Enhancing Language Learning through ICT Based Media: Fostering Students' Creativity in Language Teaching

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Abstract

The use of ICT-based media in teaching languages bring creativeness and some knowledge of teaching. The study was carried out in an undergraduate ICT in Language Teaching course for an English Education. It employed a qualitative descriptive design to investigate how pre-service teachers interacted with digital tools to produce instructional media. What the course attempted to do was engage students in a range of ICT platforms, cultivate critical literacies surrounding technology-enhanced learning and create resources that would enable them to integrate ICT into their teaching while meeting curriculum expectations. The students designed instructional media for a particular language skill (listening, reading, speaking or writing). The results showed students using a great deal of creativity, selecting tools themselves and designing student need. The students also expressed increased confidence of using ICT and pedagogical thinking along with their future use in the classroom. They overcome problems through peer collaboration and assisted exploration. Furthermore, the study contributes to deepening theory and practice through experience learning. It also underlined the crucial role of information technology in promoting creative and digital literacy on preservice teacher education. The findings indicate that language teacher education programs should offer both formative and reform-based approaches to ICT integration. This study enables prospective teachers successfully design authentic, motivating lessons based on the needs of the students.

Keywords: ICT-based media, language learning, language teaching, students' creativity

INTRODUCTION

The implementation of Information and Communication Technology (ICT) in university level has considerably changed language teaching. It changes from a traditional into a more student friendly pedagogical approach. The aims are at enhancing students' engagement creativity and critical reasoning. Language learning resources including online platforms and interactive apps have promoted access to language pedagogies. They provide adaptive practices for a variety of learning styles (Obidovna & Rustambekovich, 2024; Parveen et al., 2023).

The tools support interactive learning experiences for students that are immersive. They also foster the student autonomy, motivation, feedback in real-time and international scope through the use of virtual platforms (Indrastana, 2022). It has been proved that ICT enhanced for language education can potentially develop students' linguistic competency, engagement and performance. The difficulty is not in technology, but rather to use it in providing for a true enrichment of student learning and creativity.

In university-level language teaching, there is increasing acknowledgement of the necessity to transition from teacher-centered instruction to more participative, student-driven learning paradigms.

ICT provides opportunities to transform learning by empowering students to instructional materials, join digital collaborations, and express ideas through varying mediums. It aids this paradigm by allowing students to actively engage in project-based learning. The students can design and present instructional content, cooperate on digital works, and communicate thoughts through different modalities, taking on roles as joint knowledge creators. Through technology-enabled participatory learning activities, students transition in the education (Waly & Ashadi, 2024).

The utilisation of digital tools and resources in EFL classes has demonstrated an enhancement in student engagement, autonomy, creativity, and communication abilities, along with other sub-skills (Indrastana, 2022). These opportunities promote students to become partners of information instead of passive recipients, so greatly enhancing participation, autonomy, and creative output. Although its potential, the implementation of ICT to enhance student creativity remains rarely investigated especially in EFL settings and classroom applications. Digital technology can serve several functions in fostering collaborative creativity, including facilitating the application of co-creation abilities, enhancing co-creative thinking, and establishing fruitful conditions for collective creative activities. (Selfa-Sastre et al., 2022).

This study addresses this gap by collecting and analysing the implementation of ICT in a university-level language instruction course. The objectives are to: (1) explore the integration of ICT into the course design and instruction; (2) demonstrate students' innovative instructional media projects created during their coursework; and (3) analyse the learning outcomes, student feedback, and pedagogical implications derived from the experience. The objective is to not only demonstrate real instances of ICT-enhanced learning but also to engage in the continuing discourse regarding the meaningful application of technology to foster creativity in language teacher education.

Many language courses continue to employ a traditional, instructor-led format that restricts students' opportunities to cultivate creative competencies, despite the increasing emphasis on digital literacy and technological integration in higher education. In certain situations, instructional design does not incorporate ICT significantly; rather, it is employed as a supplementary instrument. As a result, students frequently interact with technology passively, consuming content rather than generating it. Moreover, lecturers may not have the necessary pedagogical training or institutional support to effectively utilise ICT in a manner that encourages learners to become creative producers of instructional materials. The potential of ICT to convert language education into an innovative and student-centered experience is impeded by these limitations. Furthermore, the potential for change of ICT in language education is further limited by the digital divide and unequal access to technology, which cause these challenges (Azamatova & Bekeeva, 2024; Obidovna & Rustambekovich, 2024). Even with these problems, there are some good ideas and structures that support a hybrid approach, which combines conventional techniques with new digital tools to make a more complete learning experience (Urbaite, 2024).

