**Research Proposal**

Designing and Evaluating Online Teacher Training Workshops to Enhance English Language Teachers' Digital Literacy for Increasing Adult Learners' Cognitive, Emotional, Behavioral, and Social Engagement.

**Introduction**

The integration of digital technologies into English Language Teaching (ELT) has transformed pedagogical practices, particularly in the post-pandemic era, where online and hybrid learning models have become ubiquitous. As of 2025, global reports indicate that over 80% of educators incorporate digital tools in their classrooms, yet significant disparities persist in digital literacy among EFL teachers, especially those working with adult learners (UNESCO, 2024). Digital literacy, encompassing the ability to critically evaluate, create, and communicate information using digital platforms (Serrar & Ibrahimi, 2024), is crucial for fostering inclusive and engaging learning environments. For adult learners often migrants, professionals, or lifelong learner’s digital tools offer flexibility and relevance, enabling personalized learning paths that align with real-world needs, such as workplace communication or cultural integration (Maahs et al., 2024; Welesilassie & Gerencheal, 2024).

Recent studies underscore the urgency of this issue. A systematic review of EFL online assessment in higher education highlights how digital tools enhance language skills through interactivity and autonomy, but challenges in technology adoption hinder effectiveness (Wannas & AbdelMohsen, 2024). Similarly, in Chinese universities, foreign language teachers' digital literacy is bolstered by national and institutional supports, yet individual motivation remains a bottleneck (Enhancing digital literacy in foreign language teaching, 2024). The COVID-19 pandemic amplified these gaps, forcing a rapid shift to online modalities that exposed teachers' unpreparedness, particularly in engaging adult migrants who face additional barriers like low print and digital literacy (Maahs et al., 2024; Blume, 2020). For instance, teachers of adult migrant learners in Germany reported relying on "learning-by-doing" due to inadequate training, leading to suboptimal use of tools like WhatsApp for collaborative tasks (Maahs et al., 2024).

This proposal focuses on designing and evaluating online workshops as a targeted intervention to build EFL teachers' digital literacy, specifically aiming to enhance adult learners' engagement across four dimensions: cognitive (deep processing of information), emotional (motivation and reduced anxiety), behavioral (active participation), and social (collaborative interactions) (Yaghoubi et al., 2024; Fredricks et al., 2004). Grounded in sociocultural theory (SCT), which views learning as mediated by social interactions and tools (Vygotsky, 1978; Atkinson et al., 2024), and self-determination theory (SDT), emphasizing autonomy, competence, and relatedness (Deci & Ryan, 2000), the study addresses how relationality and interconnectedness in digital spaces can transform ELT practices (Atkinson et al., 2024).

Contextually, this research is timely amid the "digital awakening" in adult education, where tools like AI-driven platforms and mobile apps are revolutionizing access (Evolllution, 2024). In diverse settings such as Ethiopian high schools, where digital literacy utilization is low despite strong pedagogical foundations (Welesilassie & Gerencheal, 2024), or Vietnamese EFL contexts requiring e-leadership for AI integration (Hoang, 2024 teachers need scalable training. Adult learners, comprising over 40% of global language enrollees (British Council, 2023), benefit from engagement-focused strategies, as evidenced by studies showing positive emotions boosting online participation (ProLiteracy, 2024). However, gaps in teacher preparation persist: pre-service teachers in Hong Kong perceive digital tools positively for engagement but lack confidence in content creation and classroom management (Integrating digital technologies into teaching, 2024).

By proposing online workshops, this study leverages accessible formats like Zoom and Google Classroom, incorporating modules on AI ethics, multimedia design, and engagement metrics. This approach aligns with recent calls for media education in EFL classes to overcome teachers' challenges in digital integration (Media education in EFL class, 2025). Ultimately, the research seeks to bridge the divide between teacher competencies and learner needs, contributing to equitable ELT in a digital age.

**Literature Review**

The literature on digital literacy in ELT has evolved rapidly since 2019, shifting from basic ICT proficiency to holistic competencies integrating pedagogy, ethics, and innovation (Serrar & Ibrahimi, 2024; Shruthi et al., 2024). This review synthesizes key themes: digital literacy frameworks, teacher training challenges, learner engagement dimensions, and emerging AI integrations, drawing exclusively from post-2019 sources to ensure relevance.

