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ISSUES

AI as CO-CREATOR: EXPLORING INDONESIAN EFL TEACHERS' COLLABORATION With AI in CONTENT DEVELOPMENT

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This research explores the collaboration between Indonesian English as a Foreign Language (EFL) educators and Artificial Intelligence (AI) in content development. Employing a qualitative approach, semi-structured interviews were conducted to delve into the perspectives, experiences, and interactions of educators in the realm of AI-enhanced content creation. The study adopts a phenomenological approach, seeking to uncover the underlying essence of the evolving educator-AI relationship in content development. The findings reveal a spectrum of AI integration among educators, from heavy reliance to a balanced approach. Educators demonstrate adaptability and resourcefulness, combining school textbooks with AI-powered tools, such as ChatGPT, magicschool.ai, and you.com, creating dynamic and engaging instructional strategies. Their approaches to lesson planning, content development, presentation, teaching methods, and assessment display a diverse range of AI incorporation, emphasizing flexibility and student-centred learning. Educators are blending textbook analysis, AI tools, and multimedia resources to enhance learning environments. Interactive and student-centred teaching methods, such as pair work, role-play scenarios, and dialogue practice, foster language acquisition, communication skills, and student confidence. In assessment and evaluation, the integration of AI tools, such as ChatGPT, Twee, and Questionwell is emerging, enriching evaluation methods and promising improved student learning experiences. This research sheds light on the dynamic nature of AI-augmented content development in Indonesian EFL education, highlighting educators' adaptability and resourcefulness in embracing technology to enhance pedagogical practices and foster enriched language acquisition experiences for their students.

1. Introduction

In recent years, the field of education has witnessed a transformative shift with the integration of Artificial Intelligence (AI) into various aspects of the teaching and learning process. One of the prominent areas where AI has shown potential is in content development. Educators worldwide are exploring the possibilities of collaborating with AI tools to co-create educational content, thereby enhancing the effectiveness and efficiency of teaching materials (Williamson & Eynon, 2020). This study explores the dynamic interaction between Indonesian educators in the English as a

Foreign Language (EFL) context and Artificial Intelligence (AI) within the realm of content creation, shedding light on the implications, challenges, and innovations that emerge from this collaboration.

Language educators have long been tasked with creating engaging and relevant learning materials that cater to the diverse needs and abilities of their students. However, the traditional content creation process can be time-consuming and resource-intensive, often limiting educators' ability to offer personalized learning experiences. The advent of AI technologies provides an opportunity to alleviate these challenges (Chan, 2023; Devi et al., 2022). It assists educators in generating content that aligns with learners' individual learning styles, language proficiency levels, and cultural contexts.

Indonesia, with its culturally diverse population and growing emphasis on English language education, presents an intriguing context to study the integration of AI in content development. Indonesian EFL educators face the dual challenge of fostering English language proficiency while ensuring the incorporation of local cultural nuances and educational goals. Collaborating with AI could potentially address these challenges (Zhai et al., 2021). It offers educators insights into adapting content to diverse learning preferences and cultural sensitivities.

However, the process of co-creating educational content with AI is not without its complexities. The interaction between human educators and AI algorithms raises questions about the roles, responsibilities, and decision-making authority of both parties. Ethical considerations, such as bias detection and cultural authenticity, must also be addressed to ensure that AI-augmented content aligns with the educational values of the Indonesian context (Chan, 2023; Holmes et al., 2022). Furthermore, as AI continues to evolve, new possibilities for innovative content creation emerge. It is important to explore the extent to which educators harness the potential of AI to introduce novel approaches, formats, and pedagogical techniques that enhance student engagement and learning outcomes.

In light of the potential advantages and intricacies inherent in the collaboration between Indonesian EFL educators and AI for content development, this study seeks to explore the process of creativity, challenges, and innovative aspects arising from this partnership. Through the utilization of semi-structured interviews involving educators with practical experience in this collaboration, the aim is to gain a comprehensive understanding of their perspectives, strategies, and personal encounters. The findings of this research have the potential to make a significant contribution to the broader discourse surrounding the effective integration of AI in education. Moreover, it offers valuable insights into best practices for effectively leveraging AI as a co-creator in content development, thereby enhancing the overall quality of English language education in Indonesia.

