

Digital Comic "My Dream is My Motivation" as a Group Guidance Medium to Increase Learning Motivation

Agus Dwiyanturi¹, Budi Astuti²

^{1,2}Faculty of Education, Yogyakarta State University, Yogyakarta

agusdwiyanturi@gmail.com

ARTICLE INFO

Article History:

Received : 12-05-2026

Revised : 11-07-2026

Accepted : 12-07-2026

Online : 15-07-2026

Keywords:

Digital Comics;

Learning Motivation;

Group Guidance.



ABSTRACT

This study aims to determine the feasibility, practicality, and effectiveness of the My Dreams is My Motivation Digital Comic as a group guidance medium to increase learning motivation in junior high school students. This study uses the R&D method with the ADDIE development model. The subjects in this study were 2 guidance and counseling teachers and 6 students in the initial field trial. The operational group test consisted of 40 students. Data collection techniques and instruments used a media feasibility test scale, a material feasibility test scale, a guidance and counselling teacher response questionnaire, a student response questionnaire, and a learning motivation scale. The results of this study show that 1) Digital Comics Eligibility for "My Dreams is My Motivation", according to media experts, was categorised as "very feasible" with a percentage of 4.15%, the assessment of material experts was categorised as "very feasible" with a percentage of 4.36%; 2) Practicality of Digital Comics "My Dreams is My Motivation." According to teachers, guidance and counselling are categorised as "very practical" with a percentage of 4.36%; 3) Digital Comic Effectiveness "My Dreams is My Motivation" is very effective in increasing students motivation to learn.



Crossref



This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license

1. INTRODUCTION

Learning motivation is widely recognized as a fundamental psychological factor that influences students academic success and engagement in the learning process. It refers to the internal energy, drive, or desire (Kalyar, Ahmad, & Kalyar, 2018). That encourages students to initiate, sustain, and direct learning behaviors toward achieving specific educational goals (Izmi, Saenab, & Maryati, 2023). Learning motivation also encompasses the beliefs and emotions that shape students learning behaviors and contribute to improved academic outcomes (Marisa, 2019). Accordingly, motivation serves as a driving force that encourages students to actively participate in learning activities and strive for optimal academic performance (Hasibuan & Afrita, 2022).

Students with high learning motivation are more likely to engage consistently in learning activities, demonstrate persistence when facing academic challenges, and employ effective learning strategies to achieve their educational goals (Brophy, 2010). Celik & Yildis (2019) reported that high learning motivation enhances students participation in learning activities, whereas low motivation increases the risk of academic failure. Rahman, Windayana, & Agustina (2022) identified learning motivation as a key determinant of academic achievement. These findings emphasize the critical role of learning motivation in improving academic achievement and learning engagement. Ryan & Deci (2000) between two types of motivation: intrinsic and extrinsic.

Teachers play a pivotal role in fostering students learning motivation. However, without effective motivational strategies, teachers are unlikely to enhance students motivation despite their knowledge and teaching competencies (Altun & Tahir, 2020). Teachers who provide positive emotional support and maintain high expectations are more likely to promote students motivation and engagement (An, Yu, & Xi, 2022). Students often perceive conventional learning approaches as uninteresting and ineffective, highlighting the need for more engaging instructional strategies to foster learning motivation (Widayanti & Muntaha, 2018).

Students learning motivation is influenced by various educational factors, including curriculum design, instructional practices, learning activities, digital technology integration, assessment approaches, and the learning environment (Hartnett, 2016). In particular, the use of engaging and effective instructional media has been shown to stimulate students interest and encourage active participation during learning activities (Fadillah, 2018). Nafala (2022) further argued that selecting appropriate learning media significantly contributes to increasing students learning motivation, which subsequently affects their academic achievement.

Preliminary observations and interviews conducted with guidance and counseling teachers in SMPN 2 Kota Jambi, SMPN 8 Kota Jambi, SMPN 11 Kota Jambi, and SMPN 12 Kota Jambi revealed that a considerable number of students exhibited indications of low learning motivation. These findings were supported by interviews with school counselors and a needs assessment conducted by the researchers. The results revealed that 67% of students reported declining academic performance, 52% had difficulty maintaining concentration during classroom learning, 36% were reluctant to participate in classroom discussions, 44% frequently submitted assignments late or failed to submit them, and 69% expressed pessimism about achieving their future aspirations due to low learning motivation. Furthermore, student interviews indicated that classroom instruction remained predominantly teacher-centered. Teachers are required to create a learning environment that is conducive, creative, and innovative for instance, by using engaging learning media to make it easier for students to grasp the material being presented (Alfonso, 2021). Learning media play a role in enlivening the learning atmosphere (Lian, Oksatianti, Risdianto, & Mayub, 2021).

