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Indonesian Teachers' Roles in Designing and Utilizing AI-Powered Animated Videos: A Case Study on Classroom Practices and Character Development

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Abstract. The integration of artificial intelligence (AI) in education has introduced innovative tools for instructional design, yet the pivotal role of teachers in leveraging these technologies remains underexplored. This qualitative case study examines how Indonesian middle school teachers exercise pedagogical agency in designing and implementing AI-powered animated videos to promote moral values (e.g., honesty, perseverance, collaboration) and enhance language proficiency. Employing Braun and Clarke's (2021) thematic analysis guided by Danielson et al's teaching framework (2024), the study analyzed interview transcripts, observations, and reflective journals from ten middle school teachers from diverse regions across Java Island, Indonesia. Five key themes emerged: (1) teachers' strategic design of AI-powered animated videos, (2) their adaptive implementation practices, (3) pedagogical techniques for character development, (4) assessment methodologies using AI-generated content, and (5) professional reflection on technology integration. Findings reveal that teachers actively curated and customized AI tools to align with learning objectives, scaffolded moral reasoning through guided discussions, and systematically evaluated student engagement and linguistic growth. The study contributes to emerging discourse on AI in education by foregrounding teacher autonomy as a determinant of successful technology integration, particularly in character development contexts. Notably, it underscores the necessity of structured teacher training programs to optimize AI's

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pedagogical potential. For future research, longitudinal studies are recommended to assess the sustained impact of AI-assisted teaching on both academic and socio-ethical learning outcomes across diverse educational settings.

Keywords: animated video; artificial intelligence; character values; folk tales; instructional media.

1. Introduction

In recent years, the rapid advancement of Artificial Intelligence (AI) technologies has transformed educational practices across various disciplines (Katsarou et al., 2023). AI-powered tools, such as intelligent tutoring systems (Adiguzel et al., 2023), Natural Language Processing (NLP) (Derga et al., 2023), and animated videos (Ma et al., 2023), offer dynamic and personalized learning experiences that cater to individual students' needs. These technologies have shown significant promise in overcoming traditional challenges in language education, such as limited classroom interaction, inconsistent feedback, and lack of motivation among students (Abuhsahyon et al., 2023; Sangrasu, 2023). Building on the promise of AI in language education, these technologies address common challenges and create new avenues for deeper engagement in language acquisition.

For language learners, acquiring language skills is a complex process, often requiring repeated exposure to contextualized language use (Goodrich et al., 2021). AI-powered learning tools enhance this language acquisition by providing immersive, context-rich environments where learners repeatedly encounter authentic vocabulary and grammar structures through scenario-based activities (Xiu-Yi, 2024). Animated videos, in particular, are valuable tools for combining visual, auditory, and linguistic elements to enhance comprehension and retention of language skills (Putri & Munawarah, 2024). Moreover, animated video offers a unique opportunity to integrate character development by embedding moral and ethical lessons within language learning content (Rohali et al., 2024). AI-powered tools enhance the learning experience and offer opportunities to integrate critical elements such as character development into language learning, further enriching the process (Yusfika, 2021).

Character development is critical in shaping students' personalities and moral compasses (Gunada et al., 2024; Taja et al., 2021). In language learning, character values such as honesty, perseverance, and collaboration are particularly pertinent (Sakti et al., 2024). These values are universally relevant and can enhance students' motivation and engagement while providing them with culturally rich content that promotes linguistic and moral development (Arjaya et al., 2024; Matiso, 2024). The integration of character development through AI tools can be especially impactful when drawing upon culturally significant resources, such as Indonesia's rich tradition of folk tales. This dual focus aligns with the holistic educational goals of many language programs, which aim to prepare students for global citizenship (Yusfika, 2021).

As a nation rich in cultural heritage, Indonesia is home to numerous folk tales that encapsulate profound moral and ethical values. Apart from being cultural treasures, these folk tales have considerable potential to serve as educational media for fostering character values in the younger generation (Abidin et al., 2021; Irsyadi & Mulae, 2021). Nevertheless, in practice, using folk tales as educational tools often fails to captivate students' interest, particularly in today's digital era (Afriani et al., 2022).

However, despite their cultural value, traditional folk tales often struggle to engage modern students, which is where AI-based animated videos can offer a compelling solution. Implementing AI-based animated videos offers a highly appropriate solution to this issue. AI technology facilitates the creation of animations that are not only visually captivating but also customized to meet the needs and characteristics of students (Memarian & Doleck, 2024; Zarei et al., 2024). By utilizing audiovisual learning media through animated videos, the folk tale can be portrayed more dynamically, effectively capturing students' interest while helping them comprehend and internalize the character values embedded in the story (Gabinete, 2017).

