Article

https://doi.org/10.52696/TKKG3982
Reprints and permission:
The Malaysian English Language Teaching Association
Corresponding Author:
Warid Mihat waridmihat@uitm.edu.my
ORCID ID: https://orcid.org/0000-0002-6525-3661

ELT Teachers Beyond the Classroom: Glocalising AI Literacy and Competency in Malaysian ELT through AI Profile

Warid Mihat
Universiti Teknologi MARA
Cawangan Kelantan, Malaysia

ABSTRACT

Generative artificial intelligence (GenAI) is increasingly used by English language teachers to plan lessons, prepare materials and assess learning. These applications matter, but they can also make teachers' AI development appear largely concerned with classroom instruction. Teaching, however, involves more than this. Teachers must also reflect on their practice, extend their professional knowledge and work with families and communities. This conceptual paper therefore examines how AI literacy and competency can be developed across these wider responsibilities in Malaysian English language teaching (ELT). Using conceptual theory synthesis and contextual adaptation, the paper considers how international AI frameworks can be glocalised through the Southeast Asia Teachers Competency Framework and Standard Guru Malaysia 2.0 (SGM 2.0). It proposes a Teacher AI Profile that brings together the development of AI literacy and competency across SGM 2.0's four domains: Personal Quality, Knowledge Orientation, Instructional and Community Engagement. Illustrative ELT situations show how teachers might question AI advice during reflection, verify research summaries, adapt learning materials and prepare suitable communication for parents. The discussion argues that confidence in instructional AI use does not necessarily indicate comparable development in other professional roles. It also recognises that deciding not to use AI may be appropriate and that ethical responsibilities inform all four domains. The paper concludes that teachers' AI development should be understood more broadly than classroom technology use. The proposed profile offers a basis for professional learning and future research, rather than a validated assessment instrument.

KEYWORDS: AI literacy; AI competency; Teacher AI Profile; glocalisation; Standard Guru Malaysia 2.0

Introduction

English language teachers make professional decisions every day, often under demanding conditions. They select reading texts, explain language rules, decide how pupils should practise speaking and writing, assess learning and communicate with parents and other stakeholders. Generative artificial intelligence (GenAI) has made some tasks faster, but it has not removed the responsibility for doing them well (Mishra et al., 2023). An AI-generated passage may be linguistically fluent but too difficult for its intended readers (Moorhouse, 2024). A model answer may be accurate but leave little for pupils to work out themselves. Similarly, a reading comprehension exercise may contain the correct answer but poorly constructed distractors, while automated speaking feedback may treat an intelligible pronunciation feature as an error (Jeon et al., 2024). These examples remind us that producing materials is not the same as making sound educational decisions (Kohnke et al., 2023). The question, therefore, is not simply what AI can produce, but whether teachers can decide what should be used, adapted or rejected for a particular learning purpose.

This question becomes more important when AI systems developed for international users are introduced into Malaysian classrooms. English teachers work within a national curriculum, Common European Framework of Reference for Languages (CEFR)-related expectations and schools where opportunities to encounter English vary considerably (Council of Europe, 2020). Some pupils use Bahasa Melayu and other home languages to make sense of unfamiliar English expressions, especially when reading demanding classroom texts. Others have access to digital resources, while some depend largely on printed materials and classroom instruction. Asking AI to produce a 'Malaysian' lesson by changing names, places or cultural references does not necessarily make the materials suitable for local learners (Mishra, 2019). A dialogue set in a Malaysian restaurant, for example, may appear familiar but still contain language that pupils cannot use meaningfully (Kirkpatrick, 2007; Moorhouse et al., 2024). Glocalisation, therefore, requires more than making AI-generated materials look local; it requires attention to learners and their circumstances.

International frameworks have contributed to our understanding of AI literacy and competency. They explain what teachers should know about AI, how to evaluate its outputs and how to use the technology responsibly (Long & Magerko, 2020; Ng et al., 2021). They also remind us that teachers remain accountable for decisions involving learners and the quality of their education. However, these principles do not always establish what constitutes an appropriate decision in a particular setting. Knowing that AI can generate a CEFR A2 reading passage, for example, does not establish whether it is suitable for a particular Form 1 class. Nor does knowing how to generate automated feedback show whether it will help a pupil become an independent writer (Chiu et al., 2024; Miao & Cukurova, 2024). Such decisions depend on teachers' knowledge of language, learners and educational contexts.

There is, however, another issue that deserves attention. Discussions and training concerning AI in education often begin with instructional applications: lesson planning, materials development, classroom activities, assessment and feedback. These are important responsibilities, and research has helped teachers understand both the possibilities and limitations of AI in these areas (Li et al., 2025). Nevertheless, reviews of GenAI in school education and language teaching continue to emphasise instructional design, assessment and changing classroom roles, although professional development and identity also receive attention (Cincioğlu et al., 2026; Zhang et al., 2026). The problem is not that

classroom applications receive too much attention; they are, after all, central to teaching. It is that AI literacy and competency for other responsibilities may be developed less deliberately. Learning to write effective prompts for worksheets, for example, does not necessarily prepare teachers to examine research claims, reflect on professional choices or work appropriately with parents. We therefore need a wider perspective that places instructional use within teaching as a profession.

Established models help explain why instruction is a prominent starting point. The Technological Pedagogical Content Knowledge (TPACK) framework has been influential in explaining how teachers combine technological, pedagogical and subject knowledge (Mishra & Koehler, 2006). Its value lies in showing that knowing how to operate technology is insufficient for effective teaching. Mishra et al. (2023) extend this discussion to GenAI, emphasising contextual knowledge and wider social implications. Nevertheless, TPACK remains principally concerned with technology in teaching and learning. Similarly, Ng et al. (2021) identify knowing and understanding, using and applying, evaluating and creating, and ethical awareness as dimensions of AI literacy. These provide a useful foundation but do not, by themselves, explain how teachers develop and apply AI literacy and competency across their full professional responsibilities (Chiu et al., 2024). This does not mean that these established models are inadequate or have limited educational value. Rather, they address particular questions and cannot be expected to explain every aspect of teachers' work.