Enhancing students learning motivation requires systematic support from educational professionals, particularly guidance and counseling teachers through group guidance. Group guidance is a developmental that utilizes group dynamics to facilitate active participation among members in discussing specific topics, with the objective of enhancing students personal, social, academic, and career development while broadening their knowledge, attitudes, and essential life skills (Rismi, Yusuf, & Firman, 2022).

The effectiveness of group guidance can be further enhanced through the integration of instructional media. The use of media creates a more engaging, interactive, and less monotonous learning environment, enabling students to participate more actively and develop their learning potential. According to POP BK (Ministry of Education and Culture, 2016), guidance and counseling may be delivered through various media, including informational media, printed media, and digital media. Appropriate media utilization enables students to understand counseling materials more effectively while improving the overall quality of counseling. Furthermore, integrating digital technology into educational settings facilitates teachers' explanations and enhances students comprehension of learning materials (Saini & Salim Al-Mamri, 2019).

To develop an intervention that corresponds with students preferences and characteristics, the researchers conducted a needs assessment to identify the most suitable digital media for guidance. The results revealed that 86% of students preferred digital comics. Consequently, developing digital comics is expected to provide counselors with a more engaging medium that facilitates students understanding of counseling materials and ultimately enhances their learning motivation.

The development of digital comics also reflects the need to align educational innovation with rapid technological advancement (Widyasari & Nurcahyani, 2021). Digital comics integrate visual illustrations, attractive color schemes, typography, and narrative storytelling into an electronic format, making educational information more accessible and easier for students to understand (Triadi & Rahman, 2019). Through contextual stories and relatable characters, digital comics can increase students interest, emotional engagement, and comprehension of counseling materials. In this study, the digital comic entitled *My Dreams is My Motivation* was specifically designed as a medium for group guidance. The development of this digital comic is expected to provide guidance and counseling teachers with an innovative, technology-based medium for enhancing junior high school students learning motivation.

B. METHODS

This research is a type of development research, also known as Research and Development (R&D). The research and development method is a method used to produce a specific product and then test the effectiveness of the product produced (Sugiyono, 2019). This research adopts the ADDIE research and development model, which has five stages: Analyze, Design, Develop, Implement, and Evaluate.

The subjects in this study were eighth-grade students from SMP N 2 Jambi City and SMP N 8 Jambi City as the control group, while SMP N 11 Jambi City and SMP N 12 Jambi City served as the experimental group. The subjects were selected purposively, with 10 students from each school, resulting in a total of 40 students in the guidance groups. The data collection techniques used in this study included interviews, questionnaires, and scales. The research instruments were evaluated using validity and reliability tests to ensure their appropriateness and consistency. After the *My Dreams is My Motivation Digital Comic* had been developed, it underwent expert validation by both a media expert and a subject matter expert to assess its feasibility as a digital medium for group guidance.

Furthermore, data analysis was conducted to obtain qualitative and quantitative data. The collected data were then classified into several categories. This study used the steps of quantitative data analysis techniques based on the learning motivation scale as explained by Azwar (2017).

Determine the highest score (S_{max}) and lowest score (S_{min})

S_{max} = Number of test items x maximum score

S_{min} = Number of test items x minimum score

Determine the ideal average score (μ)

$\mu = \frac{1}{2} (S_{max} + S_{min})$

Calculate the standard deviation (σ)

$\Sigma = \frac{1}{6} (S_{max} - S_{min})$

Table 1. Categories of Learning Motivation

Formula	Category
$X \leq (\mu) - 1,5 \sigma$	Very Low
$(\mu) - 1,5 \sigma < X \leq (\mu) - 0,5 \sigma$	Low
$(\mu) - 0,5 \sigma < X \leq (\mu) + 0,5 \sigma$	Moderate
$(\mu) + 0,5 \sigma < X \leq (\mu) + 1,5 \sigma$	High
$(\mu) + 1,5 \sigma < X$	Very High

The analysis of media suitability assessment data was carried out by media experts, subject matter experts, practitioners, and students. The suitability analysis used a quantitative method with a Likert scale, with the following scoring system:

