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**| RESEARCH ARTICLE**

# Bringing the *Hikayat Hang Tuah* into Digital Learning: Student Perceptions of AI-Assisted Animated Videos

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**| ABSTRACT**

The utilization of Artificial Intelligence in developing learning media offers opportunities to present classic literary works in audiovisual formats that align better with the characteristics of digital learning. The aim of this study was to analyze the perceptions of tenth-grade students regarding an AI-assisted animated video of *Hikayat Hang Tuah* (HHT) as a learning medium for Indonesian language studies. A quantitative approach with a survey design was employed. The study involved 310 tenth-grade high school students in Palembang City. Data were collected using a Likert-scale questionnaire comprising 18 statements across five aspects: visual quality, storytelling, ease of comprehension, learning interest, and perceived benefits. The instrument underwent content validation by three experts (Aiken's V coefficient: 0.778–1.000) and a reliability test with 30 students (Cronbach's Alpha coefficient: 0.906). Data were analyzed using descriptive statistics, with a positive perception threshold set at ≥62.5%. The results indicate that all perception statements fell within the positive range, with scores between 81% and 87%. The highest score was recorded for the statement regarding the visual comfort of the video's colors and illustrations, while the lowest score related to students' willingness to use AI-assisted animated videos in their studies; nevertheless, even the lowest score exceeded the positive perception threshold. Thus, the AI-assisted animated video of HHT was positively received by students and serves as a viable alternative medium for teaching hikayat (traditional Malay tales). These findings reflect student perceptions of the medium and do not demonstrate its experimental effectiveness regarding learning outcomes.

**| KEYWORDS**

Artificial Intelligence; *Hikayat Hang Tuah*; learning media; student perception; animated video

**| ARTICLE INFORMATION**

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## 1. Introduction

Digital transformation expands the ways in which learning materials are represented through the integration of verbal and visual information in multimedia environments (Mayer, 2024). The use of such representations offers learning benefits to students when various pieces of learning information complement each other and can be meaningfully integrated (Rexigel *et al.*, 2024), meanwhile multimedia visual design can influence the affective and motivational dimensions of students' learning experiences (Mutlu-Bayraktar, 2024). These developments drive the use of various forms of digital media that integrate representations and learning resources into learning activities (Lestari *et al.*, 2024; Staneviciene & Žekienė, 2025). In this context, video serves as a medium that enables information to be presented through a combination of visuals, audio, text, and narration within a unified representation.

Instructional videos are defined not only by the presence of audiovisual elements but also by the characteristics of their production style and the accompanying instructional design (Navarrete *et al.*, 2025). In language learning, the use of animated videos can support the understanding of material and student engagement through the presentation of information in a more dynamic way (Azizah *et al.*, 2025; Rahmadani *et al.*, 2025). Student responses to the media are also linked to their interest and the ease of accessing the information presented (Choirina *et al.*, 2025; Kemuda & Yasa, 2024; Prihantoro *et al.*, 2025). These characteristics make the animated video relevant for story-based material, as characters, settings, conflicts, and sequences of events can be organized through the interplay of moving images, sound, and narration within an integrated audiovisual representation.

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Audiovisual media production is increasingly evolving alongside the use of generative AI to create and modify digital content in education (Giannakos *et al*., 2025; Ullmann *et al*., 2024; Vieriu & Petrea, 2025). In educational videos, AI has been utilized to support the production of various audiovisual components that are comparable to recorded video in certain contexts (Xu *et al*., 2025), although students' subjective experiences of the two things are not always the same (Arkün-Kocadere & Çağlar Özhan, 2024; Netland *et al*., 2025). The integration of AI-generated instructional videos also shows potential when their use is linked to purposeful pedagogical activities (Pellas, 2025), but the use of AI in education still requires attention to accuracy, reliability, transparency, and responsible use (Francis *et al*., 2025; Kasneci *et al*., 2023; Marzano, 2026). In this study, AI is positioned as a technology supporting the production of animated video components, making the resulting media the object of the students' experience rather than as a system that interacts directly with the students.

