Pause, Reflect, Dialogue: AI as a Reflective Partner in GTA Teaching Practice

Azadeh Moladoost, Doctoral Researcher in Applied Linguistics, University of Warwick, Azadeh.Moladoost@warwick.ac.uk

Azadeh Moladoost is a doctoral researcher at the University of Warwick, investigating English language teachers' feedback-seeking behaviour. Her research interests include teacher identity, professional development, reflective practice, and posthumanist mentoring. She is also an experienced English for Academic Purposes (EAP) practitioner and mentors teachers engaged in Exploratory Action Research (EAR) and other forms of classroom-based inquiry. Her recent work explores the role of artificial intelligence in reflective practice and professional learning within higher education.

Abstract

This paper explores how structured, intentional reflection can help Graduate Teaching Assistants (GTAs) navigate fragmented teaching roles and develop stronger professional identities. Drawing on Schön's (1983) and Killion and Todnem's (1991) models of reflection, I adapted the Five-Minute Reflection Rule—brief, focused reflections before and after teaching sessions—to build sustainable habits that foster agency, confidence, and pedagogical intentionality. Extending Brookfield's (1995) four lenses, I incorporated generative artificial intelligence (AI) tools such as ChatGPT and Grok as dialogic partners. Rather than producing content, these tools acted as reflective scaffolds, prompting new questions, surfacing blind spots, and reframing teaching dilemmas. Through examples from my GTA experience, I show how combining structured reflection with AI-mediated dialogue produced tangible classroom changes while exposing the limitations and risks of algorithmic input. I propose a sociotechnical lens as an extension to existing reflective frameworks, emphasizing how human reflection and technological mediation co-construct reflective processes. Ethical concerns—including bias, data privacy, and institutional responsibility for AI literacy—are also addressed. I argue that when approached critically and complementarily, AI can lower barriers to reflection and enrich professional learning without replacing the relational and dialogic dimensions of human reflection. For GTAs and early-career educators, even five minutes of disciplined, critically informed reflection can transform teaching practice and identity formation.

Key words: Reflective Practice, Graduate Teaching Assistants (GTAs), Five-Minute Reflection Rule, Micro-Reflection, Artificial Intelligence (AI) in Education, Professional Identity Development

1. The Need to Pause and Notice

Working as a Graduate Teaching Assistant (GTA) at Warwick offered valuable but fragmented teaching experiences. My role often involved episodic seminar support and marking responsibilities without the continuity of leading a full module. Balancing these duties with doctoral research and mentoring sometimes felt overwhelming and led to moments of self-doubt. I often felt reactive—moving from task to task with limited agency and visibility as a proactive educator.

Recognising the need to slow down and connect more intentionally with both students and teaching tasks, I turned to reflection as a means of making sense of my professional learning. In Schön's (1983) terms, I was caught up in action and risked missing opportunities to reflect in practice. Compared with previous teaching roles, this GTA position involved diverse student cohorts and pre-designed materials, which challenged my assumptions and prompted me to develop a more structured reflective routine to support identity formation and confidence.

This paper explores how I adapted the Five-Minute Reflection Rule to my GTA practice and extended it through dialogic engagement with artificial intelligence (AI) tools. Drawing on established reflective frameworks (Schön, 1983; Killion & Todnem, 1991; Brookfield, 1995), I argue that structured self-reflection, supported by AI as a reflective partner, can scaffold professional development for GTAs. While peer dialogue remains central, AI-supported reflection offers accessible, low-stakes opportunities for critical inquiry. The Five-Minute Reflection Rule builds on existing notions of micro-reflection (Ryan & Ryan, 2013) by operationalising them into a systematic, time-bounded routine that integrates reflection-for-action and reflection-on-action. Whereas micro-reflections typically occur informally, the Five-Minute Rule formalises these brief pauses into a repeatable structure explicitly linked to professional identity formation and iterative pedagogical design.