It would also be unfair to suggest that international frameworks have ignored teachers' wider professional development. UNESCO's AI Competency Framework for Teachers includes five areas: human-centred mindset, ethics of AI, AI foundations and applications, AI pedagogy, and AI for professional learning (Miao & Cukurova, 2024). These areas recognise the need to question AI, continue learning professionally and consider its wider consequences. The European Digital Competence Framework for Educators (DigCompEdu) also includes professional engagement, organisational communication, collaboration and reflective practice alongside teaching, learning and assessment (Redecker, 2017). These frameworks offer a broader view of teachers' work than classroom technology alone. However, they are general references across educational systems. Their application to Malaysian ELT requires attention to professional expectations, school conditions and responsibilities towards pupils, colleagues, families and communities (SEAMEO INNOTECH, 2018; Kementerian Pendidikan Malaysia, 2023).

The issue, then, is not a shortage of frameworks acknowledging teachers' wider responsibilities. It is the possibility of uneven development when AI-related training focuses mainly on instructional tasks (Zhang et al., 2026). An English teacher may confidently generate reading exercises but be less prepared to question an AI summary of educational research, use AI for self-reflection or judge whether an AI-drafted message is appropriate for parents. These differences concern both AI literacy—what teachers understand, recognise and question—and AI competency, what they can responsibly do with that understanding (Miao & Cukurova, 2024). Developing either only through classroom examples risks presenting a narrower and perhaps misleading picture of professional readiness. This paper therefore considers how both can develop across the responsibilities that constitute teachers' work (Schön, 1983; Priestley et al., 2015).

Standard Guru Malaysia 2.0 (SGM 2.0) provides a useful local starting point. Developed with reference to the Southeast Asia Teachers Competency Framework (SEA-TCF) and other standards, SGM 2.0 identifies four domains: Personal Quality, Knowledge Orientation, Instructional and Community Engagement (SEAMEO INNOTECH, 2018; Kementerian Pendidikan Malaysia, 2023).

Together, they comprise fourteen competencies reflecting the breadth of teachers' professional responsibilities. The standard separately identifies ethical duties towards the profession, pupils, parents or guardians, and society and the nation (Kementerian Pendidikan Malaysia, 2023). For English teachers, developing AI literacy and competency may involve evaluating AI advice for personal reflection, verifying information for professional learning, adapting reading activities and communicating with parents. These activities belong to different professional domains but require sound judgement in each situation. SGM 2.0 thus offers a meaningful structure for considering development beyond instruction (Redecker, 2017; Miao & Cukurova, 2024).

Against this background, the paper proposes the term 'Teacher AI Profile'. The profile refers to the developing configuration of a teacher's AI literacy and AI competency across the four SGM 2.0 domains. AI literacy involves understanding AI's possibilities, limitations and implications, while competency involves applying and evaluating that understanding in professional action (Ng et al., 2021; Chiu et al., 2024). The profile brings both together to provide a broader and more balanced view of teachers' professional development. It may show considerable confidence in instructional use but emerging capability in professional inquiry or community engagement, or a different pattern for another teacher. Professional judgement—deciding when, why, how and whether AI should be used—runs through both constructs in every domain; it is not a third competency or final developmental stage (Bandura, 2001; Schön, 1983). Nor is the intention to encourage teachers to use AI in every professional task. Teachers may show literacy and competency by recognising when a non-AI approach is preferable. The contribution is a domain-sensitive account of development across professional responsibilities, not a new tool inventory or a claim that every teacher should use AI in the same way.

Three questions guide the discussion. First, what does it mean to glocalise global AI literacy and competency concepts for Malaysian ELT? Second, how might teachers' AI literacy and competency be developed and understood across the four domains and fourteen competencies of SGM 2.0? Third, what conceptual and empirical evidence is needed before the proposed Teacher AI Profile can be used responsibly? The article uses conceptual theory synthesis with contextual adaptation (Jaakkola, 2020). It clarifies AI literacy and competency, examines the regional SEA-TCF and Malaysian SGM 2.0, and considers how both may develop within each professional domain (SEAMEO INNOTECH, 2018; Kementerian Pendidikan Malaysia, 2023). The proposed profile offers a basis for discussion and future research rather than a validated assessment instrument or an officially endorsed Malaysian AI standard (Kane, 2013).

Conceptual Approach and Method

Design and rationale

This article uses conceptual theory synthesis and contextual adaptation to examine how AI literacy and competency can develop across Malaysian teachers' professional responsibilities rather than primarily within classroom instruction (Jaakkola, 2020; Mishra, 2019). Conceptual synthesis connects ideas often considered separately, while contextual adaptation interprets them within educational settings (Jaakkola, 2020; Miao & Cukurova, 2024). Following Jaakkola (2020), the contribution lies in conceptual clarity, coherent relationships and practical relevance, rather than systematic coverage or empirical validation.

The Southeast Asia Teachers Competency Framework (SEA-TCF) establishes a foundation for instruction, professional learning and community engagement (SEAMEO INNOTECH, 2018). Standard Guru Malaysia 2.0 (SGM 2.0) provides the national reference through four domains, fourteen competencies and a separate ethical component (Kementerian Pendidikan Malaysia, 2023). The frameworks are related but not identical: the SEA-TCF identifies twelve general competencies, whereas SGM 2.0 specifies fourteen (SEAMEO INNOTECH, 2018; Kementerian Pendidikan Malaysia, 2023). Accordingly, Kementerian Pendidikan Malaysia (2023) provides the organisational basis for the proposed Teacher AI Profile, while the regional framework explains its broader professional rationale.

Selection and analytical procedure

Sources were selected purposively from four areas: AI literacy and competency; pedagogical knowledge, teacher agency and reflection; GenAI in language education; and the SEA-TCF and SGM 2.0 documents (Ng et al., 2021; SEAMEO INNOTECH, 2018). Original frameworks informed definitions, while ELT examples illustrated their relevance to professional situations (Shulman, 1986; Miao & Cukurova, 2024). Consistent with Jaakkola (2020), this selection supports conceptual interpretation rather than claiming an exhaustive literature review.

