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IMPLEMENTATION OF RPG MAKER MV GAMES BASED ON LITERACY NUMERACY IN CLASS IV IPS MATERIAL TO FORM THE CHARACTER OF PANCASILA STUDENTS

Surayanah¹, Marsanda Avilia Putri², Fayruz Syamyllya Hasna Azizah³, Rida Nanda Kirana⁴

¹Universitas Negeri, Malang, Indonesia *email*: surayanah.fip@um.ac.id
²Universitas Negeri, Malang, Indonesia *email*: marsanda.avilia.2201516@students.um.ac.id
³Universitas Negeri, Malang, Indonesia *email*: fayruz.syamyllya.2101516@students.um.ac.id
⁴Universitas Negeri, Malang, Indonesia *email*: rida.nanda2101516@students.um.ac.id

Abstract: This study aims to form the character of Pancasila learners of grade IV students by implementing the RPG Maker MV game based on Literacy Numeracy Social Studies material. This type of research is Classroom Action Research conducted in two cycles. Each cycle consists of 4 stages, namely the planning, action, evaluation, and reflection stages. The subjects of this study were fourth grade students of Islamic Elementary School in Blitar City in the 2023/2024 academic year, totaling 22 people. The object of this research is RPG Maker MV game based on Numeracy Literacy Social Studies material, character of Pancasila Students and student responses. Data on the character of Pancasila Students and student responses were collected by questionnaire. The data collected were then analyzed descriptively. The results showed the implementation of RPG Maker MV game based on numeracy literacy social studies material Class IV can form the character of Pancasila students. The score of Pancasila character is 0.69 sufficient category in cycle 1. While in cycle 2 the score becomes 0,96 excellent category. While the response of fourth grade students of Islamic Elementary School of Blitar City to the game RPG Maker MV Based Literacy Numeracy Social Studies Material on a positive category with an average score of 77,82.

Keywords: RPG Maker MV game; IPS; literacy numeracy; characther; Pancasila students.

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INTRODUCTION

Nowadays, the development of science and technology (IPTEK) is increasingly rapid, encouraging humans to adapt to these developments. No exception in the world of education, the development of 21st Century skills is very important to prepare humans to face increasingly complex world problems (Rifa Hanifa Mardhiyah, Sekar Nurul Fajriyah Aldriani, Febyana Chitta, & Muhamad Rizal Zulfikar, 2021). 21st Century skills consist of communication skills, collaboration skills, critical thinking skills, and creative thinking skills (creativity) (Zubaidah, 2018). In order to achieve these skills, it is necessary to pay



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Vol. 2, No. 1, pg. 185 – 192

ISSN: 3046-594X

attention to the presentation of learning. Learning should focus on students as the subject of learning (McGurgan, 2017). That way, 21st Century skills can be optimally developed.

However, the application of student-centered learning still experiences various obstacles. There are several schools that have not implemented student centered learning and still use conventional learning. This can be caused by the lack of teacher competence in planning learning activities (Pertiwi, Nurfatimah, & Hasna, 2022). Consequently, students' interest in learning can decrease due to their lack of interest in the learning process. Learning must be presented in such a way that it is student-centered and interesting. One way to alleviate this problem is the use of media that is in accordance with the times, such as games (Hidayatulloh, Praherdhiono, & Wedi, 2020; Pratama, Lestari, & Bahauddin, 2019).

Based on the results of interviews and discussions with the Education Office in Greater Blitar in March 2023, it was found that conventional learning media were used in the learning process. Schools have not yet implemented digital learning media in learning. The use of games in the learning process is adapted by the tendency of students who are more interested in technology such as games in everyday life. The game itself has technical work that stimulates students to think critically (Asmar, 2020). The presentation of the game completion flow at each level can spur student (Kurniawan, Lukman, & Nurcahyono, 2021). Furthermore, games have other advantages that can encourage students' 21st Century skills if presented in the appropriate dosage. Therefore, the application of games needs to be carried out with appropriate direction and guidance so that it can produce benefits for students.