Table 2. Provisions for Grading

Category	Score
SS (Highly Suitable)	5
S (Suitable)	4
KS (Less Suitable)	3
TS (Not Suitable)	2
STS (Highly Not Suitable)	1

The data obtained was then summed and grouped according to existing categories, then the average score was calculated using the following formula.

$$\bar{x} = \frac{\sum x}{N} \quad (1)$$

Explanation:

$\bar{x}$ = Average value

$\sum x$ = Total valuse

N = Number of subject

After obtaining the average value, it was converted into product suitability categories based on Widoyoko's classification table to obtain conclusions about media quality. According to Widoyoko (2016), the classification table was compiled based on the highest and lowest scores, the number of classes, and the distance between intervals, so that the conversion calculation can be seen as follows:

Highest score (ideal) = 5

Lowest score = 1

Number of classes/classifications = 5

Interval distance = $(5-1)/5 = 0.8$

Based on the above calculations, a classification table with an interval distance of 0.8 is obtained, which is tabulated in the following table.

Table 1. Classification of Expert Eligibility

Average Score Range	Classification
>4,20 - 5,00	Highly Acceptable
3,40 - 4,20	Acceptable
2,60 - 3,40	Less Acceptable
1,80 - 2,60	Unacceptable
1,00 - 1,80	Highly Unacceptable

The pretest and posttest data analysis was conducted by the researcher using the Wilcoxon test data analysis technique, which sought to identify differences between the pretest and posttest. This analysis was carried out to determine the effectiveness of using My Dreams is My Motivation Digital Comics as a medium in group guidance to increase student motivation to learn.

C. RESULT AND DISCUSSION

The result of this research and development is the My Dreams is My Motivation Digital Comic media. The steps in developing the My Dreams is My Motivation Digital Comic followed the ADDIE method.

1. Analyse

At the Analyse stage, an instructional needs analysis was conducted at SMP Negeri 2 Jambi, SMP Negeri 8 Jambi, SMP Negeri 11 Jambi, and SMP Negeri 12 Jambi. The results of the needs analysis indicated that 68% of the students preferred comics as a learning medium. In addition, the analysis identified several challenges faced by guidance and counseling teachers in implementing group guidance. To address these challenges, the development of a digital comic was proposed as an appropriate solution to support the implementation of group guidance and enhance the learning motivation of eighth-grade students.

2. Design

During the Design phase, the researchers designed the My Dreams is My Motivation comic in a digital format. The digital comic was systematically developed by determining the storyline, designing the characters and visual layout, organizing the learning content, and integrating guidance materials aimed at fostering students learning motivation. Then create a comic media framework. The media framework design is presented in the following table.

Table 2. Digital Comic Framework My Dreams is My Motivation

No	Component	Description
1	Introduction	Comic Title Character Introduction Four Episodes of a Digital Comic Titled "My Dreams are My Motivation"
2	Content	Episode 1: Having the drive to achieve something Episode 2: Being committed to learning Episode 3: Taking initiative in learning Episode 4: Believing in your abilities (Optimism)

3. Development

The development phase is the product realization stage. Comic media development refers to the steps outlined by Maharsi (2011), namely creating verbal and visual characters, sketching panel layouts, illustrations, text balloons, inking, coloring, creating covers, comic book layouts, and the finishing stage. In the process of developing this digital comic, the researcher was also assisted by the use of the Canva Pro application to design the cover and supporting images in this digital comic. After the My Dreams is My Motivation Digital Comic was compiled, it was then validated by media experts and subject matter experts with the aim of determining the feasibility of digital comics as a group guidance medium to increase the learning motivation of junior high school students.

The quality of the comic media was assessed by media experts based on three aspects: comic appearance, comic anatomy, and design and color. The following are the results of the feasibility assessment by media experts.

Table 5. Final Data on the Feasibility Assessment of My Dreams is My Motivation Digital Comic by Aspect by Media Experts

No	Assessment Aspect	Average Score	Category
1.	Comic Appearance	4,60	Very Worthy
2.	Comic Anatomy	4,12	Worthy
3.	Design and Color	3,75	Worthy
Average Score		4,15	Worthy

Based on the media expert's assessment, the final score was 4.15, which means that the results obtained are classified as "Appropriate."

The quality of the material in the My Dreams is My Motivation Digital Comic was reviewed based on five aspects, namely the appropriateness of the material, the accuracy of the material, the relevance of the material, the language, and the characters. The following is the data from the appropriateness assessment by the material expert.