This paper contributes to scholarship on reflective practice and GTA professional development in two ways. First, it extends existing reflection models by integrating the Five-Minute Reflection Rule with Schön's and Killion and Todnem's frameworks, showing how brief, structured reflection before and after teaching can foster agency, confidence, and professional identity in roles often marked by fragmentation. Second, it expands current discussions on digital tools in reflective practice (e.g., Novoa-Echaurren et al., 2025; Sellnow , 2025; L'Enfant, 2024) by positioning generative AI as a sociotechnical reflective partner that complements, rather than replaces, human dialogue. While scholars such as Bearman, Ryan, and Ajjawi (2022) have explored how AI is reshaping higher education discourse, little attention has been paid to how GTAs specifically can mobilise such tools for structured, critical reflection. Addressing this gap, the paper offers a theoretically grounded yet practical model for supporting early-career educators' professional learning through the integration of self-reflection, dialogic inquiry, and emerging technologies. The Five-Minute Rule thus laid the groundwork for a more dialogic and transformative reflective process—one that I later expanded through engagement with AI partners and observed in the evolving dynamics of my teaching practice.

2. Developing a Reflective Routine

To reconnect with my teaching practice and make sense of my role as a GTA, I turned to the Five-Minute Reflection Rule, a technique I had first developed during my work as a teacher-research mentor. In that earlier context, I discovered that brief, disciplined pauses could transform otherwise fleeting experiences into learning opportunities. By allocating just five minutes before and after sessions to jot down thoughts, I created a structure that made reflection less daunting and more habitual.

Adapting this practice to my GTA work meant deliberately pausing before each seminar to set intentions and after each session to capture immediate impressions. I initially framed these as short notes—bullet points, keywords, and fragments rather than polished prose—so the practice remained manageable. This five-minute routine was sustained throughout the term, with pre- and post-seminar reflections written weekly. Before class, I wrote about my aims, possible challenges, and expectations of student engagement. After class, I noted observations, emotions, surprises, and critical incidents. Over time, I developed guiding questions that anchored this process:

- What am I aiming to achieve today?
- What concerns or challenges might arise?
- What surprised me during the session?
- What would I change for next time?

Although deceptively simple, these prompts shaped a rhythm that encouraged intentionality, observation, and iterative improvement. They also helped counter the fragmented nature of GTA work. Moving between multiple modules and groups often left me feeling like a temporary participant in other people's classrooms; these reflective pauses gave me a sense of ownership and continuity across disparate teaching episodes.

There were also emotional benefits. Writing even a few sentences before teaching gave me a moment to centre myself and manage the emotions experienced before entering a class. Recording reflections immediately afterwards captured raw impressions that might otherwise have been lost to memory. In this sense, the Five-Minute Rule acted both as a cognitive scaffold and an emotional checkpoint, helping me process the affective dimensions of teaching as well as the practical ones.

My use of the Five-Minute Rule aligns with what Ryan and Ryan (2013) describe as micro-reflections—short, intentional pauses that create "reflective spaces" in otherwise fast-paced academic contexts. However, the Rule extends this concept in two ways. First, it operationalises micro-reflection as a systematic before-and-after routine rather than an occasional pause, embedding reflection directly into the temporal rhythm of teaching. Second, it connects these brief moments to Schön's (1983) reflection-in/on/for-action cycle, transforming micro-reflection from a spontaneous act into a structured habit that supports ongoing identity formation. These small, structured interventions made reflection feasible amid competing demands. They also resonate with Larrivee's (2008) argument that reflective practice is not just about "thinking back" but about cultivating habits of mind that transform teaching into ongoing inquiry.

In the GTA context, the Five-Minute Rule thus became more than a time-management strategy; for me it was a way to actively construct my newly developing professional identity as a GTA. Pausing before and after teaching enabled me to frame myself not simply as a deliverer of content, but as an educator engaged in inquiry, experimentation, and growth. This small, intentional practice seeded a shift from reactivity toward a more deliberate, agency-oriented stance as a GTA.

