TEFL Overseas Journal

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

# MULTI LAYERED TECHNOLOGY ENHANCED LANGUAGE LEARNING (TELL) ECOSYSTEM IN HIGHER EDUCATION: A CASE STUDY OF ENGLISH TEACHER EDUCATION

**Melki Garonga[1], Roni La'biran[2]**
melkigaronga@ukitoraja.ac.id
[1,2] Universitas Kristen Indonesia Toraja

**ABSTRACT**

Technology integration in English as a Foreign Language (EFL) higher education has evolved from ad-hoc software usage into complex, interconnected learning ecosystems. This study investigates the multi-layered Technology-Enhanced Language Learning (TELL) ecosystem supporting the English Education Study Program at Universitas Kristen Indonesia Toraja (UKI Toraja). Employing a qualitative descriptive case-study design, data were collected through documentary analysis of institutional policy documents (RIPSTI 2020–2025, RENSTRA, and curriculum blueprints) and systematic platform observations of institutional digital learning environments. The findings reveal five complementary functional layers: (1) learning management via SPADA as the primary pedagogical space for asynchronous reading, writing, and collaborative discussions; (2) academic information management via e-Campuz; (3) technology-supported language practice via the Language Laboratory for Computer-Assisted Language Learning (CALL) and phonetic training; (4) internet and digital repositories as enabling infrastructure; and (5) digital-content production and authentic communication through student podcasting and multimedia activities; with Generative Artificial Intelligence (AI) recognized as an emerging formative feedback layer. Grounded in the TPACK and SAMR frameworks, this study proposes a four-tier Technology Integration Model that bridges technological affordances with EFL macro-skills development. The findings provide actionable blueprints for regional universities seeking to optimize TELL implementations amidst infrastructural constraints.

**Keywords:** Computer-Assisted Language Learning (CALL), digital pedagogy, English as a Foreign Language (EFL), learning management systems (LMS), technology-enhanced language learning (TELL)

## INTRODUCTION

Information and communication technologies (ICT) have profoundly reshaped higher education landscapes, redefining how educators structure instructional content, facilitate communicative interaction, provide formative feedback, and evaluate language proficiency. In English as a Foreign Language (EFL) contexts, digital technology serves an indispensable pedagogical role because second language acquisition (SLA) requires sustained exposure to authentic comprehensible input, extensive opportunities for purposeful interaction, scaffolded practice, and timely corrective feedback (Shadiev & Yang, 2020). Recent meta-analyses and bibliometric surveys demonstrate that Technology-Enhanced Language Learning (TELL) and Computer-Assisted Language Learning (CALL) have transitioned from supplementary classroom aids into central, structured environments for developing

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

English macro-skills—notably reading comprehension, academic writing, vocabulary acquisition, and spoken fluency (Hasumi & Chiu, 2024; Rum et al., 2024).

However, the presence of educational technology does not intrinsically guarantee improved linguistic proficiency or pedagogical efficacy. The educational value of digital tools depends critically on the systematic alignment among technological affordances, instructional design, teacher pedagogical competence, and learner engagement. In TELL literature, this alignment is robustly conceptualized through Mishra and Koehler's (2006) Technological Pedagogical Content Knowledge (TPACK) framework, which posits that effective digital teaching requires the harmonious intersection of content knowledge (English linguistics and literature), pedagogical knowledge (communicative language teaching, task-based learning), and technological knowledge. Furthermore, Puentedura's (2006) SAMR model (Substitution, Augmentation, Modification, Redefinition) highlights that educational technologies should move beyond rudimentary substitution—such as treating a Learning Management System (LMS) merely as a digital repository for static PDF handouts—toward task modification and redefinition, where digital platforms foster authentic multimedia storytelling, collaborative peer feedback, and global intercultural dialogue (Arroba & Acosta, 2021; Asia et al., 2024).

