Algerian Pre-service English Teachers' Perceptions of AI-Assisted Lesson Planning

Dr. Saida Tobbi
Batna 2 University, Algeria

Abstract

This study examines how final-year ENS (École Normale Supérieure) Constantine trainee English teachers evaluate the pedagogical value, limitations, and ethical implications of using generative AI for lesson planning during their compulsory school-based training. Drawing on semi-structured interviews with 44 trainees (22 Bac+5; 22 Bac+4), the study employs a qualitative thematic analysis to trace how trainees negotiate AI's affordances in relation to the realities of their practicum settings, including curricular demands, inspection requirements, and classroom conditions in Algerian middle and secondary schools. Findings show that trainees view AI as a helpful starting point that accelerates idea generation, yet they consistently judge its outputs insufficient without substantial adaptation, particularly regarding assessment, differentiation and contextual relevance. Ethical concerns, apprehension about inspector scrutiny, and infrastructural limitations further restrict trainees' willingness to adopt AI. Trainees call for practicum-embedded AI training, clear institutional guidelines and mentor-supervised classroom piloting to ensure responsible integration. The study highlights the need to align AI literacy, pedagogical training and institutional policy within pre-service teacher education.

Keywords: AI-assisted lesson planning; EFL trainee teachers; practicum-embedded AI training; mentor-supervised piloting; ethical concerns

Introduction

Generative artificial intelligence has moved from novelty to practical instrument in many educational settings, challenging assumptions about how teachers prepare learning sequences, design assessments and respond to immediate classroom needs. In language education, systems such as large language models and advanced chatbots can produce lesson outlines, activity sequences and sample assessments within seconds, thereby promising relief from repetitive planning tasks and new sources of inspiration for pedagogy. Yet these affordances are uneven: while AI can supply coherent structures and creative prompts, it commonly fails to capture local curricular constraints, the fine-grained needs of mixed-ability classes, and the ethical complexities of assessment and authorship that pre-service teachers must navigate.

In Algeria, interest in generative AI for EFL instruction is rising, and several recent investigations report cautious optimism among teachers: AI is valued primarily as a

time-saving scaffold and idea generator rather than as a substitution for professional judgment (Ghouali, 2025; Zarzi & Mahmoud, 2025; Boughaddou & Chorfi, 2024). These studies underscore recurrent concerns—limited contextualisation, weak differentiation, and an absence of explicit assessment rubrics—while also noting that inspectors and some institutional actors remain skeptical about uncritical adoption. Such ambivalence is significant for trainee teachers at ENS of Constantine, for whom the practicum is compulsory and the demands of lesson planning, classroom management and formal assessment are immediate and consequential for graduation.

This study examines how final-year ENS trainee English teachers—44 participants, split evenly between Bac+5 (secondary school placements) and Bac+4 (middle school placements)—perceive the pedagogical potential and limitations of AI-generated lesson plans, what concerns they raise about integrating AI into practicum practice, and what forms of training or institutional support they consider necessary to deploy AI responsibly. By privileging the voices of trainee teachers working under compulsory practicum conditions in Algerian public schools, the investigation aims to supply evidence that is both locally grounded and relevant for teacher-education policy: what trainee teachers accept, adapt, or reject during practicum will shape their subsequent classroom practice and thus the longer-term trajectory of AI adoption in Algerian EFL contexts.

The research is guided by four questions: (1) How do ENS trainee English teachers judge the pedagogical usefulness and shortcomings of AI-generated lesson plans and resources? (2) What ethical, pedagogical and contextual concerns do they associate with AI use during their school-based training? (3) What types of AI literacy, training and institutional support do they identify as necessary to integrate AI productively into lesson planning and assessment?

Literature Review

The contemporary conversation about AI in language education pivots on a double claim: generative systems offer considerable practical utility for professional tasks such as planning and materials development, yet this utility is bounded by persistent shortcomings in contextual adaptation, assessment design and ethical transparency. International empirical work indicates a recurrent pattern. Pre-service teachers often welcome AI for its capacity to generate ideas and reduce routine workload, but they meet AI outputs with professional reservations shaped by concerns about cultural fit, accuracy and the erosion of pedagogical agency (e.g., Yetkin & Özer-Altınkaya; Chung & Jeong). These studies show that pre-service teachers value AI as an assistive device but remain skeptical about its capacity to supply final, classroom-ready materials without substantial teacher intervention.

Beyond general attitudes, research highlights specific skill sets that mediate effective AI use. Investigations into task-specific prompting and teacher-LLM (large language model) interaction reveal that successful exploitation of LLMs depends on the teacher's pedagogical content knowledge, a working understanding of model behaviours, and iterative prompting skills; in practice, teachers moved through a three-stage cycle of task identification, iterative prompt refinement and implementation decisions when they used LLMs to rework lesson plans (Moorhouse et al.; Runge et al.). This line of work implies that AI literacy is not merely technical fluency but a situated competence that integrates prompt craft, pedagogical judgement and critical verification.

