supports their cognitive processes, rather than having it complete work on their behalf.

Our work also contributes to the broader conversation about the role of AI in higher education. AI coaching cannot replace human mentorship, nor can it replicate the professional judgment that educators must develop. It can, however, offer structured support when designed with ethical clarity and pedagogical intent. When introduced with thoughtful guidance, AI can strengthen reflective habits, support alignment, and reveal learning needs. Programs that prepare educators must continue to explore methods that support student reasoning in a landscape where AI will remain part of academic and professional practice.

The three courses in our study offered distinct opportunities for students to engage with AI coaching while developing their instructional and leadership skills. Each course contributed a different dimension of professional preparation, yet the coaching interactions revealed common patterns related to clarity, alignment, ethical reasoning, and reflective thinking. Figure 1 illustrates how these program areas intersect through the shared use of AI coaching, highlighting the central role of reflective practice across early childhood education, teacher preparation, and educational leadership.
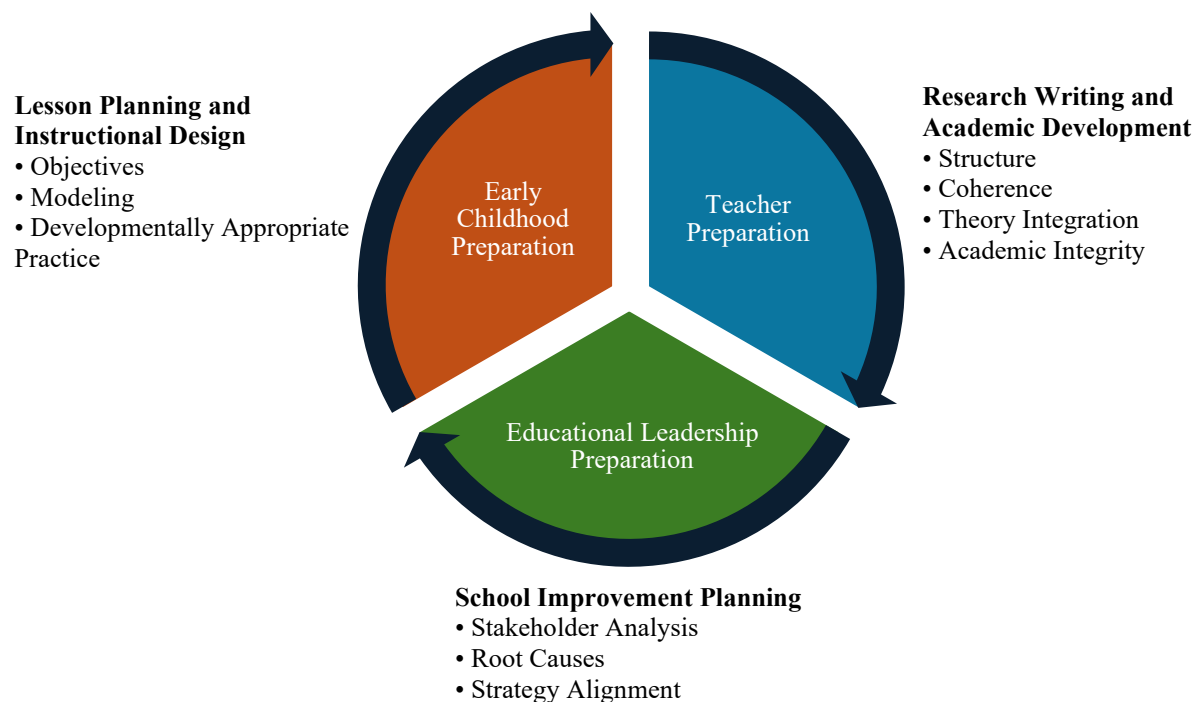
Lesson Planning and Instructional Design
• Objectives
• Modeling
• Developmentally Appropriate Practice

Early Childhood Preparation

Teacher Preparation

Research Writing and Academic Development
• Structure
• Coherence
• Theory Integration
• Academic Integrity

Educational Leadership Preparation

School Improvement Planning
• Stakeholder Analysis
• Root Causes
• Strategy Alignment

Figure 1. Conceptual Model of AI Coaching Across the Licensure Spectrum

Conclusions

Our study revealed how student reflections, professor reflections, and AI transcripts shaped our understanding of

learning, teaching, and leadership preparation in an era when GenAI is becoming more visible in higher education. Students described moments of clarity, frustration, growth, and renewed confidence as they worked with the coaching tools. One student shared that they had felt "defeated" before realizing that the structured prompts helped them regain a sense of direction. Another wrote that the tool strengthened their instruction and encouraged them to think more carefully about modeling and vocabulary. These reflections anchored the themes that emerged from the data and provided insight into how students approached revision, alignment, and professional judgment.