Although the use of AI technologies in education has garnered increasing attention, existing research in language learning contexts has concentrated mainly on enhancing linguistic skills, such as vocabulary, grammar, and fluency, while neglecting the broader goal of character development. While prior studies have recognized AI's technical potential for personalized learning and immediate feedback (Bilad et al., 2023; Pujiani et al., 2022; Ridha et al., 2022), there remains a notable gap in examining how teachers strategically employ AI-powered animated media to foster language proficiency and ethical values simultaneously.

This study addresses that gap by investigating how Indonesian middle school teachers design and implement AI-powered animated videos to improve Bahasa Indonesia competencies while promoting character traits like integrity and collaboration. This research is particularly significant in educational contexts where the national language also serves as a vehicle for cultural transmission, as in the case of Bahasa Indonesia. Such dual-purpose instruction necessitates culturally responsive teaching strategies that align moral education with linguistic development. The findings aim to inform teacher training, and the development of AI-based educational tools grounded in local pedagogical traditions rather than externally imposed models.

2. Literature Review

2.1 AI, Video, and Folk Tales as an Educational Medium

Artificial intelligence (AI) has significantly transformed educational practices, providing innovative tools that personalize learning experiences and foster inclusivity (Adeleye et al., 2024). By leveraging adaptive learning models, AI dynamically adjusts content to cater to individual learning needs (Gligorea et al., 2023). These systems align with theoretical models such as adaptive learning and behaviorist theories, which emphasize the importance of tailored instruction in maximizing student engagement and knowledge retention (Ejjami, 2024). AI's

real-time feedback and predictive capabilities address diverse learning challenges, making it a cornerstone of modern educational technology (Yadav & Shrawankar, 2025).

Research on AI in education demonstrates its potential to transform learning through personalized and interactive experiences (Rane et al., 2024). Holmes et al. (2023) and Bilad et al. (2023) offer complementary yet distinct perspectives on AI in education. Holmes et al. adopt a macro-level approach, analyzing global trends in AI adoption to identify leading regions and institutions. In contrast, Bilad et al. focus on micro-level impacts, examining how AI-driven cognitive tutors enhance learning through personalization. While both studies underscore AI's transformative potential, they diverge in scope: one highlights systemic implementation patterns, while the other demonstrates pedagogical efficacy.

Additionally, while AI's impact on individualized learning is well-documented, its potential to enhance teacher-student interactions and address cultural diversity in educational settings requires further investigation. Regions with limited resources also remain underrepresented in current research (Roche et al., 2023). This gap highlights the need to explore complementary tools—such as video-based media—that can enhance AI-driven instruction's personalization and cultural responsiveness.

Videos have become a powerful medium in education, enhancing engagement and comprehension (Utaminingsih et al., 2024). They combine visual and auditory elements, making complex concepts more accessible and easier to retain (Dahlan et al., 2023). Among these, animated videos stand out due to their ability to combine high-quality visuals with interactivity, effectively capturing learners' attention. This aligns with multimedia learning theories, emphasizing the importance of engaging multiple sensory channels to facilitate deeper knowledge acquisition (AlShaikh et al., 2024). A growing body of literature supports the efficacy of video-based education in improving learning outcomes. For instance, Tugtekin et al. (2023) emphasized that e-learning platforms incorporating videos significantly enhance student motivation and understanding.

Similarly, Nurkhayati and Prastowo (2022) underscored the role of animation in translating abstract content into more tangible and relatable learning experiences. However, despite these promising findings, current studies often overlook contextual variables such as cultural relevance, learner diversity, and curriculum alignment when evaluating video effectiveness (Ring & Brahm, 2022). This gap in literature indicates a pressing need for research that critically examines how video content can be designed and implemented to support culturally responsive and pedagogically adaptive learning across varied educational settings.

In this context, folk tales offer a culturally embedded pedagogical resource that can enrich video-based instruction. Folk tales are rooted in oral tradition and encapsulate moral lessons and cultural values within engaging narrative structures (Cristina, 2024). Their universal appeal and ability to convey character values like honesty, perseverance, and collaboration make them ideal for

integrating character development into curricula (Antika et al., 2021). Theoretical frameworks like narrative learning suggest that stories enhance memory retention by connecting abstract concepts of folk tales in character and cultural education. Irsyadi and Mulae (2021) examined the pedagogical potential of Indonesian folk tales, finding them effective in teaching moral values while preserving cultural identity. Abidin et al. (2021) further demonstrated how folk tales provide a relatable medium for fostering empathy and ethical reasoning among students.

However, traditional folk tales face challenges in engaging modern learners accustomed to digital media (Olasina, 2020). This gap underscores the need to modernize these stories without losing their educational essence. Recent innovations have transformed folk tales into dynamic animated videos (Abidin et al., 2021; Irsyadi & Mulae, 2021), leveraging AI tools to enhance visual appeal and narrative depth. Figure 1 depicts developing AI-powered animated videos by integrating artificial intelligence, video-based learning, and folk tales to create personalized, culturally rich educational content.