The use of digital media holds particular relevance in literature education because literary works present narratives, values, and cultural contexts that require reader interpretation (Eltias *et al*., 2024). Digital media offers possibilities for linking literature education, creative production, and cultural preservation within the learning environment (Nurhayati *et al*., 2022, 2026). Integrating local knowledge into instruction can also strengthen students' connections to the cultural values and identities being studied (Eliyanti *et al*., 2024; Wijayanti *et al*., 2025). In the context of classical Malay literature, HHT (Tale of Hang Tuah) represents Malay cultural identity and continues to undergo transformation through various forms of media adaptation of a process integral to cultural literacy (Aziz & Ali, 2012; Mu'jizah & Nurmujingsih, 2023; Nagarajah & Yaapar, 2023). Audiovisual representation is one such form of adaptation, enabling HHT to be incorporated into digital learning while maintaining its status as literary and cultural material.

This shift in medium positions the student experience as a crucial component in the evaluation of instructional media (Kusuma *et al*., 2021; Nainggolan *et al*., 2025). Regarding the use of animated videos, students' perceptions relate to their interest in the medium, the ease of obtaining information, and their experience in understanding the presented material (Yasa, 2023). Research on AI-assisted video indicates that users respond positively to visual and audio quality while also identifying issues regarding interactivity and student cognitive load (Aswan, 2025). The user perspective thus provides empirical information on how a product is received after use, complementing evaluations that rely solely on the technical characteristics of the medium. In the context of the HHT animated video, this perspective is particularly relevant because the students' experience is shaped by audiovisual representations, the narrative presentation of a classic literary work, and a medium whose production process is supported by AI technology.

Previous research has explored the use of animated videos in teaching narrative texts, student perceptions of audiovisual media, the digitization of literary and cultural materials, and the production of AI-assisted instructional videos. However, studies on AI-generated instructional videos still present fragmented evidence and largely focus on the higher education context (Hai *et al*., 2025), meanwhile research on animated videos for narrative texts focuses more on comprehension, motivation, and language learning experiences (Rahmawati & Siswana, 2025). The study's framework reveals a scarcity of empirical evidence regarding how secondary school students perceive audiovisual representations of classical Malay literature developed with AI support. This research addresses that gap by analyzing tenth-grade students' perceptions of an AI-assisted animated video of HHT within the context of Indonesian language instruction. This focus extends the study of AI-assisted learning media to the context of the digital transformation of classical literature in education.

## 2. Research Method

This study employs a quantitative approach with a survey design to analyze students' perceptions of an AI-assisted animated video of the HHT. The study involved 310 tenth-grade students from two high schools in Palembang City, comprising 155 students from a public school and 155 students from a private school. Respondents were selected using non-probability sampling based on their alignment with the study's criteria specifically, tenth-grade high school students in Palembang City who were able to view the AI-assisted animated video of HHT and provide their perceptions of it.

Data were collected using a perception questionnaire based on Google Forms. Each statement utilized a four-point Likert scale: strongly agree (4), agree (3), disagree (2), and strongly disagree (1). The instrument consisted of 18 statements covering five aspects. The development of the instrument adapted research on students' perceptions of animated videos (Kusuma *et al*., 2021; Nainggolan *et al*., 2025; Rahmawati & Siswana, 2024) by taking into account the principles of the Cognitive Theory of Multimedia Learning (CTML) in formulating indicators related to verbal and visual representations.