The analysis followed three interpretive passes (Jaakkola, 2020). First, literacy was examined as understanding and evaluating AI, and competency as applying that understanding in purposeful professional action (Ng et al., 2021; Chiu et al., 2024). Second, all fourteen SGM 2.0 competencies were considered within their official domains through illustrative ELT activities (Kementerian Pendidikan Malaysia, 2023). Third, these domain-based interpretations informed a Teacher AI Profile representing the development of literacy and competency across professional responsibilities and over time (Schön, 1983; Priestley et al., 2015). Ethical duties remain separate under SGM 2.0 (Kementerian Pendidikan Malaysia, 2023), while professional judgement and justified non-use guide interpretation (Schön, 1983).

Three boundaries guided the synthesis: literacy and competency overlap; ethical duties are not additional domains; and illustrative cases are not empirical findings (Chiu et al., 2024; Kementerian Pendidikan Malaysia, 2023). Following Kane (2013), the profile cannot yet be treated as a validated measure, and its usefulness and fairness require empirical examination.

AI Literacy, AI Competency and The Development of AI Profile

AI literacy: Knowing what

AI literacy refers to understanding what AI can do, its limitations and what requires human evaluation (Long & Magerko, 2020; Ng et al., 2021). Teachers must distinguish fluent language from reliable information and generated questions from valid comprehension assessments (Moorhouse, 2024). It also involves recognising that explanations must suit learners' age and proficiency, rather than merely be linguistically correct (Shulman, 1986). AI literacy therefore involves critical understanding, evaluation and ethical awareness, not simply knowledge of technical terms (Pinski & Benlian, 2024; Miao & Holmes, 2023). The central concern is knowing what deserves closer examination.

A teacher asks GenAI to explain the present perfect tense to Year 5 pupils. The explanation may be grammatically correct but too complicated for them (Moorhouse, 2024). An AI-literate teacher recognises that correctness does not guarantee suitability and that examples may be misleading or culturally unfamiliar (Ng et al., 2021). Likewise, a passage labelled 'CEFR A2' may not match its intended readers in vocabulary, structure or task demands (Council of Europe, 2020). Recognising these limitations helps teachers decide what to check before using the materials.

AI competency: Doing what

AI competency concerns applying AI-related understanding purposefully and responsibly in professional practice (Chiu et al., 2024; Miao & Cukurova, 2024). It involves selecting, adapting, evaluating or rejecting AI suggestions rather than merely operating tools (Mishra & Koehler, 2006). For example, instead of accepting an AI-generated rewrite of a pupil's paragraph, a teacher may select two feedback points and ask the pupil to revise independently (Han & Li, 2024). This protects opportunities for learning. Competency may equally be demonstrated through a justified decision not to use AI (Chiu et al., 2024). Competency also applies to professional inquiry, personal reflection and communication with families.

These responsibilities call for informed action. A teacher might adapt speaking prompts, verify an AI summary of language policy, question a suggestion offered for professional reflection or revise an AI-drafted message to parents (Mena Octavio et al., 2024; Miao & Cukurova, 2024). Such activities require knowledge of language, educational purposes and local circumstances (Shulman, 1986; Mishra et al., 2023). Success in one task, however, does not establish competency in every domain. What matters is whether teachers can explain their choices and assess their suitability.

AI Profile: Developing literacy and competency across four domains

The AI Profile refers to the developing configuration of AI literacy and competency across SGM 2.0's four domains: Personal Quality, Knowledge Orientation, Instructional and Community Engagement (Kementerian Pendidikan Malaysia, 2023). In each domain, literacy concerns what teachers understand and question; competency concerns what they do responsibly with that understanding (Ng et al., 2021; Chiu et al., 2024). Together, these provide a broader picture than instructional proficiency alone. Professional judgement connects understanding and action, including decisions to avoid AI when it is unnecessary or inappropriate (Bandura, 2001; Schön, 1983). It is not a separate competency or the definition of the profile.

A teacher may use AI skilfully to prepare A2 reading activities and evaluate comprehension questions, demonstrating strengths in the Instructional domain (Council of Europe, 2020). Yet the teacher may need further support in checking research summaries, reflecting critically or communicating with families. Another teacher might be more experienced in professional inquiry and community engagement but less familiar with automated assessment. Such differences should not automatically be treated as deficiencies (Kementerian Pendidikan Malaysia, 2023). Instead, the profile makes visible where literacy and competency are developing across professional responsibilities. Evidence should therefore extend beyond one lesson or reflection (Kane, 2013; Schön, 1983) and, where possible, consider change over time.

AI literacy, competency and the profile should not be understood as successive levels (Ng et al., 2021; Chiu et al., 2024). Understanding informs action, while experience can deepen understanding. Questioning an unreliable research summary may strengthen professional learning, just as revising AI feedback may improve instructional competency (Schön, 1983). These developments can differ across domains and change with experience (Kementerian Pendidikan Malaysia, 2023). Figure 1 and Table 1 illustrate this relationship, with professional judgement and SGM 2.0's separate ethical duties applying throughout. The value of the profile lies in making wider professional development visible rather than equating classroom AI use with overall readiness.

Table 1.
AI literacy, AI competency and the proposed four-domain Teacher AI Profile

Question	AI literacy	AI competency	Teacher AI Profile
Central emphasis	Understanding and critically appraising AI	Purposeful and responsible professional action	A developing view of AI literacy and competency across all four SGM 2.0 domains
Guiding question	What must I understand or question about AI here?	What can I do responsibly with this understanding?	How are my AI literacy and competency developing across my professional responsibilities?
Core evidence	Critical awareness of capabilities, limits, biases and ethical concerns	Informed action, adaptation, evaluation and appropriate non-use	Domain-specific strengths, development needs and changes in understanding and practice
Example in ELT	Questions an AI-generated A2 label or research summary	Adapts a reading task or verifies information before relying on it	Shows instructional strengths alongside development in inquiry, reflection and community engagement

Note. Conceptual distinctions developed from Long and Magerko (2020), Ng et al. (2021), Chiu et al. (2024), and Kementerian Pendidikan Malaysia (2023); the categories overlap and are not developmental stages.