3. Extending Reflection: AI as a Reflective Partner

Alongside Brookfield's lenses to explore my own reflections, I experimented with AI tools (e.g., ChatGPT, Grok) as reflective partners. I did not use them for teaching content or administration but positioned them as interlocutors to deepen reflection. Across a term, I engaged with AI approximately once or twice per week, typically spending 10–15 minutes per interaction. These exchanges often followed my written pre- and post-class notes- or at a later time- allowing me to extend or question my initial reflections while the experiences were still fresh. After writing my pre- and post-class notes, I shared selected excerpts with AI, inviting questions, theme spotting, and identification of potential blind spots.

This shifted my self-reflections from solitary journaling to conversational inquiry, similar to dialogue with a critical peer. For example, I prompted:

- What recurring themes, emotions, or behaviours do you notice across my reflections?
- What blind spots or biases might I be overlooking?
- What new reflection prompts could help me dig deeper?

One reflection noted my difficulty in transitioning from informal conversation to structured discussion. AI asked, "What helps you feel ready to shift from informal to structured teaching work?" This led me to introduce short check-in activities (e.g., asking students, "What's one idea from the reading that caught your attention?"), which balanced rapport with focus.AI thus acted as a low-stakes reflective scaffold—not replacing peer dialogue but preparing me for more focused conversations with colleagues.

4. What Changed (and What Didn't): Reflection in Action

Over time, these reflective practices did more than generate insights; they led to tangible shifts in my teaching. One notable change was how I approached moments of silence in seminars. Previously, I tended to rush to fill these pauses with content, interpreting them as disengagement. Through reflective dialogue with AI, I reconsidered silence as a potential space for processing and voluntary participation. I began intentionally extending wait times and framing silence as an active part of the learning process, which resulted in more thoughtful student contributions and deeper discussions. This represented a form of reflection-in-action (Schön, 1983), where in-the-moment awareness and adjustment became integral to my teaching decisions.

Similarly, by anticipating challenges identified in my pre-class reflections, I experimented with new facilitation techniques, such as using think-pair-share activities early in sessions to increase engagement. These anticipatory adjustments align with reflection-for-action, using prior insights to shape future practice. These

changes, grounded in structured reflection, improved classroom dynamics and my confidence as a facilitator, demonstrating that the reflective process was not only analytical but transformative in shaping my practice.

Not all AI-supported reflections were productive, however. In one instance, I shared a reflection about students' reluctance to participate in group work. The AI suggested introducing competitive elements, such as awarding points for contributions, as a solution. While this seemed plausible, it clashed with the collaborative, low-pressure atmosphere I was trying to foster and risked alienating quieter students. Acting on this suggestion initially reduced participation and shifted the classroom dynamic in ways I found counterproductive. Reflecting on this misstep taught me an important lesson about the limits of AI-generated advice: while it can prompt creative ideas, these must always be critically evaluated against pedagogical aims, classroom context, and student needs. This stage of analysing outcomes after teaching corresponded to reflection-on-action, reinforcing the iterative cycle through which insight informed both immediate and future pedagogical choices. Ultimately, the experience underscored that critical reflection involves not only recognising successful strategies but also learning through misjudgements, which often yield the most enduring professional insights.

These instances illustrate the full spectrum of Schön's reflective framework: reflection-for-action (planning), reflection-in-action (adapting), and reflection-on-action (evaluating), each supported and deepened through structured and AI-mediated reflection. And most importantly this experience deepened my awareness that AI is best used as a question generator rather than a prescriptive source of solutions.

5. Theoretical Underpinnings

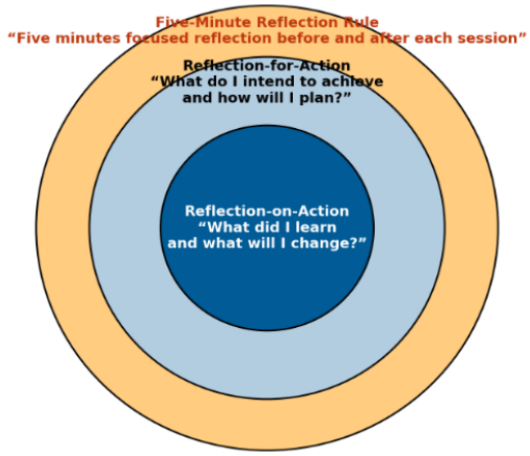

Figure 1The Five-Minute Reflection Rule integrating reflection-for-action and reflection-on-action.

