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# Revolutionizing Arabic Language Reading Skills Among Junior Islamic School Students via Innovative Digital Comic Learning Media

**Diana Novita and Almaida Fitra Hamdala**

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# Revolutionizing Arabic Language Reading Skills Among Junior Islamic School Students via Innovative Digital Comic Learning Media

Diana Novita\* and Almaida Fitra Hamdala

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## Abstract

This study explores the effectiveness of digital comic media in improving Qira'ah proficiency among seventh-grade students at MTs AL-Hikmah Bandar Lampung. It addresses three main research questions: (1) How does the development of digital comic media contribute to enhancing Qira'ah proficiency? (2) What is the feasibility of this digital comic media in promoting Qira'ah proficiency? (3) How do students respond to the implementation of this digital media? The research adopts a Research and Development (R&D) approach, guided by the ADDIE model, which includes Analysis, Design, Development, Implementation, and Evaluation phases. Findings reveal that the Arabic digital comic media was highly feasible, with media experts assigning an assessment score of 94.1% and material experts rating it at 91%. Additionally, student feedback reflected a strong positive response, with an average approval rate of 91%. Teacher evaluations yielded a score of 95.5%, further corroborating the tool's utility in the educational process. In conclusion, this study affirms the potential of digital comic media as an innovative and effective tool for enhancing Qira'ah skills in a junior high school context, contributing to the broader landscape of Arabic language learning methodologies.

**Keywords:** ADDIE; Digital Comics; Learning Media; Reading Skills

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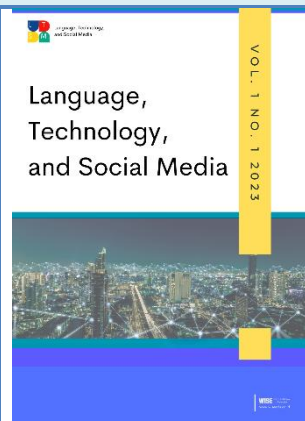
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## INTRODUCTION

The utilization of media in the learning process is a crucial aspect in determining the achievement of learning objectives or the effectiveness of the current learning process. The utilization of instructional media in the teaching and learning process can stimulate students' interest, motivation, and engagement in learning activities [1], [2], [3], [4]. Additionally, it greatly aids in facilitating the delivery of messages and lesson content more easily. For learners, not all media can play an effective role in Arabic language education, as they are more inclined to grasp the lesson content using interactive or visual media, such as digital comics. Learning that heavily relies on verbal methods becomes monotonous and hampers students' critical thinking abilities and attitudes. To achieve these goals, educators must recognize the significance of media as a supportive element for successful Arabic language education.

Instructional Media encompasses all forms of intermediaries used to convey an idea effectively to the recipient [5], [6], [7]. Learning, on the other hand, involves the effort to make an individual acquire knowledge [8], [9]. Therefore, instructional media serve as tools and materials used to mediate communication or ideas during the learning process [10]. With the presence of these media, educators can be significantly aided in attaining the learning objectives. These media hold a pivotal role and function in the learning process, as media generally function as message conveyors. According to Hamalik, the use of media in the learning process can arouse interest and motivate engaging learning activities [11], [12], [13]. In essence, instructional media serves as a teaching aid employed by educators to deliver subjects/topics during the learning process, making learning processes appealing, non-monotonous, and creating active, creative, effective, and enjoyable learning experiences. Learning models are employed to assist educators in delivering essential subject matter to students. Through these models, educators have diverse alternatives for conveying information to learners. As scientific knowledge advances, learning can take place through various media, including digital comics [14], [15].

Comics are a form of illustrated storytelling that conveys characters and plots in a sequence, closely tied to images designed to entertain readers. With technological advancement, digital-based comics have been developed through application software, which is considered more effective since they can be integrated into computers, LCD projectors, and smartphones [16], [17], [18].

This research focuses on reading skills for 7th-grade students, who have reached the second level of reading proficiency, namely, reading comprehension. Reading comprehension is a higher-level reading skill than basic or mechanical reading. In reading comprehension, readers are expected to understand the content of the text. To achieve the goals of reading comprehension skills, the most suitable activity is silent reading.