Table 6. Data on the Results of the Feasibility Assessment of the Digital Comic My Dreams is My Motivation Per Aspect by Subject Matter Experts

No	Assessment Aspect	Average Score	Category
1.	Material Suitability	4,33	Very Worthy
2.	Material Accuracy	4,00	Worthy
3.	Material Up-to-Date	4,00	Worthy
4.	Language	4,50	Very Worthy
5.	Character	5,00	Very Worthy
Average Score		4,36	Very Worthy

Based on the expert assessment of the material, a final score of 4.36 was obtained, which means that the results obtained are in the "Highly Recommended" category.

The quality of the material and media in the My Dreams is My Motivation Digital Comic was assessed by practitioners, namely guidance and counseling teachers, who reviewed the comic in terms of its appearance, anatomy, design and color, material suitability, material accuracy, material relevance, language, and characters.

Table 7. Data on the Practicality Assessment Results of the Digital Comic My Dreams is My Motivation by Practitioners (Guidance and Counseling Teachers)

No	Assessment Aspect	Average Score	Kriteria
1	Material Suitability	4,16	Practical
2	Material Accuracy	4,12	Practical
3	Material Up-to-date	4,50	Very Practical
4	Language	4,50	Very Practical
5	Character	4,75	Very Practical
6	Comic Appearance	4,30	Very Practical
7	Comic Anatomy	4,18	Practical
8	Design and Color	4,37	Very Practical
Average Score		4,36	Very Practical

Based on the assessment results from the guidance and counseling teacher, a final score of 4.61 was obtained, which falls into the "Very Practical" category. A summary of the

feasibility assessment results by media experts, subject matter experts, and guidance and counseling teachers is presented in the following table.

Table 8. Summary of My Dreams is My Motivation Digital Comic Assessment

No	Subject Expert	Score	Criteria
1.	Media Expert	4,15	Worthy
2.	Subject Matter Expert	4,36	Very worthy
3.	Practitioner (Guidance and Counseling Teacher)	4,36	Very Practical
Average		4,29	Sangat Praktis

The average assessment score from experts and guidance and counseling teachers was 4.29 with the criteria (Very Practical). Therefore, it can be concluded that the My Dreams is My Motivation Digital Comic is very practical to use as a group guidance medium to increase learning motivation.

4. Implementation and Evaluation

My Dreams is My Motivation Digital Comic product, which has been declared feasible in assessments by media experts, subject matter experts, and guidance and counseling teachers, was then tested on students to determine their response to the developed product. Next, the product implementation phase in two stages, that is a field trial and an effectiveness trial of the My Dreams is My Motivation Digital Comic. The field trial involved 6 eighth-grade students, consisting of 3 students from SMP N 8 Kota Jambi and 3 students from SMP N 2 Kota Jambi. The results of the student assessment in the field trial can be seen in the following table.

Table 9. Data on Student Responses in Field Trials

No	Assessment Asp	Total Score	Criteria
1	Media Effectiveness	4,28	Effective
2	Media Quality	4,45	Very Effective
Average Score		4,36	Very Effective

Based on the results of student responses in the field trial, a final score of 4.36 was obtained, which falls into the "Very Good" category.

Next, an effectiveness test was conducted using a quasi-experimental method with a "Post-Test Control Group Design" research design. The effectiveness test was conducted by the researcher by administering a pretest and posttest to determine the difference before and after the treatment was given. The Wilcoxon test was used to compare and see the difference between the pretest and posttest data. The results of the Wilcoxon test on the My Dreams is My Motivation Digital Comic in the control and experimental groups are presented in the following table.

Table 10. Wilcoxon Test Results for the Control Group

	Posttest Kontrol - Pretest Kontrol
Z	-3.940 ^b
Asymp. Sig. (2-tailed)	.000

Based on the Wilcoxon test results in the control group, a Z value of -3.940 with Asymp. Sig 0.000 was obtained. This shows that the value $0.000 < 0.05$, so it can be concluded that there is a difference in learning motivation results in the control group before and after the service was provided.

Table 11. Descriptive Statistics Results on the Pretest and Posttest of the Control Group

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Kontrol	20	53	64	59.80	2.707
Posttest Kontrol	20	61	70	66.55	2.164
Valid N (listwise)	20				

Based on the table in Descriptive Statistics, it is known that the number of samples used in this control group is $N = 20$ samples. The mean value on the pretest was 59.80 and the mean value on the posttest was 66.55. The mean value in the posttest stage was greater than that in the pretest stage, namely $66.55 > 59.80$. This shows that there was an increase from the pretest to the posttest results of 6.75, indicating an increase in the posttest stage, but this increase was not very significant compared to the experimental group.