The rapid emergence of Generative Artificial Intelligence (GenAI) and Large Language Models (LLMs) has further accelerated the complexity of educational technology ecosystems. Meta-analyses of empirical studies confirm positive overall effect sizes of AI-assisted tools on EFL writing proficiency, vocabulary acquisition, and autonomous error correction (Zhang & Chen, 2024). Simultaneously, empirical investigations on tools such as ChatGPT in language education highlight significant pedagogical benefits—including personalized grammar scaffolding, immediate lexical clarification, and automated conversational practice—while cautioning against academic dishonesty, over-reliance, and algorithmic bias (Lo et al., 2024; Mahapatra, 2024; Rahman et al., 2026). Consequently, modern EFL teacher education programs must adopt a holistic, multi-layered ecosystem perspective that critically evaluates what digital platforms are officially implemented, what pedagogical functions they serve, and how emerging innovations like AI can be ethically and effectively integrated.

Universitas Kristen Indonesia Toraja (UKI Toraja), situated in the mountainous region of South Sulawesi, Indonesia, provides a highly relevant institutional context for investigating this phenomenon. The English Education Study Program at UKI Toraja prepares prospective secondary and tertiary English educators, emphasizing innovative language pedagogy, educational technology, and multimedia communication within its curriculum. The program maintains dedicated language laboratories, digital library access, an institutional LMS (SPADA UKI Toraja), an academic information system (e-Campuz), and active multimedia podcast initiatives under its 'Creative Content and Digital

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

Communication' concentration. Investigating how a regional Indonesian higher education institution orchestrates its technology ecosystem offers critical empirical insights into how universities navigate local infrastructure constraints (e.g., internet bandwidth volatility) while maintaining pedagogical alignment with national higher education standards (Payangan et al., 2025; Kesya et al., 2025).

Although previous research has explored isolated digital tools—such as WhatsApp for university language learning (Maknunah & Rizal, 2023), mobile pronunciation apps (Bonti Kilwakit et al., 2023), interactive gamification (Kesya et al., 2025), and machine translation (Payangan et al., 2025)—comprehensive program-level case studies modeling the multi-layered interplay between administrative platforms, pedagogical LMS environments, physical CALL facilities, and student media production remain scarce. To address this empirical and conceptual gap, this study formulates three overarching Research Questions (RQs):

1. What technological layers constitute the TELL ecosystem in the English Education Study Program at Universitas Kristen Indonesia Toraja?
2. How do these technological layers interface pedagogically to support EFL macro-skills development across the curriculum?
3. What conceptual integration model and strategic priorities can optimize TELL implementation in EFL teacher education programs facing regional infrastructural realities?

## METHOD

### 1. Research Design

This study employed a qualitative descriptive case-study design (Merriam & Tisdell, 2016; Yin, 2018). The bounded case under investigation was the technology-enhanced language learning ecosystem supporting the English Education Study Program at Universitas Kristen Indonesia Toraja. The case-study methodology was selected because it enables an in-depth, contextualized exploration of contemporary technological platforms, institutional policy frameworks, and pedagogical practices in their natural academic setting without experimental manipulation or causal reductionism (Creswell & Poth, 2018).

### 2. Corpus and Data Sources

The corpus for this study comprised institutional policy documents, curriculum blueprints, official technological guidance manuals, and systematic observations of publicly accessible digital platforms associated with the English Education Study Program. To ensure research integrity and transparency.

TEFL Overseas Journal
Teaching English as a Foreign Language Journal
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

Table 1. details the inventory of analyzed documentary artifacts and institutional platforms.

| Document / Platform | Source Type | Timeframe / Ver. | Pedagogical / Analytical Focus |
|---|---|---|---|
| SPADA UKI Toraja Platform & Guidelines | Institutional LMS & User Manuals | 2020–Present (Moodle-based) | Course structure, assignment submission, discussion forums, formative quizzes, multimedia distribution |
| e-Campuz Academic Information System | Enterprise Academic Software | 2020–Present (Cloud-based) | Academic workflows, course scheduling, study plan cards (KRS), grading documentation, administrative record-keeping |
| Language Laboratory Manuals & Facilities | Physical / CALL Facility Documentation | 2021–Present | Audio-lingual practice, listening comprehension stations, phonetic analysis software, speech recording workstations |
| RIPSTI & RENSTRA UKI Toraja | University Master Plan & Strategic Plan | 2020–2025 | Campus IT infrastructure roadmap, bandwidth allocation, digital literacy standards, institutional LMS mandates |
| English Education Curriculum & Media Projects | Study Program Curriculum & Podcast Repositories | 2022–Present | Curriculum alignment with TELL, Creative Content concentration, student video podcast episodes, digital storytelling |