Faculty reflections played a central role in shaping the interpretation of the findings. Each instructor documented how the coaching interactions revealed student thinking in ways not accessible through traditional assignments. One professor wrote that they observed misunderstandings that would have remained hidden without the transcripts. Another noted that the tool mirrored supervisory feedback and reinforced the instructional intentions of the course. These reflective accounts highlighted the influence of faculty positionality on the design and meaning of the study. We approached the work with varied professional histories, yet we shared a commitment to reflective practice and ethical engagement with emerging technologies.

Faculty Reflections Within the Autoethnography
Christopher Dignam (Educational Leadership)

Christopher reflected on how the AI coaching interactions aligned with authentic school improvement planning. He observed how students reasoned through data interpretation, stakeholder analysis, and goal formation in ways that mirrored the real-world processes of committees. He also recognized how the digital exchanges encouraged students to articulate their leadership decisions and confront overlooked perspectives. His experience as a principal and superintendent shaped his interpretation of these moments. He viewed the digital records as valuable tools for strengthening leadership preparation by making the reflective and analytical components of planning more visible.

Amy Kelly (Early Childhood Education)

Amy reflected on how AI coaching influenced the clarity and structure of her students' instructional plans. She noted improvements in the precision of learning objectives and their alignment with modeling, vocabulary instruction, and assessment. She also recognized how the tool encouraged students to think more intentionally about developmentally appropriate practice. Her background in early childhood education shaped her attention to detail, and she found that the coaching interactions highlighted common areas where students needed additional guidance.

Candace Smith (Research Writing and Academic Development)

Candace reflected on how AI coaching helped students confront confusion related to research structure, theory, and academic writing. She documented how many students recognized gaps in understanding only after engaging with the tool and how the structured prompts encouraged them to revise with greater focus. She also noted how

the coaching tool helped students refine their arguments while maintaining their own voice. Her work in academic integrity and teacher preparation shaped her interpretation of the transcripts, and she viewed the coaching structure as a supportive way to strengthen writing without diminishing authorship.

Implications

The combined reflections strengthened the digital autoethnographic approach. Each instructor documented how their background influenced their interpretation of student work and how the AI transcripts expanded their understanding of student reasoning. The reflections also demonstrated how the coaching process shaped faculty thinking about instruction, assessment, and the integration of AI in professional preparation.

Several implications arise from our work. Students benefited when AI prompted them to clarify ideas, explain decisions, and revise with intention. Faculty members benefited from digital records, which provided insight into how students interpreted expectations and addressed confusion. Programs preparing teachers and leaders may consider integrating AI coaching when the goal is to support reflective thinking or enhance alignment. The documentation process also reinforced academic transparency and encouraged students to maintain ownership of their work.

Recommendations for Educator Preparation

Educator preparation programs may benefit from introducing GenAI coaching tools when the goal is to support reflective learning, instructional clarity, and professional judgment. Our study demonstrated that the coaching interactions helped students examine their thinking, revise with intention, and strengthen the alignment of their work across multiple program levels. Several recommendations follow from these observations.

Programs may consider introducing AI coaching after students have created their own drafts. Students engaged more thoughtfully when the coaching interaction began with their original work. Documentation procedures may support academic transparency and encourage students to maintain ownership of their writing. Expectations for ethical use should be clearly stated so that students understand how AI can support reflection without replacing their own reasoning.

Faculty may consider modeling reflective questioning rather than corrective instruction within AI coaching activities. Clarifying questions prompted deeper analysis and supported stronger instructional and leadership decisions. AI coaching may be integrated across licensure programs, as students in early childhood preparation, teacher preparation, and educational leadership preparation have benefited from this structure. AI transcripts may be used as formative assessment tools that reveal misconceptions and guide next steps in instruction. Student agency should remain central, and students should be encouraged to explain when AI guidance does not align with their intentions. Programs may also map AI coaching activities to relevant standards to ensure alignment with expectations for teaching and leadership.