Table 12. Wilcoxon Test Results for the Experimental Group

Eksperimental posttest-Eksperimental Pretest	
Z	-3.930 ^b
Asymp. Sig. (2-tailed)	.000

Based on the Wilcoxon test results in the control group, a Z value of -3.930 with Asymp. Sig 0.000 was obtained. This shows that the value $0.000 < 0.05$, so it can be concluded that there is a difference in learning motivation results in the experimental group before and after treatment.

Table 13. Descriptive Statistics Results on the Pretest and Posttest of the Experimental Group

	N	Minimum	Maximum	Mean	Std. Deviation
Eksperimental Pretest	20	56	65	60.25	2.770
Eksperimental posttest	20	80	92	86.30	3.785
Valid N (listwise)	20				

Based on the table in Descriptive Statistics, it is known that the number of samples used in this control group is $N = 20$ samples. The mean value on the pretest is 60.25 and the mean value on the posttest is 86.30. The mean value in the posttest stage is greater than that in the pretest stage, namely $60.25 < 86.30$. This indicates that there is an increase from the pretest and posttest results of 26.05, which indicates an increase in the posttest stage. Therefore, it can be concluded that the My Dreams is My Motivation Digital Comic has an effect on learning motivation in the experimental group.

Based on the results of Descriptive Statistics, it is known that the results and differences in the control group, namely the pretest mean value of 59.80 and the posttest mean value of 66.55, show an increase from the pretest and posttest results of 6.75, which means that conventional methods such as lectures and discussions are not effective in increasing learning motivation. Meanwhile, in the experimental group, the mean pretest score was 60.25 and the posttest score was 86.30, representing an increase of 26.05 from the pretest to the posttest, which means that My Dreams is My Motivation Digital Comics are effective in increasing learning motivation. These results show that My Dreams is My Motivation Digital Comics are an effective group guidance medium for increasing the learning motivation of students at junior high schools in Jambi City.

D. CONCLUSION AND SUGGESTIONS

Based on the result, several conclusions can be drawn regarding the development of the My Dreams Is My Motivation Digital Comic as a medium for group guidance to enhance junior high school students learning motivation in Jambi City. The My Dreams Is My Motivation Digital Comic was found to be "highly feasible" for use as a medium in group guidance to enhance students learning motivation. The media expert evaluation classified the digital comic as "feasible" with score of 4.15, and 4.36 for the subject matter expert evaluation categorized it as "highly feasible," indicating that the developed product meets the required standards in terms of both media design and content quality. The My Dreams Is My Motivation Digital Comic, together with its accompanying user guide, was evaluated by two guidance and counseling teachers and was classified as "highly practical" with score 4.36. These findings indicate that the digital comic is easy to use and can be effectively implemented by school counselors as a medium for conducting group guidance aimed at enhancing students learning motivation. The results of the pretest and posttest demonstrated that the My Dreams Is My Motivation Digital Comic was "effective" in improving students learning motivation. Therefore, the developed digital comic can serve as an effective digital medium for delivering group guidance to enhance the learning motivation of junior high school students.

Suggestion Guidance and counseling teacher's should use the "My Dreams is My Motivation" Digital Comic as an innovation aimed at creating a more enjoyable learning atmosphere to improve the quality of education, especially in terms of learning guidance counseling. Students should use the "My Dreams is My Motivation" Digital Comic individually or in groups as a resource for self-development and understanding of learning motivation.