2. Literature review

2.1. Steps to teach English as a foreign language

In the realm of teaching English as a Foreign Language (EFL), educators can follow Richards's (2017) instructional stages. They could initiate a comprehensive assessment of students' proficiency in reading, writing, listening, and speaking (Daumiller et al., 2022). This evaluation enables the customization of teaching methods to individual needs (Ahmad & Shah, 2022; Carhill-Poza & Chen, 2020; Pereira & Tay, 2023). Concurrently, educators can establish clear, achievable goals, guiding their teaching journey and encapsulating their vision for student success in the program.

Following the initial assessment, EFL educators enter the critical phase of curriculum planning, wherein a carefully tailored curriculum is designed to meet diverse student needs (Howard et al., 2021; Montecinos et al., 2022; Y. Zhang, 2022). This results in a detailed syllabus outlining subjects, materials, and activities, serving as a guide for a structured and goal-oriented learning journey.

Selecting engaging content is crucial for effective learning. EFL instructors excel at choosing tailored materials, including textbooks and diverse resources such as news articles and videos, to suit students' varied skills (Antonietti et al., 2022; Mu & Yu, 2023; Pimdee et al., 2023). This blend of traditional and real-world materials makes learning relatable and captivating.

Lesson planning plays a crucial role in this pedagogical approach, breaking down the curriculum into manageable units. Each module is carefully designed to target specific language skills or themes (Bashori et al., 2022; Wong & Luke, 2021). Within this structured framework, interactive activities, discussions, and contextual exercises seamlessly blend together, fostering student engagement and active participation in the learning journey.

The learning experience begins with an introduction and warm-up segment, setting the stage and sparking students' interest. Well-executed warm-up activities tap into prior knowledge, preparing students for active engagement (González-Lloret, 2020). Next, the presentation phase smoothly introduces new material, covering various aspects such as vocabulary and grammar. Teachers use clear explanations, relevant examples, and visual aids to enhance comprehension (Cutrone & Beh, 2018). Following this, practice becomes crucial as students apply their newly acquired language skills (Bashori et al., 2022; Richards, 2017). This phase involves collaborative activities, role-playing, and interactive exercises, fostering dynamic participation and improved mastery of the subject matter.

Feedback and correction play a pivotal role in language teaching, guiding students towards enhancing their language proficiency. Constructive feedback, which emphasizes both strengths and areas for improvement, serves

as a valuable tool for student development (Alwahoub et al., 2022; Runge et al., 2023; Stillman-Webb et al., 2023). During this phase, instructors tactfully address errors while encouraging self-correction, thereby cultivating a sustainable learning environment. This pedagogical approach extends to real-life scenarios, where teachers construct situations for practical language application (Bashori et al., 2022). Engaging in discussions, debates, and presentations not only enhances speaking skills but also nurtures critical thinking abilities.

Assessment and evaluation are pivotal for monitoring student progress and enabling teachers to tailor instruction to diverse learning styles (Szymkowiak et al., 2021; Y. Wang et al., 2023; Chen et al., 2020). Systematic assessments provide insights into students' cognitive development and academic achievements, fostering a nuanced understanding of strengths and areas for improvement. This approach promotes inclusivity, personalization, and optimization of instructional strategies for improved educational outcomes.

Continual improvement underscores the reflective nature of teaching. EFL educators continuously assess and refine their methods, drawing insights from student feedback and personal observations. This iterative process ensures the dynamic evolution of teaching practices, fostering an atmosphere of growth and effective communication (Anagnostopoulos et al., 2021). In essence, teaching English transcends mere knowledge transmission; it entails nurturing an environment where learners thrive, facilitating their holistic development in language and communication.

Richards's (2017) theoretical framework proves highly apt for this research, which delves into the interaction between Indonesian EFL educators and AI in content development. His instructional stages in teaching EFL provide a systematic and comprehensive approach, addressing key aspects such as assessment, curriculum planning, content selection, lesson planning, and feedback. This framework aligns well with the multifaceted nature of language instruction, offering a structured guide for educators in navigating language learning complexities. Richards's emphasis on tailored instruction is particularly pertinent for investigating the collaborative dynamics between EFL teachers and AI in content creation. The systematic nature of the theory provides a solid foundation for examining AI integration across various language instruction stages, contributing to a nuanced understanding of collaborative dynamics within the Indonesian EFL classroom.