Digital literacy is no longer confined to technical skills but extends to critical evaluation and ethical use of digital content, particularly in foreign language contexts (Serrar & Ibrahimi, 2024). A systematic review of 72 articles from Chinese universities identifies four enhancements dimensions’ national policies, institutional infrastructure, team collaboration, and individual motivation emphasizing synergistic interactions for effective implementation (Enhancing digital literacy in foreign language teaching, 2024). In Ethiopian high schools, teachers demonstrate pedagogical strengths but struggle with digital utilization due to infrastructure deficits and training gaps, limiting language instruction efficacy (Welesilassie & Gerencheal, 2024). Similarly, a study on pre-service language teachers in Hong Kong reveals positive perceptions of digital tools (e.g., Kahoot for real-time feedback) for boosting efficiency and motivation, yet concerns over distractions and workload persist (Integrating digital technologies into teaching, 2024).

For adult learners, digital literacy addresses unique barriers like LESLLA (Low-Educated Second Language and Literacy Acquisition) challenges, where migrants require multimodal supports visuals, audio, and translations to navigate platforms (Maahs et al., 2024). Recent research highlights how smartphones facilitate oral practice via recording features, but economic divides exacerbate access issues (Maahs et al., 2024; The role of digital literacy in Enhancing Technical Learning, 2025).

Teacher training remains a critical gap, with many EFL educators unprepared for digital-inclusive transformation (Chilla et al., 2024). A bilateral German-Norwegian study of 221 participants shows that confidence in digital tools for diverse learners (DLN) correlates with attitudinal readiness, advocating for experience-based training to foster a "transformation mindset" (Chilla et al., 2024). In Vietnam, EFL teachers need e-leadership development for AI integration, including technical proficiency and change management, yet current programs overlook these (Hoang, 2024). Pre-service teachers often excel in information literacy but falter in content creation, necessitating targeted workshops (Integrating digital technologies into teaching, 2024; Preparing preservice teachers to teach with digital technologies, 2025).

Online workshops emerge as promising solutions. A qualitative study of 18 Chinese EFL teachers in a 60-hour program reveals psychological shifts from digital anxiety to empowerment, underscoring workshops' role in building resilience (From challenges to chances in the digital age, 2025). Similarly, TESOL training research emphasizes technology-assisted practices for online instruction, with workshops enhancing teacher identity via TPACK frameworks (Research: TESOL and Language Teacher Training, 2024; Delving into EFL teachers' digital literacy, 2023).

Engagement is multidimensional, with digital tools uniquely positioned to address each facet in adult ELT. Cognitive engagement thrives through interactive forums promoting higher-order thinking, as seen in Japanese high school blended programs where facilitation strategies transfer from teachers to learners (Miyashita, 2024). For adults, performance-based assessments in virtual classes build resilience and skills, with online formats yielding stronger motivation effects (Yaghoubi et al., 2024).

Emotional engagement benefits from reduced anxiety via voice-enabled apps and positive reinforcement, as in mobile-assisted learning post-pandemic (Bradley & Al-Sabbagh, 2022; Enhancing Online Student Engagement for Adult Literacy Learners, 2024). Behavioral engagement increases with autonomous tool use, like Quizlet for self-paced practice, though LESLLA learners need scaffolded support (Maahs et al., 2024). Social engagement flourishes in collaborative spaces, such as WhatsApp groups for migrant discussions, fostering relatedness (Maahs et al., 2024; Ren et al., 2024).

A systematic review of EFL online assessments confirms interactivity boosts autonomy across dimensions, but psychological barriers like tech anxiety must be mitigated (Wannas & AbdelMohsen, 2024; Digital Literacy: Empowering Individuals, 2025).

AI's role in FL teaching evolves alongside digital literacy, enabling personalized feedback but requiring ethical training (Serrar & Ibrahimi, 2024). Studies show AI enhances convergence with language didactics, yet teachers lack skills for "good" versus "bad" uses (Serrar & Ibrahimi, 2024). In blended reforms, AI supports continuous assessment for engineering talents, linking to engagement (Ren et al., 2024). Recent webinars advocate free tools for data literacy in adult classes, integrating AI for workplace skills (Teacher Training Plus - Workplace and Digital Literacy, 2024).

**Innovation and Gap**

While extant literature addresses digital literacy (Enhancing digital literacy, 2024) and engagement (Yaghoubi et al., 2024), few studies holistically target in-service EFL teachers via online workshops for adult learners' multidimensional engagement (Shruthi et al., 2024). Gaps include: (1) limited focus on adult-specific contexts, overlooking migrants' needs (Maahs et al., 2024); (2) insufficient evaluation of workshop designs incorporating AI and SQD2 strategies (Preparing preservice teachers, 2025); (3) neglect of cultural responsiveness in global settings (Chilla et al., 2024). This study innovates by employing mixed-methods to co-design workshops with teachers, measuring engagement via validated scales, and extending SCT to relational AI-mediated learning (Atkinson et al., 2024). By filling these voids, it provides a scalable framework adaptable to low-resource areas like Ethiopia (Welesilassie & Gerencheal, 2024).

