

**IMPLEMENTATION OF WORDWALL-BASED LEARNING MEDIA IN
IMPROVING STUDENTS' UNDERSTANDING OF SOCIAL STUDIES
LEARNING OF HUMAN MATERIALS, PLACES, AND
ENVIRONMENTS AT ICC MUAR MALAYSIA**

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Abstract

This research aims to improve students' understanding of social studies learning of human materials, places, and environments through the application of Wordwall learning media at ICC Muar, Malaysia. The background of the research departs from the low understanding of students and the limited access to education of Indonesian Migrant Workers. The study used the Kemmis and McTaggart model Class Action Research (PTK) method which was carried out in two cycles, involving 27 students. Data was collected through observation, learning outcome tests, interviews, and documentation, then analyzed using the Miles, Huberman, and Saldana models. The results showed a significant increase in student motivation, activeness, and comprehension after the use of Wordwall. The percentage of learning completeness increased from 44.4% in the pre-cycle to 51.85% in Cycle I, and reached 81.48% in Cycle II. The average score of students rose from 58.5 to 84.8. Teacher and student activities also increased from the fair to excellent category. The research concludes that Wordwall is effective as an interactive learning medium that is able to improve student understanding and is suitable for sustainable application in social studies learning.

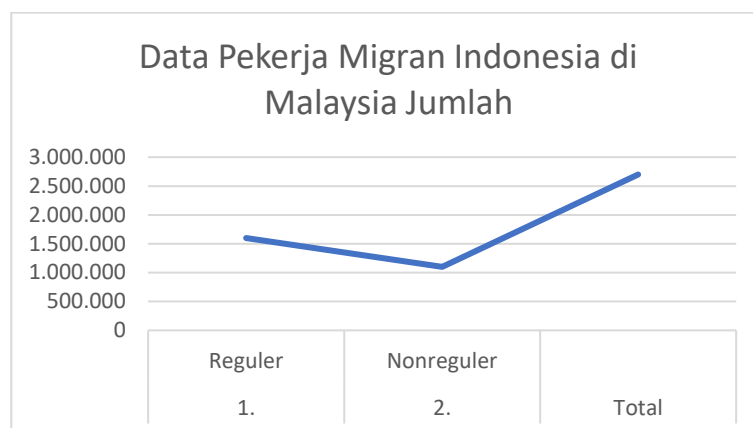
Keywords: Wordwall, Social Studies, Student Understanding, PTK, Learning Media



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INTRODUCTION



Graph 1. Data on Indonesian Migrant Workers in Malaysia

Malaysia is one of the largest recipients of migrant workers in Southeast Asia, and most of them are from Indonesia. Of the total of around 2.7 million Indonesian migrant workers in Malaysia, only around 1.6 million people work through regular channels according to data from Bank Indonesia and BP2MI in 2020.¹ This means that there are still more than one million Indonesian migrant workers with non-regular status. This group generally works in the household, construction, and agricultural sectors in often worrying working conditions, ranging from long working hours, inappropriate wages, to the risk of exploitation. These findings show the need to strengthen protections for Indonesian migrant workers, especially those without official documents. This information is conveyed in the IOM Indonesia report. The problem of migration clearly has a much more complex dimension than just the movement of labor.² This situation is even more worrying because many migrant workers bring their children with them who often do not have access to a decent education in the country where their parents work. Various international reports and studies show that migration does have a significant impact on the fulfillment of children's basic rights, especially in access to education.

UNICEF in *the Education Uprooted report* emphasized that migrant children are at risk of experiencing limited access to decent education due to family legal status, high mobility, and lack of educational services in destination countries.³ The same thing was conveyed by UNESCO, which emphasized that education for migrant children is *an inalienable human right* that must be fulfilled

¹ "Memperkuat Perlindungan Pekerja Migran Indonesia di Malaysia," diakses 9 Juni 2026, <https://indonesia.iom.int/id/news/memperkuat-perlindungan-pekerja-migran-indonesia-di-malaysia>.

² Sukamdi, "Memahami Migrasi Pekerja Indonesia ke Luar Negeri," *Populasi* 18, no. 2 (2007).