Assessment and differentiation emerge repeatedly as domains where AI outputs are weakest. Comparative reviews and field studies of AI-generated lesson plans consistently find acceptable performance on overall structure, engagement prompts and sequencing, but substantial deficits in specifying measurable learning outcomes, rubrics and targeted adaptations for heterogeneous classes. For pre-service teachers—whose practicum evaluations hinge on clear objectives, assessment criteria and adaptive strategies—these deficits translate into additional workload and justified mistrust: AI can sketch a scenario, but it rarely furnishes the concrete instruments that novice teachers must present to supervisors and inspectors (Zhang et al., 2023).

Ethical and integrity concerns form a further strand in the literature. Teachers report anxieties about plagiarism, automated authorship, and the potential for students to misuse AI to evade learning processes (Coşgun, 2025); at the same time, commentators note that AI can enrich experiential and individualized learning when embedded within carefully scaffolded pedagogy (Hamid & Abbas, 2025). These twin possibilities make teacher judgement and institutional regulation central variables: institutions that provide clear policies, assessment redesign and scaffolded AI training tend to produce more constructive teacher engagements with AI than contexts where guidance is absent. Empirical analyses therefore recommend coupling exposure to AI with curriculum and assessment adjustments that preclude misuse while enabling legitimate pedagogical gains.

Teacher education is thus pivotal. Large-sample studies and process-oriented investigations find that participation in AI-related coursework correlates with increased AI competence and perceived usefulness, which in turn predicts intention and actual use (Zhang et al.; Runge et al.). Experimental and design-based studies that embed hands-on LLM tasks—where pre-service teachers draft prompts, revise model outputs and justify adaptations—report improved prompt practices and greater critical awareness (Moorhouse et al.). Such findings underscore a pragmatic conclusion: if AI is to be more than a convenience, teacher education must reconfigure practicum and methodology modules to include AI-TPACK (technological pedagogical content

knowledge oriented to AI), explicit assessment design, and supervised opportunities to pilot AI-augmented lessons.

Local Algerian research, while still nascent, reflects and refines these international themes. Studies conducted in Algeria indicate that teachers generally perceive ChatGPT and related tools as useful scaffolds for lesson generation and time saving, but they consistently qualify that endorsement: AI-generated materials should serve as supplementary inputs rather than as final, classroom-ready products (e.g., Ghouali, 2025). Fieldwork by Zarzi and Mahmoud (2025) and Boughaddou and Chorfi (2024) converge on the same practical concerns—assessment clarity, contextualisation and inspectors' reservations—while documenting a pragmatic acceptance among many teachers who already use AI informally to draft activities or devise explanations. Importantly, those Algerian studies do not focus on trainee teachers in compulsory practicum placements; they therefore leave open how soon-to-graduate trainees, under evaluative pressure, interpret and are prepared to adapt AI outputs to public-school realities.

Overall, the extant literature provides two clear lessons that frame the present study. The first is conceptual: AI tools can assist professional tasks but are not pedagogical panaceas; their educational value is contingent upon teacher knowledge, institutional scaffolding and the redesign of assessment practices. The second is empirical: although multiple international studies document pre-service attitudes and prompting practices, and several Algerian investigations document in-service perceptions, the specific voices of ENS trainees who must perform compulsory practicum in Algerian middle and secondary schools remain under-represented. This lacuna matters because trainees face unique constraints—evaluative monitoring, curricular demands and limited experience—that likely shape both their openness to AI and the kinds of training they require. By eliciting the accounts of Bac+5 and Bac+4 ENS trainee English teachers, the present study seeks to bridge a local empirical gap while contributing to broader debates about how teacher education can responsibly and realistically prepare teachers for an AI-augmented profession.

Methods

Research design and rationale

This study adopted a qualitative interpretivist design to explore how final-year ENS trainee English teachers interpret, evaluate, and envisage the use of AI-generated lesson plans during compulsory school-based practicum. A qualitative approach was selected because the primary aim was to capture participants' meanings, pedagogical reasoning and context-sensitive concerns rather than to estimate population-level frequencies. Semi structured interviews were chosen as the main data-collection instrument because they provide the flexibility to probe participants' perspectives in

depth while ensuring comparability across respondents through a common interview guide. This design aligns with recent qualitative work on pre-service teachers' interactions with AI and with best practices for exploratory, contextually grounded inquiry.

Participants and sampling strategy

The sample comprised 44 final-year trainee English teachers enrolled at ENS of Constantine — 22 trainees enrolled in the Bac+5 stream (assigned to secondary schools) and 22 trainees enrolled in the Bac+4 stream (assigned to middle schools). A purposive, stratified sampling strategy was adopted to ensure representation of both qualification streams and the school levels where trainees complete their compulsory practicum. Recruitment proceeded via liaison with ENS practicum coordinators and teaching supervisors; participation was voluntary and no financial incentives were offered.