**Research Questions**

1. To what extent do online workshops improve EFL teachers' digital literacy competencies, including AI integration and pedagogical adaptation?
2. How does enhanced teacher digital literacy influence adult learners' cognitive, emotional, behavioral, and social engagement in ELT settings?
3. What contextual challenges (e.g., infrastructure, attitudes) and facilitators emerge during workshop implementation across diverse regions?

**Hypotheses**

**H1**: Online workshops will significantly elevate teachers' digital literacy scores (e.g., TPACK framework), with a predicted 25-35% improvement, as supported by e-leadership models.

**H2:** Improvements in teacher literacy will correlate positively (r > 0.4) with gains in learner engagement dimensions, particularly in virtual environments.

**H3:** Facilitators like institutional support will moderate outcomes more than challenges like digital divides, varying by region.

**Methodology**

An exploratory sequential mixed-methods design will guide this study, prioritizing qualitative insights for workshop refinement before quantitative validation (Creswell & Plano Clark, 2017; Hoang, 2024). Phase 1 (qualitative): Semi-structured interviews with 20 EFL teachers from Asia, Africa, and Europe to identify needs (e.g., AI ethics, engagement tools). Thematic analysis via NVivo will inform design (Braun & Clarke, 2021; Shruthi et al., 2024).

Phase 2 (intervention): 8-week online workshops (n=100 teachers) via Moodle/Zoom, with modules on: (1) Digital fundamentals (e.g., multimedia creation); (2) Engagement strategies (e.g., Kahoot for cognitive tasks); (3) AI applications (e.g., ChatGPT for feedback); (4) Inclusive practices for adults (Maahs et al., 2024). Each session includes hands-on activities and peer feedback.

Phase 3 (quantitative): Pre/post surveys using TPACK (Mishra & Koehler, 2006) and Engagement Scale (Fredricks et al., 2004), plus learner journals (n=300 adults). Analysis: Paired t-tests, regression for correlations, and ANOVA for regional differences (SPSS; Yaghoubi et al., 2024). Sampling: Purposive via ELT networks, ensuring diversity (e.g., 40% from low-resource contexts). Ethics: IRB approval, consent forms, anonymity.

**Predicted Results for Methodology**

The sequential design anticipates high validity, with qualitative themes (e.g., "anxiety reduction via modeling") yielding 80% workshop adoption rate. Quantitative data will show literacy gains (ΔM=2.5 on 7-point scale), with strong inter-rater reliability (κ>0.8) in theming. Engagement correlations (β=0.45) align with prior effects (Yaghoubi et al., 2024), though regional moderation may dilute in low-access areas (Welesilassie & Gerencheal, 2024).

**Significance and Contribution**

This study advances ELT by validating a workshop framework that equips teachers for digital equity, directly impacting adult learners' outcomes in migration and workforce contexts (Maahs et al., 2024; The role of digital literacy in Enhancing Technical Learning, 2025). Theoretically, it enriches SCT with digital relationality (Atkinson et al., 2024). Practically, it informs policies like UNESCO's digital inclusion guidelines, offering open-access resources for global scalability (Chilla et al., 2024). Contributions include reduced dropout rates (predicted 15% via engagement) and empowered teachers, fostering lifelong learning (Digital Literacy: Empowering Individuals, 2025).

**Timeline**

| **Phase** | **Activities** | **Duration** | **Milestones** |
| --- | --- | --- | --- |
| Year 1 (Months 1-12) | Literature review; Interviews; Workshop design & pilot (n=20) | 12 months | Prototype workshops; Ethics approval |
| Year 2 (Months 13-24) | Full implementation; Data collection (surveys, journals) | 12 months | 100 teachers trained; Preliminary analysis |
| Year 3 (Months 25-36) | Advanced analysis; Dissertation writing; Conferences/publications | 12 months | Thesis submission; 2-3 journal articles |

**Predicted Results**

Workshops will yield measurable literacy enhancements (e.g., 30% TPACK increase; Hoang, 2024), translating to engagement boosts: cognitive (20% deeper processing via forums; Miyashita, 2024), emotional (15% motivation rise; Enhancing Online Student Engagement, 2024), behavioral (25% participation; Yaghoubi et al., 2024), social (18% collaboration; Maahs et al., 2024). AI modules predict ethical use adherence (85%), with regional variations (stronger in high-access areas). Overall, 70% sustained implementation post-study.

**Limitations**

Potential biases include self-selection (tech-savvy participants) and generalizability beyond sampled regions (Shruthi et al., 2024). Self-reports may inflate effects; longitudinal follow-up is needed (Yaghoubi et al., 2024). Infrastructure in low-resource sites could skew data (Welesilassie & Gerencheal, 2024). Mitigation: Diverse sampling and triangulation.

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