Learning activities that are expected in the 21st century are learning that is able to develop student character in accordance with the Pancasila Learner Profile. The Pancasila Learner Profile (P3) consists of faith and devotion to God Almighty, and noble character; global diversity; independence; mutual cooperation; critical thinking; and creativity (Mulyani, Nurmeta, & Maula, 2023). In order to maximize the impact of the application of learning, optimal student attention is also needed. The use of games is a solution, because students tend to be interested in games.

The hope is that the RPG Maker MV Game will be able to bring benefits to students, especially in influencing students' Pancasila character. This research will focus on the application of RPG Maker MV Game in social studies subjects. Problem solving skills are presented in the form of numeracy literacy, by prioritizing character values in it. This study aims to determine the effect of the application of numeracy literacy-based games on students' Pancasila character in social studies material.

METHOD

This study used the Classroom Action Research (PTK) method using 2 cycles (Cycle I and II). Each cycle consists of 4 stages, namely the planning, action, evaluation, and reflection stages. The research subjects were fourth grade students of SD Islam Blitar City in the 2023/2024 academic year, totaling 22 people. Data collection used a questionnaire to collect data on the character of Pancasila Students and student responses. The data was then analyzed descriptively to determine the effect of RPG Maker MV Game media on the character of Pancasila Students and student responses. The variables used are the independent variable (X): RPG Maker MV Game media, the dependent



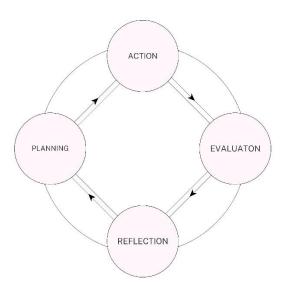
International Conference on Teaching and Learning Proceeding

Faculty of Education and Teacher Training – Universitas Terbuka UTCC, South Tangerang, Banten, June 28th 2024

Vol. 2, No. 1, pg. 185 – 192

ISSN: 3046-594X

variable (Y): student Pancasila Student character. The stages of PTK are carried out as follows.



Pigure 1. Research Stages Cycle I and II

Cycle I

a. Planning

Planning includes: preparing learning tools such as Learning Implementation Plans (RPP), teaching materials, student worksheets (LKPD), and test questions, as well as preparing learning media that will be used, namely the numeracy literacy-based RPG Maker MV Game on social studies material.

b. Action

Action includes: researchers conduct learning by applying numeracy literacy-based RPG Maker MV Game media to support students' Pancasila Student character. The implementation of learning is adjusted to the lesson plan, worksheets, and cycle I tests.

c. Evaluation

Evaluation includes: observing, recording, and evaluating learning activities, learning activities, and student behavior to obtain data on the character of Pancasila Students during the learning process.

d. Reflection

Reflection includes: the results of learning, evaluation, and collaborative team discussions can be reflected in the form of recommendations to be continued in cycle II.

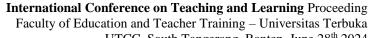
Cycle II

a. Planning

Planning includes: preparing learning tools such as lesson plans and cycle II test questions.

b. Action

Action includes: researchers conduct learning by applying numeracy literacy-based



UTCC, South Tangerang, Banten, June 28th 2024 Vol. 2, No. 1, pg. 185 – 192

INTERNATIONAL CONFERENCE ON TEACHING AND LEARNING

Vol. 2, No. 1, pg. 185 – 192 ISSN: 3046-594X

RPG Maker MV Game media to support students' Pancasila Student character. The class is more conditioned than cycle I learning as a result of cycle I reflection. The implementation of learning is adjusted to the lesson plan, worksheets, and cycle II tests.

c. Evaluation

Evaluation includes: observing, recording, and evaluating learning activities, learning activities, and student behavior to obtain data on the character of Pancasila Students during the learning process with the same assessment instrument as cycle I.

d. Reflection

Reflection includes: the results of learning, evaluation, and collaborative team discussions can be reflected in the form of recommendations to be continued in the next cycle.

RESULT AND DISCUSSION

This research was conducted at SD Islam Kota Blitar in the 2023/2024 school year. The research subjects were 22 4th grade students. This study aims to determine the effect of the implementation of RPG Maker MV Game based on numeracy literacy on the character of Pancasila Students. Questionnaire data on the character of Pancasila Students taken in cycle I is presented in Table 1 as follows.