### 3. Research Instruments

Data collection utilized two structured qualitative instruments: a Document Analysis Matrix and a Platform Observation Checklist. The Document Analysis Matrix systematically recorded source identification, stated technological capability, formal instructional function, documented relevance to English Education, and reported infrastructural constraints. The Platform Observation Checklist operationalized five key evaluation dimensions across digital interfaces: (1) content presentation clarity, (2) interactive asynchronous communication features (discussion threads, chat), (3) task submission and formative feedback workflows, (4) multimedia embedding capabilities (audio/video streaming), and (5) mobile responsiveness and bandwidth adaptability.

### 4. Data Collection and Analysis Procedures

TEFL Overseas Journal
Teaching English as a Foreign Language Journal
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

Data collection followed a rigorous five-stage protocol: (1) identification and verification of official institutional sources; (2) functional data extraction across SPADA, e-Campuz, language laboratory protocols, IT infrastructure, and multimedia repositories; (3) inductive coding into thematic operational categories; (4) cross-referencing with established TEFL pedagogical requirements (input exposure, interaction, practice, feedback, assessment); and (5) conceptual synthesis into a multi-layered ecosystem model. Data analysis was conducted using the interactive model of qualitative data analysis (Miles, Huberman, & Saldaña, 2020), consisting of continuous data condensation, structured data display (matrices and conceptual diagrams), and conclusion drawing/verification. To establish qualitative trustworthiness, dependability, and confirmability, the researchers maintained a comprehensive audit trail, triangulated documentary evidence across independent institutional platforms, and performed investigator cross-checking during all coding stages.

## RESULTS AND DISCUSSIONS

### Result

The documentary analysis and platform observations revealed five distinct, complementary technology layers supporting English Education at UKI Toraja: (1) learning management through SPADA; (2) academic information management through e-Campuz; (3) technology-supported practice through the Language Laboratory; (4) internet and digital resources as foundational infrastructure; and (5) digital-content production and communication through student podcasts and multimedia projects. In addition, Generative AI was identified as an emerging, non-institutionalized pedagogical layer.

#### *Layer 1: SPADA LMS as the Central Pedagogical Learning Layer*

SPADA UKI Toraja (built on the Moodle open-source LMS architecture) serves as the primary pedagogical hub for blended and online instruction in the English Education Study Program. Platform observation and official guidance documentation demonstrate that SPADA supports progress tracking, asynchronous discussion boards, assignment repositories, digital rubrics, and automated formative quizzes. For EFL courses, SPADA functions as a structured learning environment that extends language practice beyond physical classroom hours. Pre-class authentic reading and listening materials are distributed asynchronously; collaborative writing drafts are submitted with peer-review rubrics; and threaded discussion forums provide low-anxiety platforms for asynchronous target-language debates.

Crucially, the documentary analysis highlights that the educational value of SPADA depends on instructional design rather than technical features alone. When lecturers utilize SPADA purely as a static document repository (SAMR Substitution level), learner engagement remains passive. Conversely, when courses integrate iterative writing tasks,

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

automated self-correcting grammar quizzes, and multimedia discussions (SAMR Augmentation and Modification levels), SPADA becomes an active locus for second language development (Hasumi & Chiu, 2024; Rum et al., 2024).