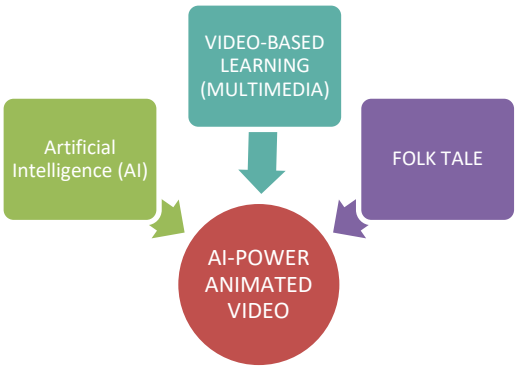

Figure 1: AI-Powered Animated Video Process

This research justifies the focus on adapting folk tales into AI-powered videos to modernize character development. By exploring this integration, it seeks to preserve cultural narratives while addressing the preferences of today's learners.

2.2 The Teachers' Roles in Language Learning with Multimedia

In contemporary language education, the integration of multimedia technologies has significantly transformed traditional pedagogical approaches, requiring teachers to assume dynamic roles as facilitators (Hwang et al., 2020), curators (Bilad et al., 2023), and adapters (Kohnke et al., 2023) in an increasingly technology-driven educational landscape. Teachers guide learners through multimedia-enhanced experiences as facilitators by structuring activities that promote active engagement (Waang, 2023). Unlike traditional lecture-based instruction, multimedia learning requires teachers to adopt a student-centred approach, where they scaffold lessons using videos, interactive simulations, and AI-driven tools (Aybirdi et al., 2023; Zhao et al., 2022). Teachers must also monitor student progress through analytics provided by adaptive learning platforms, intervening when necessary to clarify misconceptions or adjust difficulty levels (Isaeva et al., 2025).

The role of curators involves carefully selecting and adapting multimedia resources to ensure cultural relevance and pedagogical appropriateness (Tam, 2023). While digital platforms offer vast content libraries, not all materials suit diverse classrooms (Haleem et al., 2022). Teachers must evaluate resources for linguistic accuracy, cultural sensitivity, and alignment with curricular goals (Wong & Samudra, 2021). Additionally, recent studies highlight the need for multimedia to incorporate moral and cultural education, such as selecting films that reflect local values while teaching language skills (Zhao et al., 2024). This curation extends to addressing the digital divide—teachers in low-resource settings may need to modify high-tech materials for offline use or advocate for equitable access to devices (Kohnke et al., 2023).

Teachers continuously update their practices as adapters to leverage new tools (Kohnke et al., 2023). AI-powered language apps, virtual reality (VR) simulations, and gamified platforms require teachers to experiment with innovative methodologies while maintaining pedagogical integrity. For instance, generative AI tools like Chatgpt can create personalized reading passages, but teachers must train students to evaluate AI-generated content for biases or errors critically (Kohnke et al., 2023). Adaptation also involves professional development; teachers must train to master emerging technologies and collaborate with peers to share best practices (Hwang et al., 2020). The teacher's role in multimedia language learning is no longer confined to knowledge transmission but extends to facilitation, curation, and adaptation. By embracing these roles, teachers can harness multimedia's potential to create inclusive, engaging, and effective learning experiences while addressing technological and cultural challenges.

2.3 Classroom Practices and Character Development in AI-Integrated Language Learning

In recent years, advancements in artificial intelligence (AI) have led to innovative tools that enrich language learning, notably through AI-animated videos, which have profoundly influenced instructional practices. Among the prominent instructional frameworks guiding effective teaching is Danielson et al's (2024) framework for teaching, which delineates four critical domains: (1) planning and preparation, (2) the classroom environment, (3) instruction, and (4) professional responsibilities. In planning, teachers select and design multimedia resources that align with language learning and character development goals, focusing on culturally relevant content that promotes honesty, perseverance, and collaboration.

In creating a supportive classroom environment, teachers encourage open discussions and reflective thinking, fostering collaboration and teamwork that is essential for holistic development. During instruction, teachers use multimedia tools to engage students actively, employing questioning strategies, guided discussions, and language-based activities inspired by storytelling to enhance language skills and character development. Lastly, professional responsibilities involve continuous reflection on the effectiveness of multimedia tools, maintaining accurate records of student progress, and participating in professional development to improve digital teaching skills.

Khasawneh et al. (2025) revealed that AI-supported portfolio evaluation systems positively influenced linguistic acquisition perspectives while simultaneously developing emotional control and present-moment awareness - crucial elements for maintaining student involvement. Correspondingly, Wen et al. (2024) documented that systematically implemented AI-driven lexical acquisition systems enhanced vocabulary preservation among elementary-level students when combined with ongoing formative evaluation processes.