REFERENCES

- Alfonso. (2021). Learning motivation of primary education students in 3T areas of Bengkayang Regency during the COVID-19 pandemic.. *Jurnal Pendidikan Informatika Dan Sains*, 10(2), 133-143. <https://doi.org/10.31571/saintek.v10i2.3379>
- Altun, M., & Tahir, R. (2020). Motivational Techniques in EFL Classrooms in the Universities of Kurdistan. *International Journal of Social Sciences & Educational Studies*, 7(1). <https://doi.org/10.23918/ijsses.v7i1p88>
- An, F., Yu, J., & Xi, L. (2022). Relationship between perceived teacher support and learning engagement among adolescents: Mediation role of technology acceptance and learning motivation. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.992464>
- Azwar, S. (2017). *Preparation of psychological scales 2nd Edition*. Pustaka Pelajar.
- Brophy, J. (2010). *Motivating Student To Learn (Third Edition)* (Third Edition). Taylor & Francis.
- Celik, B., & Yildis, Y. (2019). The Role of Foreign Language Culture on Teaching the Language and Learner Motivation. *International Journal of Social Sciences & Educational Studies*, 5(4). <https://doi.org/10.23918/ijsses.v5i4p150>
- Fadillah, A. (2018). The Development of Comic-Based Learning Media and Its Impact on Student Learning Motivation. *JTAM Jurnal Teori Dan Aplikasi Matematika*, 2(1), 36-42.
- Hartnett, M. (2016). *Motivation in Online Education*. Springer Nature.
- Hasibuan, M. S., & Afnita, A. (2022). The Effect of the CIRC and Learning Motivation on Reading Comprehension Skills for Junior High School Students. *Al-Ishlah: Jurnal Pendidikan*, 14(4), 5701-5708. <https://doi.org/10.35445/alishlah.v14i4.1816>
- Izmi, N., Saenab, S., & Maryati. (2023). The Implementation of Comic Media in Instruction to Enhance Students' Learning Motivation at SMP Negeri 16 Mandai. *JP-3 Jurnal Pemikiran Dan Pengembangan Pembelajaran*, 5(2).
- Kalyar, M. N., Ahmad, B., & Kalyar, H. (2018). Does teacher motivation lead to student motivation? The mediating role of teaching behavior. *Voprosy Obrazovaniya / Educational Studies Moscow*, (3), 91-119. <https://doi.org/10.17323/1814-9545-2018-3-91-119>

- Lian, B., Oksatianti, B. R., Risdianto, E., & Mayub, A. (2021). Need Analysis of MOOCs-Based Learning Media Development to Improve Student Motivation. *Al- Ishlah: Jurnal Pendidikan*, 13(2). <https://doi.org/10.35445/alishlah.v13i2>
- Maharsi, I. (2011). *Comics: A World of Limitless Creativity*. Kata Buku.
- Marisa, S. (2019). The influence of motivation on student learning and efforts to overcome learning difficulties.. *Jurnal Taushiah FAI-UISU*, 9(2).
- Nafala, M. (2022). Implementation of Comic Media in Instruction to Enhance Student Learning Motivation. *Al-Fikru : Jurnal Pendidikan Dan Sains*, 3(1), 114–130. <https://doi.org/10.55210/al-fikru.v3i1.571>
- Panduan Operasional Penyelenggaraan (POP) Bimbingan dan Konseling SMP. (2016). *2-panduan-bk-smp-2016ditjen-gtk-revisi-final*.
- Rahman, F. R., Windayana, H., & Agustina, I. O. (2022). The Influence of Study Groups on Fostering Learning Motivation Among Elementary School Students During the COVID-19 Pandemic. *Aulad: Journal on Early Childhood*, 4(3), 299–305. <https://doi.org/10.31004/aulad.v4i3.233>
- Rismi, R., Yusuf, M., & Firman, F. (2022). Group guidance to develop students' understanding of cultural values. *Journal of Counseling, Education and Society*, 3(1), 17. <https://doi.org/10.29210/08jces149300>
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Saini, D. K., & Salim Al-Mamri, M. R. (2019). Investigation of Technological Tools used in Education System in Oman. *Social Sciences and Humanities Open*, 1(1). <https://doi.org/10.1016/j.ssaho.2019.100003>
- Sugiyono. (2019). *Quantitative, Qualitative, and R&D Research Methods, 2nd Edition*. ALFABETA.
- Triadi, A., & Rahman, Y. (2019). Designing a webtoon story about doorstep culture. *DEMANDIA (Jurnal Desain Komunikasi Visual, Manajemen Desain Dan Periklanan)*, 04(01). <https://doi.org/10.25124/demandia.v0i0i.1283>
- Widayanti, A., & Muntaha, M. (2018). Islamic WEB comics as visual aid in teaching english for secondary school student. *Indonesian Journal of Islamic Literature and Muslim Society*, 3(1), 75–90. <https://doi.org/10.22515/islimus.v3i1.1298>
- Widoyoko, E. P. (2016). *Techniques for developing research instruments*. Pustaka Pelajar.
- Widyasari, N., & Nurcahyani, D. A. (2021). Development of E-Comic-Based Mathematics Teaching Materials on the Topic of Multiplication and Division with Realistic Mathematics Education (RME) Approach. *Kreano Jurnal Matematika Kreatif-Inovatif*, 12(2). <http://journal.unnes.ac.id/nju/index.php/kreano>