³ UNICEF, *Education Uprooted: For Every Migrant, Refugee and Displaced Child, Education* (New York, NY: UNICEF, 2017), <https://www.unicef.org/reports/education-uprooted>.

without discrimination, including for children whose parents are undocumented.⁴ The findings of the study on the children of Indonesian migrant workers in Malaysia also revealed that many children of migrant workers (Indonesian Migrant Workers) face obstacles in obtaining education due to immigration status, parental working conditions, and lack of adequate legal protection.⁵ On the other hand, IOM Indonesia noted that such vulnerabilities are increasing in the families of non-regular migrant workers who do not have access to formal services, including children's education. These various facts show that the problem of migration is not only related to employment, but also has a direct impact on the fulfillment of children's educational rights. Education is an important foundation to ensure equal learning opportunities for all Indonesian children, including those living abroad. Given the various challenges faced by the children of migrant workers, ranging from limited access to formal education services, differences in curriculum, to administrative constraints related to the legal status of parents, efforts to ensure the fulfillment of their educational rights are becoming increasingly urgent. The role of education is very important as a means to ensure that every child has equal learning opportunities, both at home and abroad.⁶

Education in schools is an important part of the learning process that aims to change behavior that includes cognitive, affective, and psychomotor aspects.⁷ Understanding concepts, mastery of materials, and learning achievement are indicators of success in the learning process. Sudijono explained understanding as a person's ability to understand and understand what they know and remember.⁸ Understanding is when a person can explain or give a more detailed description of something in their own words or when a person has the ability to see things from different points of view. Comprehension is a higher level of thought than memorization or memory. According to Sudjana, understanding is a learning outcome that can be achieved by students.⁹ They can give different examples from the teacher, give other examples of what they heard or read, and use application instructions for different situations. The goal of education becomes difficult to achieve when the children of Indonesian Migrant Workers (PMI) do not get access to a proper

⁴ UNESCO, "Education for Migrants: An Inalienable Human Right," UNESCO, 2020, <https://www.unesco.org/en/articles/education-migrants-inalienable-human-right-0>.

⁵ Shafiyah Rahmah, Salwa Ummu Fazya, dan Muhammad Khosyiko Noer Adiwijaya, "Pemenuhan Hak Anak Para Pekerja Imigran: Studi Kasus Anak Pekerja Migran Indonesia Di Malaysia," *Jurnal Legal Reasoning* 7, no. 2 (Agustus 2025), <https://doi.org/10.35814/jlr.v7i2.8244>.

⁶ Shafiyah Rahmah, Salwa Ummu Fazya, dan Muhammad Khosyiko Noer Adiwijaya, "Pemenuhan Hak Anak Para Pekerja Imigran: Studi Kasus Anak Pekerja Migran Indonesia Di Malaysia," *Jurnal Legal Reasoning* 7, no. 2 (Agustus 2025), <https://doi.org/10.35814/jlr.v7i2.8244>.

⁷ Lista Fauzia, Daniel Agustio, dan Gusmaneli, "Tujuan Dan Sistem Pendidikan Di Sekolah," *Jurnal Teknologi Pendidikan Dan Pembelajaran (JTPP)* 3, no. 2 (Oktober 2025).

⁸ Anas Sudijono, *Pengantar Evaluasi Pendidikan*, Edisi 1 (Jakarta: RajaGrafindo Persada, 2011).

⁹ Nana Sudjana, *Penilaian Hasil Proses Belajar Mengajar* (Bandung: Remaja Rosdakarya, 1995).

learning process.¹⁰ This challenge causes the quality of students' understanding to be affected, especially for those living in migration destination countries such as Malaysia.