The findings of Aeni and Yusupa [19] study on "Model Media Pembelajaran E-Komik Untuk SMA" indicate that students favor this e-Comic learning model and feel like they are reading comics in digital format. The conclusion drawn from the development of the e-Comic model is that it is an innovative, effective, efficient, and enjoyable learning medium, enhancing students' focus on understanding the subject matter. The study by Umi Hijriyah et al. [20] on "Development of Digital Comic Media for Learning Qira'ah for Fifth Grade Students of Madrasah Ibtidaiyah" indicates a significant difference before and after treatment using comic media, such as increased learning motivation and qira'ah performance. This research primarily focuses on cognitive development. The forthcoming comic holds the advantage of presenting content in a series of

engaging images, coupled with simple stories closely related to the experiences of learners, yet easily comprehensible due to their simplicity. This comic is also portable as it is available in an Android application.

## METHODS

This study adopts a research and development approach, utilizing the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). This model will be employed to design, develop, implement, and evaluate the innovative digital comic learning media for enhancing Arabic language reading skills among students at the Junior Islamic School (MTs) AL - Hikmah, Bandar Lampung.

The research procedures will comprise the stages of needs analysis, design, development, implementation, and evaluation, following the ADDIE model. Each stage will be carefully planned and executed. The research subjects are junior-grade students at MTs AL - Hikmah, Bandar Lampung, with varying levels of Arabic language reading skills. The selected subjects will be chosen randomly and grouped based on their reading skill levels. Data collection involves several stages:

1. Analysis: This initial stage involves preliminary surveys, interviews with Arabic language teachers, and curriculum evaluations to understand the needs and challenges in improving Arabic language reading skills.
2. Design: Based on the needs analysis, an initial design of the digital comic learning media will be created, including content, structure, and evaluation methods.
3. Development: Following the design, the digital comic will be developed according to the design. A development team will be involved in this process.
4. Implementation: The digital comic will be introduced to students at MTs AL - Hikmah. Learning sessions will be recorded and monitored to collect implementation data.
5. Evaluation: Evaluation will be conducted by analyzing data from pre- and post-implementation reading skills tests. Additionally, interviews and questionnaires with students and teachers will be conducted to assess the effectiveness of the learning media.

## RESULTS AND DISCUSSION

Based on the interview results conducted by the researcher at MTs Al-Hikmah Bandar Lampung with Arabic Language teachers, it was found that the media used in the Arabic language learning process, especially in the skill of qira'ah (reading), is still not varied. The use of printed books and worksheets (LKS) is still common, resulting in many students lacking enthusiasm in participating in the Arabic language learning process. Therefore, there is a need for new innovations to prevent students from feeling bored while learning Arabic, particularly qira'ah.

Based on the observations carried out by the researcher at MTs Al-Hikmah Bandar Lampung, it was found that the teachers are already using printed books, worksheets, whiteboards, and projectors as instructional media. However, there are still challenges in effectively utilizing these instructional media in the classroom, which leads to difficulties in understanding and remembering the qira'ah material in Arabic language learning. According to the researcher's observations, several factors contribute to students' difficulties in learning Arabic, especially

qira'ah: the media used is not very effective for qira'ah learning, lack of innovation, and the teaching methods used are often monotonous, leading to a lack of student motivation.

Hence, one of the innovations that Arabic language teachers can implement, particularly for qira'ah, is the use of engaging instructional media that can help students enhance their interest in reading and improve their understanding of the learning materials. From a pragmatic perspective, students prefer reading materials that contain many images, colorful visuals, and narrative text, similar to digital comics. The term "media" originates from the Latin word "medius," which literally means "middle," "intermediary," or "conduit."