Most crucially, Børte et al.'s (2023) comprehensive analysis of empirical investigations identified methodical educator preparation in technology-integrated instructional methods as the most reliable indicator of effective artificial intelligence adoption, demonstrating a greater reduction in technological competence limitations relative to unstructured implementation strategies. These collective findings underscore that when AI integration is systematically implemented through pedagogical frameworks, teacher training, and emotionally supportive designs, it elevates language learning outcomes and transforms digital literacy challenges into opportunities for holistic educational development.

In parallel, AI tools are pivotal in fostering character development by embedding moral values within language instruction. Culturally relevant folktales, adapted into AI-animated videos, serve as effective mediums for teaching honesty, perseverance, and collaboration (Oztabak, 2025). Studies demonstrate that narrative-based AI animations enhance students' ethical reasoning by contextualizing abstract values in relatable stories (Weng et al., 2024). Additionally, guided discussions following AI-assisted storytelling sessions deepen students' moral reflection (Fatmawati & Raharjo, 2024), reinforcing socio-emotional learning (Saliuk & Shkola, 2023) alongside linguistic skills (Eragamreddy, 2025). Despite these benefits, further research is needed to assess the long-term impact of AI-mediated character development across diverse cultural settings.

3. Method

3.1 Research Design

This study adopted a qualitative case study approach to explore Indonesian middle school teachers' pedagogical strategies in designing and implementing AI-powered animated videos to cultivate moral values, such as honesty, perseverance, and collaboration, while enhancing Bahasa Indonesia proficiency. The investigation focused on teachers' agency, the practical implications for classroom instruction, and the potential impact on students' character development. A qualitative methodology was selected to obtain in-depth insights into teachers' implementation processes, perceived challenges, and attitudes toward integrating these innovative digital tools. The case study design (Yin, 2018) was appropriate, as it facilitated a comprehensive examination of how AI-driven animated videos can concurrently support language acquisition and moral education within an authentic classroom setting.

3.2 Participants

The study involved ten middle school teachers from diverse regions across Java Island, Indonesia, encompassing West Java, Central Java, East Java, and the Special Region of Yogyakarta. Participants were selected through purposive sampling to ensure they met specific criteria, including prior experience integrating character development into their pedagogical practices. This sampling strategy enabled the deliberate inclusion of teachers who were well-versed in moral instruction and receptive to innovative, technology-driven teaching approaches. The participant cohort comprised six female and four male teachers, with at least five years of classroom experience and a demonstrated commitment to embedding values-based education within language instruction.

Prior to their involvement, informed consent was obtained from all participants, with detailed explanations provided regarding the study's objectives, procedures, and their rights as research subjects. Participation was entirely voluntary, and participants were explicitly informed of their right to withdraw from study at any stage without consequence. All collected data were anonymized to uphold ethical standards, with personally identifiable information removed from transcripts, reflective journals, and other documentation. These measures safeguarded participant confidentiality while ensuring the study's integrity and adherence to established research ethics protocols.

3.3 Research Procedure

The study was conducted over six months, structured into three sequential phases: preparation, implementation, and analysis. The initial three-month preparation phase involved comprehensive training facilitated by university educators, delivered through a hybrid model combining online and offline sessions to accommodate participants across Java Island's diverse geographic regions. Figure 2 illustrates the process within each of the three phases.

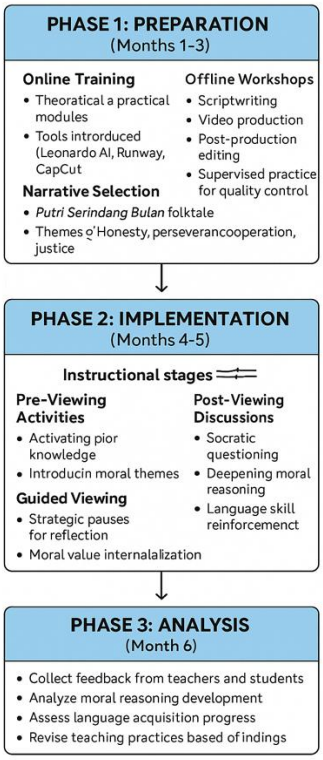

Figure 2: Three-Phase Structure of the AI-Powered Animated Video Instructional Program

The online training modules introduced theoretical foundations and practical demonstrations of AI-powered video creation tools, including Leonardo AI, Runway, and CapCut, enabling remote participation without logistical constraints. Special emphasis was placed on narrative selection, with the Indonesian folktale *Putri Serindang Bulan* chosen as the instructional anchor due to its thematic depth in moral values such as honesty, perseverance, cooperation, and justice, qualities deemed integral to character development within language education. Teachers were trained to align these values with language proficiency objectives while ensuring cultural relevance.

Complementary offline workshops provided hands-on practice in scriptwriting, video production, and post-production editing. These sessions, conducted in centralized locations, allowed collaborative refinement of animated videos under expert supervision, ensuring pedagogical coherence and technical quality. Regular consultations with the research team further supported teachers in harmonizing moral narratives with curricular goals.