Limitations

Limitations relate to the course contexts, the specific coaching tools used, and the varied backgrounds of the students. Engagement with AI may differ in other program structures or institutional settings. The study did not explore long-term outcomes beyond the assignments. Future research may investigate how AI coaching affects fieldwork, leadership decision-making, or the development of sustained reflective habits across multiple semesters.

Our work affirms the importance of integrating AI coaching through methods that preserve student agency, safeguard academic integrity, and foster reflective practice. The combination of student voices, faculty voices, and digital artifacts offered a detailed view of learning that would have remained hidden without the coaching tools. The digital autoethnographic design enabled us to engage with the material as both instructors and researchers, and to examine our own assumptions as part of the analytical process. Ongoing inquiry will be needed as programs continue to refine how GenAI supports the preparation of teachers and leaders in an evolving educational environment.

Significance

A shared belief guided our work. Educators and leaders must learn how to think with care, revise with intention, and engage with emerging tools in ways that honor the responsibilities of the profession. Generative artificial intelligence will continue to evolve, and programs that prepare teachers and administrators must remain attentive to how such tools influence reflective thinking and decision-making. Our study demonstrated that coaching structures grounded in clarity, transparency, and ethical guidance can support students as they develop stronger habits of analysis, reasoning, and alignment. The digital records created through the coaching process reminded us that learning takes place in the space between confusion and clarity, and that students benefit when they are able to examine their thinking before presenting a final product.

Our reflections also reinforced the importance of faculty engagement when integrating AI in educator preparation. Instructor guidance shaped the ways students approached the coaching activities and helped define the boundaries that preserved student voice and agency. The collaboration across our three courses revealed how shared inquiry can strengthen instructional design and create opportunities for growth across program areas. The work encouraged us to think more purposefully about how we introduce GenAI in our courses and how we prepare students to evaluate digital tools in their future roles. We offer this study as a resource for educators seeking practical, ethical, and reflective approaches to integrating GenAI in a landscape that will continue to evolve.

References

Akpan, I. J., Kobara, Y. M., Owolabi, J., Akpan, A. A., & Offodile, O. F. (2025). Conversational and generative artificial intelligence and human–chatbot interaction in education and research. *International Transactions in Operational Research*, *32*(3), 1251-1281. https://doi.org/10.1111/itor.13522

Arzu, E. M., Agan, T., Miller, G. J., & Badgett, K. (2023). The role of stakeholders: Implications for continuous improvement in principal preparation. *School Leadership Review*, *17*(2), 9. https://doi.org/10.1891/SLR-17-02-09

Austin, J., & Hickey, A. (2007). Autoethnography and Teacher Development. The International Journal of Interdisciplinary Social Sciences: Annual Review. 2 (2): 369-378. https://doi.org/10.18848/1833-1882/CGP/v02i02/52189

Belbase, S., Luitel, B., & Taylor, P. (2008). Autoethnography: A method of research and teaching for transformative education. *Journal of Education and Research*, *1*(1), 86-95. http://dx.doi.org/10.3126/jer.v1i0.7955

Bickmore, D. L., Roberts, M. M., & Gonzales, M. M. (2021). How aspiring principals applied course-based learning to develop school improvement plans. *Journal of Educational Administration*, *59*(2), 199-214. http://dx.doi.org/10.1108/JEA-06-2020-0139

Boysen, M. S. W., Sørensen, M. C., Jensen, H., Von Seelen, J., & Skovbjerg, H. M. (2022). Playful learning designs in teacher education and early childhood teacher education: A scoping review. *Teaching and Teacher Education*, *120*, 103884. https://doi.org/10.1016/j.tate.2022.103884

Canagarajah, A. S. (2012). Teacher development in a global profession: An autoethnography. *TESOL Quarterly*, *46*(2), 258-279. https://doi.org/10.1002/tesq.18

Cooper, R., & Lilyea, B. (2022). I'm interested in autoethnography, but how do I do it. *The Qualitative Report, 27*(1), 197-208. https://doi.org/10.46743/2160-3715%2F2022.5288

Dignam, C. (2024). Beyond the acronym: Intersections of STEAM, cybernetics, and leadership nurturing. Journal of Education in Science, Environment and Health, 10(2), 155–170. https://doi.org/10.55549/jeseh.700

Dignam, C. (2023). *Utilizing digital autoethnography for STEAM education and leadership nurturing*. In Dignam, C. & Hebebci, M. T. (Eds.), Current Academic Studies in Technology and Education 2023 (pp. 1-26).