**Table Grid for the Instrument Assessing Student Perceptions of the AI-Assisted Animated Video of the HHT**

| Aspect | Indicator | Sub-indicator | Item |
|---|---|---|---|
| **Video Visual Quality** | Visual Video Appearance | The animation is engaging to watch | **2** |
| | Visual Readability | The animated movements help follow the storyline | |
| | Visual Comfort | The on-screen text is easy to read | **1** |
| | Visual Video Appearance | The colors and illustrations make the video pleasant to watch | **1** |
| **Story Presentation** | Clarity of Plot | The storyline is easy to follow. | **1** |
| | Narrative Delivery | The narration helps follow the flow of the story. | **1** |
| | Story Transitions | Scene transitions make the story easy to understand. | **1** |
| | Clarity of Presentation | The storytelling is not confusing. | **1** |
| **Ease of Understanding the Story** | Understanding the Story Content | The video helps in understanding the story's content. | **1** |
| | Character Introduction | The video helps in identifying the characters in the story. | **1** |
| | Understanding the Story's Message | The video helps in understanding the message conveyed by the story. | **1** |
| | Ease of Remembering the Story | After watching the video, students find it easier to retell the story. | **1** |
| **Interest in Learning** | Interest in Watching the Video | Videos engage students, keeping them interested in the story until the end. | **1** |
| | Learning Atmosphere | Videos make learning more enjoyable. | **1** |
| | Attention During Learning | Videos help students stay focused during lessons. | **1** |
| | Interest in the Material | Videos increase interest in learning about hikayat (traditional tales). | **1** |
| **Benefits of Video** | Ease of Learning | Videos make hikayat material easier to understand. | **1** |
| | Willingness to Use the Media | Students want to use animated video media in their learning. | **1** |
| | | **Item Total** | **18** |

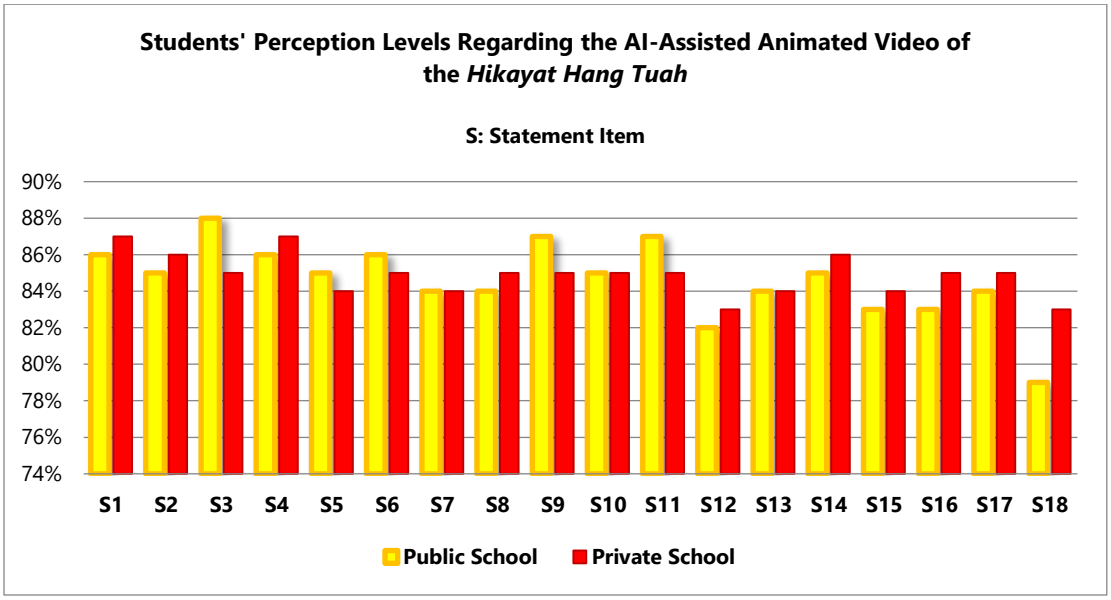
The content validity of the instrument was evaluated by three validators with expertise in Indonesian language and literature instruction, instructional media and educational technology, and educational evaluation. Each validator assessed the relevance of the items to the indicators, and the content validity coefficient was subsequently calculated using Aiken's V (Aiken, 1985). The Aiken's V values for the 18 items ranged from 0.778 to 1.000. Following revisions based on the validators' assessments, the instrument was pilot-tested with 30 tenth-grade students in Palembang City who were not included among the 310 respondents in the main study. The internal consistency test yielded a Cronbach's alpha coefficient of 0.906.