Following video production, teachers systematically integrated the AI-generated animations into their Bahasa Indonesia lessons through a scaffolded instructional framework. The implementation began with pre-viewing activities designed to activate students' prior knowledge and establish the moral themes embedded in

the materials. During guided viewing sessions, teachers incorporated strategic pauses to facilitate reflection and support value internalization. The lessons concluded with post-viewing discussions featuring Socratic questioning techniques to deepen students' moral reasoning and linguistic engagement. This structured, three-phase approach ensured the synergistic advancement of language acquisition and character development, while continuous feedback mechanisms allowed for ongoing optimization of instructional effectiveness.

3.4 Data Collection and Data Analysis

The study employed a multi-method data collection approach utilizing semi-structured interviews, observations, and reflective journals to examine teachers' implementation experiences comprehensively. Semi-structured interviews were conducted with all ten participating teachers at three strategic intervals (beginning, middle, and end of implementation), each lasting approximately 30 minutes and administered online to accommodate participants' schedules. The interviews captured teachers' perspectives on several key dimensions: their adoption and application of AI technologies, obstacles encountered during implementation, the perceived effects on students' linguistic proficiency and moral growth, and their methods for evaluating learner progress across the intervention period.

Complementary observations provided direct evidence of pedagogical implementation, particularly documenting student engagement patterns and discourse dynamics during value-laden discussions prompted by the animated videos. Teachers concurrently maintained detailed reflective journals, systematically recording daily implementation experiences, instructional adjustments, and emerging insights.

The data analysis employed Braun and Clarke's (2021) six-phase thematic analysis, with Danielson et al's (2024) framework for teaching serving as an organizational lens during the preliminary coding stage. The process began with comprehensive data familiarization through repeated engagement with interview transcripts, observation notes, and reflective journals. Initial coding was informed by Danielson et al's four domains (Planning/Preparation, Classroom Environment, Instruction, Professional Responsibilities), which helped categorize pedagogical practices before transitioning to inductive theme development.

Through iterative refinement, five primary themes emerged: (1) teacher's role in desiging AI-powered animated video, (2) teachers' role in utilizing/implementing AI-powered animated video, (3) teaching practices for character development, (4) teacher's role in conduction assessment using AI-powered animated video, and (5) professional responsibilities. All themes were rigorously validated through member checking and substantiated with participant quotations, ensuring analytical credibility.

4. Finding

4.1 Teachers' Roles in Designing AI-powered Animated Videos

This study employed Danielson et al's (2024) framework for teaching as an analytical lens to examine educators' experiences designing and implementing

AI-powered animated videos. Within the planning and preparation domain, qualitative data analysis identified two principal instructional roles assumed by teachers: (1) content curators selecting culturally relevant narratives, and (2) technological integrators adapting AI tools for instructional purposes.

Teachers played a pivotal role as content curators in selecting, evaluating, and adapting source materials—such as folk tales, local legends, and culturally embedded stories—that would serve both linguistic and moral instructional goals. This role required teachers to make nuanced decisions about narrative relevance, thematic resonance, and ethical clarity to ensure that the chosen content aligned with students' socio-cultural contexts and developmental levels. Drawing upon observational data, this study reveals that all teachers emphasize the fundamental necessity of integrating character values within educational frameworks. These teachers chose *Putri Serindang Bulan* folktale as the narrative because *Putri Serindang Bulan* embodies several character values that can serve as exemplary models for students. The key character values identified in the narrative are portrayed in **Table 1**.

Table 1: The key character values identified in the narrative Putri Serindang Bulan

No	Value	Description
1	Honesty	*Putri Serindang Bulan* demonstrates honesty in all her actions. This honesty is crucial as a foundation for building trust and integrity.
2	Courage	*Putri Serindang Bulan's* courage in facing challenges and obstacles reflects the importance of being brave in confronting difficulties and making the right decisions, even in challenging situations.
3	Hard Work	This story highlights the importance of hard work in achieving goals. *Putri Serindang Bulan* works hard to assist her family and people, showing that success often requires significant effort and dedication.
4	Patience	*Putri Serindang Bulan's* patience in dealing with various trials and obstacles teaches that perseverance and calmness are essential in overcoming difficulties.
5	Cooperation	In this story, *Putri Serindang Bulan* often collaborates with others to achieve common goals. The value of cooperation teaches the importance of working together to achieve better outcomes.
6	Compassion	*Putri Serindang Bulan's* compassion towards her family and people demonstrates the importance of empathy and concern for the well-being of others.
7	Justice	*Putri Serindang Bulan* strives to be just to everyone. This value is important in maintaining harmony and fairness within society.
8	Sacrifice	*Putri Serindang Bulan* exemplifies sacrifice for the benefit of others, teaching that at times we must set aside personal interests for the greater good.