Table 1. Questionnaire data of Pancasila Students character cycle I

Data	Score	% 0
Min	18	60
Max	24	80
Average	0,70	70

Based on Table 1, it is known that the average character of Pancasila Students in cycle I through data collection in the form of questionnaires is still at a low level. The average character of Pancasila Students shown is 0.70 which is still far from the maximum average of 1.00. The minimum value obtained is at 60% and the maximum value is 80%. This shows that there are no respondents who have reached the maximum value in cycle I. The following data on the character of Pancasila Students in cycle II is presented in Table 2.

Table 2. Questionnaire data of Pancasila Students character cycle II

Data	Score	%
Min	27	90
Max	30	100
Average	0,96	96

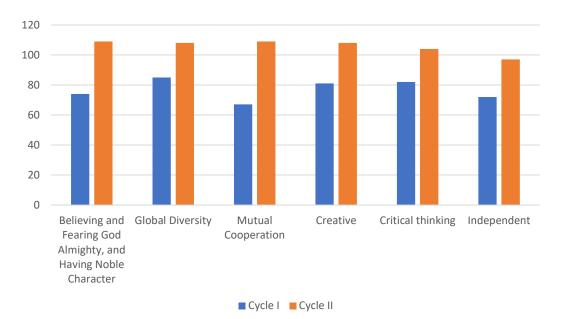
Based on the results of cycle II, it was shown that 22 students experienced an increase with an average of 0.96. This value shows an increase in the character of Pancasila Students for each student in cycle II. Thus, the numeracy literacy-based RPG Maker MV Game media is said to be able to significantly improve students' Pancasila Student character.



International Conference on Teaching and Learning Proceeding Faculty of Education and Teacher Training – Universitas Terbuka UTCC, South Tangerang, Banten, June 28th 2024

Vol. 2, No. 1, pg. 185 – 192

ISSN: 3046-594X



Pigure 1. Comparison chart of Pancasila Student character per-indicator in cycle I and II

Figure 1 presents a comparison of each indicator of Pancasila Student character in cycle I and II which shows a significant increase. The indicator of Pancasila Student character that increased dramatically was the indicator of mutual cooperation with a percentage increase of 62.69%, followed by other indicators. The average between cycles is presented in Figure 2 below.

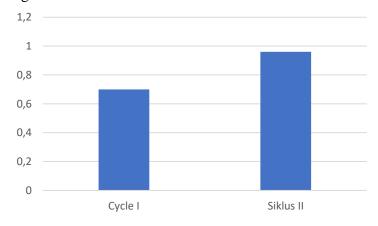


Figure 2. Average comparison chart in cycle I and II

The table below presents data on student responses to learning by applying numeracy literacy-based RPG Maker MV Game media, which is based on a Likert scale assessment (Nempung, Setiyaningsih, & Syamsiah, 2015).



International Conference on Teaching and Learning Proceeding Faculty of Education and Teacher Training – Universitas Terbuka

UTCC, South Tangerang, Banten, June 28th 2024 Vol. 2, No. 1, pg. 185 – 192

ISSN: 3046-594X

Table 3. Student response data

Score	Category	Amount	Percentage (%)
5	Very Good	7	31,82
4	Good	13	59,09
3	Good Enough	2	9,09
2	Not Good	0	0
1	Not Very Good	0	0
	Total	22 students	100

Based on Table 3, students' responses to learning media are positive, indicated by the tendency of student responses on a scale of 3-5 (Quite Good-Very Good) which states that students have an interest in learning by using the numeracy literacy-based RPG Maker MV Game. The indicator items used in the student response questionnaire were 20 items with a total of 22 students, so that based on the calculation results, the average value of student responses was 77,82% with a positive category.