The number of Indonesian students who do not have access to proper education, especially the children of migrant workers abroad such as Malaysia, has a major impact on the development of national education. This condition causes a low school participation rate and widens the disparity in learning opportunities between regions. Many migrant workers' children are not recorded in the Indonesian education system, so they do not get the right to study as they should. The main obstacles they face are generally related to the status of parental documents, residence permits, as well as the unavailability of access to formal schools in the destination country. Various studies, as explained by Sari in the study *Rights of Indonesian Migrant Workers' Children to Access Education at Sanggar Bimbingan Hulu Langat Malaysia*, as well as the findings of Rohman and Abdullah in *The Difficulty of Education for the Children of Indonesian Migrant Workers in Sabah Malaysia*, showing that the children of migrant workers are often denied formal schooling because they do not have official documents, so they can only attend non-formal education in study studios or community centers.¹¹ Equitable distribution of education, which is the government's goal, is also difficult to achieve, because there are still groups of Indonesian children who cannot enjoy educational services according to national standards.¹² The limited learning facilities and lack of access to modern learning media make students' understanding of the subject matter low, as also conveyed by Putri who highlighted the importance of learning media in improving the quality of student understanding. Concrete and sustainable efforts are needed through the provision of inclusive, flexible educational services, and utilizing interesting and accessible learning technology, so that Indonesian children can continue to learn well even though they are outside the territory of Indonesia.

This limited access not only affects the number of children attending school, but also has a direct impact on their ability to understand learning materials. This is evident from various field findings that show that the quality of learning is highly determined by the quality of access to education obtained by students. The problem of access to education experienced by the children of Indonesian Migrant Workers (PMI) is not only about their inability to enter formal school, but also

¹⁰ Budi Sulistya Handoyo dan Reza Triarda, "Problematisasi Pendidikan di Perbatasan: Studi Kasus Pendidikan Dasar bagi Anak Pekerja Migran Indonesia (PMI) di Negara Bagian Sarawak, Malaysia," *Jurnal Transformasi Global* 7, no. 2 (2020).

¹¹ Tyas Retno Wulan, Muslihudin Muslihudin, dan Sri Wijayanti, "The Difficulty of Education for the Children of Indonesian Migrant Workers in Sabah Malaysia," *Migration Letters* 21, no. 2 (2024), <https://doi.org/10.59670/ml.v21i2.5855>.

¹² Samhaji Samhaji dan Francesco Dennis Anggara, "Analisis Implementasi Kebijakan Pemerataan Akses Pendidikan pada Daerah Tertinggal Indonesia," *Journal of Governance and Policy Innovation* 5, no. 2 (Oktober 2025), <https://doi.org/10.51577/jgpi.v5i2.839>.

has a direct impact on their ability to understand the subject matter. Research conducted by Nurhayati (2021) in *An Analysis of Listening Skill Difficulties Faced by Children of Indonesian Migrant Workers in Malaysia* shows that migrant children living in a multilingual environment, with limited learning facilities and minimal access to technology and the internet, experience serious difficulties in understanding English lessons.¹³ This condition is increasingly complex when access to formal education is almost unavailable. Rohman & Abdullah's study in *The Difficulty of Education for the Children of Indonesian Migrant Workers in Sabah Malaysia* revealed that migrant workers often rely only on non-formal education, but these services do not always meet national curriculum standards and are often inconsistent in their implementation.¹⁴

This finding is strengthened by Salsabila research from E-Journal Insuri Ponorogo who explained that alternative education services for migrant workers still face major obstacles, ranging from the availability of competent teaching staff to the lack of learning media that suits the needs of children. The problem of access to education does not only concern the quantity aspect, namely how many children can attend school, but also the aspect of the quality of learning they receive. Even PMI children who have attended non-formal classes still have difficulty understanding the material due to the lack of facilities, learning resources, and modern learning media that support them. Improving understanding is not enough just by opening access to schools, it is necessary to have an inclusive education system and alternative education services that are quality, flexible, and adaptive to the conditions of migrant children. These conditions are then evident in the learning situation at ICC Muar, Malaysia, where this research was conducted. The variation in students' understanding in the classroom shows that learning media is an important factor that can bridge the learning gap due to limited access to education.