From A Southeast Asian Framework to SGM 2.0

The SEA-TCF describes four essential competencies: knowing and understanding what to teach, helping students learn, engaging the community, and becoming a better teacher every day. These encompass twelve general competencies, thirty-one enabling competencies and 136 success descriptors. The framework moves beyond technical instructional skill to include knowledge, relationships, reflection and human qualities. It was developed regionally, with the intention that shared principles could remain meaningful in different educational systems. This provides an important reason for beginning an account of teacher AI development with professional work rather than the functions of a technological application (SEAMEO INNOTECH, 2018; Shulman, 1986; Priestley et al., 2015; Miao & Cukurova, 2024).

SGM 2.0 draws on the SEA-TCF but develops a distinct Malaysian structure. The four domains in the official document are Knowledge Orientation (Orientasi Ilmu), Instructional (Instruksional), Community Engagement (Pelibatan Komuniti) and Personal Quality (Kualiti Peribadi). They contain, respectively, three, four, three and four competencies, giving fourteen in total. A separate ethical component identifies responsibilities to the profession, pupils, parents or guardians, and society and the nation. These are not another four competency domains. They are obligations that should inform decisions within every domain, including the handling of pupil information and communication with

families (Kementerian Pendidikan Malaysia, 2023; SEAMEO INNOTECH, 2018; Miao & Holmes, 2023; UNESCO, 2021).

The distinction between regional foundations and national competencies is essential for glocalisation. The SEA-TCF explains why teachers' professional work extends beyond the classroom, whereas SGM 2.0 provides the locally authorised structure for discussing that work in Malaysia. Neither document is an AI assessment framework. The proposal in this paper is to consider how AI literacy and competency can be developed in relation to all four SGM 2.0 domains, using their professional purposes rather than a list of AI functions as the starting point. The Teacher AI Profile is consequently a researcher's interpretation of possible professional development, not an element of the official SGM 2.0 assessment system (SEAMEO INNOTECH, 2018; Kementerian Pendidikan Malaysia, 2023; Jaakkola, 2020; Miao & Cukurova, 2024).

Glocalisation As a Process of Professional Choice

The term *glocalisation* is coined from the words *global* and *local*. Here, it means adapting global AI ideas to the needs, circumstances and professional responsibilities of Malaysian ELT (Mishra, 2019; Kementerian Pendidikan Malaysia, 2023). Changing names or translating prompts into Bahasa Melayu does not ensure suitability (Kirkpatrick, 2007). A familiar story may be linguistically difficult, while an international topic may work well with appropriate support (Council of Europe, 2020). What matters is how well materials serve learners, not how much Malaysian they appear.

Pronunciation provides a useful example (Jeon et al., 2024). Speech-recognition tools may treat intelligible Malaysian English features as errors or favour one variety of English (Jeon et al., 2024; Kirkpatrick, 2007). Teachers therefore need to consider communicative purposes and learner confidence before accepting automated feedback (Moorhouse, 2024; Miao & Holmes, 2023). The aim is intelligible communication, not uncritical conformity to a particular accent.

Access presents another consideration. In schools with limited or unreliable internet connectivity, teachers may prepare AI-assisted resources for offline use; elsewhere, supervised interaction may be possible (Mishra, 2019; Miao & Cukurova, 2024). A brief first-language explanation can support understanding, but a chatbot that supplies every answer may reduce opportunities for reading (Moorhouse et al., 2024). Teachers must decide what support helps pupils learn and when textbooks, colleagues or peer discussion offer a better alternative.

Reading The Four SGM 2.0 Domains Through AI-Supported ELT

Table 2 sets out the fourteen SGM 2.0 competencies in concise English translations under their official domains and places them alongside broad SEA-TCF correspondences. The translations are used for discussion, not proposed as new national AI descriptors. The following sections consider each domain through two connected questions: what should English teachers understand and question about AI in relation to this responsibility, and what should they be able to do responsibly with that understanding? The first points to AI literacy; the second to AI competency. Together, the answers begin to describe a Teacher AI Profile that extends beyond Instructional practice. The domains are discussed in the order Personal Quality, Knowledge Orientation, Instructional and Community Engagement for explanatory purposes, without altering SGM 2.0's official structure (Kementerian Pendidikan Malaysia, 2023; SEAMEO INNOTECH, 2018; Jaakkola, 2020; Miao & Cukurova, 2024).

Table 2.
SEA-TCF regional competencies and the fourteen SGM 2.0 competencies

SGM 2.0 domain	Corresponding SEA-TCF general competencies (three in each group)	SGM 2.0 competencies (English translations)
Knowledge Orientation (3)	Deepen and broaden subject knowledge; understand educational trends, policies and curricula; follow local-to-global developments.	1. Understand educational philosophy, policy, curriculum and organisational management. 2. Deepen and broaden knowledge of teaching and learning. 3. Keep abreast of trends and educational developments.
Instructional (4)	Know students; use effective teaching and learning strategies; assess and provide feedback on learning.	4. Focus on developing pupils' potential. 5. Plan teaching and learning. 6. Implement teaching and learning. 7. Manage learning assessment.
Community Engagement (3)	Partner with parents and caregivers; involve the community in learning; encourage respect and diversity.	8. Build networks and relationships with parents/guardians and communities. 9. Involve parents/guardians and communities in pupils' learning. 10. Celebrate community diversity.
Personal Quality (4)	Know oneself and others; practise human goodness in life and work; develop mastery of teaching practice.	11. Practise self-reflection. 12. Embody the vocation of teaching. 13. Demonstrate human-centred educational leadership. 14. Celebrate cultural diversity.