This practice aligns with established reflection models. Schön (1983) distinguishes reflection-in-action (thinking on one's feet) and reflection-on-action (looking back afterwards). My post-class notes exemplified reflection-on-action, while pre-class notes introduced a proactive element resonating with reflection-for-action (Killion & Todnem, 1991). This forward-looking habit shifted me from task-oriented delivery toward mindful, intentional pedagogy.

Brookfield's (1995) four lenses of critical reflection offer complementary perspectives for examining and improving teaching practice. They include the autobiographical lens (reflecting on one's own experiences and assumptions), the

students' lens (considering how learners perceive and experience teaching), the colleagues' lens (drawing on peer feedback and dialogue), and the theoretical lens (using research and theory to interrogate practice). Engaging with all four helps teachers move beyond a single viewpoint, uncover hidden assumptions, and develop more responsive, informed, and critically grounded practices.

While my focused journaling foregrounded the autobiographical lens, I attempted to simulate the students' and colleagues' perspectives by using AI to pose critical questions and alternative interpretations. However, AI's contribution here is not unproblematic. Whereas the colleagues' lens is grounded in human relationships, shared contexts, and tacit pedagogical knowledge, AI-generated feedback lacks these relational and contextual dimensions. It may surface valuable alternative framings, but it can also obscure nuance or oversimplify complex dynamics, especially when reflective questions are shaped by training data rather than lived experience. This tension highlights both the potential and the limits of AI as an extension of the colleagues' lens: it can prompt new lines of inquiry but cannot replicate the trust, empathy, and situated understanding that underpin genuine collegial dialogue.

Building on Brookfield's (1995) foundational framework, I propose the concept of a sociotechnical lens as a tentative extension to reflective practice models in higher education. This lens foregrounds the dynamic interplay between human reflection and technological mediation, viewing generative AI tools as active participants that shape rather than merely mirror reflective processes. While the term "sociotechnical" has been widely used in fields such as information systems and human–technology interaction (e.g., Orlikowski & Iacono, 2001; Suchman, 2007; Dourish, 2001), it has not, to my knowledge, been systematically applied to reflective models in teacher development. I use the term here to describe a perspective that foregrounds the interplay between human reflection and technological mediation, in which generative AI tools do more than passively mirror human thinking — they actively shape the reflective process through their embedded biases, training data, design logics, and affordances. Unlike Brookfield's original lenses, which are rooted in human experience, relationships, and discourse, a sociotechnical lens highlights how reflection is increasingly co-constructed in interaction with algorithmic systems. For GTAs, this matters because it encourages not only the interrogation of their own assumptions but also a critical examination of the assumptions and power dynamics embedded in the technologies they use. I offer this lens as a conceptual provocation rather than a definitive addition to Brookfield's model, aiming to stimulate further inquiry into how emerging technologies might reconfigure reflective practice and professional learning in higher education.

Table 1.
Brookfield's (1995) Four Lenses and the Proposed Sociotechnical Lens

Lens	Focus	Source of Insight	Purpose in Reflection
Autobiographical	How do my experiences, values, and	Self-reflection on personal practice	To identify assumptions and patterns in one's own teaching

	emotions shape my teaching?		
Students'	How do learners perceive and experience my teaching?	Student feedback, dialogue, and observation	To understand impact and responsiveness of teaching
Colleagues'	How might peers view or interpret my teaching practices?	Peer dialogue, observation, mentoring	To gain alternative perspectives and reduce blind spots
Theoretical	What can existing research and theory reveal about my practice?	Educational literature and reflective frameworks	To connect practice with broader pedagogical knowledge
Sociotechnical (proposed)	How do human–technology interactions shape reflection and practice?	Dialogues with generative AI tools and awareness of their affordances and biases	To examine how reflection is co-constructed with technological mediation and power dynamics

6. Ethical and Critical Considerations

My reflections with AI surfaced ethical and practical concerns. AI literacy proved critical: as Walter (2024) argues, effective engagement requires skill in crafting prompts and evaluating responses. At times, outputs were overwhelming or superficial, requiring careful filtering.