Educational media refers to tools designed to convey instructional messages. Learning is a process of communication among learners, educators, and teaching materials. Educational media are also tools that can be created to fulfill various needs for foreign language learners. There are several terms related to educational media. Media as any aids that can be used as a means of delivering learning information or messages to achieve learning goals [21], [22]. In the context of media as a source of learning, it can broadly include humans, objects, or events that allow learners to acquire knowledge and skills. Essentially, the various definitions above share the same fundamental understanding. Communication requires media or tools. In general, media is anything that conveys information from an information source to the recipient of the information. Therefore, educational media are the "software" that represents educational messages or information presented using auxiliary "hardware" to deliver these messages/information to students [23], [24]. Here, it's clear that media is distinct from equipment, but both are interconnected elements in the effort to convey educational messages/information to students. Thus, it can be concluded that (a) media is a vessel for messages that the source or distributor wants to pass on to the target or recipient of those messages, and (b) the material to be conveyed is educational content, with the goal of facilitating the learning process.

Educational media encompass everything designed, programmed, and aimed at delivering the content of a lesson's message to stimulate students' interest, thoughts, attention, feelings, and behavior in the teaching and learning process to achieve predetermined learning objectives [25], [26], [27]. So, Arabic language educational media are designed, programmed, and aimed at making the material of the Arabic language easily understood.

A comic is an art form that utilizes non-moving images arranged in a sequence to form a narrative. Comics are usually printed on paper and accompanied by text. Comics can take various forms, ranging from strips in newspapers, magazine content, to standalone books. Comics can also be defined as a form of cartoon that portrays characters enacting a story sequentially. Comics are then connected with images designed to entertain readers, especially children. Comics can be defined as cartoons that depict characters and apply a sequential story closely related to images, designed to entertain readers. Comics are a form of storytelling presentation using a series of humorous images. Comic books provide simple, easily graspable stories, making them popular among both children and adults [15], [16], [17], [19], [20], [28].

Based on the above definitions, it can be concluded that comics are a series of illustrated stories accompanied by simple text that clarifies the visual presentation. The images in comics serve as a medium for describing the story, allowing readers not only to imagine the characters and settings but also to convey messages/information from the author/illustrator to readers of various ages.

The term "model development" can be understood as an effort to expand a situation or scenario in a structured manner towards a more complete or improved state. The development design aligns with the ADDIE model, a instructional design model used to create a comprehensive learning system. The development design in the ADDIE model comprises five stages of development, which are explained as follows:

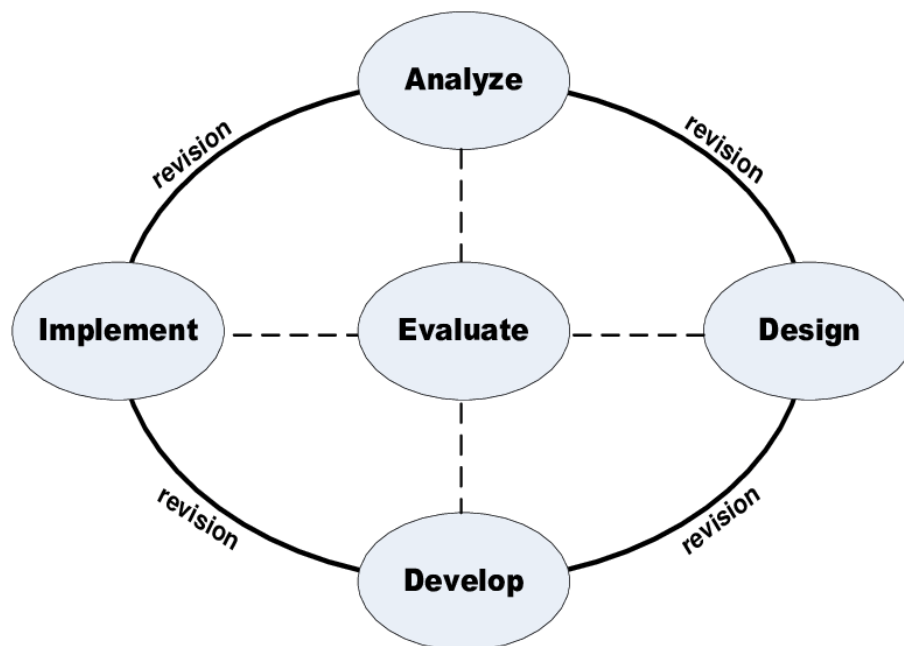


Figure 1. ADDIE Model Development Process

### *Analysis*

Analysis is the stage where needs assessment is performed, problems are identified, and task analysis is conducted. The analysis phase is a process of identifying what will be learned by the learners, which involves conducting a needs assessment. Therefore, the output generated includes characteristics or profiles of prospective learners, gap identification, needs identification, and detailed task analysis based on those needs.