Based on a survey of the literature, most studies on ICT in language instruction concentrate more on developing students' vocabulary, reading comprehension, or pronunciation than on encouraging their creativity or media production abilities. Fewer research have looked at how ICT might foster students' creative thinking through project-based or media-rich assignments, despite the fact that studies have shown how it can increase motivation and engagement. Additionally, limited is known about how pre-service or in-service instructors use ICT to construct and create their own instructional material, especially in EFL environments. These gaps highlight the need for further reflective, practice-based research on how intentional technology integration might foster creativity.

This research provides an alternative perspective by integrating technology-enhanced learning with creative project-based instruction in a language teaching course. Rather than regarding students as recipients of digital content, the course positioned them as designers of instructional media, fostering critical thinking, collaboration, and the communication of ideas through multimodal formats. The methodology emphasizes the potential of ICT to bolster teacher development and inventive pedagogy, in addition to its integration into language instruction. This study explores the gap between the theoretical and practical elements by examining the process, student outputs, and instructors' reflections of teaching. It further offers insights for creatively from an education perspective.

METHOD

Research Design

This investigation employed descriptive qualitative research to examine how information and communication technology was applied into an EFL course. It also assessed students' creativity through their projects. The qualitative approach was selected to facilitate an examination of the students' experiences, project outcomes, and pedagogical reflections. Then, it also emphasized the importance of attributed information and communication technology-based practices for language acquisition.

Research Context and Participants

There were 69 undergraduates enrolled in the class participated in the semester-long study. All students contributed to discussions, assignments, and assessments throughout the duration of the course. They joined ICT in Language Teaching in an English Education Department at a Indonesian private university.

Data Collection and Data Analysis

The undergraduate pre-service teachers applied the project of ICT media. Encoding was undertaken inductively, focusing on subjects such as innovative media, curriculum integration, and student involvement.

FINDINGS AND DISCUSSION

The use of ICT-based pedagogical media in the ICT in Language Teaching course revealed quite a significant discovery regarding the students' utilization. This study employs observational information, examination, and points of view to demonstrate how the students demonstrated the online learning media. Some students showed their use of technology to engage students in teaching and learning process. The findings highlight the application of emerging technologies, the improvement of creativity among students, and the new experience of learning. These insights not only demonstrate students' proficiency in utilizing technology effectively but also reveal the wider pedagogical implications of utilizing ICT in language teacher education.

Table of Research Findings

Aspect	Description	Examples / Evidence
Use of ICT Tools Across Language Skills	Students utilized various ICT tools tailored to specific language skills: speaking, listening, reading, and writing.	• Speaking: ElevenLabs, Padlet (pronunciation, speaking prompts) • Reading: Wordwall, Quizizz (vocabulary games) • Writing: Educaplay, Mentimeter (collaborative writing)
Student Creativity and Media Design	High levels of creativity observed in task design and tool use. Students developed age-appropriate, engaging media aligned with learning objectives.	• Designed interactive tasks for different proficiency levels • Chose tools beyond those introduced in class
Pedagogical Alignment	Projects showed understanding of instructional design, targeting curriculum goals and learners' needs.	• Tasks reflected balanced skill focus and task appropriateness • Used Bloom's taxonomy in activity planning
Student Engagement	Students were motivated and actively participated in both the creation and presentation of their ICT-based projects.	• Peer feedback sessions • Enthusiastic responses and sharing of project rationale
Reflections and Student Feedback	Students reported increased confidence, awareness of ICT potential, and willingness to use technology in their future classrooms.	• "This project helped me explore new tools I can use as a future teacher." • "I feel more confident using ICT now."
Challenges Encountered	Students faced technical limitations and unfamiliarity with some platforms.	• Issues with login, tool features, or limited access • Difficulty integrating sound/media in some tools
Solutions and Support Mechanisms	Support strategies included peer mentoring, guided tutorials, and flexible exploration spaces embedded into course design.	• Informal peer coaching • Instructor-led tutorials and open Q&A sessions