2.2. Previous studies on AI in EFL education and gaps identification

During the period spanning from 2020 to 2023, an array of studies was undertaken with the aim of examining the integration of Artificial Intelligence in the realm of education. From this collection of research endeavours, 34 studies were considered germane and subsequently

incorporated into the scope of this investigation. The subsequent table serves to provide a comprehensive overview of the prevailing themes and primary focal points that were investigated in each of these research undertakings.

Table 1. Previous study on Artificial Intelligence in education in 2020-2023

Focus	Authors
Policy and ethical considerations	(Chan, 2023), (Nguyen et al., 2023), (Selwyn, 2022), (Akgun & Greenhow, 2022), (Davies et al., 2021)
Pedagogical implications	(Xue & Wang, 2023), (Chiu et al., 2023), (Tapalova & Zhiyenbayeva, 2022), (Devi et al., 2022), (Holmes & Tuomi, 2022)
Impact on learning	(Su & Yang, 2023), (Mertala et al., 2022), (Kim et al., 2022), (Xia et al., 2022), (Zhai et al., 2021)
Educational practices and curriculum design	(Cope et al., 2021), (Chiu, 2021), (Steinbauer et al., 2021), (T. Wang & Cheng, 2021), (Chen et al., 2020)
Ethics and human rights	(Dieterle et al., 2022), (Berendt et al., 2020), (Perrotta & Selwyn, 2020)
Trends and future directions	(Chaudhry & Kazim, 2022), (Limna et al., 2022), (Khosravi et al., 2022), (Tahiru, 2021), (Yang et al., 2021)
Empirical studies and comprehensive reviews	(Lameras & Arnab, 2022), (K. Zhang & Aslan, 2021), (Renz et al., 2020), (Williamson, 2020), (Hwang et al., 2020)

Table 1 illustrates the expanding field of research on Artificial Intelligence in education, predominantly characterized by a global or Western focus. Noteworthy contributions include investigations into policy and ethical considerations, as demonstrated by the works of Selwyn (2022), Akgun and Greenhow (2022) and Davies et al. (2021). Additionally, attention is given to the pedagogical implications of Artificial Intelligence in education, exemplified by Holmes and Tuomi's study in 2022. Certain scholarly endeavors also concentrate on empirical studies and comprehensive reviews, illustrated by Williamson's work in 2020. The present research, situated in an Indonesian English as a Foreign Language (EFL) context, has the unique opportunity to contribute by examining AI's role in a specific cultural and educational setting. This local perspective can illuminate how AI is adopted and utilized within the distinct Indonesian educational landscape, addressing the need for cross-cultural studies. Despite the extensive discussion on AI in education, there is a noticeable gap in the literature when it comes to understanding the dynamics of collaboration between EFL teachers and AI in content development. This research can delve deeper into this uncharted territory, exploring the intricacies of how teachers and AI can effectively collaborate to co-create educational materials. By shedding light on this aspect, it can contribute to the development of best practices for such collaborations.

3. Methodology

3.1. The aim of the study

Given the potential benefits and complexities associated with the collaboration between Indonesian EFL educators and AI in content development, this research aimed to explore this by focusing on the creative

process, challenges, and innovations. Through semi-structured interview with educators experienced in this collaboration, the study sought an in-depth understanding of their perspectives, strategies, and experiences. The findings contribute to the discourse on AI integration in education, offering insights into best practices for leveraging AI as a co-creator in content development. This article addresses the research question:

- How is the collaboration between Indonesian EFL educators and AI in content development manifested in terms of the creative process, including ideation and creation of educational materials?

3.2. Participants and the context

The investigation involved five Indonesian EFL teachers, all possessing prior experience in collaborative endeavors with AI tools for content creation. The participant selection was methodically guided by a purposive sampling strategy, ensuring a comprehensive portrayal of educators with varying degrees of experience, roles, and perspectives (Fraenkel et al., 2023). For the purpose of confidentiality, participants were pseudonymously coded as T1 through T5, corresponding to Teacher 1 through Teacher 5, and their identities were anonymized during the reporting of the findings. Ethical considerations were central to the study, with informed consent being a foremost requirement. All participants voluntarily engaged with a clear understanding of the research objectives.