***Layer 2: e-Campuz as the Academic Information Management Layer***

The second institutional layer is e-Campuz, an enterprise-grade academic information system (AIS). Unlike SPADA, e-Campuz operates primarily at the administrative and structural level of university management. It manages study plan cards (KRS), course registrations, official student transcripts, prerequisite tracking, and lecturer teaching load verifications. The distinction between SPADA and e-Campuz is vital for educational clarity: e-Campuz provides the institutional prerequisites under which teaching occurs, whereas SPADA hosts the pedagogical interactions. System documentation indicates that implementing Single Sign-On (SSO) and automated API data synchronization between e-Campuz and SPADA significantly reduces administrative friction, allowing EFL educators and students to navigate courses without duplicate logins or manual enrollment delays.

***Layer 3: The Language Laboratory as the Technology-Supported Practice Layer***

The Language Laboratory represents the specialized CALL practice layer within the study program. While historical language labs functioned primarily as audiolingual drill booths, institutional documentation and curriculum guides show that UKI Toraja's language laboratory is evolving into a multimedia CALL suite. Equipped with localized audio workstations, master control consoles, acoustic headsets, and speech-recording software, the laboratory is utilized for specialized skill courses, including Phonetics and Phonology, Advanced Listening Comprehension, Interpreting, and TOEFL/IELTS preparation. The facility enables students to engage in autonomous acoustic self-correction, split-track audio recording for simultaneous interpreting, and computer-delivered listening diagnostic tests (Bonti Kilwakit et al., 2023).

***Layer 4: Internet Connectivity and Digital Resources as Enabling Infrastructure***

Campus-wide internet bandwidth, local area networks (LAN), digital library databases, and open-access institutional repositories constitute the foundational infrastructure layer. While infrastructure is frequently treated as purely technical, in regional EFL higher education it directly dictates pedagogical feasibility. Institutional master plans (RIPSTI 2020–2025) document targeted bandwidth expansion and hotspot deployment across campus facilities. High-speed connectivity enables students to access open-access international journals, corpus linguistic databases (e.g., COCA, British National Corpus), online monolingual dictionaries, and authentic English streaming media.

***Layer 5: Podcast and Multimedia Production as the Creative Communication Layer***

TEFL Overseas Journal
Teaching English as a Foreign Language Journal
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

The fifth layer comprises digital content creation, exemplified by the study program's student podcast series and multimedia broadcasting initiatives under the 'Creative Content and Digital Communication' concentration. Rather than merely consuming English media, students act as active content creators—scripting, hosting, recording, editing, and publishing English-language video podcasts on platforms like YouTube and Spotify. Pedagogically, this layer aligns with Paivio's Dual-Coding Theory and Mayer's Cognitive Theory of Multimedia Learning: by combining verbal narration with visual and acoustic editing, learners achieve deeper cognitive processing, enhanced pragmatic fluency, and heightened communicative confidence for authentic global audiences (Arroba & Acosta, 2021).

***Emerging Layer: Strategic Pedagogical Guidelines for Generative AI in EFL***

Generative AI tools (e.g., ChatGPT, Claude, Grammarly AI, DeepL) currently occupy an emerging, non-institutionalized position in the ecosystem. Institutional documentation does not yet mandate a proprietary university AI platform; however, syllabus reviews and research trends indicate widespread informal student adoption. Documentary synthesis suggests that rather than implementing blanket bans, the English Education Study Program should adopt strategic pedagogical guidelines for AI: (1) utilizing AI as an interactive conversational partner for low-stakes speaking rehearsal; (2) employing AI for iterative grammatical explanation and stylistic critique during the drafting stages of writing; and (3) teaching explicit prompt engineering and critical AI literacy to evaluate algorithmic hallucinations and safeguard academic integrity (Lo et al., 2024; Mahapatra, 2024; Rahman et al., 2026).