Data were analyzed using descriptive statistics at both the item level and the overall instrument level. The frequency of each response category was calculated to determine the distribution of answers, while item scores were converted into percentages representing the level of agreement by comparing empirical scores against the maximum possible score. Consequently, the score percentages ranged from 25% to 100%; the midpoint of this range (62.5%) served as the interpretation threshold, with scores of ≥62.5% categorized as positive perceptions and scores of <62.5% as negative perceptions. Analyses were conducted separately for each school (n = 155 per school) to allow for the observation of student perception patterns in both school contexts without obscuring inter-group variations. The results from the two schools were then compared descriptively to identify similarities and differences in response patterns, rather than to test for statistical differences between the schools. A combined analysis of all respondents (N = 310) provided an aggregate overview of student perceptions but did not replace the results of the individual school analyses.

## 3. Finding and Discussion

### 3.1 Finding

Student perceptions of the AI-assisted HHT animated video show a positive trend across all items at both schools. Although response patterns are generally quite similar, item-level variations indicate that student acceptance is not uniformly distributed across all media characteristics. A comparison of the responses from both groups is presented in graph.




**Graph of Student Perception Levels Regarding the AI-Assisted Animated Video of the HHT**

The graph reveals that both schools exhibited relatively similar response patterns, albeit with some variations at the item level. In public high schools, the highest response was observed for item S3, whereas in private high schools, it was for item S1. Item S3 pertains to the readability of the text within the video, while S1 represents the visual appeal of the animation. This pattern indicates that visual characteristics elicited strong responses from both groups, even though the most prominent features differed slightly.

Further variation is evident in items related to the experience of following and comprehending the story. In public high schools, responses to items S9 and S11 were among the highest, highlighting a strong student preference for video support in understanding the content and message of HHT. In private high schools, responses regarding comprehension remained positive, yet items related to the viewing and learning experience specifically S4 and S14 which stood out more prominently. Thus, while the response patterns of the two schools were largely similar, there remained variations regarding which specific video characteristics garnered the strongest approval.

The most distinct difference appears in item S18. The item regarding the willingness to use AI-assisted animated videos of the HHT in instruction elicited the lowest response levels at both schools. This pattern contrasts with most of the preceding items, which showed relatively small gaps between the groups. These findings indicate that positive assessments of the videos' characteristics and the experience of using them were not fully matched by a corresponding level of willingness to utilize the media in the learning process.

**Student Perception Criteria Regarding the AI-Assisted Animated Video of the HHT**

| | Statement Item | Percentage | Perception Criteria |
|---|---|---|---|
| 1. | The animated video presentation of the HHT is engaging to watch. | 86% | **Positive** |
| 2. | The animation in the video helps me follow the storyline. | 85% | **Positive** |
| 3. | The text displayed in the video is easy to read. | 86% | **Positive** |
| 4. | The colors and illustrations in the video make for a comfortable viewing experience. | 87% | **Positive** |
| 5. | The storyline of the HHT animated video is easy to follow. | 84% | **Positive** |
| 6. | The narration in the video helps me follow the storyline. | 86% | **Positive** |
| 7. | The scene transitions in the HHT animated video help me understand the storyline. | 84% | **Positive** |
| 8. | The story in the HHT animated video is presented clearly and coherently. | 84% | **Positive** |
| 9. | The animated video helps me understand the content of HHT. | 86% | **Positive** |
| 10. | The animated video helps me recognize the characters in HHT. | 85% | **Positive** |
| 11. | The animated video helps me understand the message conveyed in HHT. | 86% | **Positive** |
| 12. | After watching the HHT animated video, it is easier for me to retell the story. | 83% | **Positive** |
| 13. | HHT animated video keeps me interested in following the story to the end. | 84% | **Positive** |
| 14. | The HHT animated video makes Indonesian language learning more enjoyable. | 85% | **Positive** |
| 15. | The HHT animated video helps me stay focused while studying the hikayat material. | 84% | **Positive** |
| 16. | The animated video makes me more interested in learning about HHT | 84% | **Positive** |

| | | | |
|---|---|---|---|
| 17. | The HHT animated video helps me understand the hikayat material more easily. | 84% | **Positive** |
| 18. | I would like to use the AI-assisted HHT animated video in Indonesian language learning. | 81% | **Positive** |