Inclusion criteria were: (1) enrollment in the final-year practicum course at ENS Constantine, (2) completion of at least one full-week placement in a public middle or secondary school at the time of interview, and (3) willingness to participate in a recorded interview and to permit anonymised use of excerpts in publication. Trainees with no practicum experience or who were unavailable during the data-collection window were excluded.

Context and positionality

Data collection occurred during the final practicum. The lead researcher is an EFL teacher-researcher familiar with the ENS practicum context; to manage potential bias and to increase transparency, the researcher kept reflexive memos throughout data collection and analysis and documented decisions in an audit trail. Reflexivity and memoing were used both to surface preconceptions and to record interpretive choices, following recommended qualitative practice.

Data collection procedures

Data were collected in January 2025 through individual semi structured interviews conducted in the language chosen by each participant (Arabic, French, or English) to maximise expressiveness and accuracy. Interviews were scheduled for approximately 30–45 minutes and proceeded until participants felt their accounts had been sufficiently explored; actual durations varied according to participant responses. Interviews were audio-recorded with participants' informed consent, and contemporaneous field notes captured contextual details and non-verbal cues.

The interview guide was developed iteratively from the literature and from pilot conversations with two recent ENS graduates (pilot interviews used only to refine wording and did not enter the analytic dataset). The guide covered five broad domains: (1) prior experience with AI tools and general attitudes; (2) concrete reactions to AI-generated lesson plans (perceived strengths and weaknesses); (3) assessment- and differentiation-related concerns; (4) ethical and professional worries (e.g., plagiarism, authorship, inspectorate standards); and (5) perceptions of needed training or institutional support. Example questions included: "Can you describe a time when you used or considered using an AI tool to prepare a lesson?", "What do you see as the main strengths of an AI-generated lesson plan for your practicum?", and "What would you need from ENS or the school to use AI safely and effectively?" The semi structured format ensured that core topics were covered while permitting follow-up probes to clarify reasoning and elicit illustrative examples.

Transcription, translation and data management

All interviews were transcribed verbatim. Transcription included verbal content and salient non-lexical vocalisations (e.g., laughter, pauses) where relevant to meaning. When interviews were conducted in Arabic or French, the original-language transcript was retained and parallel English translations were produced for analytic transparency and for use in publication. Translations were checked by a bilingual colleague to preserve nuance and to guard against inadvertent misinterpretation during analysis. All audio files and transcripts were stored on encrypted drives; identifying details were removed and pseudonyms assigned to each participant in line with ethical protocols.

Analytical approach and coding procedure

An inductive thematic analysis inspired by Braun and Clarke's iterative reflexive model was used to identify patterns of meaning across the dataset. The analysis proceeded through six documented stages: (1) familiarisation — repeated reading of transcripts and reflective memoing; (2) initial coding — line-by-line open coding to capture salient features; (3) searching for candidate themes — grouping related codes into provisional themes; (4) reviewing themes — checking candidate themes against coded data and the full dataset for coherence and distinctiveness; (5) defining and naming themes — refining each theme and writing analytic memos that described scope and boundaries; and (6) producing the report — selecting illustrative excerpts and articulating analytic arguments that address the research questions. To increase transparency and reproducibility, a codebook was developed iteratively and stored with exemplar quotations and decision rules for each code.

Coding was performed in NVivo (qualitative analysis software) to facilitate systematic retrieval and comparison of coded excerpts. NVivo supported traceable coding queries,

coding density checks, and the generation of code co-occurrence matrices that helped to surface relationships among themes.

Inter-rater checks and dependability procedures

To strengthen dependability and to guard against idiosyncratic interpretation, a second analyst independently coded a purposive subset of 25% of the transcripts. Inter-rater agreement was assessed through iterative discussion rather than as a single numeric gate: initial percentage agreement and Cohen's kappa were calculated to identify codes with low concordance; disagreements were then resolved in consensus meetings where coding rationale was explicated and code definitions refined. Discrepancies that reflected divergent conceptualizations led to revision of the codebook rather than discarding minority readings. The threshold for acceptable kappa was set conservatively (target ≥.70) but, importantly, the project prioritised reflexive consensus and transparent documentation of changes over rigid numeric criteria. The final codebook thus represented a negotiated, documented interpretive framework.

Trustworthiness and credibility strategies

Multiple strategies were employed to ensure trustworthiness. Triangulation of analytic sources (participant accounts, field notes, and literature-derived sensitisers) enriched interpretation; member checking was conducted by sharing a one-page analytic summary with a purposive subset of participants (n = 12) to confirm that key findings resonated with their experiences; and negative-case analysis was used to explore and account for discrepant accounts. Thick description and rich illustrative quotations in the findings support transferability. An audit trail comprising raw data indices, the evolving codebook, memos, and notes from consensus meetings was maintained to document analytic decisions and to facilitate external scrutiny.