Needs assessment is conducted to understand the potential and issues within the school's teaching process. In this case, the researcher conducted interviews with Arabic Language teachers. The potential found here includes the availability of facilities that can support classroom learning, such as LCD projectors, laptops for each teacher, and guidebooks for each student at MTs Al-Hikmah Bandar Lampung. However, the issue faced is the suboptimal utilization of the available facilities at the school. The use of digital comics as a media can enhance students' reading interest during learning, as digital comics are practical media, particularly because they present dialogue-rich images that can captivate students' attention during qira'ah lessons.

### *Design*

The design process begins by creating a digital comic media for teaching the qira'ah maharah with material about "البيت" (the house). The steps involved are as follows:

1. Crafting the storyline script.
2. Designing character figures using Photoshop.

3. Designing the comic's background using Photoshop, while the Arabic text is typed using MS Word.
4. Transforming the story layout into a digital book format using a flipbook application.
5. Adding audio narration based on the text content.
6. Providing translations using icons within the flipbook application.
7. Exporting the media into an HTML/web format for easy access.
8. Clicking "Publish online," logging in, entering the media title, and then clicking "publish" to complete the process.



**Figure 2.** (a) Product cover display. (b) Product content display.

### *Development*

After the completion of the creation of the media, the next step involves assessing the feasibility of the digital comic media. This evaluation is carried out by media experts, subject matter specialists, and incorporates responses from both students and teachers.

#### *Evaluation of Feasibility of Digital Comic Media Based on Media Experts*

Validation by media experts is conducted by two media specialists who assess three aspects: language, graphics, and presentation. According to the assessment of the first validator, the media receives a validation score of 95%, categorizing it as highly feasible. Meanwhile, the second validator awards a validation score of 93.2%, also within the highly feasible criteria. Consequently, the average validation percentage is 94.1%.

#### *Evaluation of Feasibility of Digital Comic Media Based on Subject Matter Specialists*

Validation by subject matter specialists involves two experts evaluating two aspects: content/material and instructional aspect. The evaluation results from the first validator indicate a

rating score of 94%, falling into the category of highly feasible. The second validator provides a score of 88%, also within the highly feasible criteria. Therefore, the average validation score by subject matter specialists is 91%.

#### *Evaluation of Feasibility of Digital Comic Media Based on Teacher Assessment*

Teacher assessment of the digital comic media is based on their feedback. The evaluation for content receives an average percentage score of 95%, categorized as highly feasible. The instructional aspect obtains an average score of 100%, also within the highly feasible category. Language and effectiveness aspects each garner an average score of 100% and 90%, respectively, both within the highly feasible category.

Based on data analysis, these findings align with the research conducted by Panji, which demonstrates that the use of comics in the learning process can enhance learning outcomes from 43% to 93%. Indriani Mei Listiyani's research further confirms the suitability of using comic-based accounting learning media. The assessment scores from subject matter specialists reach 87.5%, the average media expert rating is 92%, and field testing scores reach 92.5%. Consequently, it can be concluded that this comic-based learning media is highly suitable for educational purposes.

#### *Implementation*

The revised product, following the suggestions and feedback from experts, proceeds to the implementation stage. During this implementation phase, the revised product is introduced to the students through a series of testing stages. These tests serve to assess the media's feasibility and gauge the responses of both students and teachers regarding the attractiveness of the developed media. In this process, the researcher employs both small group and large group testing.