Note. The SEA-TCF has twelve general competencies, 31 enabling competencies and 136 success descriptors; SGM 2.0 has fourteen competencies and additional elements/descriptors. The table is a broad conceptual correspondence, not an official item-by-item equivalence. Ethical duties are a separate component (SEAMEO INNOTECH, 2018; Kementerian Pendidikan Malaysia, 2023).

Personal Quality: reflection, vocation, humane leadership and cultural diversity

Personal Quality concerns teachers' self-reflection, commitment to teaching, humane leadership and respect for cultural diversity (Kementerian Pendidikan Malaysia, 2023). Here, AI literacy involves recognising that persuasive AI advice may overlook human relationships, professional values or local circumstances (Miao & Holmes, 2023). AI competency involves questioning or using that advice in ways that support responsible reflection rather than simply following recommendations (Schön, 1983). This is important in culturally diverse schools: Mihat's (2016) study of a Temiar learner highlighted the influence of teacher attitudes and assumptions about parenting on English learning. A teacher must also consider whose perspectives have been overlooked in a proposed solution. The aim is not greater enthusiasm for AI, but greater sensitivity in professional conduct.

After a difficult speaking lesson, for example, a teacher might ask AI to suggest possible reasons why pupils remained silent, without sharing identifiable information. It might raise unfamiliar topics, demanding vocabulary or anxiety about speaking before others (Miao & Holmes, 2023). AI literacy means recognising that these suggestions are possibilities, not diagnoses of particular pupils (Ng et al., 2021). AI competency becomes visible when the teacher checks these explanations against classroom experience, speaks with colleagues and makes an appropriate change (Schön, 1983; Bandura, 2001). What develops is the teacher's capacity to reconsider an assumption, not merely the ability to obtain advice.

Evidence might include an anonymised reflection describing an assumption questioned, the AI advice evaluated and a later professional decision (Darling-Hammond et al., 2017). It should not involve uploading sensitive pupil details or asking a chatbot to judge a teacher's character (UNESCO, 2021; Miao & Holmes, 2023). The profile would consider how teachers recognise the limits of AI advice and act thoughtfully on what they learn (Kementerian Pendidikan Malaysia, 2023). The teacher might revisit the same concern later to see whether the change was helpful. Ethical obligations inform this process without becoming another Personal Quality competency.

Knowledge Orientation: extending teachers' knowledge, not merely knowledge about AI

Knowledge Orientation concerns educational philosophy, policy, curriculum, professional knowledge and new developments (Kementerian Pendidikan Malaysia, 2023). In this domain, AI literacy does not mean simply understanding how AI systems operate. It includes recognising that an AI explanation of research, policy or a CEFR descriptor may be incomplete or incorrect (Ng et al., 2021). AI competency involves using AI to explore questions, then verifying claims against original sources and developing informed professional understanding (Miao & Cukurova, 2024). The purpose is to strengthen what teachers know about education, not merely what they know about technology.

Consider a Year 6 teacher concerned that pupils complete comprehension worksheets but rarely read English voluntarily. AI could suggest research questions about reading behaviour and summarise relevant studies, including the eye-tracking investigation by Mihat et al. (2023). That study reported difficulties such as negative skipping and sentence-level processing among CEFR-basic readers (Mihat et al., 2023). Rather than accept an AI summary, the teacher could compare it with the original article, examine what the findings do and do not establish, and reconsider assumptions about reading difficulties (Shulman, 1986; Moorhouse, 2024). The teacher might also ask AI to explain unfamiliar research terms before checking their meaning. The professional learning matters even before it leads to a classroom activity.

Evidence of development might include an annotated article, a corrected AI summary or a note explaining how the teacher's understanding changed (Schön, 1983). A decision to reject a misleading explanation would also demonstrate critical AI literacy and responsible competency (Pinski & Benlian, 2024). Neither workshop attendance nor the number of summaries produced establishes such growth (Miao & Cukurova, 2024). These examples would also show whether teachers notice what a source cannot tell them. The profile should therefore attend to the quality of inquiry and verification.

Instructional: pupil development, planning, teaching and assessment

The Instructional domain covers pupils' development, lesson planning, teaching and assessment (Kementerian Pendidikan Malaysia, 2023). AI literacy includes recognising that generated texts, feedback and scores may be unsuitable or inaccurate (Moorhouse, 2024). AI competency involves adapting, using and evaluating such resources while protecting opportunities for pupils to read, think, speak and write independently (Mishra et al., 2023). This distinction matters because attractive materials do not necessarily lead to meaningful learning (Wiggins & McTighe, 2005). The questions pupils answer matter as much as the appearance of the text. Teachers must first decide what pupils need to learn.

For example, a teacher could ask AI to prepare a short infographic and guided reading questions for CEFR-basic pupils. Mihat et al. (2025) found that such readers often struggled to recognise the

functions of textual features across narrative, expository and infographic texts. This evidence gives the teacher a reason to check whether the generated questions direct attention to headings, graphics and relationships between ideas (Mihat et al., 2025). The teacher could simplify language, provide a graphic organiser and observe whether pupils use the features to make sense of the text (Council of Europe, 2020). The teacher may also compare pupils' answers before and after the additional support. AI supports the work, but the teacher determines whether the task serves reading development.

Assessment presents similar choices. AI may supply extensive writing feedback or scores that misjudge an intelligible accent (Han & Li, 2024; Jeon et al., 2024). A teacher may instead select two feedback priorities and let pupils revise their own work. Mihat et al. (2024), studying a game-based platform rather than GenAI, found differences in lecturers' and students' perceptions, reminding us that appealing technology must still be evaluated for its educational purpose. Profile evidence might include revised materials, reasons for assessment choices and anonymised pupil responses (Kane, 2013). Pupils still need time to think through corrections and attempt improvements themselves. Producing more feedback should not be confused with improving learning.