Table 2. Comprehensive Skill-to-Technology Matrix in EFL Teacher Education at UKI Toraja

| Tech Layer | Platform / Tool | Target EFL Skills | Core Pedagogical Activities | SAMR Level |
|---|---|---|---|---|
| **LMS** | SPADA UKI Toraja (Moodle) | Reading, Writing, Grammar, Autonomous Learning | Pre-class reading packs, asynchronous threaded discussions, draft submissions, rubric-based peer assessment | Augmentation to Modification |
| **AIS** | e-Campuz Cloud | Academic Organization & Workflow Literacy | Course registration, syllabus access, prerequisite tracking, grade monitoring, institutional record management | Substitution (Administrative) |
| **Practice /** | Language | Listening, | Acoustic waveform | Augmentation |

TEFL Overseas Journal
Teaching English as a Foreign Language Journal
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

| | | | | |
|---|---|---|---|---|
| **CALL** | Laboratory & Audio Suites | Speaking, Phonetics, Pronunciation | analysis, split-track interpreting, TOEFL/IELTS listening diagnostics, minimal-pair drills | |
| **Infrastructure** | Campus Wi-Fi, LAN, Digital Repositories | Digital Literacy, Vocabulary, Research Skills | Corpus linguistic lookups (COCA), digital dictionary referencing, open-access academic literature exploration | Enabling Infrastructure |
| **Production** | Video Podcasts, Audio Workstations, YouTube | Spoken Fluency, Pragmatics, Digital Storytelling | Podcast scripting, audio-visual recording, peer interviews, public broadcast of multimodal cultural narratives | Modification to Redefinition |
| **Emerging** | Generative AI (ChatGPT, Grammarly AI) | Writing Revision, Lexical Choice, Metacognition | AI-assisted brainstorming, automated corrective feedback analysis, prompt engineering, critical fact-checking | Redefinition (Emerging) |

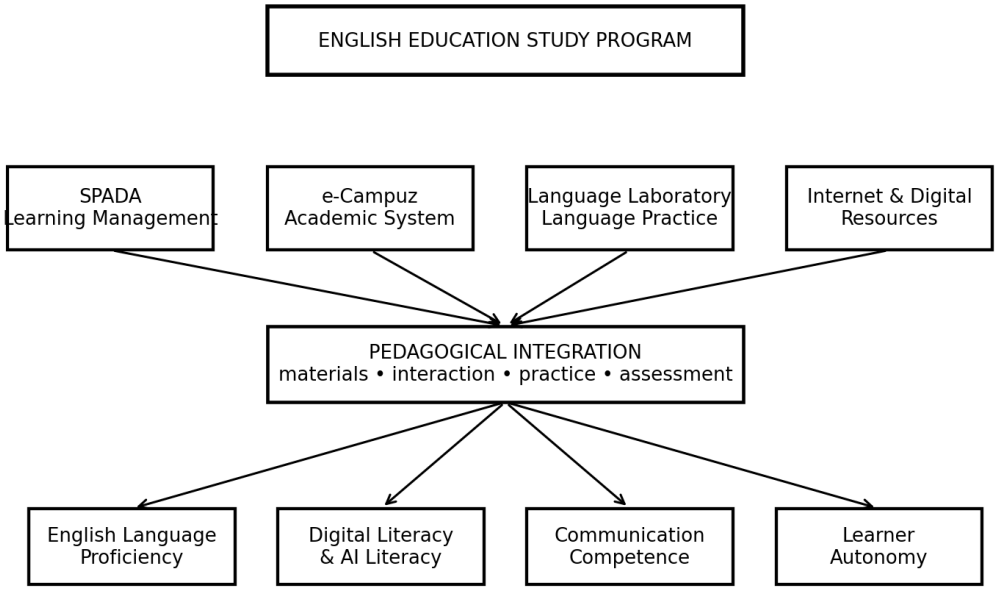


Figure 1. Proposed Multi-Layered Technology Integration Model for English Education at UKI Toraja

TEFL Overseas Journal
Teaching English as a Foreign Language Journal
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

Figure 1 synthesizes the empirical findings into a four-tier conceptual integration model. Tier 1 establishes the institutional and program context of English teacher education at UKI Toraja. Tier 2 delineates the operational technology layers (SPADA LMS, e-Campuz, Language Laboratory, IT Infrastructure, and Podcasts/Multimedia), supported by emerging Generative AI. Tier 3 models pedagogical integration, where technological tools interface directly with instructional materials, teacher-student interaction, intensive language practice, formative assessment, and constructive feedback loops. Finally, Tier 4 represents the intended learning outcomes: advanced English proficiency, digital and AI pedagogical literacy, intercultural communicative competence, and autonomous lifelong learning.