In their role as technological integrators, the teachers systematically utilized a range of advanced digital tools to optimize the quality and instructional value of the animated learning materials. Leonardo AI was employed to generate high-quality visual assets that aligned closely with narrative descriptions, thereby enhancing the visual appeal and contextual relevance of the animations. Runway was instrumental in facilitating smooth and realistic character animations,

contributing to the dynamic presentation of moral scenarios. Additionally, CapCut was used for audio integration, including voiceovers and background music—as well as for final video editing, ensuring a cohesive and polished multimedia output. This systematic technological integration enabled the successful transformation of the traditional *Putri Serindang Bulan* folktale into an engaging educational medium that effectively reinforced character values among learners.

The AI tools demonstrated particular efficacy in three key areas: significantly streamlining production timelines while maintaining quality standards, elevating visual presentation through sophisticated rendering capabilities, and deepening narrative impact through enhanced storytelling techniques. The resulting animated output achieved a dual pedagogical purpose, combining compelling visual appeal with a carefully structured narrative framework to promote moral reasoning and character development. The visual representation can be seen in **Figure 3**.

Figure 3: Visual representation of the animated video of the folk tale Putri Serindang Bulan

However, implementation efficacy demonstrated significant variation contingent upon individual technological competencies, highlighting the complex interplay between pedagogical planning and digital literacy in AI-enhanced education. One participant observed, "*The integration of AI tools has made it possible to present complex concepts in ways that are visually appealing and accessible to students.*" Although most teachers reported positive outcomes, some faced difficulties adapting to AI tools despite training. One teacher noted, "*The AI tools were powerful, but the learning curve was steep—I struggled with Runway's animation features and had to rely on peer support*." These findings underscore the need for sustained professional development that introduces AI tools and cultivates the digital pedagogical fluency required to implement them effectively in diverse classroom contexts.

4.2 Teachers' Roles in utilizing/Implementing AI-Powered Animated Video

Within the classroom environment domain of Danielson et al.'s (2024) framework, qualitative data analysis revealed that teachers' implementation of AI-powered animated videos contributed to two key pedagogical functions: (1) fostering an interactive and engaging learning atmosphere, and (2) supporting structured, student-centred discourse. As facilitators of critical moral discourse, teachers used AI-powered animated videos to structure discussions analyzing virtues such as

compassion and justice in the *Putri Serindang Bulan* folktale, explicitly linking these themes to modern social contexts. One teacher noted that the videos effectively stimulated engagement: "*The animated video opened up conversations we would not normally have. Students felt comfortable discussing moral values and were more attentive and reflective than usual*." This highlights the technology's potential to create a dynamic learning environment where abstract ethical concepts become accessible. However, the study revealed variability in student responsiveness. Cultural relevance emerged as a critical factor, as some students disengaged due to unfamiliarity with the folktale's context. One teacher explained, "*I had to spend extra time explaining the story before the discussion,*" underscoring the need for preparatory scaffolding.

As designers of collaborative learning environments, teachers leveraged AI videos to cultivate classrooms where moral discourse flourished. One teacher described the ideal outcome as "*a community of learners who valued kindness, respect, and collaboration*," observing that "*typically reserved students began participating more in discussions about the story's moral dilemmas*." This shift underscores the tool's capacity to democratize participation and foster peer-to-peer learning. However, the implementation revealed disparities in discourse quality. Higher-achieving students thrived in collaborative analysis, while others faced challenges. As one teacher noted, "*Struggling learners had difficulty articulating their thoughts about the moral dilemmas*," pointing to the need for differentiated discussion frameworks (e.g., sentence stems, small-group protocols). These results highlight the dual role of AI videos: they can structure inclusive discourse but require tailored support to address diverse learning needs.

4.3 Teaching Practices for Character Development

Within the instruction domain of Danielson et al.'s (2024) framework, findings from the qualitative data revealed that teachers actively facilitated student learning through guided activities and discussions centered on the animated video. Teachers employed a variety of instructional strategies, such as group discussions and reflective writing, to deepen students' understanding of key character values like honesty, courage, and cooperation. Table 2 highlights instructional strategies, observed impacts, and illustrative quotes for each of the 10 teachers.

Table 2: Teachers' instructional strategies for character development

Teacher Code	Instructional Strategy	Character Value Targeted	Observed Impact on Students	Illustrative Quote
T1	Group discussion	Honesty	Students showed deeper engagement and connected the characters' honesty to real-life situations	*"They said the video made it easier to understand what being honest really means."*
T2	Reflective writing	Courage	Students reflected on personal experiences and related them to the bravery shown in the video	*"After watching, they started writing about their own small acts of courage."*
T3	Role play	Cooperation	Students reenacted scenes and discussed how characters worked together to solve problems	*"They acted out the scenes and began to realize the importance of teamwork."*
T4	Storytelling and questioning	Honesty	Students asked insightful questions and interpreted character motives more thoughtfully	*"The visuals helped them see when a character was honest or not, and why that mattered."*
T5	Group project	Cooperation	Students collaborated to create new stories that emphasized cooperation	*"They worked together to build stories that reflect the same values they saw in the video."*
T6	Journaling	Courage	Students used the video as a prompt to reflect on their fears and how they might overcome them	*"One student wrote about standing up for a friend, inspired by the character's bravery."*
T7	Peer feedback	Honesty	Students evaluated each other's work based on moral insights from the story	*"They gave honest feedback, saying things like 'your character wasn't truthful enough.'"*
T8	Class debate	Courage	Students confidently expressed differing	*"They debated whether the character was brave or*