Community Engagement: partnerships, learning support and inclusion

Community Engagement involves relationships with parents and communities, support for pupils' learning and respect for diversity (Kementerian Pendidikan Malaysia, 2023). AI literacy involves recognising that generated communication may overlook families' languages, resources, cultures or privacy (Miao & Holmes, 2023). AI competency means adapting or declining such assistance to build respectful, workable partnerships. Mihat's (2016) study of a Temiar learner showed why teachers should examine assumptions about parenting and recognise the importance of a supportive home environment. Families may interpret the same message differently, depending on language, experience and access. Such awareness matters when teachers use AI to communicate beyond the classroom.

Imagine AI drafting a home-reading message that recommends costly subscriptions, lengthy daily sessions and constant internet access. The teacher should recognise that these suggestions may not suit every family (Kirkpatrick, 2007; Kementerian Pendidikan Malaysia, 2023). After consulting parents, the teacher might use AI to draft a shorter bilingual message suggesting shared reading and library borrowing, then check its accuracy and tone (Miao & Holmes, 2023). These steps show literacy in questioning assumptions and competency in adapting communication. Parents could then comment on whether the advice is understandable and realistic. The teacher could also write the message without AI if that would be more appropriate.

Evidence might include a de-identified message, an account of how parents' feedback changed the advice, or a description of a community partnership (Miao & Cukurova, 2024). Neither the number of messages nor the frequency of AI use demonstrates successful engagement (Priestley et al., 2015). Sensitive information should remain protected, and ethical duties towards pupils, families, the profession and society apply across all four domains (UNESCO, 2021; Kementerian Pendidikan Malaysia, 2023). Teachers should also avoid assuming that sending a message is the same as establishing a relationship. The aim is communication that families can understand and use.

What The Four-Domain Teacher AI Profile Adds

The Teacher AI Profile responds to a possible imbalance: AI development may look strong because its most visible examples come from classroom instruction, while other responsibilities receive less attention (Miao & Cukurova, 2024). It does not add a new skill beyond AI literacy and competency (Chiu et al., 2024). Instead, it considers how both develop across Personal Quality, Knowledge Orientation, Instructional and Community Engagement (Kementerian Pendidikan Malaysia, 2023). The domains bring reflection, professional inquiry, teaching and relationships into one view. This approach recognises that proficiency in one domain need not transfer automatically to another. The question is not only whether teachers can use AI, but where their understanding and responsible practice are developing.

One teacher may evaluate AI-generated reading activities confidently but have less experience verifying research summaries or adapting messages for families. Another may be thoughtful in professional inquiry and community collaboration yet unfamiliar with automated speaking assessment. These patterns should not be ranked by the number of AI applications used (Priestley et al., 2015). Instead, they can help identify strengths and areas for further learning across the four domains (Kementerian Pendidikan Malaysia, 2023). Table 3 offers examples, not official descriptors or findings about teachers' current capabilities. It may also help teacher educators plan appropriate support instead of prescribing identical training. The profile is a way of understanding development, not an additional performance score.

A teacher might therefore revisit a few professional episodes and ask what AI claims were questioned, what was done responsibly and what could improve (Schön, 1983). Relevant evidence could include anonymised reflections, verified reading notes, adapted teaching materials and non-sensitive accounts of communication with parents (Kane, 2013). Such records should remain proportionate and voluntary unless stronger evidence supports their wider use. Context, access and professional judgement must inform interpretation (Bandura, 2001; Priestley et al., 2015). Teachers should not be expected to collect examples of every interaction with a tool. The value of the profile lies in making development across professional responsibilities visible without treating frequent AI use as proof of professionalism.

Table 3.
Illustrative development of AI literacy and competency across SGM 2.0 domains

SGM 2.0 domain	AI literacy: what teachers recognise and question	AI competency: what teachers responsibly do
Personal Quality	AI advice may reflect bias and cannot replace humane judgement.	Question AI suggestions during self-reflection; respond with professional care.
Knowledge Orientation	AI summaries of research and policy may contain errors or omit context.	Verify original sources and use them to extend professional understanding.
Instructional	Generated tasks and scores may not suit learners or validly assess learning.	Adapt materials, feedback and assessment to serve language learning.
Community Engagement	Generated messages can overlook language, access, culture or privacy.	Revise communication with families and develop inclusive partnerships.

Note. These are hypothetical professional-development examples, not SGM 2.0 descriptors. The Teacher AI Profile brings together the development of both AI literacy and AI competency across these domains. Ethical duties and professional judgement apply throughout (Kementerian Pendidikan Malaysia, 2023; Ng et al., 2021; Chiu et al., 2024)

Boundaries, Implications and Future Research

The preceding discussion has shown how the Teacher AI Profile could provide a broader understanding of teachers' AI literacy and competency across the four domains of SGM 2.0. However, recognising the potential value of this approach is different from establishing its usefulness in practice. Although the examples illustrate how AI literacy and competency may develop beyond instruction, they do not tell us whether teachers experience such development or whether the proposed profile adequately represents their professional responsibilities (Jaakkola, 2020; Kementerian Pendidikan Malaysia, 2023). These questions need to be addressed before the profile can inform professional development or assessment. Four areas deserve particular attention.

The first concerns the conceptual usefulness of the profile. Existing frameworks already recognise several aspects of teachers' AI literacy and competency (Chiu et al., 2024; Miao & Cukurova, 2024). The question is whether considering both constructs across the four SGM 2.0 domains offers something additional. Do teachers recognise AI-related development in Personal Quality, Knowledge Orientation and Community Engagement as well as Instructional practice? Might this broader perspective reveal professional learning needs that instruction-centred approaches overlook (Priestley et al., 2015)? These questions are more important than treating professional judgement as another construct to be measured (Schön, 1983). The purpose is to establish whether a four-domain view helps us understand teachers' development more fully.

If the profile offers conceptual value, the next question concerns its alignment with SGM 2.0. Table 2 compares the fourteen competencies, but does not examine every official element or descriptor (Kementerian Pendidikan Malaysia, 2023). Practising English teachers, teacher educators, school leaders and specialists in the standard should therefore examine whether the proposed examples represent each domain appropriately (Jaakkola, 2020; Miao & Cukurova, 2024). This is particularly important because an activity that appears relevant to one domain may also involve another. Such overlaps are not necessarily problematic, but they need careful explanation. The review must also distinguish SGM 2.0's four competency domains from its separate ethical obligations and avoid treating SEA-TCF categories as identical to Malaysian descriptors (SEAMEO INNOTECH, 2018; Kementerian Pendidikan Malaysia, 2023).