At the aggregate level, all 18 statements fell within the positive perception range, with scores between 81% and 87%. Item S4 regarding the visual comfort of colors and illustrations which received the highest rating at 87%, while S18 regarding the willingness to use AI-assisted animated videos for Indonesian language learning whichreceived the lowest at 81%. Thus, the aggregate pattern reveals consistent acceptance of the media while highlighting a gap between the assessment of the audiovisual experience and the willingness to utilize it in the learning process.

**3.2 Discussion**

The results indicate that student acceptance of the AI-assisted HHT animated video stems from the interplay of various media characteristics rather than a single, isolated element. Strong responses regarding the visual presentation, readability, and narration as well as the video's role in facilitating comprehension of the story's content and message which suggest that students are reacting to the way verbal and visual information is organized into a cohesive audiovisual experience. These findings align with the CTML, which identifies the processing of verbal and visual information—and its integration with existing knowledge as a crucial mechanism in multimedia learning (Mayer, 2024). However, since this study measures perceptions rather than directly assessing cognitive processes, the findings do not serve as direct evidence of the CTML mechanisms in action. Instead, the data more accurately demonstrate that media characteristics involving verbal and visual representations garnered positive acceptance from students. This perspective is consistent with Rexigel *et al*. (2024), who emphasize that the benefits of external representations depend on how available information complements and integrates with other elements.

The prominent response to visual characteristics takes on greater significance when viewed alongside the aggregate results. Color and illustration comfort emerged as the highest-rated aspect, while visual appeal and readability also ranked highly. This pattern indicates that the visuals in the video serve not merely as ornamentation but as an integral part of the student's experience when accessing the material. Mutlu-Bayraktar (2024) shows that the emotional design of multimedia is related to the affective and motivational experiences of users, whereas Navarrete *et al*. (2025) demonstrates that design and production characteristics are crucial to understanding the video-based learning experience. In the context of this study, positive responses to visuals are significant because HHT has undergone a shift in representation from a classic literary work to a digital audiovisual format.

This shift in representation is also linked to how students access the narrative structure of HHT. Positive responses to the plot, narrative, characters, content, and message indicate that the reception of the medium goes beyond mere visual appeal. These findings align with research Rahmadani *et al*. (2025) regarding the use of animated videos to support reading comprehension, as well as Rahmawati and Siswana (2025) concerning student perceptions of animated videos in narrative text instruction. However, the context of this study extends that discussion to classical Malay literature. HHT does not only encompass a sequence of events but also conveys literary and cultural dimensions that form part of the material accessed by students. Eltias *et al*. (2024) emphasize the relevance of hikayat (traditional tales) rooted in local wisdom for tenth-grade students literature instruction, while Mu'jizah and Nurmujingsih (2023) situate HHT within the relationship between identity and cultural literacy. Thus, the reception of the story's presentation in this study demonstrates the potential for a digital medium transformation that does not detach the material from the narrative structure underpinning its meaning.

The most dominant finding across the overall pattern relates to the willingness to use the media. Item S18 consistently ranked the lowest, although it remained within the positive range. This positioning indicates that the evaluation of the audiovisual experience and the intention to use the media do not align with equal intensity. In other words, students may positively rate the video's visuals, presentation, and ability to facilitate understanding without necessarily expressing an identical level of agreement regarding the use of the media in their learning. These findings broaden the interpretation of research on animated video perceptions, highlighting student acceptance of the media's appeal and the user experience (Kemuda & Yasa, 2024; Yasa, 2023). In the context of AI-assisted video, Aswan (2025) it also demonstrates that a positive response to audiovisual characteristics can coexist with more varied evaluations of user experience dimensions. Thus, media acceptance needs to be understood as a multidimensional response, rather than a direct equivalent of usage preference.