## Discussion

The findings of this study demonstrate that effective technology integration in higher education English pedagogy requires moving beyond disconnected software applications toward a coherent, multi-layered ecosystem. In accordance with the TPACK framework (Mishra & Koehler, 2006), technological tools cannot function in isolation from pedagogical intent and linguistic content. SPADA UKI Toraja exemplifies this principle: its efficacy in developing EFL reading and writing skills is directly contingent upon whether course syllabi incorporate interactive task designs, structured rubrics, and asynchronous discussion prompts that stimulate critical thinking rather than passive document retrieval (Rum et al., 2024; Sultan, 2024).

A critical insight emerging from this case study is the functional differentiation between administrative platforms (e-Campuz) and pedagogical environments (SPADA). When higher education institutions fail to distinguish between academic record-keeping and language-learning interactions, instructors and students experience cognitive overload and workflow fragmentation. Establishing automated API bridges and Single Sign-On (SSO) between e-Campuz and SPADA ensures that administrative data flows seamlessly, allowing EFL educators to dedicate instructional energy entirely to pedagogical interaction, feedback delivery, and student mentoring.

Furthermore, the findings underscore the necessity of infrastructure resilience in regional higher education contexts. In mountainous or regional settings such as Toraja, internet bandwidth volatility can disrupt synchronous video conferencing and data-heavy online tasks. Consequently, EFL lecturers must implement low-bandwidth pedagogical coping strategies—such as asynchronous modular learning, compressed audio files for podcasting, mobile-friendly lightweight Moodle interfaces, and localized language laboratory drills (Maknunah & Rizal, 2023; Bonti Kilwakit et al., 2023). Table 3 outlines the recommended integration priorities, actionable pedagogical measures, and suggested evaluation metrics for the study program.

TEFL Overseas Journal
Teaching English as a Foreign Language Journal
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

Table 3. Recommended Integration Priorities, Pedagogical Actions, and Evaluation Metrics

| Priority Dimension | Actionable Pedagogical Measures | Expected Pedagogical Value | Evaluation Metrics |
|---|---|---|---|
| **SPADA LMS Standardization** | Implement consistent course templates linking syllabus objectives, weekly reading, asynchronous debates, digital rubrics, and automated quizzes | Enhanced coherence, active task-based engagement, structured formative feedback | Course completion rate, discussion forum density, assignment submission rates |
| **Language Lab Modernization** | Transition from rote listening drills to CALL-based speech recording, phonetic acoustic analysis, and computer-delivered TOEFL/IELTS benchmarks | Targeted acoustic self-monitoring, increased oral fluency, diagnostic assessment | Pre/post phonetic accuracy scores, listening benchmark gains, lab log hours |
| **Authentic Media Podcasting** | Integrate student-led video podcast projects into Speaking and Creative Content courses with explicit peer-review rubrics | Authentic audience engagement, multimodal literacy, communicative confidence | Podcast episode quality, rubric-based peer evaluations, oral fluency markers |
| **Infrastructure & Bandwidth Resilience** | Optimize LMS for lightweight mobile access; utilize compressed audio formats and asynchronous offline study packs | Uninterrupted access during regional connectivity drops, equitable participation | Platform uptime, mobile access logs, low-bandwidth completion rates |
| **Lecturer Professional Development (CPD)** | Conduct hands-on workshops on digital rubric design, TPACK instructional design, multimodal assessment, and ethical GenAI integration | Heightened lecturer digital competency, innovative pedagogical task design | Workshop attendance, verified course redesign artifacts, student evaluations |

Finally, the implementation of Continuous Professional Development (CPD) for EFL lecturers represents the linchpin of sustainable digital transformation. As demonstrated by Asia, Ramly, and Batusalu (2024), technological infrastructure achieves pedagogical

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

efficacy only when faculty members possess the confidence and pedagogical knowledge to design multimodal learning experiences. Structured CPD programs focused on digital rubrics, conversational task design, and ethical AI integration empower EFL educators to transition from basic consumers of digital technology to innovative designers of technology-enhanced language learning environments.