Use of ICT Tools Across Language Skills

Based on the analysis of the findings, this study illustrates a trend in ICT tools selection and explore how students learn technology with pedagogy goals. For example, students knew that it takes tools to learn specific skills: they used ElevenLabs for them practice speaking pronunciation and Quizlet and Wordwall for vocabulary recall in reading.

In addition, the creative tools along with linguistic tasks evidence students advancement in digital literacies. Students provide significant input by incorporating media such as visual stimuli, sound files, or quizzes into their educational materials. It is in line with both communicative and multimodal learning theories.

By doing four language competencies (listening, reading, speaking, and writing), the use of ICT shows a full understanding of how digital tools could support learning a language. For example, using Padlet paired with Mentimeter worked for having students create group speaking or writing tasks that require them to use language and speak to each other. Together these behaviours describe the plans of task-based and collaborative language learning, further emphasizing the point that ICT is a media as well as a method in effective instruction.

These results also demonstrate the importance of having the appropriate tools. Students selected tools that they felt were easy to use, utilized for learning. This study suggests that the chances given to pre-service teachers to evaluate ICT resources in hands-on tasks and make use of them result from a more reflective, sensitive approach towards digital implementation into language classrooms. Information technology (IT) has substantial implications for language communication in education and the teaching of a foreign language, as a result of recent developments in language, fundamental and networked learning, and computing resources for large data storage (Rokhayani et al., 2022).

Student Creativity and Engagement

The creativity of the students in the instructional media projects was one of the most significant components. Students were not only did activities they had known and experienced but also explored the content and method of teaching. Some of the tasks were narrative structures, some game-like features, and other AI-based techniques utilizing all this to create original audio-visual resources.

Students also got creative when adapting tools to meet the needs of their students. For example, some students utilized Quizizz for things beyond multiple choice tests. This flexibility signifies that more and more students will learn how to personalize the tools, develop a lesson of their own.

Significant engagement was noted during the study, implementation, and presentation phases of the project. Students dedicated considerable time to examining tool characteristics, evaluating interactions, and enhancing their work in response to other students and lecturer comments. Furthermore, it showed that project-based learning encourages active participation, teamwork, and creativity of the students (Xudayberdiyevna, 2024).

Moreover, the awareness of students recognizing that their initiatives would be disseminated, assessed, and deliberated—seems to have intensified students' engagement and responsibility. This practical

performance setting reflects actual teaching situations and enhances the connection between teacher education and classroom preparedness. It promotes the notion that creativity can be fostered in organized settings that offer autonomy within constraints, stated objectives, and opportunities for public exposure and thought.

Reflections and Student Responses

Student written reflections at the end of the course show satisfaction with the project and a deeper knowledge of ICT's instructional advantages. Many students felt that they discovered tools and how to use them appropriately.

Several responses noted increased confidence and less worry about employing technology in future classrooms. Comments like “Now I feel more confident using ICT in my future classroom” imply that the project's hands-on, exploring nature shaped students' professional identities. Belief in this context includes pedagogical decision-making, tool adaptability, and the sense that one can manage classroom innovation.

In their reflections, students also demonstrated pedagogical thinking by outlining the justification for their choice of tools, task sequencing, and learner engagement techniques. One beneficial result of teacher education is this type of metacognitive reflection, which aids in bridging the gap between theory and practice. Lecturers must adopt a variety of creative methods and utilize technology to improve student engagement, critical thinking, and language proficiency as the demand for 21st-century skills increases. It is in line with the previous research that the integration of technology into classroom can improve motivation and language skills (Akyıldız & Şahin, 2024).

Lastly, the reflections emphasized the learning experience's emotional significance. As a crucial reminder that emotional engagement frequently precedes deeper cognitive engagement, students characterized the process as pleasurable, significant, and empowering. They alter attitudes toward future classroom innovation, these emotive responses are especially significant in the context of teacher preparation. The project contributed to the development of a favorable attitude toward ICT-based, innovative language training by encouraging both academic and emotional engagement.