			opinions grounded in the video's moral dilemmas	*reckless – and backed it with examples."*
T9	Cooperative games	Cooperation	Students linked their teamwork in games to the cooperation shown by video characters	*"They said the characters reminded them of how they had to work together during the game."*
T10	Moral dilemma discussions	Honesty	Students evaluated ethical decisions made by characters and discussed their own possible choices	*"They said, 'If I were that character, I'd tell the truth too – even if it was hard.'"*

4.4 Teachers' Roles in Conducting Assessment using AI-powered Animated Video

Within the instructional domain of Danielson et al.'s (2024) framework, analysis of the qualitative data revealed that teachers employed dynamic assessment tools to comprehensively evaluate students' cognitive learning outcomes and their moral development. Through strategically embedded reflective questions and discussion prompts within the video content, teachers could assess narrative comprehension and students' capacity to transfer character values to real-life scenarios. One teacher observed,

> "*The animated video proved particularly effective as an assessment medium – analysis of student responses during structured discussions provided insights into their conceptual understanding and their evolving ability to examine ethical principles such as justice and compassion* critically."

The Assessment incorporated multiple complementary strategies: pre- and post-viewing written reflections allowed students to document their evolving perspectives on the folktale's moral dilemmas, revealing substantive growth in ethical reasoning; AI-generated scenario-based quizzes measured applied understanding of core values like honesty and cooperation through hypothetical situations; and structured peer/self-assessment protocols using discussion rubrics tracked the development of collaborative competencies and empathy.

4.5 Professional Responsibilities

In the domain of Professional Responsibilities outlined by Danielson et al. (2024), this component emphasizes the teacher's ongoing commitment to professional ethics, collaboration, and continuous growth to enhance student learning outcomes. One of the teachers said,

> "*Sometimes, I feel like I'm spending more time figuring out how to use the tool than actually teaching with it. We need more training programs that teach us how to use AI and how to align it with our existing curriculum.*"

This excerpt highlighted the need for comprehensive professional development programs to build the teachers' confidence and competence in utilizing AI tools effectively.

Despite the positive outcomes, implementing AI tools presented significant challenges. Teachers frequently cited the lack of adequate resources, and the steep learning curve associated with using AI technologies. Some reported difficulties in adapting AI-generated content to specific educational contexts due to insufficient technical support. For instance, one teacher noted,

> "*While the tools are effective, we often lack the infrastructure or training necessary to maximize their potential.*"

Additionally, limited access to technology in resource-constrained schools posed a barrier to wider adoption.

Another challenge was the time-intensive process of creating and customizing AI-powered content. Teachers reflected on the balancing act required to integrate this technology while managing their regular teaching responsibilities. However, they acknowledged that the benefits of AI-powered animated videos, such as their ability to simplify complex concepts and engage students, outweighed these challenges. This underscores the need for systemic support, including training programs and technological investments, to overcome these barriers and fully leverage the potential of AI in education.

5. Discussion

This study examined teachers' multifaceted roles in implementing AI-powered animated videos for character education. The findings reveal that teachers assumed some critical roles in this technological integration, demonstrating both strengths and limitations in their approach. During the planning phase, teachers assumed the role of content curators, carefully selecting culturally meaningful narratives—such as local folktales—to integrate core moral values including honesty, courage, cooperation, and compassion. This deliberate choice of content demonstrates teachers' sensitivity to students' cultural contexts and developmental stages (Danielson et al., 2024).

Furthermore, this approach is consistent with the findings of Zafari et al. (2022), who emphasize the necessity of aligning AI-generated educational content with clearly defined learning outcomes to ensure pedagogical effectiveness. However, despite their pedagogical intentionality, several challenges emerged during the planning and preparation stage, particularly regarding teachers limited technical proficiency. These constraints affected their ability to fully optimize AI tools for instructional design and multimedia production.

This finding corresponds with Farooqi et al. (2024), whose research identified a lack of technical competence among educators as a significant barrier to the effective integration of AI technologies in classroom settings. As such, while the planning phase reflected thoughtful content selection and moral alignment, it was

simultaneously constrained by gaps in digital literacy that limited the full realization of the instructional potential of AI-powered media.