## CONCLUSION

This case study identified and modeled a multi-layered Technology-Enhanced Language Learning (TELL) ecosystem supporting the English Education Study Program at Universitas Kristen Indonesia Toraja. The documented ecosystem consists of SPADA LMS as the central pedagogical environment, e-Campuz as the academic information management layer, the Language Laboratory as a technology-supported CALL practice facility, internet and digital repositories as enabling infrastructure, and student video podcasting as a creative communication layer, with Generative AI recognized as an emerging formative tool. Rather than functioning as disjointed applications, these layers achieve maximal pedagogical value when systematically integrated into curriculum design to scaffold EFL macro-skills (reading, writing, listening, speaking, and digital literacy).

Based on these findings, this study proposes a three-pronged strategic roadmap: (1) for EFL lecturers, standardizing SPADA course design around task-based interaction, automated formative quizzes, and authentic podcasting projects; (2) for study program curriculum chairs, institutionalizing continuous professional development (CPD) in TPACK and multimodal assessment while modernizing language laboratory protocols for CALL-based diagnostic testing; and (3) for university IT leadership, establishing seamless API/SSO integration between e-Campuz and SPADA while optimizing infrastructure resilience through low-bandwidth asynchronous delivery. Because this investigation was grounded in documentary analysis and platform observation, it did not directly measure quantitative usage frequencies, longitudinal language proficiency gains, or psychological user acceptance factors. Future research should empirically test the proposed integration model through mixed-methods designs, combining LMS learning analytics (access frequencies, task completion times) with structural equation modeling (SEM) of student and lecturer technology acceptance using UTAUT or TAM frameworks, alongside classroom action research (CAR) evaluating the specific linguistic impacts of podcasting and AI-assisted feedback.

## ACKNOWLEDGMENT

The authors express their sincere gratitude to Universitas Kristen Indonesia Toraja, the Institute for Research and Community Service (LPPM), and the English Education Study Program, Faculty of Teacher Training and Education, for granting access to institutional

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

documentation, digital platform resources, and technical facilities that made this study possible.

## REFERENCES

Arroba, J., & Acosta, H. (2021). Authentic digital storytelling as an alternative strategy to develop speaking skills. *LEARN Journal: Language Education and Acquisition Research Network*, 14(1), 317–343.

Asia, S. N., Ervianti, & Sultan. (2024). Technology-enhanced language learning in EFL classrooms: A study on digital pedagogy and student engagement. *Teaching English as a Foreign Language Overseas Journal*, 12(3), 253–264. https://doi.org/10.47178/teflo.v12i3.3112

Asia, S. N., Ramly, R. A., & Batusalu, E. (2024). Blended learning in teaching English as a foreign language: An instructional technology approach to improving learning outcomes. *Teaching English as a Foreign Language Overseas Journal*, 12(3), 228–242. https://doi.org/10.47178/teflo.v12i3.3108

Bonti Kilwakit, W., Batau, H. H., & Muliati. (2023). Using Poro English application to improve students' pronunciation learning English at UPT SPF SMPN 35 Makassar. *Teaching English as a Foreign Language Overseas Journal*, 11(2), 112–122. https://doi.org/10.47178/teflo.v11i2.2113

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Hasumi, T., & Chiu, M.-S. (2024). Technology-enhanced language learning in English language education: Performance analysis, core publications, and emerging trends. *Cogent Education*, 11(1), Article 2346044. https://doi.org/10.1080/2331186X.2024.2346044