The study also followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines for reporting qualitative studies, ensuring transparency in recruitment, data collection and analysis and aligning the manuscript with peer-review expectations. The procedural choices (double-coding, audit trail, member checking) were selected to address credibility, dependability, confirmability and transferability — the four pillars commonly used to evaluate qualitative inquiry.

Ethical considerations

Participants received information about the study aims, the voluntary nature of participation, confidentiality safeguards and the right to withdraw at any time without consequence. Signed informed consent was obtained from all participants. Data were

anonymised and stored on encrypted drives accessible only to the research team; quotations used in the manuscript are presented without identifiable details.

Findings

RQ1 — How do ENS trainee English teachers judge the pedagogical usefulness and shortcomings of AI-generated lesson plans and resources?

When trainees described what they found useful about AI-generated lesson plans, they most often invoked a sense of practical relief and a ready-made structure that eased the opening task of lesson design. Many accounts began by locating the tool in the preparatory stage: "When I have only a short time before class, I ask the system for a 45-minute plan and it gives me a clear sequence — warm-up, presentation, practice, production — which I then tailor," one trainee explained. In a number of interviews this sequence metaphor recurred: trainees treated the AI output as a sketch or scaffold rather than a finished product, and they described rapid ideation as the primary pedagogical contribution. Another trainee put this succinctly: "It gives me ideas I would not have thought of at that moment; it saves the first hour of blank page anxiety."

Alongside these accounts of usefulness, however, a consistent cluster of limitations was raised with comparable frequency and force. Trainees repeatedly remarked that while activities and sequences were present, explicit assessment mechanisms and clear differentiations for mixed-ability classes were missing. Typical comments illustrated this lacuna: "The activity was interesting, but it didn't say how to grade it — what counts as 'good' or 'satisfactory'," and "It suggested tasks for advanced learners, but there was nothing for the students who struggle with basic grammar." These concerns were not marginal: for trainees under practicum scrutiny, the absence of measurable learning outcomes or rubrics translated into additional work and anxiety because supervisors expected explicit criteria and evidence of how learning would be evaluated.

A linked strand of commentary focused on contextual fit. Several trainees described AI examples that drew on cultural references or assessment formats unfamiliar in Algerian public schools: "The sample text was full of references my students couldn't relate to; I had to change every example to match our syllabus," reported one participant. In practice this meant that trainees did not adopt AI outputs wholesale but engaged in a two-step process: accept the macro-structure offered by the model, then rework language, examples and assessment to fit local curricula and student profiles. Notably, the balance among these three evaluative strands varied by training level. Bac+5 trainees, who were teaching in secondary schools and were mindful of baccalaureate expectations, foregrounded the need for precise assessment criteria; Bac+4 trainees,

placed in middle schools, tended to emphasise immediate classroom feasibility and scaffolding for younger or lower-proficiency learners.

Across the dataset a final pedagogical judgement emerged: AI is judged as a productive starting point for lesson planning but not as a substitute for teacher judgement. The pattern of responses — efficiency and ideational support followed by identified gaps in assessment, differentiation, and contextualisation — was near universal. In short, trainees saw clear pedagogical affordances but considered the outputs incomplete for practicum purposes without substantive teacher mediation.

RQ2 — What ethical, pedagogical and contextual concerns do they associate with AI use during their school-based training?

Ethical anxieties surfaced repeatedly and took several forms. The most immediate and frequently voiced anxiety concerned academic integrity: trainees worried that students could use AI to generate homework or essays and thereby circumvent learning processes. One participant illustrated the tension: “If I set a written task, some students will simply paste what an AI gives them; then my marking won’t reflect their real ability.” This worry led many trainees to prefer in-class or performance-based assessments that are less easily outsourced to automated systems. The concern about student misuse also shaped how trainees framed assignments: they reported designing tasks with staged, monitored components or using oral follow-ups precisely to verify student authorship.

Closely related to integrity worries were concerns about professional legitimacy and inspection. Trainees were acutely aware that their practicum work would be examined by supervisors and inspectors; consequently, they feared that a plan perceived as “AI-produced” could be questioned or penalised. One trainee reported, “Even if I used an AI plan to start, I would make extensive changes and be prepared to explain every choice if an inspector asks.” This institutional dimension created a protective posture: trainees were cautious about exposing raw AI outputs in formal documents and frequently revised plans to foreground their own pedagogical reasoning.

Contextual and infrastructural constraints further complicated ethical and practical debates. Several trainees noted that school contexts varied widely: some placements had unreliable or no internet access, limited student device availability, and low levels of digital literacy among learners. A typical comment was: “I cannot rely on an online tool during the lesson because the school has no Wi-Fi; so whatever I generate at home must work on paper.” These constraints circumscribed the scope of AI use and required trainees to produce offline adaptations — another reason the AI output was treated as provisional rather than definitive.