Gardner, R., Rudolph, J., & Minehart, R. (2024, June). Feedback reimagined: Generative AI and conversational avatars as your new training partners. In *The Learning Ideas Conference* (pp. 133-144). Cham: Springer Nature Switzerland.

Hui, K. S., Khemanuwong, T., & Ismail, S. A. M. M. (2020). Keeping teachers afloat with instructional coaching: Coaching structure and implementation. *The Qualitative Report*, *25*(7), 1790-1816. https://doi.org/10.32529/TQR.2020.25.7.1790-1816

Kraft, M. A., Blazar, D., & Hogan, D. (2018). The Effect of Teacher Coaching on Instruction and Achievement: A Meta-Analysis of the Causal Evidence. *Review of Educational Research*, *88*(4), 547-588. https://doi.org/10.3102/0034654318759268

Mao, Y., Rafner, J., Wang, Y., & Sherson, J. (2023). A hybrid intelligence approach to training generative design assistants: Partnership between human experts and AI enhanced co-creative tools. In *HHAI 2023: augmenting human intellect* (pp. 108-123). IOS Press. https://doi.org/10.3233/FAIA230078

Marshall, T., Keville, S., Cain, A., & Adler, J. R. (2022). Facilitating reflection: a review and synthesis of the factors enabling effective facilitation of reflective practice. *Reflective Practice*, *23*(4), 483-496. https://doi.org/10.1080/14623943.2022.2064444

Mathew, P., Mathew, P., & Peechattu, P. J. (2017). Reflective practices: A means to teacher development. *Asia*

Pacific Journal of Contemporary Education and Communication Technology, *3*(1), 126-131.

Meyers, C. V., & VanGronigen, B. A. (2021). Planning for what? An analysis of root cause quality and content in school improvement plans. *Journal of Educational Administration*, *59*(4), 437-453. https://doi.org/10.1108/JEA-07-2020-0156

Mok, S. Y., & Staub, F. C. (2021). Does coaching, mentoring, and supervision matter for pre-service teachers' planning skills and clarity of instruction? A meta-analysis of (quasi-) experimental studies. *Teaching and Teacher Education*, *107*, 103484. https://doi.org/10.1016/j.tate.2021.103484

Passmore, J., & Tee, D. (2024). The library of Babel: assessing the powers of artificial intelligence in knowledge synthesis, learning and development and coaching. *Journal of Work-Applied Management*, *16*(1), 4-18. https://doi.org/10.1108/JWAM-06-2023-0057

Pinner, R. S. (2018). Re-learning from experience: using autoethnography for teacher development. *Educational Action Research*, *26*(1), 91–105. https://doi.org/10.1080/09650792.2017.1310665

Soisangwarn, A., & Wongwanich, S. (2014). Promoting the reflective teacher through peer coaching to improve teaching skills. *Procedia-Social and Behavioral Sciences*, *116*, 2504-2511. https://doi.org/10.1016/j.sbspro.2014.01.601

Tan, E. (2023). Partnership in the age of generative artificial intelligence. *Teaching and Learning Together in Higher Education*, *1*(39), 3.

Terblanche, N. H. (2024). Artificial Intelligence (AI) coaching: redefining people development and organizational performance. *The Journal of Applied Behavioral Science*, *60*(4), 631-638. https://doi.org/10.1177/00218863241283919

VanGronigen, B. A., Meyers, C. V., Adjei, R. A., Marianno, L., & Charris, L. (2023). The design and characteristics of school improvement plan templates. *AERA Open*, *9*, 23328584231168378. https://doi.org/10.1177/2332858423116

Vellanki, V., & Prince, S. P. (2018). Where are the "people like me"?: A collaborative autoethnography of transnational lives and teacher education in the US. *The Teacher Educator*, *53*(3), 313-327. https://doi.org/10.1080/08878730.2018.1462873

Wang, S. (2017). "Teacher centered coaching": An instructional coaching model. *Mid-Western educational researcher*, *29*(1), 3.

Yazan, B. (2019). Toward identity-oriented teacher education: Critical autoethnographic narrative. *Tesol Journal*, *10*(1), e00388. https://doi.org/10.1002/tesj.388