The understanding of students at ICC Muar, Malaysia varies. Some students can capture explanations well in just one delivery, while others need several explanations to be able to understand the material taught by the teacher. This is seen in student engagement, especially when they are unable to provide an answer after the teacher has asked some of them to summarize the core of the material that has been presented. These problems prove that learning media is very important and needed as a bridge of understanding for students. Learning media can make the teaching and learning process more effective and efficient and establish a good relationship between teachers and students. Fahrin, revealed that the benefit of learning media is to clarify the presentation of messages and information so that it can clarify and improve the learning process

¹³ Nur Ain Nun dan Diah Safithri Armin, "An Analysis of Listening Skill Difficulties Faced by Children of Indonesian Migrant Workers in Malaysia," *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature* 13, no. 1 (Mei 2025), <https://doi.org/10.24256/ideas.v13i1.6812>.

¹⁴ Wulan, Muslihudin, dan Wijayanti, "The Difficulty of Education for the Children of Indonesian Migrant Workers in Sabah Malaysia."

and outcomes.¹⁵ Learning media can also provide motivation that has an impact on activeness and learning outcomes.

Technology-based learning media can increase learning motivation and encourage students' imagination in writing and speaking.¹⁶ Today, the use of gadgets has become a part of children's lives, including in ICC Muar, Malaysia, where most students already have personal cellphones. *Wordwall* can be a way out considering the number of elementary school-age students who use their personal cellphones just to play *games*. The author considers that this media can be an effective bridge in diverting students' interest in playing in a more positive direction, as well as a solution to increase students' understanding of learning materials. The use of educational game-based learning media such as *Wordwall* is relevant to be implemented as a learning strategy that suits the needs of students at ICC Muar. The implementation of this media is expected to be the answer to the various learning obstacles that have been described.

Educational game-based learning has great potential in supporting the student learning process. One of the media that is considered effective in increasing learning motivation while attracting students' interest is *Wordwall*. This media is interactive and in accordance with the characteristics of elementary school students, so it can help create a fun and meaningful learning atmosphere. *Wordwall* is one of the educational-based learning platforms to increase student participation and learning motivation, as well as help improve student understanding through fun and competitive games. *Wordwalls* can also strengthen material memory and can provide immediate feedback to assess understanding effectively. Further research is needed to examine how the implementation of *Wordwall* learning media is carried out in the classroom, so the researcher is interested in researching it more deeply in the form of scientific research with the title "Implementation of *Wordwall Learning Media* in Improving Students' Understanding in Social Studies Learning of Human Materials, Places, and Environments at ICC Muar, Malaysia".

This study aims to find out how the implementation of *Wordwall* learning media in improving students' understanding of social studies learning at ICC Muar, Malaysia. This study also aims to find out the results of the implementation on student understanding, as well as identify supporting and inhibiting factors in the implementation of educational game-based learning media in the school environment.

¹⁵ Fahrin Nailatil Karomah dkk., "Peran Dan Manfaat Media Pembelajaran Dalam Upaya Meningkatkan Hasil Belajar Siswa Sekolah Dasar," *Jurnal IKA PGSD (Ikatan Alumni PGSD) UNARS* 15, no. 2 (Desember 2024), <https://doi.org/10.36841/pgsdunars.v15i2.5768>.

¹⁶ Indah Afina and Yullys Helsa, "The Role of Technology-Based Interactive Media in Increasing Elementary School Students' Learning Engagement," *Sindoro: Scholar of Education* 15, no. 1 (2025), <https://doi.org/10.99534/dvtb0g40>.

RESEARCH METHODS

This type of research is Classroom Action Research (CAR). This research was carried out collaboratively between researchers and classroom teachers with the aim of improving student understanding through the application of Wordwall learning media to human materials, places, and environments which were carried out at ICC Muar in the odd semester of the 2025/2026 school year. In this study, the Minimum Completeness Criteria (KKM) was set at 70 with a target of learning completeness percentage reaching more than 75% of all students. The subjects of the study were all ICC Muar students totaling 27 students, as well as teachers as collaborators. The research design refers to the Kemmis and Mc Taggart model which consists of several cycles, (1) planning preparation, planning includes actions to be taken to improve, improve, or change desired behaviors and attitudes as a solution to problems. (2) Implementation of actions, actions carried out by researchers as an effort to improve, improve, or change. (3) Observation (Observation), the researcher observes the results or impact of the actions carried out on students. (4) Reflection, analysis, synthesis, interpretation of all information obtained during action activities. This research focuses on the application of *Wordwall* learning media to improve student understanding.