Beyond these pragmatic issues, a pedagogical concern emerged about the risk of eroding novice teachers' craft. A number of participants expressed unease that habitual reliance on AI for planning might weaken their own development as lesson designers. As one trainee put it, "I want to learn how to plan on my own so that after graduation I won't depend on the machine." This comment was echoed by others who sought training that would preserve teacher agency even as it exploited technological affordances.

Taken together, the ethical, pedagogical and contextual concerns create a layered constraint around AI uptake: integrity and inspection anxieties impose normative limits; infrastructural realities impose practical limits; and professional development considerations impose developmental limits. Trainees negotiated these simultaneously in their accounts, frequently articulating pragmatic workarounds — staged assessment, supervised piloting, and offline preparation — that reflect an attempt to steward AI use responsibly within the practicum environment.

RQ3 — What types of AI literacy, training and institutional support do they identify as necessary to integrate AI productively into lesson planning and assessment?

When trainees turned to solutions, their responses clustered around three complementary domains: practical prompt craft, pedagogical integration, and institutional scaffolding. In the first domain—prompting and tool use—participants wanted hands-on, task-oriented workshops that show how to elicit usable, context-sensitive outputs. A common plea was for concrete templates: "Show us prompts that return a 45-minute lesson for A2 learners with a formative rubric," one trainee suggested. The request was not for abstract theory but for examples and iterative exercises that demystify prompting and reduce trial-and-error time.

The second domain involved integrating AI into pedagogical knowledge. Trainees envisaged modules that link AI outputs to curriculum standards, assessment criteria and differentiation strategies—essentially an AI-oriented TPACK. One participant explained the need succinctly: "Help us translate an AI sketch into a lesson that matches our syllabus and the inspectors' expectations." This demand signal was specific: trainees wanted guidance not only in operating tools but in converting tool outputs into locally valid pedagogical artifacts.

Institutional scaffolding comprised the third domain. Trainees asked for supervised practicum opportunities to pilot AI-augmented lessons with mentor observation and feedback, exemplar rubrics that can be adapted to AI outputs, and clear ENS guidance on acceptable AI practices so that inspectors and trainees share expectations. A typical formulation was: "If ENS provides a rubric and inspectors accept it, then using AI becomes less risky." These requests underscore that training alone is insufficient;

institutional alignment and policy clarity are necessary to normalise responsible AI use in high-stakes practicum settings.

Across these domains trainees emphasised the need for incremental, practicum-embedded learning: short, applied workshops followed by mentored classroom trials and formalised templates that survive inspector scrutiny. In their accounts, the sequence mattered: acquiring prompting skills without pedagogical integration or institutional endorsement would not remove the practicums' constraints; likewise, policy alone without trainee competence would generate compliance without professional judgement. The trainees' solution set therefore coheres around integrated capacity building—task-specific skill, pedagogical translation, and institutional legitimation.

Overall, trainees value AI for efficiency and ideation but identify recurrent and consequential shortcomings—assessment, differentiation, contextual fit—that render raw outputs insufficient for practicum submission. Ethical and institutional concerns (plagiarism, inspector scrutiny) and infrastructural constraints further limit unmediated adoption. Finally, trainees articulate a clear and actionable set of needs—practical prompting training, AI-TPACK integration, supervised piloting, and institutional templates—that together form a pragmatic roadmap for responsible integration in ENS practicum contexts.

Discussion

This study explored how final-year ENS trainee English teachers in Constantine judge AI-generated lesson plans, what ethical and practical concerns they associate with AI during compulsory practicum, and what forms of training and institutional support they consider necessary. The principal empirical profile that emerges is consistent and coherent: trainees value AI chiefly as an expedient, idea-generating scaffold but regard raw AI outputs as incomplete for practicum submission because they under-specify assessment, differentiation and local curricular alignment. These pragmatic judgements are accompanied by layered ethical and institutional worries — student misuse, inspector scrutiny and infrastructural limits — and by concrete, practice-oriented requests for training that integrates prompting skills with pedagogical translation and supervisory piloting.

Interpreting these findings requires situating them within the broader literature. International studies of pre-service teachers report a similar hesitation: trainees appreciate AI's capacity to generate ideas and save time but remain sceptical about over-reliance and about AI's capacity to supply contextually valid and assessment-ready materials (Yetkin & Özer-Altınkaya; Chung & Jeong). Empirical work that focuses on task-specific LLM use stresses that effective uptake depends on prompting skill and pedagogical content knowledge — a layered competence variously labelled AI-

TPACK in the recent literature (Moorhouse et al.; Runge et al.). The present study reinforces these conclusions: trainees routinely used AI as a preparatory scaffold (confirming the "idea-generator" role seen elsewhere) yet also demanded AI-specific pedagogical training and assessment templates in order to make AI outputs practicable for their practicum responsibilities.