CONCLUSION

This study investigated the use of ICT-based instructional media projects in a university-level language teaching course, specifically how students built and used digital tools to foster creativity across the four fundamental language abilities. The findings show that pre-service English teachers were not only able to identify relevant pedagogical tools, but also demonstrated a high level of creativity in constructing interactive and learner-centered activities. Students' ability to align ICT use with curriculum objectives and learner needs implies that, given organized chance and autonomy, they can be innovative and reflective creators of instruction.

The use of technologies such as Quizizz, Wordwall, Padlet, and ElevenLabs into task-based learning activities demonstrates the power of technology to transform traditional language learning into more engaging, interactive experiences. Additionally, the emphasis on authenticity, real-world challenges, and multimodal learning prepared students to implement theory in practice successfully. Their passion and effort, as indicated by their works and thoughts, highlight the value of practical, project-based methods for classroom learning.

Furthermore, this study emphasises the importance of personal reflection and teamwork in promoting professional development. Responses from students demonstrated enhanced confidence, pedagogical insight, and a favorable shift in attitudes regarding technology implementation in upcoming

classrooms. These findings contribute to the emerging understanding that teacher preparation programs must go beyond theoretical education and provide authentic, hands-on learning experiences that combine creativity, pedagogy, and technology.
Finally, the study adds to the discussion of digital pedagogy in language education by illustrating how ICT can serve as a stimulus for innovative teaching approaches. It proposes for a rethinking of teacher education programs in which digital literacy is integrated not as a technological add-on but as a core pedagogical skill. Further study could build on this model by researching long-term effects on teaching practices after graduation, or by investigating comparable initiatives in different instructional settings.

REFERENCES

Akyıldız, S. T., & Şahin, F. (2024). Voices from the classroom: Integrating 21st century skills in Turkish private school EFL education–A qualitative perspective. *International Journal of Current Approaches in Language, Education and Social Sciences*, *6*(2), 178–210. https://doi.org/https://doi.org/10.35452/caless.1523283

Azamatova, A. K., & Bekeeva, N. (2024). Digitalization of language education in higher education institutions. *A. Âsaui Atyndaġy Halyḳaralyḳ Ḳazaḳ-Tùrìk Universitetìnìņ Habaršysy*, *133*(3), 206–220. https://doi.org/https://doi.org/10.47526/2024-3/2664-0686.87

Indrastana, N. S. (2022). Integrating technology into language teaching: Best practices and emerging trends. *Transformational Language Literature and Technology Overview in Learning (Transtool)*, *1*, 25–30.

Obidovna, D. Z., & Rustambekovich, A. A. (2024). The role of digital technologies in language education: Tools, approaches, and implications. *American Journal Of Philological Sciences*, *4*(11), 18–22.

Parveen, S., Farid, M. F., & Fatima, S. H. (2023). Impact of information and communication technology usage on learning English language. *Global Social Sciences Review, VIII*.

Rokhayani, A., Rukmini, D., Hartono, R., & Mujiyanto, J. (2022). Integrating Technology in Online Learning Based on Computer-Mediated Communication Artificial Intelligence to Improve Students' Achievement. *Journal of Higher Education Theory & Practice*, *22*(15).

Selfa-Sastre, M., Pifarre, M., Cujba, A., Cutillas, L., & Falguera, E. (2022). The role of digital technologies to promote collaborative creativity in language education. *Frontiers in Psychology*, *13*, 828981.

Urbaite, G. (2024). The role of technology in modern language education. *EuroGlobal Journal of Linguistics and Language Education*, *1*(1), 3–10.

Waly, M. M., & Ashadi, A. (2024). Unleashing the potentials: Nurturing students' 4Cs skills through project-based learning with ICT in EFL classrooms. *Journal of Foreign Language Teaching and Learning*, *9*(2), 127–160.

Xudayberdiyevna, N. M. (2024). Integrating educational technology for enhancing project-based learning motivation in students. *American Journal Of Social Sciences And Humanity Research*, *4*(11), 156–160.