The use of technology-based learning media can increase student interest in learning (Nursyam, 2019). This is because learning by using interactive media such as games can make students happy in learning (Nurkhasanah, 2022; Windawati & Koeswanti, 2021). Students can easily understand the learning content, or in this case develop the character of Pancasila Students due to their direct involvement in the learning process. Pancasila character can be developed under the condition of student-centered learning (Angga, Abidin, & Iskandar, 2022). Such learning can be presented by providing direct experience to students in the learning process.

The numeracy literacy-based RPG Maker MV Game Media provides students' experience of problem solving and exploring the character of Pancasila according to the Pancasila Student Profile (P3). This is because through student interaction with learning media, not just imagining will make learning more fun. In line with research (Nisa & Susanto, 2022), states that the use of games is proven to be able to increase student attention to learning.

Cycle I was conducted for 2 meetings by applying RPG Maker MV Game based on numeracy literacy on social studies material. In cycle I, direct observation was carried out by the social studies teacher, to find out whether the material taught was in accordance with the substance of social studies, and learning activities had fulfilled the stages in the application of numeracy literacy-based RPG Maker MV Game properly. Researchers gave a test in the form of a questionnaire to measure the character of Pancasila Students through learning by using the numeracy literacy-based RPG Maker MV Game at the beginning and end of learning. According to the results presented, cycle I has not shown success because the average score is still relatively low. Based on the results of the reflection, several obstacles were found, namely students were not used to applying laptops and did not understand the rules of the game in the game. This then had an impact on the understanding of the Pancasila character of each student, where as shown in Figure 1, the average value per-indicator of the Pancasila character in cycle I was still in the low group.

As a follow-up effort, cycle II applied the numeracy literacy-based RPG Maker MV Game on different social studies materials than cycle I. The planning stage,



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Vol. 2, No. 1, pg. 185 – 192

ISSN: 3046-594X

researchers plan learning by preparing lesson plans with improvements based on reflections from cycle I. The action stage, carried out in accordance with the previously prepared lesson plan based on the results of the first cycle reflection. At this stage, some of the things that were improved were student assistance with the use of the game, emphasis on the instructions for using the game, and encouragement to conduct discussions with students. The evaluation stage, researchers used the same instrument as cycle I, added with a student response questionnaire instrument to determine student interest in learning.

Based on the results of Classroom Action Research (PTK) conducted by applying RPG Maker MV Game media based on numeracy literacy in social studies material can significantly improve students' Pancasila character. It can be seen from the changes in the increase in cycle I and II. In cycle I the average character of Pancasila students is 0,70 and cycle II is 0,96. The application of the media can also increase student interest in learning, indicated by the average student response which is in the positive category of 77,82.

CONCLUSION

This Classroom Action Research (PTK) was conducted at SD Islam Kota Blitar in the 2023/2024 school year consisting of 2 cycles. Each cycle includes 4 stages, namely the planning, action, evaluation, and reflection stages. The application of RPG Maker MV Game based on numeracy literacy is declared effective in improving students' Pancasila Student character. It is shown by the change in the average value of cycle I and cycle II, namely 0,70 in cycle I and 0,96 in cycle II. This means that the numeracy literacy-based RPG Maker MV Game has a significant influence on the student learning process, especially in developing the character of Pancasila Students. In addition, the use of numeracy literacy-based RPG Maker MV Game received a positive response from students, seen from the average student response of 77,82. So it can be concluded that the use of numeracy literacy-based RPG Maker MV Game media in addition to improving the character of Pancasila Students, can also encourage student interest in learning. Furthermore, this media can be developed in other subjects as an optimization of the development of 21st Century skills in preparing students to face the development of science and technology.

REFERENCES

- Angga, A., Abidin, Y., & Iskandar, S. (2022). Penerapan Pendidikan Karakter dengan Model Pembelajaran Berbasis Keterampilan Abad 21. *Jurnal Basicedu*, *6*(1), 1046–1054. https://doi.org/10.31004/basicedu.v6i1.2084
- Asmar, A. (2020). Berpikir Kritis Melalui Penggunaan Software Geogebra. *Jurnal Program Studi Pendidikan Matematika*, 9(2), 221–230.
- Hidayatulloh, S., Praherdhiono, H., & Wedi, A. (2020). Pengaruh Game Pembelajaran Terhadap Peningkatan Hasil Belajar Pemahaman Ilmu Pengetahuan Alam. *JKTP: Jurnal Kajian Teknologi Pendidikan*, *3*(2), 199–206. https://doi.org/10.17977/um038v3i22020p199
- Kurniawan, R., Lukman, H. S., & Nurcahyono, N. A. (2021). Desain Instrumen Tes