As skilled technology integrators, most teachers effectively used AI tools like Leonardo AI, Runway, and CapCut to improve visual storytelling while boosting production efficiency and educational outcomes. AI-assisted tools have accelerated content development by automating tasks such as animation, voiceover generation, and video editing while preserving high production values (Halim et al., 2023; Tzoneva, 2023). Classroom observations indicated that vivid character designs and realistic backgrounds may foster deeper student connections with the narrative (Susanti et al., 2023; Triana et al., 2023), supporting Afriani et al.'s (2022) findings on the motivational impact of high-quality visuals.

Thomas (2020) notes that realistic animation enhances students' comprehension of educational content, highlighting the direct influence of animation quality on instructional effectiveness (Suzana et al., 2021). This is further corroborated by the findings of Saripudin et al. (2021), who assert that high-quality animation improves information retention and conceptual understanding. The utilization of CapCut for voiceover, music, and final editing of the animated video produced highly satisfactory outcomes.

Tabroni et al. (2021) emphasize that high-quality audio, such as clear narration, well-balanced background music, and crisp sound effects, plays a crucial role in educational media by helping students better grasp and remember lesson content. Poor audio can distract learners, while professional-grade sound enhances focus and information absorption (Awang et al., 2021). The integration of AI-assisted tools in instructional animation development has proven to be a transformative approach for enhancing both the quality and pedagogical impact of educational media (Chiu et al., 2023; Li et al., 2023; Khurma et al., 2024).

Teachers implemented dynamic evaluation methods to assess learning outcomes, including reflections, quizzes, and peer assessments, to measure cognitive and moral development comprehensively. Integrating AI-powered animated videos enabled them to embed reflective questions and discussion prompts directly into the media content, facilitating a more interactive and insightful assessment process. This approach aligns with the view of Matsumoto-Royo and Ramírez-Montoya (2021), who advocate for authentic assessment strategies that evaluate factual recall and students' capacity to transfer knowledge to real-life contexts. While AI tools such as Runway and CapCut were recognized for streamlining animation production and enhancing instructional quality (Saripudin et al., 2021; Tabroni et al., 2021), their successful deployment relies heavily on teachers' adaptive capabilities and contextual sensitivity.

As reflective practitioners, teachers in this study critically engaged with both the opportunities and limitations presented by AI integration in educational contexts. They demonstrated an awareness of implementation challenges, particularly in navigating technological adaptation, resource limitations, and the pressing need for sustained professional development. Echoing Ifenthaler and Schumacher

(2023) and Tzoneva (2023), participants underscored that the effective use of AI tools requires comprehensive training to build teachers' technical competence and pedagogical confidence. This is consistent with Yu's (2024) assertion that integrating AI reshapes the educator's role, positioning teachers as ethical mediators who align AI-driven innovations with meaningful learning outcomes. Consequently, cultivating AI-related competencies has become integral to teacher professionalism, aligning with Ding et al.'s (2024) findings on the urgent need to promote AI literacy among educators, especially those from non-technical backgrounds (Adiguzel et al., 2023). As such, AI is not merely a technical tool but a transformative medium that, when thoughtfully mediated by reflective practitioners, can enrich the pedagogical experience and support deeper student engagement.

6. Conclusion

This study examined how Indonesian middle school teachers leveraged AI-powered animated videos, particularly through adapting the *Putri Serindang Bulan* folktale using tools like Leonardo AI, Runway, and CapCut, to advance character development and Bahasa Indonesia proficiency synergistically. Three key contributions emerge: First, the AI-generated videos enhanced student engagement, as observed through increased participation in moral reasoning discussions during scaffolded viewing sessions. Second, the culturally grounded narrative may have served as a dynamic medium for internalizing values like honesty and perseverance, with students drawing connections between thematic lessons and real-world contexts. Third, the study highlights the potential for teachers to adopt evolving roles—as designers (curating culturally responsive content), facilitators (guiding value-based discourse), and assessors (evaluating linguistic and ethical growth)—when integrating such tools.

The findings are limited in generalizability due to its small sample size and focus on a specific cultural and educational context within Java Island, Indonesia. Additionally, the exclusive reliance on qualitative methods, such as interviews and observations focused solely on teachers rather than students, while offering in-depth insights, may lack the statistical robustness required for wider extrapolation. The study also concentrated primarily on the immediate outcomes of utilizing AI-animated videos, leaving the long-term effects on students' character formation and language proficiency unexplored. While this study focuses on the Indonesian context, its implications extend to other culturally diverse or resource-constrained settings facing similar challenges in technology integration and curricular development.

For instance, the insights gained could inform teacher training programs by highlighting effective strategies for blending AI tools with character education. This research contributes to a broader discourse on sustainable AI integration in global education by addressing universal challenges such as equitable access to technology and teacher readiness. Future research should expand geographical and demographic representation and incorporate mixed methods approaches to achieve a more comprehensive and generalizable understanding.

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