Generative AI also raises questions of bias, privacy, and epistemic authority. Yan et al. (2023) show how large language models reproduce biases from training data, aligning with my experience of occasionally generic or culturally insensitive outputs. Sharing classroom reflections with external systems also introduced data protection risks. Dotan et al. (2024) call for responsible adoption frameworks—transparency, governance, and values-based principles—that I found necessary in deciding what to share.

AI also challenges ownership of reflection. Bauer's (2025) ISAR model warns against over-reliance that substitutes reflective labour. Francis et al. (2025) note that although generative AI may free cognitive capacity, there is a risk of diminished critical thinking or superficial engagement if it is used uncritically. For me, the danger lay in leaning on AI for questions rather than practising the discomfort of self-interrogation. Reflection, however, is ultimately relational and collective rather than solitary. As Novoa-Echaurren et al. (2025) remind us, collegial closeness remains essential. While AI provided a low-stakes space to test ideas, it cannot replace the

empathy, trust, and solidarity of peer dialogue. My stance is that AI should act as a catalyst, not a substitute, embedded within broader reflective communities. At the same time, reflection on AI use cannot remain solely at the individual level; broader institutional responsibilities must also be addressed. Universities have a crucial role in supporting GTAs to engage with AI tools ethically and critically through clear policies, structured training, and ongoing dialogue about responsible use. As Dabis and Csáki (2024) argue, higher-education institutions are beginning to develop governance frameworks that address accountability, transparency, human oversight, and inclusiveness in AI use. Embedding such guidance into GTA development programmes is essential if reflective practice with AI is to remain ethical, equitable, and aligned with educational values. Without institutional support, GTAs risk navigating complex ethical terrain in isolation, which can undermine both the depth and safety of their reflective practices. Ultimately, my ethical stance is that AI should be approached as a reflective partner within a human-centred, values-driven practice—used critically, transparently, and always in service of pedagogical integrity.

7. Insights and practical implications

Drawing on my experiences, I identify three key insights that may resonate with other practitioners seeking to improve their teaching practice.
First, keep reflection simple and time-efficient. The Five-Minute Rule makes reflection sustainable and, over time, a manageable habit even under heavy workloads.

Second, aim to make reflection multidimensional by incorporating multiple perspectives. Combining Schön's, Brookfield's, and the sociotechnical lens broadened my own insights. However, caution is essential when inviting external perspectives—especially from AI—into your reflective process.

Finally, use AI as a complement, not a replacement. While AI supported my confidence and inquiry, its use must remain grounded in peer dialogue and ethical awareness.

8. Conclusion: Short Time, Big Influences

This paper traced my journey as a GTA navigating fragmented teaching roles alongside doctoral study. Integrating the Five-Minute Reflection Rule with Schön's and Brookfield's frameworks supported professional growth and identity formation. Extending this practice with AI illustrated how emerging technologies can scaffold reflection when used critically and complementarily.

The central insight is that AI can lower barriers to inquiry and help surface assumptions in a low-stakes space, yet credibility, empathy, and belonging still depend on human dialogue. Reflection is not optional but integral to professional practice. For GTAs, even five minutes of disciplined reflection can reshape teaching, sustain growth, and strengthen identity—especially when supported by both human and technological partners. Looking ahead, future research should examine how AI-

mediated reflection can be tested and adapted across GTA cohorts and disciplines to foster more connected, sustainable reflective communities.