Where the present study extends prior work is in the fine-grained, practicum-centred detail and in highlighting how institutional gatekeepers mediate uptake. The Algerian studies report broadly similar appraisals: university EFL teachers in Ghouali's study judged ChatGPT-generated materials useful as supplementary supports but not as sole sources; Zarzi and Mahmoud documented teacher perceivable benefits in Mila and Constantine alongside concerns about contextualisation and the need for verification; Boughaddou and Chorfi (2024) found that inspectors in Tiaret remained cautious even when teachers used AI to enhance materials. The ENS trainee accounts align with these local findings but add a crucial dimension: trainees are subject to immediate evaluative pressures (supervisors, inspectors) and are at a formative stage of professional development, so their risk calculations about exposing AI-derived materials differ from those of more established in-service teachers. In other words, while in-service teachers may privately use AI to streamline planning, trainees—because they are evaluated and because they must demonstrate pedagogical competence—are less willing to present unmodified AI outputs to inspectors or supervisors. This difference helps explain the apparent divergence between studies that report widespread informal use among teachers and the caution documented here among trainees.

Several plausible mechanisms account for the pattern observed. First, the practicum imperative reframes any planning aid: trainees' lesson plans are not private drafts but evaluative artifacts. When an AI output lacks rubrics or explicit learning criteria, it is not merely inconvenient — it jeopardises a trainee's graded performance. This explains why the absence of assessment detail was a particularly salient criticism in our Bac+5 group, who operate under secondary-level evaluative pressures tied to exam preparation. Second, contextual mismatch is not a superficial problem of phrasing but a pedagogical barrier: AI models tend to produce culturally generic examples and assessment formats that assume curricular priorities different from those of Algerian public schools. Trainees therefore invest time adapting examples, and this adaptation cost diminishes the time-saving advantage of AI in practice. Third, institutional signalling matters: inspectors' scepticism creates a deterrence effect that pushes trainees to obscure or over-edit AI traces in their documents, thereby attenuating transparent experimentation with AI in practicum settings. Together, these mechanisms explain why trainees treat AI as a behind-the-scenes assistant rather than a visible co-author of pedagogical artifacts.

Compared with the international literature that documents positive attitudes or high willingness to adopt (e.g., quantitative acceptance studies), the present study's cautious stance is not contradictory so much as contextually conditioned. Large-sample surveys often capture attitudinal readiness but may not fully capture the constraining influence of practicum evaluation, inspection regimes, and infrastructural limits that become visible in detailed qualitative accounts. The present findings therefore complement survey-based work by identifying boundary conditions for adoption that are likely to matter in settings where pre-service teachers operate under stringent external evaluation.

The study's findings also carry clear implications for teacher education and policy. First, AI training for pre-service teachers should be tightly practicum-oriented: workshops that teach prompting and model-use in a theoretical way are necessary but insufficient. Instead, training should involve concrete exercises that convert AI sketches into curriculum-aligned lesson plans complete with measurable objectives, rubrics and differentiated tasks that supervisors will recognise and accept. This recommendation resonates with the AI-TPACK proposals in the literature (Runge et al., 2025; Moorhouse et al., 2025) and with Algerian practitioners' calls for contextualised support (Zarzi & Mahmoud, 2025; Ghouali, 2025). Second, institutional actors — ENS coordinators, school mentors and inspectorates — should co-create clear protocols that define acceptable uses of AI in practicum documents. Such protocols would reduce uncertainty and produce a shared standard that allows trainees to experiment openly while preserving assessment integrity; this is particularly pressing given inspectors' documented reservations in Algerian studies (Boughaddou & Chorfi, 2024). Third, infrastructure limitations (intermittent internet, limited student devices) argue for a pragmatic approach that emphasises offline adaptation skills and paper-based alternatives: training must therefore include strategies to render AI outputs usable in low-tech classrooms.

Several divergences and nuances deserve explicit attention. International studies emphasising the transformative potential of AI for language teaching sometimes portray more optimistic uptake than the caution observed here. One reason for that divergence is methodological: many international studies sample in-service teachers or use surveys that foreground perceived usefulness while eliding the constraints of evaluated practicum settings. A second reason is contextual: the Algerian practicum environment, with its inspector-driven evaluations and uneven school infrastructure, creates barriers not always present in the contexts studied elsewhere. Finally, temporal readiness matters: pre-service trainees are still developing lesson-design expertise and therefore display stronger protective instincts about adopting external aids that might be read as substitutes for their own professional competence. These explanations are

consistent with the theoretical emphasis on teacher agency and assessment redesign found in the literature (Coşgun, 2025; Zhang et al., 2023).