3.3. Design and procedure

The research design was rooted in a qualitative approach, chosen for its ability to uncover participants' perspectives, lived experiences, and interactions within the realm of AI-augmented content development (Creswell & Creswell, 2018). The primary method employed was semi-structured interview, enabling participants to articulate their experiences, insights, and perceptions in their own words. Crafted strategically, interview questions encompassed various dimensions of the collaboration, including motivators, challenges faced, decision-making processes, and perceived impacts of collaborative efforts with AI. The design was further informed by a phenomenological approach, aiming to uncover the underlying essence of the evolving relationship between educators and AI in content creation. This choice aligned seamlessly with the exploration of lived experiences and unique perspectives on AI's role as a co-creator in educational content.

3.4. Data collection tools and procedures

The primary method of data collection involved conducting semi-structured interviews with the selected Indonesian EFL educators. This approach offered flexibility, allowing participants to provide insights on their own terms (Fraenkel et al., 2023). The interview questions were meticulously designed to capture diverse aspects of the collaboration, illuminating motivations,

challenges, decision-making processes, and perceived impacts. Following the interviews, collected data underwent a rigorous thematic analysis process (Zheng & Barrot, 2022). This iterative approach included stages such as data familiarization, coding, theme development, and interpretation. Throughout this meticulous process, prominent themes emerged that related to the collaboration between educators and AI in content development, forming the basis for detailed discussions. Ethical considerations, including informed consent and participant confidentiality, were carefully integrated into the research procedures, ensuring the integrity of the study.

By employing a qualitative research approach and utilizing semi-structured interviews, this study aimed to achieve a comprehensive understanding of the collaborative efforts between Indonesian EFL educators and AI in content development. The insights garnered hold the potential to enrich educational practices and contribute valuable input for policy recommendations. Furthermore, the study contributes to the broader discourse surrounding the utilization of AI as a co-creator in content development, particularly in the realm of English language education in Indonesia.

4. Findings and discussion

Presented here is an overview of the collaborative endeavors between Indonesian EFL teachers and Artificial Intelligence (AI) in the realm of content development, as derived from the insights gathered during semi-structured interviews. Subsequently, this section delves into an in-depth discussion of the findings, providing a scholarly and formal exploration of this collaborative partnership.

4.1. Indonesian EFL teachers and AI collaboration in content development

The focal point of this study lies in the semi-structured interviews, probing into the collaborative partnership between Indonesian EFL educators and AI within the context of content development. This inquiry specifically delved into the integration of AI across six essential phases of English language teaching, as articulated by Richards (2017), which encompass lesson planning, introduction and warm-up, presentation, practice, feedback and correction, and assessment and evaluation.

Table 2 provides insights into the lesson planning approaches of five Indonesian EFL educators (T1 to T5) and their utilization of AI. All educators start with school textbooks as a foundation, but there are variations in their integration of AI tools. T1 and T2 heavily rely on AI, particularly ChatGPT, to generate lesson plans, while T3, T4, and T5 adopt a balanced approach, combining school textbooks with AI-powered platforms such as

ChatGPT, magicschool.ai, and you.com. This demonstrates a spectrum of AI integration in their teaching practices, showcasing adaptability and resourcefulness in enhancing their instructional strategies.

Table 2. Lesson planning

Participants	Interview excerpt
T1	I use school textbooks as a guide for lesson planning, then generate plans using ChatGPT.
T2	I refer to school textbooks initially and then utilize AI, particularly ChatGPT, to efficiently formulate content. It saves time and occasionally I compare with Lex.page, yet my preference leans towards ChatGPT.
T3	I use school textbooks as a foundation and then design lesson plans myself.
T4	I start by examining the objectives outlined in the school textbooks, followed by utilizing AI-powered platforms such as ChatGPT, magicschool.ai, and you.com.
T5	I begin by reviewing the school textbooks' goals and then utilize AI-powered platforms like ChatGPT, autoclassmate.io, and technology.ai.