The graph reinforces this interpretation while also demonstrating that aggregate scores do not fully capture the variation in responses. No single group consistently provided higher ratings across all items; the relative standing of the two schools shifted depending on the specific characteristics being assessed. The public high school showed relatively higher ratings on items related to readability and story comprehension, whereas the private high school scored relatively higher on items concerning appeal and the learning experience. The most distinct variation appeared in the willingness to use the media. As the study was not designed to test the statistical significance of inter-school differences, this pattern does not suggest a school type effect, it indicates that

similar overall acceptance levels can arise from response configurations that are not entirely identical. This interpretation aligns with the study's analytical design, which limited the comparison between the two schools to a descriptive level.

Overall, the study's findings indicate that student acceptance of the HHT animated video does not hinge on a single media characteristic; rather, it emerges from the interplay between audiovisual representation, narrative presentation, and the learning experience created when classical literature is adapted into a digital medium. The consistency of response patterns across both school contexts demonstrates that this acceptance is not a tendency isolated to a specific group of students. In this context, the contribution of AI must be viewed in proper perspective: the medium's pedagogical value lies not in the use of AI itself, but in how the technology supports a story representation that resonates with students without undermining the status of HHT as a work of literature and culture. These findings also underscore that positive perception serves as evidence of acceptance, not necessarily of learning effectiveness. Consequently, future research should move beyond evaluating user experience to examine the extent to which such acceptance correlates with changes in learning outcomes when AI-assisted animated videos are utilized in literature instruction.

## 4. Conclusion

This study has demonstrated that the AI-assisted animated video of HHT was positively received by tenth-grade students across both school contexts examined. This reception encompassed students' experiences regarding audiovisual representation, storytelling, comprehension, learning engagement, and the medium's utility, although the level of acceptance varied across the specific characteristics evaluated. These findings suggest that transforming HHT into an AI-assisted audiovisual format offers a viable alternative for representing classical literature in digital learning environments. However, the results must be interpreted within the scope of the survey design: the positive perceptions reflect student acceptance of the medium following its use, rather than an improvement in learning outcomes directly attributable to the medium itself. Therefore, this study provides an empirical foundation from the user's perspective for the development of AI-assisted literary media, while also highlighting the need for further research into its pedagogical effectiveness.

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## References

[1] Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement, 45*(1), 131–142. https://doi.org/10.1177/0013164485451012
[2] Arkün-Kocadere, S., & Çağlar Özhan, Ş. (2024). Video lectures with AI-generated instructors: Low video engagement, same performance as human instructors. *The International Review of Research in Open and Distributed Learning, 25*(3), 350–369. https://doi.org/10.19173/irrodl.v25i3.7815
[3] Aswan, D. (2025). Student perceptions of AI-generated videos in online learning. *Jurnal Teknodik, 29*(1), 63–72. https://doi.org/10.32550/gm0kvf36
[4] Azizah, R., Hanafi, M., & Luqman, M. (2025). Exploring the role of animated video design in english language learning through student experiences. *Jurnal Pembelajaran Bahasa Dan Sastra, 4*(5), 1051–1060. https://doi.org/10.55909/jpbs.v4i5.887
[5] Aziz, S. A., & Ali, R. M. (2012). Adaptations of HHT in children's literature. *Malay Literature, 25*(2), 261–285. https://ptsldigital.ukm.my/handle/123456789/577795
[6] Choirina, N., Khosiyono, B. H. C., Nisa, A. F., & Cahyani, B. H. (2025). Analisis implementasi video animasi cerita untuk meningkatkan motivasi belajar siswa pada pelajaran bahasa indonesia. *Ideguru: Jurnal Karya Ilmiah Guru, 10*(2), 1221-1227. https://doi.org/10.51169/ideguru.v10i2.1751
[7] Eliyanti, N. K., Septiani, L. E., Juliatni, N. K. E., Komang Suryani, K., Kadu, J. G., Putrayasa, I. B., & Sudiana, I. N. (2024). Local culture-based learning in improving indonesian students' cultural awareness. *PSIKONEO: Jurnal Ilmiah Psikologi, 4*(1) 458-462. http://dx.doi.org/10.30872/psikoborneo.v12i4