Beyond conceptual alignment, we need to understand how teachers actually develop their AI literacy and competency. Longitudinal studies could follow teachers as they engage in professional reading, reflection, instruction, assessment and communication with families (Priestley et al., 2015). Interviews could explore what teachers understand and question, while observations and professional artefacts could show how that understanding informs their actions (Mena Octavio et al., 2024). Follow-up discussions could then examine how their practices change with experience (Schön, 1983). Such research should recognise that development may differ across domains and that teachers do not necessarily progress at the same rate. It should also avoid treating classroom materials alone as evidence of an overall AI Profile. Similarly, changes in pupil performance or family engagement should not automatically be attributed to AI use (Han & Li, 2024; Kane, 2013).

These considerations lead to a fourth concern: fairness. A profile intended for reflection or mentoring may help teachers recognise areas requiring further professional learning (Darling-Hammond et al., 2017). However, using it for appraisal or certification would require stronger evidence concerning validity, consistency and opportunities to demonstrate competency (Kane, 2013). Teachers in schools

with limited connectivity should not be disadvantaged for choosing printed resources or direct communication over AI applications (Priestley et al., 2015). Nor should teachers be expected to use AI in every professional domain. The ability to recognise when AI is unnecessary may itself demonstrate responsible competency (Chiu et al., 2024). Local circumstances and professional ethics must therefore inform how the profile is interpreted.

These research needs also have implications for teacher professional development. Rather than organising training mainly around AI tools for lesson preparation, programmes could provide opportunities to develop literacy and competency across all four SGM 2.0 domains (Miao & Cukurova, 2024; Kementerian Pendidikan Malaysia, 2023). Under Personal Quality, teachers might question AI-generated advice during self-reflection. Under Knowledge Orientation, they could examine the accuracy of an AI-generated research summary. Instructional development might involve evaluating automated feedback, while Community Engagement could involve adapting an AI-drafted home-reading message for parents. In each activity, teachers would consider what they need to understand and what they can responsibly do with that understanding (Chiu et al., 2024). Such an approach does not reduce the importance of instruction. Rather, it places instructional development within the wider responsibilities of being an English teacher.

Table 4 brings together these priorities, beginning with conceptual usefulness and alignment before considering development over time and fairness of interpretation (Jaakkola, 2020; Kane, 2013). These are proposed directions for research, not findings from an empirically validated model. Their purpose is to provide a basis for investigating whether the Teacher AI Profile can support professional learning in Malaysian ELT.

Table 4.
Research agenda before the proposed Teacher AI Profile is used in practice

Question requiring evidence	Possible approach	Important boundary
Does a four-domain view reveal different areas of AI development?	Teacher interviews; professional-development cases across domains	Do not mistake instructional proficiency for the whole profile.
Do proposed examples align with SGM 2.0?	Review official elements and descriptors with practitioners and experts	Keep the ethical component distinct from the four domains.
How do literacy and competency develop across domains?	Longitudinal cases, interviews, artefacts and contextual analysis	Avoid inferring development from a single lesson or AI activity.
Can profile interpretations be used fairly?	Trials across different teaching contexts and access conditions	Do not reward AI-use frequency or penalise justified non-use.

Note. Proposed studies, not completed validation activities; adapted conceptually from Jaakkola (2020), Kane (2013), and Kementerian Pendidikan Malaysia (2023).

Conclusion

The need for further research should not obscure the central argument of this paper. Although AI has created opportunities for English language teachers, its contribution to professional development should not be understood mainly through classroom applications (Miao & Cukurova, 2024). Teachers also need AI literacy and competency to support professional reflection, extend their knowledge and engage responsibly with families and communities (Chiu et al., 2024). These responsibilities deserve attention alongside lesson planning, teaching and assessment.

The proposed Teacher AI Profile brings these responsibilities together through SGM 2.0's four domains: Personal Quality, Knowledge Orientation, Instructional and Community Engagement (Kementerian Pendidikan Malaysia, 2023). It recognises that AI literacy and competency may develop differently across domains, while professional judgement guides how both are applied (Ng et al., 2021; Schön, 1983). The profile does not require teachers to use AI in every situation, nor does it suggest that greater AI use necessarily indicates better professional practice. Instead, it encourages a broader understanding of what teachers know, what they can do and where further development may be needed.

The proposal remains conceptual and requires empirical investigation before it can be used for assessment (Kane, 2013). Nevertheless, it offers a different starting point for thinking about teachers' AI development. Rather than asking only how AI can help teachers teach better, perhaps we should also ask how AI literacy and competency can help them become better-informed, more reflective and more responsible professionals across the wider work of teaching.

Declaration Of Genai Use in The Writing Process

The author used ChatGPT to assist with language editing, conceptual organisation and preparation of the revised draft. All arguments, citations, interpretations and final decisions remain the author's responsibility.

Funding

This research was funded by the Ministry of Higher Education Malaysia under the Fundamental Research Grant Scheme (FRGS), FRGS/1/2025/SSI09/UITM/02/1.