Ethical Statement: This paper is based on the author's own reflective and autoethnographic accounts of professional practice as a Graduate Teaching Assistant. It does not involve external participants or sensitive institutional data; therefore, formal ethical approval was not required. The author affirms that the work adheres to the ethical principles of integrity, transparency, and responsible self-representation, and that there are no conflicts of interest, financial or otherwise, related to the conduct or publication of this research.

References

Bauer, E., Greiff, S., Graesser, A. C., Scheiter, K., & Sailer, M. (2025). Looking beyond the hype: Understanding the effects of AI on learning. *Educational Psychology Review, 37*(2), 45. https://doi.org/10.1007/s10648-025-10020-8

Bearman, M., Ryan, J., & Ajjawi, R. (2022). Discourses of artificial intelligence in higher education: A critical literature review. *Higher Education, 86*(2), 369–385. https://doi.org/10.1007/s10734-022-00937-2

Brookfield, S. D. (1995). *Becoming a critically reflective teacher.* Jossey-Bass.

Dabis, A., & Csáki, C. (2024). AI and ethics: Investigating the first policy responses of higher education institutions to the challenge of generative AI. *Humanities and Social Sciences Communications, 11*, Article 1006. https://doi.org/10.1057/s41599-024-03526-z

Dotan, R., Shneor, R., & Rodrigues, J. (2024). Ethical governance of generative AI in higher education: Principles, policies, and pedagogies. *Computers & Education, 205*, 105095. https://doi.org/10.1016/j.compedu.2023.105095

Dourish, P. (2001). *Where the action is: The foundations of embodied interaction.* MIT Press.

Francis, N. J., Jones, S., & Smith, D. P. (2025). Generative AI in higher education: Balancing innovation and integrity. *British Journal of Biomedical Science, 81*, 14048. https://doi.org/10.3389/bjbs.2024.14048

Killion, J., & Todnem, G. (1991). A process for personal theory building. *Educational Leadership, 48*(6), 14–16.

Larrivee, B. (2008). Development of a tool to assess teachers' level of reflective practice. *Reflective Practice, 9*(3), 341–360. https://doi.org/10.1080/14623940802207451

L'Enfant, J. (2024). AI as a reflective coach in graduate ESL practicum: Activity theory insights into student-teacher development. *European Journal of Open, Distance and e-Learning, 26*(Suppl. 1), 1–19. https://doi.org/10.2478/eurodl-2024-0003

Novoa-Echaurren, P., Rodríguez, F., Herrera, C., & Salazar, M. (2025). Reflective practice and digital technology use in a university setting. *Education Sciences, 15*(6), 643. https://doi.org/10.3390/educsci15060643

Orlikowski, W. J., & Iacono, C. S. (2001). Research commentary: Desperately seeking the "IT" in IT research—A call to theorizing the IT artifact. *Information Systems Research, 12*(2), 121–134. https://doi.org/10.1287/isre.12.2.121.9700

Ryan, M., & Ryan, M. (2013). Theorising a model for teaching and assessing reflective learning in higher education. *Higher Education Research & Development, 32*(2), 244–257. https://doi.org/10.1080/07294360.2012.661704

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

Sellnow, D. D., Johnson, M., & Rivera, C. (2025). Reflection-AI: Exploring the challenges and opportunities of integrating AI in reflective practice. *Frontiers in Communication, 10*, 1615040. https://doi.org/10.3389/fcomm.2025.1615040

Suchman, L. (2007). *Human–machine reconfigurations: Plans and situated actions* (2nd ed.). Cambridge University Press.

Walter, Y. (2024). Embracing the future of artificial intelligence in the classroom: The relevance of AI literacy, prompt engineering, and critical thinking in modern education. *International Journal of Educational Technology in Higher Education, 21*, Article 15. https://doi.org/10.1186/s41239-024-00448-3

Yan, X., Li, H., & Wang, Z. (2023). Large language models and the reproduction of bias: Implications for education. *Computers and Education: Artificial Intelligence, 4*, 100157. https://doi.org/10.1016/j.caeai.2023.100157