In Table 3, the participants (coded as T1 to T5) shared diverse approaches to initiating English as a Foreign Language (EFL) lesson. T1 uses ChatGPT for engaging lead-in questions via PowerPoint, while T2 employs Q&A sessions, ChatGPT quizzes, and AI-driven Slidesgo. Teachers T3 to T5 demonstrated adaptability with T3 using group games and handouts, T4 combining traditional and AI-based games such as Wordwall, and T5 emphasizing group work and utilizing materials from platforms such as Baamboozle, YouTube, and islcollective. These insights underline the flexibility in EFL teaching, with educators using a range of methods from AI-driven tools to traditional games to create engaging and motivating learning environments, ultimately enhancing students' English language learning experiences.

Table 3. Introduction and warm-up

Participants	Interview excerpt
T1	Reflecting on my varied approaches, one standout method involved leveraging ChatGPT to craft intriguing lead-in questions. I then presented these questions through a PowerPoint presentation, which proved to be a straightforward yet remarkably effective technique.
T2	For warming up, I use Q&A, create ChatGPT quizzes, and present with PowerPoint or AI-powered Slidesgo.
T3	The approach varies depending on the lesson, but typically I engage students in group games during class using handouts that I personally create.
T4	My methods are flexible. I sometimes incorporate traditional classroom games with real items, and I also utilize AI-based platforms such as Wordwall, Twee, and Kahoot to design and enhance games. Among these, I particularly enjoy using Wordwall.
T5	I enjoy group work, and for materials, I vary between creating handouts myself and utilizing resources from AI-based platforms like Baamboozle, YouTube, and islcollective.

Table 4 provides insights from five participants (T1 to T5) on their approaches to educational content development and presentation, illustrating the dynamic nature of their roles in enhancing learning. The first group (T1 and T2) starts with comprehensive textbook analysis and augments content using AI, specifically ChatGPT, along with multimedia tools such as PowerPoint and AI-powered Slidesgo to create informative and visually appealing lessons. The second group (T3 and T4) also prioritizes thorough textbook study; T3 transforms content into engaging PowerPoint

presentations, while T4 adapts using tools such as Curipod and Twee when time is limited. Participant T5 highlights the use of AI tool Speechify for reading-focused classes, showing AI's potential to enhance learning. Overall, these approaches, blending textbook analysis, AI tools, and multimedia resources, contribute to dynamic learning environments.

Table 4. Presentation

Participants	Interview excerpt
T1	I thoroughly review the textbook and take comprehensive notes. Subsequently, I utilize ChatGPT to enhance the content. Lastly, I will present the refined information using a PowerPoint presentation.
T2	I analyze textbooks, use ChatGPT to create content, and then present using dynamic tools like PowerPoint or AI-powered Slidesgo.
T3	My typical approach involves studying the textbooks thoroughly and then converting the content into visually engaging PowerPoint presentations, which I use to deliver lessons to the class.
T4	When I'm busy, I use Curipod to make explanation slides and sometimes Twee for teaching materials. I also make my own PowerPoint slides when needed. It depends on the situation.
T5	I can't remember all the details, but my recent class was about reading. I used Speechify to help, and the students really liked it.

Table 5 summarizes the diverse teaching methods used by the EFL educators (T1 to T5) to enhance language acquisition in their classrooms. These methods focus on interactive and student-centred activities, emphasizing collaborative learning and meaningful language use. For example, T2 employs picture description stations to encourage immersive learning in contextual settings, while T4 emphasizes student-driven inquiry through classroom surveys, promoting critical thinking and communication. These practices, including pair work, role-play scenarios, surveys, and dialogue practice, facilitate language retention, enhance communication skills, and boost students' confidence in language use. Overall, the educators' commitment to innovative teaching methods reflects their dedication to effective language acquisition.

Table 5. Practice

Participants	Interview excerpt
T1	In our recent class, I organized pair work activity. Students worked in pairs to produce texts.
T2	This semester, I'm teaching the descriptive genre. To enhance learning, I frequently use picture description stations. I set up stations with pictures around the classroom. Students move from station to station, describing the pictures using the new language elements.
T3	I usually assign specific role-play scenarios to pairs or small groups of students.
T4	One of my favourite activities for student practice is the classroom survey. Students design a survey with questions tied to the new language elements. They interview their peers around the classroom, then share and summarize their findings with the whole class.
T5	In my most recent class session, I arranged a pair dialogue practice. Students teamed up in pairs, utilizing the dialogue prompts provided. They assumed different roles, engaging in conversations to practice the newly introduced language elements.