This discussion also highlights practical tensions that future research should examine. For example, how does supervised piloting with mentor feedback affect trainees' willingness to present AI-informed plans publicly? Would co-developed rubrics accepted by inspectors accelerate legitimate adoption? Experimental or design-based studies that embed AI-TPACK modules into practicum and measure subsequent changes in trainees' practice and in supervisors' evaluations would illuminate these causal pathways. Longitudinal work could also investigate whether early exposure to scaffolded AI use strengthens or weakens autonomous planning abilities over time.

The study's limitations moderate the strength of these claims. The dataset is institutionally bounded (ENS Constantine) and qualitative by design; while the findings resonate with other Algerian studies and with international qualitative work, they should not be taken as population estimates of adoption. In addition, the interview evidence reported here is rich and consistent but would be usefully complemented by observational data from practicum lessons, artefact analysis of submitted lesson plans, and follow-up interviews with inspectors and mentors to triangulate the institutional perspective.

In closing, the study makes two inter-related contributions. Empirically, it documents how the practicum condition — the requirement that trainees produce evaluable, inspector-scrutinised artefacts — crucially shapes attitudes toward AI and constrains the forms in which AI can be sustainably integrated into pre-service practice. Conceptually, it pushes the field to see AI literacy not only as technical prompting competence but as a pedagogical and institutional competence that must be taught, modelled and legitimated within practicum ecosystems. For policy and teacher education, the practical takeaway is clear: modest, practicum-embedded, curriculum-aligned AI training combined with explicit institutional protocols offers the most realistic pathway for harnessing AI's benefits while safeguarding assessment integrity and fostering genuine professional development.

Conclusion

This study highlights the nuanced role of generative AI in pre-service teacher development, showing that its value extends beyond technical novelty to its integration within the practicum ecosystem. For trainee English teachers at ENS Constantine, AI is most effective when framed as a scaffolded, adaptable tool rather than a ready-to-use solution, underscoring the importance of aligning AI outputs with local curricular requirements, assessment standards, and professional expectations.

The findings suggest that successful integration of AI in teacher education depends on three interrelated dimensions: (1) pedagogical competence, including the ability to translate AI-generated materials into contextually meaningful lesson plans; (2) institutional legitimacy, where clear guidance from supervisors and inspectorates defines acceptable use; and (3) infrastructural feasibility, which addresses technological limitations and classroom realities. These dimensions point to a model of AI literacy that is both technical and socially situated, emphasizing adaptation, interpretation, and professional judgment over mere tool proficiency.

From a policy and practice perspective, the study supports the design of targeted, practicum-embedded AI interventions that combine prompt training, curriculum alignment, and supervised piloting. Establishing explicit institutional protocols can further enable trainees to experiment responsibly while maintaining assessment integrity. Beyond ENS Constantine, these insights offer a template for pre-service programs seeking to incorporate AI meaningfully without compromising professional development or local teaching standards.

Finally, the research underscores the need for future longitudinal and observational studies to track how scaffolded AI use shapes teacher autonomy, lesson quality, and the evolution of professional risk assessment over time. By positioning AI within the broader ecosystem of practicum, supervision, and policy, this study contributes a framework for responsible, context-sensitive AI adoption in teacher education, demonstrating that AI can be a productive ally when integrated thoughtfully into the formation of novice teachers.

Bibliography

1. Boughaddou, H., & Chorfi, K. I. (2024). *Exploring middle school English teachers' and inspectors' perceptions of using artificial intelligence tools as lesson planning resources in the city of Tiaret* (Unpublished master's thesis). Ibn Khaldoun University. http://dspace.univ-tiaret.dz:80/handle/123456789/14966
2. Chung, J., & Jeong, S. (2024). Exploring the perceptions of Chinese pre-service teachers on the integration of generative AI in English language teaching: Benefits, challenges, and educational implications. *Online Journal of Communication and Media Technologies, 14*(4), 1-10. https://doi.org/10.30935/ojcmt/15266
3. Coşgun, G. (2025). Artificial intelligence literacy in assessment: Empowering pre-service teachers to design effective exam questions for language learning. *British Educational Research Journal, 51*(5), 2340-2357. https://doi.org/10.1002/berj.4177