The media testing is carried out in two distinct stages: firstly, with a small group, and secondly, with a larger group. The evaluation during these tests focuses on the presentation and delivery aspects. Based on the small group testing involving 10 students, the media receives an average percentage score of 87%, categorizing it as highly feasible. Subsequently, during the large group testing involving 28 students, the media achieves an average percentage score of 91%, also falling within the highly feasible category.

#### *Evaluation*

The final stage in the ADDIE model is evaluation. In this study, only formative evaluation is conducted, as this type of evaluation is linked to the development research phase aimed at improving the resulting product.

## **CONCLUSION**

This study has effectively demonstrated the potential of digital comic media in enhancing Qira'ah proficiency among seventh-grade students at MTs AL-Hikmah Bandar Lampung. By employing the ADDIE model comprising Analysis, Design, Development, Implementation, and Evaluation stages the research successfully developed a feasible and engaging learning tool. Validation from media and content experts, yielding scores of 94.1% and 91%, respectively, affirms the high quality and appropriateness of the developed media. Additionally, the positive responses from students (91%) and teachers (95.5%) further substantiate the media's effectiveness in improving engagement

and learning outcomes. These findings underscore the significance of incorporating digital media into language education, particularly in enhancing reading skills such as Qira'ah. The results suggest that digital comic media can be a valuable pedagogical resource, offering an interactive and enjoyable learning experience that supports the development of essential language skills. Further research is recommended to explore the long-term impact of such digital tools on language acquisition and their applicability across diverse educational settings.

## AUTHOR INFORMATION

### *Corresponding Author*

**Diana Novita** – Department of Arabic Education, Universitas Islam Negeri Raden Intan Lampung (Indonesia);

 [orcid.org/0009-0001-0312-7483](https://orcid.org/0009-0001-0312-7483)

Email: [novitadiana817@gmail.com](mailto:novitadiana817@gmail.com)

### *Authors*

**Diana Novita** – Department of Arabic Education, Universitas Islam Negeri Raden Intan Lampung (Indonesia);

 [orcid.org/0009-0001-0312-7483](https://orcid.org/0009-0001-0312-7483)

**Almaida Fitra Hamdala** – MTs Al – Hikmah Bandar Lampung (Indonesia);

 [orcid.org/0009-0006-4227-7237](https://orcid.org/0009-0006-4227-7237)

## AUTHOR CONTRIBUTION

D.N. was responsible for the conceptualization of the study, methodology development, validation, formal analysis, investigation, data curation, and the preparation of the original draft. She also contributed to the visualization and project administration. A.F.H. contributed to the conceptualization, validation, and writing – review & editing. Additionally, she provided supervision and was involved in funding acquisition. Both authors contributed equally to the design, development, and evaluation of the digital comic media, as well as to the analysis and interpretation of the data.

## CONFLICT OF INTEREST

"The authors declare no conflict of interest."

## REFERENCES

- [1] R. Tsai et al., "COVID-19 Vaccine Hesitancy and Acceptance Among Individuals With Cancer, Autoimmune Diseases, or Other Serious Comorbid Conditions: Cross-sectional, Internet-Based Survey," *JMIR Public Heal. Surveill.*, vol. 8, no. 1, p. e29872, Jan. 2022. <https://doi.org/10.2196/29872>
- [2] I. Guellil, A. Adeel, F. Azouaou, S. Chennoufi, H. Maafi, and T. Hamitouche, "Detecting hate speech against politicians in Arabic community on social media," *Int. J. Web Inf. Syst.*, vol. 16, no. 3, pp. 295-313, Jul. 2020. <https://doi.org/10.1108/IJWIS-08-2019-0036>
- [3] A. Y. Muaad et al., "Artificial Intelligence-Based Approach for Misogyny and Sarcasm