Table 6 reports the participants' (T1-T5) accounts of their practices for feedback and correction in the EFL classroom, with varying use of AI tools such as Grammarly and Quillbot alongside traditional methods. T3, for instance, provides real-time feedback during class, while T4 emphasizes

pronunciation using online resources. This amalgamation of AI and traditional teaching methods underscores the adaptability of EFL educators in balancing technology-driven solutions with established pedagogy to foster language proficiency.

Table 6. Feedback and correction

Participants	Interview excerpt
T1	This semester, I'm teaching writing. I use Grammarly for corrections and have students upload their work on Google Docs for direct and constructive feedback.
T2	I use Quillbot for my assistance to provide students some corrections on their language productions. Then, for the feedback mostly I tell them either at the end of the class or in the next meeting as the review before new discussions.
T3	During the practice session, I'll make notes of any errors I notice. I'll provide corrections and feedback at the end of the class.
T4	I often provide feedback on pronunciation. Since my pronunciation isn't native-level, I frequently use resources like Youglish or the Cambridge online dictionary to assist.
T5	I usually provide feedback based on my understanding and the textbook content, but occasionally, I use Chat GPT to help generate written feedback.

Table 7 documents how EFL educators (T1 to T5) approach assessment and evaluation methods in their teaching practices. Most rely on textbooks for assessment materials, such as T1 and T3. However, T2 and T5 embrace technology, citing Google and "Bard Google" for quiz creation. Notably, T4 and others are integrating AI tools such as Chat GPT, Twee, and Questionwell to generate assessment questions, signalling a shift toward technology-driven assessment. This highlights the blend of traditional and tech-driven approaches, with AI tools emerging as a promising trend to enrich evaluation methods for improved student learning experiences.

Table 7. Assessment and evaluation

Participants	Interview excerpt
T1	I typically utilize the provided textbook to access the evaluation test list. However, on occasion, I employ Chat GPT to further elaborate on these assessments.
T2	I am grateful that today the technology is so advance, I get so much assistance from Bard Google to create the assessment quiz for evaluation.
T3	Of course the textbooks provide the assessment for the evaluation.
T4	I use various assistance from Chat GPT, Twee, Questionwell to generate the questions.
T5	Yesterday I used Bard Google to create the assessment quiz for evaluation.

4.2. Discussion

The findings of this research illuminate a dynamic and evolving relationship between traditional teaching practices and the innovative integration of artificial intelligence (AI) within the realm of Indonesian EFL education. What emerges from the narratives of the educators involved is a landscape marked by resourcefulness and adaptability. Educators are actively leveraging AI as a valuable ally in their teaching endeavors (Williamson, 2020). They demonstrate resourcefulness by using AI tools to enrich the process of content creation. For instance, AI, particularly ChatGPT, serves as a creative partner in the development of lesson plans, making the planning process

more efficient (Su & Yang, 2023). This is particularly noteworthy in a context where educators have traditionally relied on textbooks as their primary resource. The integration of AI supplements and enhances these resources, allowing educators to tailor content to the unique needs of their students (Luan et al., 2020). This resourcefulness reflects a shift towards more dynamic and flexible teaching practices, facilitated by technology.

Furthermore, educators are showcasing adaptability in their teaching methods. They use AI not as a replacement for traditional materials but as a complementary resource (Cope et al., 2021). The synthesis of technology and tradition is evident in various aspects of their instruction. For instance, educators are using AI-powered presentation tools alongside traditional resources, ensuring that lessons are not only informative but engaging through multimedia elements. This adaptability is also evident in their approaches to feedback and correction, where educators seamlessly blend AI-driven language correction tools with real-time observation (Vincent-Lancrin & van der Vlies, 2020). This demonstrates their ability to harness technology while maintaining the integrity of established pedagogical practices.

The findings underscore the educators' capacity to innovate within the context of EFL education in Indonesia. This synthesis of technology and tradition promises an enhanced learning experience for students. By integrating AI into content creation, educators are better equipped to provide tailored and engaging materials (Berendt et al., 2020). The adaptability and resourcefulness displayed by these educators reflect the evolving landscape of EFL instruction, where technology is harnessed to facilitate enhanced language acquisition and improved communication skills among students in Indonesia.