4. Ghouali, K. (2024). Empowering EFL learning: Leveraging ChatGPT for lesson planning and activity generation in the EFL classroom. *Onomázein (Special Issue XVI),* 31–48. https://doi.org/10.7764/onomazein.ne16.02
5. Hamid, S., & Abbas, S. (2025). Artificial intelligence as a pedagogical scaffold in K–12 language and literacy education. *Annals of Human and Social Sciences, 6,* 2790–6809.
6. Hwang, Y., Lee, S., & Jeon, J. (2024). Integrating AI chatbots into the metaverse: Pre-service English teachers' design works and perceptions. *Education and Information Technologies, 30,* 4099–4130. https://doi.org/10.1007/s10639-024-12924-4
7. Moorhouse, B., Ho, T., Wu, C., & Wan, Y. (2025). Pre-service language teachers' task-specific large language model prompting practices. *RELC Journal,0*(0). https://doi.org/10.1177/00336882251313701
8. Runge, I., Hebibi, F., & Lazarides, R. (2025). Acceptance of pre-service teachers towards artificial intelligence (AI): The role of AI-related teacher training courses and AI-TPACK within the Technology Acceptance Model. *Education Sciences, 15*(2). https://doi.org/10.3390/educsci15020167
9. Su, Y., Luo, M., & Zhong, C. (2025). To Chat or not: Pre-service English teachers' perceptions of and needs in chatbot's educational application. *SAGE Open, 15.* https://doi.org/10.1177/21582440251321853
10. Yetkin, R., & Özer-Altınkaya, Z. (2024). AI in the language classroom: Insights from pre-service English teachers. *E-Learning and Digital Media,0*(0). https://doi.org/10.1177/20427530241267011
11. Zarzi, M., & Mahmoud, K. (2025). *Exploring teachers' insights about the implementation of ChatGPT as an assistant tool in lesson planning: The case of secondary and middle school English teachers in Mila and Constantine* (Unpublished master's thesis). Abd Elhafid Boussouf University, Mila, Algeria.
12. Zhang, C., Schießl, J., Plößl, L., Hofmann, F., & Gläser-Zikuda, M. (2023). Acceptance of artificial intelligence among pre-service teachers: A multigroup analysis. *International Journal of Educational Technology in Higher Education, 20.* https://doi.org/10.1186/s41239-023-00420-7

Appendix A: Interview guide

1. Brief background: training level, school type.
2. Prior experience: "Have you ever used an AI tool (e.g., ChatGPT)? If yes, describe how."
3. Use cases: "Can you describe a time you considered using or used AI to prepare a lesson? What did you ask it to do?"

4. Perceived benefits: “What is useful about AI-generated lesson plans or activities for you?” (probe: time, creativity, scaffolding)
5. Perceived shortcomings: “What problems or limits did you notice in AI outputs?” (probe: assessment, differentiation, cultural fit)
6. Assessment concerns: “Would you use AI to design tests or rubrics? Why/why not?”
7. Ethical concerns: “Do you worry about plagiarism, student misuse, or inspector reactions?”
8. Training needs: “What training/support would enable you to use AI responsibly?” (probe: workshops, AI-TPACK, supervision)
9. Institutional issues: “How do you think ENS/schools/inspectors should regulate or support AI use?”
10. Differences by setting: “Do you think AI outputs require different adaptation for middle vs secondary schools?”
11. Closing: “Anything else you wish to add about AI and your practicum?”

Appendix B: Codebook

- Theme A: Pedagogical affordances
- A1 Efficiency/time-saving: references to reduced prep time, quick ideation. (Include when participant explicitly mentions “save time”, “quick”, “fast ideas”.)
- A2 Generative scaffolding/ideation: AI as a source of activity ideas, sequences, sample texts. (Include when participant cites “ideas”, “templates”.)
- A3 Language editing/support: AI used to create learner texts, model answers, explanations.
- Theme B: Pedagogical shortcomings and limitations
- B1 Contextual fit/cultural mismatch: AI outputs not aligned to Algerian curriculum or students’ background. (Include when participant says “not adapted to our students”, “curriculum mismatch”.)
- B2 Assessment/rubrics gap: AI fails to provide concrete rubrics or measurable objectives. (Include when participant notes absence of clear evaluation criteria.)
- B3 Differentiation deficit: Lack of adaptations for mixed-ability classes (Include when participants highlight need for scaffolds or modifications).
- B4 Accuracy/quality concerns: Instances of factual errors, unsuitable language level.
- Theme C: Ethical and institutional concerns
- C1 Plagiarism & student misuse: Worries that students may misuse AI for assignments.

- C2 Professional ownership & inspectorate acceptance: Concerns about inspectors' reactions and professional legitimacy.
- C3 Data privacy & platform trust: Concerns about data security and reliability of external platforms.
- Theme D: Training, supports and readiness
- D1 Prompting & LLM craft: Need for training on how to write effective prompts.
- D2 AI-TPACK & curriculum alignment: Integrating AI into pedagogy/assessment knowledge.
- D3 Practical workshops & supervised piloting: Requests for hands-on sessions in practicum contexts.
- D4 Policy & assessment redesign: Institutional templates, clear regulation, and reworked assessment procedures.

DP13193-DP13194 28-2010 Academicus International Scientific Journal
International Trademark Classification under the Nice Agreement

Presented: September 2025
Included for Publishing: December 2025
Published: January 2026, Volume 17, Issue 33 Academicus International Scientific Journal