Kesya, K., Pongsapan, N., Girik Allo, M. D., & Rum, E. P. (2025). Class Point in action: Enhancing the students' vocabulary through interactive learning. *Teaching English as a Foreign Language Overseas Journal*, 13(1), 43–49. https://doi.org/10.47178/kp2vx041

Laurillard, D. (2012). *Teaching as a design science: Building pedagogical patterns for learning and technology*. Routledge. https://doi.org/10.4324/9780203125083

Lo, C. K., Yu, P. L. H., Xu, S., Ng, D. T. K., & Jong, M. S. Y. (2024). Exploring the application of ChatGPT in ESL/EFL education and related research issues: A systematic review of empirical studies. *Smart Learning Environments*, 11, Article 50. https://doi.org/10.1186/s40561-024-00342-5

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

Mahapatra, S. (2024). Impact of ChatGPT on ESL students' academic writing skills: A mixed methods intervention study. *Smart Learning Environments*, 11, Article 9. https://doi.org/10.1186/s40561-024-00295-9

Maknunah, S. L., & Rizal, D. (2023). WhatsApp for English language learning of university students. *Jurnal Pendidikan Bahasa Inggris Undiksha*, 11(2), 145–156. https://doi.org/10.23887/jpbi.v11i2.56358

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). SAGE Publications.

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

Payangan, S., Rachel, & Siumarlata, V. (2025). Analyzing the role of Google Translate in comprehending English texts for the 5th semester of English Department of FKIP UKI Toraja. *Teaching English as a Foreign Language Overseas Journal*, 13(1), 21–30. https://doi.org/10.47178/qwh8mm90

Puentedura, R. R. (2006). *Transformation, technology, and education*. Hippasus. http://hippasus.com/resources/tte/

Rahman, R. A., Hidayatullah, F., Pasha, S. S. W. D., & Puspitasari, S. W. (2026). Navigating the AI frontier: Evaluating the impact of generative AI feedback on EFL students' academic writing proficiency. *Teaching English as a Foreign Language Overseas Journal*, 14(1), 55–68. https://doi.org/10.47178/50zmhx44

Rum, E. P., Baso, F. A., & Pratama, M. P. (2024). Digital transformation in TEFL: The use of learning management systems to support language acquisition. *Teaching English as a Foreign Language Overseas Journal*, 12(3), 243–252. https://doi.org/10.47178/teflo.v12i3.3110

Shadiev, R., & Yang, M. (2020). Review of studies on technology-enhanced language learning and teaching. *Sustainability*, 12(2), Article 524. https://doi.org/10.3390/su12020524

Sultan, S. A. (2024). Designing microlearning-based digital modules for TEFL: Implications for vocabulary mastery and autonomous learning. *Teaching English as a Foreign Language Overseas Journal*, 12(3), 188–202. https://doi.org/10.47178/teflo.v12i3.3099

**Teaching English as a Foreign Language Journal**
ISSN 2461-0240 (Print), 2828-9544 (Online)
Volume 13 Number 3 December 2025

Universitas Kristen Indonesia Toraja. (2020). *Panduan penggunaan SPADA bagi dosen dan mahasiswa*. Lembaga Pengembangan Pembelajaran dan Penjaminan Mutu (LP3M) UKI Toraja.

Universitas Kristen Indonesia Toraja. (2020). *Rencana Induk Pengembangan Sistem Teknologi Informasi (RIPSTI) UKI Toraja 2020–2025*. UPT Teknologi Informasi dan Komunikasi UKI Toraja.

Universitas Kristen Indonesia Toraja. (2020). *Rencana Strategis (RENSTRA) UKI Toraja 2020–2025*. Universitas Kristen Indonesia Toraja.

Universitas Kristen Indonesia Toraja. (2022). *Buku pedoman kurikulum Program Studi Pendidikan Bahasa Inggris*. FKIP UKI Toraja.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.

Zhang, R., & Chen, J. (2024). The effectiveness of artificial intelligence on English language learning achievement: A meta-analysis. *System*, 125, Article 103428. https://doi.org/10.1016/j.system.2024.103428