[8] Eltias, Y., Faizah, H., & Elmustian. (2024). Urgency of the need for learning to read local wisdom-based hikayat texts for literature learning in grade 10 of high school. *JKTP: Jurnal Kajian Teknologi Pendidikan, 7*(4), 249–258. https://doi.org/10.17977/um038v7i42024p249

[9] Francis, N. J., Jones, S., & Smith, D. P. (2025). Generative AI in higher education: Balancing innovation and integrity. *British Journal of Biomedical Science, 81*, Artikel 14048. https://doi.org/10.3389/bjbs.2024.14048

[10] Giannakos, M., Azevedo, R., Brusilovsky, P., Cukurova, M., Dimitriadis, Y., Hernandez-Leo, D., Järvelä, S., Mavrikis, M., & Rienties, B. (2025). The promise and challenges of generative AI in education. *Behaviour & Information Technology, 44*(11), 2518–2544. https://doi.org/10.1080/0144929X.2024.2394886

[11] Hai, T. T., Mai, D. T. T., & Hanh, N. V. (2025). A rapid review of using AI-generated instructional videos in higher education. *Frontiers in Computer Science, 7*, 1721093. https://doi.org/10.3389/fcomp.2025.1721093

[12] Kemuda, N. M. G. A. A., & Yasa, I. G. B. K. (2024). Persepsi siswa terhadap penggunaan video animasi berbasis Doratoon. *Prima Magistra: Jurnal Ilmiah Kependidikan, 5*(1), 8–16. https://doi.org/10.37478/jpm.v5i1.3169

[13] Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günnemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeiffer, F., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences, 103*, 102274. https://doi.org/10.1016/j.lindif.2023.102274

[14] Kusuma, W. M., Sudira, P., Hasibuan, M. A., & Daryono, R. W. (2021). The perceptions of vocational school students of video animation-based learning media to operate lathes in distance learning. *Journal of Education Technology, 5*(2), 200–206. https://doi.org/10.23887/jet.v5i2.33139

[15] Lestari, N. G. A. M. Y., Boeriswati, E., & Dhieni, N. (2024). Using interactive multimedia to stimulate early childhood students' speaking skills: A systematic review. *International Journal of Interactive Mobile Technologies, 18*(16), 174–196. https://doi.org/10.3991/ijim.v18i16.47583

[16] Marzano, D. (2026). Generative artificial intelligence (GAI) in teaching and learning processes at the K–12 level: A systematic review. *Technology, Knowledge and Learning, 31*, 789–829. https://doi.org/10.1007/s10758-025-09853-7

[17] Mayer, R. E. (2024). The past, present, and future of the cognitive theory of multimedia learning. *Educational Psychology Review, 36*, Article 8. https://doi.org/10.1007/s10648-023-09842-1

[18] Mu'jizah, & Nurmujingsih, E. (2023). Identitas dan spirit hidup ke inspirasi literasi budaya: Studi HHT. *Aksara, 35*(1), 40–52. https://doi.org/10.29255/aksara.v35i1.955.40--52

[19] Mutlu-Bayraktar, D. (2024). A systematic review of emotional design research in multimedia learning. *Education and Information Technologies, 29*, 24603–24626. https://doi.org/10.1007/s10639-024-12823-8

[20] Nainggolan, G. P., Purba, M., Aulia, N., Sitanggang, Y., & Yuni, R. (2025). Persepsi siswa terhadap penggunaan media pembelajaran video animasi dalam proses pembelajaran di sman 18 Medan. *Jurnal Sains Student Research, 3*(2), 571-578. https://doi.org/10.61722/jssr.v3i3.4836

[21] Nagarajah, K., & Yaapar, M. S. (2023). From HHT to Bharat Ek-Khoj: A Malay culture hero in an Indian docudrama. *KEMANUSIAAN: The Asian Journal of Humanities, 30*(1), 57–74. https://doi.org/10.21315/kajh2023.30.1.4