- Detection from Arabic Texts," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1-9, Mar. 2022. <https://doi.org/10.1155/2022/7937667>
- [4] M. A. Aminullah, F. Al Azmi, and D. Jalal, "Pembelajaran Bahasa Arab Mandiri Melalui Platform Aplikasi Tiktok Sebagai Tren Belajar Masa Kini," *Al Mi'yar J. Ilm. Pembelajaran Bhs. Arab dan Kebahasaaraban*, vol. 5, no. 2, p. 283, Oct. 2022. <https://doi.org/10.35931/am.v5i2.1219>
- [5] R. E. Mayer, "Computer Games in Education," *Annu. Rev. Psychol.*, vol. 70, no. 1, pp. 531-549, Jan. 2019. <https://doi.org/10.1146/annurev-psych-010418-102744>
- [6] J. Andrew, S. Henry, A. N. Yudhisthira, Y. Arifin, and S. D. Permai, "Analyzing the Factors that Influence Learning Experience through Game Based Learning using Visual Novel Game for Learning Pancasila," *Procedia Comput. Sci.*, vol. 157, no. March, pp. 353-359, 2019. <https://doi.org/10.1016/j.procs.2019.08.177>
- [7] M. Nurtanto, N. Kholifah, A. Masek, P. Sudira, and A. Samsudin, "Crucial problems in arranged the lesson plan of vocational teacher," *Int. J. Eval. Res. Educ.*, vol. 10, no. 1, p. 345, Mar. 2021. <https://doi.org/10.11591/ijere.v10i1.20604>
- [8] C. Graeske and S. A. Sjöberg, "VR-Technology in Teaching: Opportunities and Challenges," *Int. Educ. Stud.*, vol. 14, no. 8, p. 76, 2021. <https://doi.org/10.5539/ies.v14n8p76>
- [9] M. B. N. Wajdi, Iwan Kuswandi, Umar Al Faruq, Z. Zuhijra, K. Khairudin, and K. Khoiriyah, "Education Policy Overcome Coronavirus, A Study of Indonesians," *EDUTECH J. Educ. Technol.*, vol. 3, no. 2, pp. 96-106, 2020. <https://doi.org/10.29062/edu.v3i2.42>
- [10] J. Radianti, T. A. Majchrzak, J. Fromm, and I. Wohlgenannt, "A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda," *Comput. Educ.*, vol. 147, p. 103778, Apr. 2020. <https://doi.org/10.1016/j.compedu.2019.103778>
- [11] A. W. Ritonga, S. Zulfida, M. Ritonga, E. Ardinal, and D. Susanti, "The Use of E-learning as an Online Based Arabic Learning Media for Students," *J. Phys. Conf. Ser.*, vol. 1933, no. 1, p. 012127, Jun. 2021. <https://doi.org/10.1088/1742-6596/1933/1/012127>
- [12] Z. Gkoutsioukosta and V. Apostolidou, "Building Learning Communities through Digital Storytelling," *Soc. Sci.*, vol. 12, no. 10, p. 541, Sep. 2023. <https://doi.org/10.3390/socsci12100541>
- [13] U. Hijriyah, S. Basyar, K. Koderi, E. Erlina, M. Aridan, and M. S. Hidayatullah, "Pengembangan Media Pembelajaran Bahasa Arab Berbasis Android Untuk Mahasiswa Kelas 8 SMP," *Al Mi'yar J. Ilm. Pembelajaran Bhs. Arab dan Kebahasaaraban*, vol. 5, no. 2, p. 239, Oct. 2022. <https://doi.org/10.35931/am.v5i2.1352>
- [14] G. Linardatos and D. Apostolou, "Investigating high school students' perception about digital comics creation in the classroom," *Educ. Inf. Technol.*, vol. 28, no. 8, pp. 10079-10101, Aug. 2023. <https://doi.org/10.1007/s10639-023-11581-3>
- [15] D. Axelrod and J. Kahn, "'Then You go to Snap': Multimodal Making of Digital Comics in a Language Arts High School Classroom," *Educ. Technol. Res. Dev.*, Sep. 2023. <https://doi.org/10.1007/s11423-023-10285-2>
- [16] Y. Fitria, A. Malik, M. Mutiaramses, S. H. Halili, and R. Amelia, "Digital comic teaching materials: It's role to enhance student's literacy on organism characteristic topic," *Eurasia J. Math. Sci. Technol. Educ.*, vol. 19, no. 10, p. em2333, Oct. 2023. <https://doi.org/10.29333/ejmste/13573>
- [17] A. Marini et al., "The effect of digital comics on improving reading literacy in Indonesian language learning," 2023, p. 020060. <https://doi.org/10.1063/5.0141392>
- [18] R. R. Setyowati, S. Rochmat, and Aman, "The Effect of Digital Learning of Historical Comics on Students' Critical Thinking Skills," *Int. J. Inf. Educ. Technol.*, vol. 13, no. 5, pp. 818-824, 2023. <https://doi.org/10.18178/ijiet.2023.13.5.1873>