International Conference on Teaching and Learning Proceeding Faculty of Education and Teacher Training – Universitas Terbuka

UTCC, South Tangerang, Banten, June 28th 2024 Vol. 2, No. 1, pg. 185 – 192

ISSN: 3046-594X

- Kemampuan Pemecahan Masalah Matematis Berbasis Game Unity. *RANGE: Jurnal Pendidikan Matematika*, *3*(1), 9–15. https://doi.org/10.32938/jpm.v3i1.990
- McGurgan, S. (2017). Using The Culture Of Childhood To Facilitate Compassionate, Student Centered And Holistic Education. *Vidyottama Sanatana: International Journal of Hindu Science and Religious Studies*. https://doi.org/10.25078/ijhsrs.v1i1.150
- Mulyani, S., Nurmeta, I. K., & Maula, L. H. (2023). Analisis Implementasi Profil Pelajar Pancasila di Sekolah Dasar. *Jurnal Educatio FKIP UNMA*, *9*(4), 1638–1645. https://doi.org/10.31949/educatio.v9i4.5515
- Nempung, T., Setiyaningsih, T., & Syamsiah, N. (2015). *Otomatisasi Metode Penelitian Skala Likert Berbasis Web*. (November), 1–8.
- Nisa, M. A., & Susanto, R. (2022). Pengaruh Penggunaan Game Edukasi Berbasis Wordwall Dalam Pembelajaran Matematika Terhadap Motivasi Belajar. *JPGI* (*Jurnal Penelitian Guru Indonesia*), 7(1), 140. https://doi.org/10.29210/022035jpgi0005
- Nurkhasanah, S. (2022). Penggunaan Media Game Online Melalui ProProfs untuk Meningkatkan Literasi Digital Siswa di SMP Negeri 1 Gangga. *Jurnal Paedagogy*, 9(2), 248. https://doi.org/10.33394/jp.v9i2.4964
- Nursyam, A. (2019). Peningkatan Minat Belajar Siswa Melalui Media Pembelajaran Berbasis Teknologi Informasi. *Ekspose: Jurnal Penelitian Hukum Dan Pendidikan*, 18(1), 811–819. https://doi.org/10.30863/ekspose.v18i1.371
- Pertiwi, A. D., Nurfatimah, S. A., & Hasna, S. (2022). Menerapkan Metode Pembelajaran Berorientasi Student Centered Menuju Masa Transisi Kurikulum Merdeka. *Jurnal Pendidikan Tambusai*, 6(2), 8839–8848.
- Pratama, L. D., Lestari, W., & Bahauddin, A. (2019). Game Edukasi: Apakah membuat belajar lebih menarik? *At- Ta'lim: Jurnal Pendidikan*, *5*(1), 39–50. https://doi.org/10.36835/attalim.v5i1.64
- Rifa Hanifa Mardhiyah, Sekar Nurul Fajriyah Aldriani, Febyana Chitta, & Muhamad Rizal Zulfikar. (2021). Pentingnya Keterampilan Belajar di Abad 21 sebagai Tuntutan dalam Pengembangan Sumber Daya Manusia. *Lectura: Jurnal Pendidikan*. https://doi.org/10.31849/lectura.v12i1.5813
- Windawati, R., & Koeswanti, H. D. (2021). Pengembangan Game Edukasi Berbasis Android untuk Meningkatkan hassil Belajar Siswa di Sekolah Dasar. *Jurnal Basicedu*. https://doi.org/10.31004/basicedu.v5i2.835
- Zubaidah, S. (2018). Mengenal 4C: Learning and Innovation Skills untuk Menghadapi Era Revolusi Industri 4.0. *2nd Science Education National Conference*, (October 2018), 1–18.