The collaboration between Indonesian EFL educators and AI in content development brings both exciting possibilities and challenges. Striking a balance between leveraging AI's advantages while preserving the core values of EFL education is essential. These findings have the potential to impact not only Indonesian EFL education but also provide valuable insights for educators globally as they navigate the evolving landscape of AI-enhanced teaching and learning. The integration of AI into content development within the realm of EFL education carries profound pedagogical implications (K. Zhang & Aslan, 2021). It touches upon various facets of pedagogy, teaching methods, and curriculum design, ultimately aiming to enhance the overall educational experience for both educators and students in Indonesia.

One notable impact of AI in content development is the enhancement of pedagogical effectiveness. AI-powered platforms offer educators the means to create more engaging and interactive learning materials (Berendt et al., 2020). These tools can analyze individual learning styles and language proficiency levels, allowing for personalized content that caters to the diverse needs of students (Su & Yang, 2023). Moreover, AI's ability to provide instant

feedback and correction addresses errors promptly, which contributes to more effective and efficient learning processes. This is particularly important in the context of EFL education, where language acquisition is a central focus.

The customization of learning materials is another significant outcome of AI integration. AI enables educators to tailor content to meet the specific requirements of their students. It takes into account factors such as language proficiency, cultural context, and individual learning pace (Mertala et al., 2022). This high degree of customization ensures that educational materials are more relevant and engaging, resulting in increased student motivation and comprehension. By integrating local cultural nuances into language lessons, AI makes the learning experience more relatable and meaningful for students in the Indonesian EFL context.

Furthermore, AI promotes the adaptability of educators. It streamlines time-consuming tasks such as lesson planning, allowing teachers to devote more attention to pedagogical strategies and student interactions (Chiu et al., 2023). The study's findings reveal a range of teaching methods, from AI-centric lesson planning to a balanced integration of AI and traditional resources. This adaptability empowers educators to choose the approach that best aligns with their teaching objectives and the unique needs of their students, ultimately fostering a more dynamic and flexible teaching environment.

AI's impact extends to curriculum design as well. Through data-driven insights into student performance, educators can tailor the curriculum to address specific areas where students may struggle (Chen et al., 2020). This data-driven approach leads to more targeted and effective curriculum design, ensuring that students receive the support and resources they need to succeed in their language learning journey. Lastly, AI-powered content often incorporates multimedia elements, such as videos, interactive quizzes, and visual aids. These elements can significantly enhance student engagement and motivation (Xia et al., 2022). When students find lessons visually appealing and interactive, they are more likely to remain engaged and retain information effectively. AI thus contributes to creating a dynamic and stimulating learning environment that is conducive to effective language acquisition.

5. Conclusion

In conclusion, this research delves into the collaborative dynamics between Indonesian EFL educators and AI in content development. Through semi-structured interviews with five experienced educators, this study reveals a spectrum of AI integration, ranging from heavy reliance to a balanced approach, showcasing adaptability and resourcefulness in enhancing instructional strategies. The findings underscore the flexibility of EFL teaching, with educators combining traditional methods with AI-driven tools

to create engaging and motivating learning environments. The dynamic nature of educators' roles in enhancing learning, demonstrated through textbook analysis, AI tool integration, and multimedia resource utilization, contributes to a rich and diverse educational landscape.

Moreover, the study sheds light on the diverse teaching methods EFL educators employ, emphasizing interactive and student-centred activities that foster language acquisition, critical thinking, and communication skills. The amalgamation of AI and traditional teaching methods in feedback and correction practices further highlights the adaptability of educators in balancing technology-driven solutions with established pedagogy to enhance language proficiency.

In the realm of assessment and evaluation, the study identifies a shift toward technology-driven approaches, with AI tools such as ChatGPT, Twee, and Questionwell being integrated into the assessment process. This emerging trend signifies a promising avenue for enriching evaluation methods, potentially leading to improved student learning experiences. In essence, this research provides valuable insights into the evolving landscape of AI-augmented content development in Indonesian EFL education. The adaptability and resourcefulness demonstrated by educators showcase the potential of AI to enhance pedagogical practices and enrich language acquisition experiences for students. The findings contribute to the broader discourse on the effective integration of AI in education and offer practical implications for leveraging AI as a co-creator in content development, ultimately enhancing the overall quality of English language education in Indonesia.

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