[22] Navarrete, E., Nehring, A., Schanze, S., Ewerth, R., & Hoppe, A. (2025). A closer look into recent video-based learning research: A comprehensive review of video characteristics, tools, technologies, and learning effectiveness. *International Journal of Artificial Intelligence in Education, 35*(4), 1631–1694. https://doi.org/10.1007/s40593-025-00481-x

[23] Netland, T., von Dzengelevski, O., Tesch, K., & Kwasnitschka, D. (2025). Comparing human-made and AI-generated teaching videos: An experimental study on learning effects. *Computers & Education, 224*, Article 105164. https://doi.org/10.1016/j.compedu.2024.105164

[24] Nurhayati, Helaluddin, Purnomo, M. E., Ernalida, Herviani, R., & Dinata, K. K. (2026). From digital learning to creative production: A folklore-based media for drama script writing. *Journal of Applied Science, Engineering, Technology, and Education, 8*(2), 502–516. https://doi.org/10.35877/454RI.asci4768

[25] Nurhayati, Suwartono, T., Saripudin, A., & Juwita, N. (2022). Applying web-based technology in developing student worksheets on writing local culture content drama script. *Theory and Practice in Language Studies, 12*(2), 263–273. https://doi.org/10.17507/tpls.1202.07

[26] Pellas, N. (2025). The impact of AI-generated instructional videos on problem-based learning in science teacher education. *Education Sciences,* 15(1), 102. https://doi.org/10.3390/educsci15010102

[27] Prihantoro, M. T., Pratama, Z. A., & Suparmi, S. (2025). Effect of animated video media therapy on enhancing university students' learning motivation. *International Journal of Counseling and Psychotherapy, 2*(3), 116–123. https://doi.org/10.64420/ijcp.v2i3.386

[28] Rahmadani, P., Yelia, & Fajaryani, N. (2025). The use of animated video to improve students' reading comprehension. *Research and Innovation in Language Learning, 8*(1), 13–18. https://doi.org/10.33603/rill.v8i1.11104

[29] Rahmawati, N., & Siswana. (2025). Students' perception in learning narrative text using animated videos. *English Language Teaching Methodology, 5*(2), 152–164. https://doi.org/10.56983/eltm.v5i2.1828

[30] Rexigel, E., Kuhn, J., Becker, S., & Malone, S. (2024). The more the better? A systematic review and meta-analysis of the benefits of more than two external representations in STEM education. *Educational Psychology Review, 36*, Article 124. https://doi.org/10.1007/s10648-024-09958-y
[31] Staneviciene, E., & Žekienė, G. (2025). The use of multimedia in the teaching and learning process of higher education: A systematic review. *Sustainability, 17*(19), 8859. https://doi.org/10.3390/su17198859
[32] Sugiyono. (2021). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
[33] Ullmann, T. D., Edwards, C., Bektik, D., Herodotou, C., & Whitelock, D. (2024). Towards generative AI for course content production: Expert reflections. *European Journal of Open, Distance and E-Learning, 26*(S1), 20–34. https://doi.org/10.2478/eurodl-2024-0013
[34] Vieriu, A. M., & Petrea, G. (2025). The impact of artificial intelligence (AI) on students' academic development. *Education Sciences, 15*(3), 343. https://doi.org/10.3390/educsci15030343
[35] Wijayanti, Y., Warto, Wasino, & Djono. (2025). Enhancing students' cultural identity through history education based on local wisdom of Kagaluhan values. *Educational Process: International Journal, 14*, e2025075. https://doi.org/10.22521/edupij.2025.14.75
[36] Xu, T., Liu, Y., Jin, Y., Qu, Y., Bai, J., Zhang, W., & Zhou, Y. (2025). From recorded to AI-generated instructional videos: A comparison of learning performance and experience. *British Journal of Educational Technology, 56*(4), 1463–1487. https://doi.org/10.1111/bjet.13530
[37] Yasa, I. G. B. K. (2023). Teachers' and students' perception of animation video by Animaker in blended learning. *International Journal of English Education and Linguistics, 5*(1), 109–119. https://doi.org/10.33650/ijoeel.v5i1.5483