References

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Chiu, T. K. F., Ahmad, Z., Ismailov, M., & Sanusi, I. T. (2024). What are artificial intelligence literacy and competency? A comprehensive framework to support them. *Computers and Education Open, 6*, Article 100171. https://doi.org/10.1016/j.caeo.2024.100171

Cincioğlu, O., Mutlu Bayraktar, D., & Altan, T. (2026). Teachers' use of generative artificial intelligence in K–12 education: A systematic review. *Frontiers in Education, 11*, Article 1935733. https://doi.org/10.3389/feduc.2026.1935733

Council of Europe. (2020). *Common European framework of reference for languages: Learning, teaching, assessment—Companion volume*. Council of Europe Publishing. https://book.coe.int/en/education-and-modern-languages/8150-common-european-framework-of-reference-for-languages-learning-teaching-assessment-companion-volume.html

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute. https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report

Han, J., & Li, M. (2024). Exploring ChatGPT-supported teacher feedback in the EFL context. *System, 126*, Article 103502. https://doi.org/10.1016/j.system.2024.103502

Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review, 10*(1–2), 18–26. https://doi.org/10.1007/s13162-020-00161-0

Jeon, J., Lee, S., & Coronel-Molina, S. M. (2024). Rethinking AI: Bias in speech-recognition chatbots for ELT. *ELT Journal, 78*(4), 435–445. https://doi.org/10.1093/elt/ccae035

Kane, M. T. (2013). Validating the interpretations and uses of test scores. *Journal of Educational Measurement, 50*(1), 1–73. https://doi.org/10.1111/jedm.12000

Kementerian Pendidikan Malaysia. (2023). *Standard Guru Malaysia 2.0 (SGM 2.0)*. https://www.moe.gov.my/storage/files/shares/images/KPM/UKK/2023/12_Dis/Buku%20SGM%202.0%20e%20ISBN.pdf

Kirkpatrick, A. (2007). *World Englishes: Implications for international communication and English language teaching*. Cambridge University Press.

Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal, 54*(2), 537–550. https://doi.org/10.1177/00336882231162868

Li, K., Wang, P., & Chen, G. (2025). How can AI be integrated into teacher professional development programs? A systematic review based on an adapted technology-based learning model. *Teaching and Teacher Education, 168*, Article 105219. https://doi.org/10.1016/j.tate.2025.105219

Long, D., & Magerko, B. (2020). What is AI literacy? Competencies and design considerations. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1–16). Association for Computing Machinery. https://doi.org/10.1145/3313831.3376727

Mena Octavio, M., González Argüello, V., & Pujolà, J.-T. (2024). ChatGPT as an AI L2 teaching support: A case study of an EFL teacher. *Technology in Language Teaching & Learning, 6*(1), 1–25. https://doi.org/10.29140/tltl.v6n1.1142

Miao, F., & Cukurova, M. (2024). *AI competency framework for teachers*. UNESCO. https://doi.org/10.54675/ZJTE2084

Miao, F., & Holmes, W. (2023). *Guidance for generative AI in education and research*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000386693

Mihat, W. (2016). 'Bertehtuh' English: The experience of a Temiar girl in acquiring English. *Journal of Nusantara Studies, 1*(2), 25–37. https://doi.org/10.24200/jonus.vol1iss2pp25-37

Mihat, W., Azman, H., & Jaafar, N. M. (2023). Profiling CEFR-basic readers at primary schools through their eye movement behaviours. *GEMA Online Journal of Language Studies, 23*(2), 1–22. https://doi.org/10.17576/gema-2023-2302-01

Mihat, W., Wong, W. L., Kurniasih, N., Lee, H. Y., & Azman, H. (2025). Exploring CEFR-basic readers' eye movements through text features in two different reading tasks. *Computer-Assisted Language Learning Electronic Journal, 26*(4), 77–97. https://doi.org/10.54855/callej.252645

Mihat, W., Wong, W. L., Lee, H. Y., & Lee, S. S. (2024). Kahoot! in higher institution: A comparative study of lecturers' and students' perceptions on a game-based learning platform. *Computer-Assisted Language Learning Electronic Journal, 25*(2), 224–243. https://callej.org/index.php/journal/article/view/442

Mishra, P. (2019). Considering contextual knowledge: The TPACK diagram gets an upgrade. *Journal of Digital Learning in Teacher Education, 35*(2), 76–78. https://doi.org/10.1080/21532974.2019.1588611

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054. https://doi.org/10.1111/j.1467-9620.2006.00684.x

Mishra, P., Warr, M., & Islam, R. (2023). TPACK in the age of ChatGPT and generative AI. *Journal of Digital Learning in Teacher Education, 39*(4), 235–251. https://doi.org/10.1080/21532974.2023.2247480

Moorhouse, B. L. (2024). Generative artificial intelligence and ELT. *ELT Journal, 78*(4), 378–392. https://doi.org/10.1093/elt/ccae032

Moorhouse, B. L., Wan, Y., Ho, T. Y., & Lin, A. M. Y. (2024). Generative AI-assisted, evidence-informed use of L1 in L2 classrooms. *ELT Journal, 78*(4), 453–465. https://doi.org/10.1093/elt/ccae033

Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI literacy: An exploratory review. *Computers and Education: Artificial Intelligence, 2*, Article 100041. https://doi.org/10.1016/j.caeai.2021.100041

Pinski, M., & Benlian, A. (2024). AI literacy for users—A comprehensive review and future research directions of learning methods, components, and effects. *Computers in Human Behavior: Artificial Humans, 2*(1), Article 100062. https://doi.org/10.1016/j.chbah.2024.100062

Priestley, M., Biesta, G., & Robinson, S. (2015). *Teacher agency: An ecological approach*. Bloomsbury Academic.

Redecker, C. (2017). *European framework for the digital competence of educators: DigCompEdu*. Publications Office of the European Union. https://doi.org/10.2760/159770

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

SEAMEO INNOTECH. (2018). *Southeast Asia teachers competency framework (SEA-TCF)*. https://teachertaskforce.org/sites/default/files/2022-08/2018_SEAMEO_Southeast-Asia-Teachers-Competency-Framework_EN.pdf

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4–14. https://doi.org/10.3102/0013189X015002004

UNESCO. (2021). *Recommendation on the ethics of artificial intelligence*. https://unesdoc.unesco.org/ark:/48223/pf0000381137

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (Expanded 2nd ed.). ASCD.

Zhang, H., Ibrahim, N. A., & Abd. Wahid, N. S. (2026). Artificial intelligence in language teaching: Teachers' roles, identity, and professional development: A systematic literature review. *Malaysian Journal of ELT Research, 23*(1), 56–81. https://doi.org/10.52696/RMIC4694