- [19] W. A. Aeni and A. Yusupa, "Model Media Pembelajaran E-Komik Untuk SMA," *J. Kwangsan*, vol. 6, no. 1, p. 1, Jun. 2018. <https://doi.org/10.31800/jurnalkwangsan.v6i1.66>
- [20] U. Hijriyah, M. Aridan, A. N. Mizan, A. Dealintang, and L. Yuniarti, "Development of Digital Comic Media for Learning Qira'ah for Fifth Grade Students of Madrasah Ibtidaiyah," *Arab. J. Bhs. Arab*, vol. 6, no. 2, p. 693, Nov. 2022. <https://doi.org/10.29240/jba.v6i2.4361>
- [21] R. Egilistiani and R. Prayuana, "Students' Responses through the Use of Edpuzzle as an Application in Achieving Listening Comprehension," *Linguist. J. Linguist. Lang. Teach.*, vol. 7, no. 2, p. 63, Dec. 2021. <https://doi.org/10.29300/ling.v7i2.5469>
- [22] I. I. Irvy, "Understanding the Learning Models Design for Indonesian Teacher," *Int. J. Asian Educ.*, vol. 1, no. 2, pp. 95-106, 2020. <https://doi.org/10.46966/ijae.v1i2.40>
- [23] E. M. Rahayu and P. Bhaskoro, "Interactive Media Edpuzzle and Its Implementation in Teaching Vocabulary in New Normal Era," *Jo-ELT (Journal English Lang. Teaching) Fak. Pendidik. Bhs. Seni Prodi Pendidik. Bhs. Ingg. IKIP*, vol. 9, no. 1, p. 1, Jun. 2022. <https://doi.org/10.33394/jo-elt.v9i1.4425>
- [24] S. C. Domyancich-Lee, L. R. Cleeland, and J. S. McCleary, "Teaching Note-Comics in the Classroom: Teaching With Graphic Novels," *J. Soc. Work Educ.*, vol. 58, no. 3, pp. 579-585, Jul. 2022. <https://doi.org/10.1080/10437797.2021.1942353>
- [25] H. Habiddin, M. Ashar, A. Hamdan, and K. R. Nasir, "Digital Comic Media for Teaching Secondary School Science," *Int. J. Interact. Mob. Technol.*, vol. 16, no. 03, pp. 159-166, Feb. 2022. <https://doi.org/10.3991/ijim.v16i03.28967>
- [26] W. Warman, S. Suryaningsi, and W. G. Mulawarman, "Overcoming obstacles in implementing 2013 curriculum policy," *Cypriot J. Educ. Sci.*, vol. 16, no. 3, pp. 967-980, Jun. 2021. <https://doi.org/10.18844/cjes.v16i3.5770>
- [27] I. Damopolii, T. Lumembang, and G. O. İlhan, "Digital Comics in Online Learning During COVID-19: Its Effect on Student Cognitive Learning Outcomes," *Int. J. Interact. Mob. Technol.*, vol. 15, no. 19, p. 33, Oct. 2021. <https://doi.org/10.3991/ijim.v15i19.23395>
- [28] E. F. Fahyuni and I. Fauji, "Pengembangan Komik Akidah Akhlak Untuk Meningkatkan Minat Baca dan Prestasi Belajar Siswa di Sekolah Dasar," *Halaqa Islam. Educ. J.*, vol. 1, no. 1, pp. 17-26, Jun. 2017. <https://doi.org/10.21070/halaqa.v1i1.817>