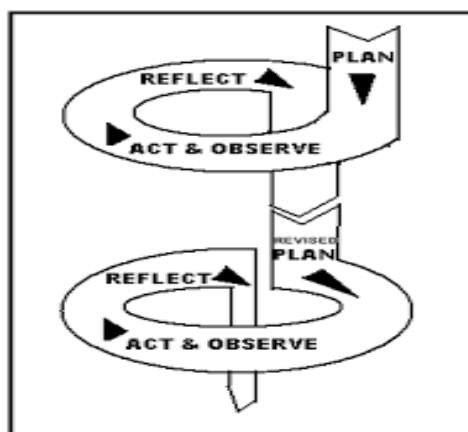


Figure 1. Kemmis and Mc Taggart Research Model

The data sources in this study consist of primary and secondary sources. The primary sources that are meant are students and teachers. The secondary sources used are school documents such as attendance lists, student scores, syllabus, lesson plans, etc. as well as field notes, photos of activities, and observation results. The selection of primary and secondary data sources is based on the consideration that the two types of sources complement each other in providing accurate and comprehensive information about the implementation of the research.

The data collection techniques used include, (1) Observation, to obtain data on the activity of teachers and students during learning using Wordwall learning media, (2) Learning outcome tests, to measure students' level of understanding, (3) Interviews, to obtain information about students' responses to the use of Wordwall media, (4) Documentation, as supporting data. The instruments used were observation sheets of teacher and student activities, learning outcome test questions, interviews, and field notes. The data analysis technique used in this study refers to the Miles, Huberman, and Saldana model which involves three main stages that run simultaneously.

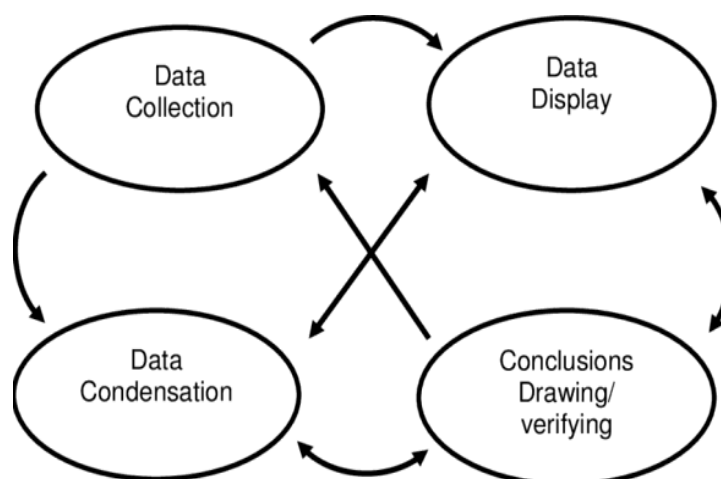


Figure 2. Miles Huberman and Saldana Data Analysis Techniques¹⁷

(1) Data condensation, the continuous process of selecting, focusing, simplifying, and abstracting the raw data collected, (2) Data presentation, organizing detailed information into a more structured framework such as a summary, (3) Drawing conclusions, interpreting findings and drawing conclusions. The application of the Kemmis and Mc Taggart model classroom action research (PTK) method which is equipped with systematic data collection and analysis techniques, it is hoped that this study can provide a clear picture of the effectiveness of the use of Wordwall learning media in improving students' understanding of human materials, places, and the environment.

¹⁷ Julizar Idris et al., "The Political Process in the Preparation of Public Policy: A Case Study on the Preparation of the Constitution of Oil and Gas in the Republic of Indonesia's House of Representatives," *Holistica Journal of Business and Public Administration* 10, no. 1 (2019), <https://doi.org/10.2478/hjbpa-2019-0008>.

RESULTS AND DISCUSSION

Results

This research is a class action research (PTK). Classroom action research (PTK) is considered suitable and effective, because this research is focused on learning problems that arise in the classroom, this research is also carried out to improve learning problems to improve the teaching and learning process in the classroom. This classroom action research (PTK) is easy for teachers to do because it does not require comparisons of learning models and while carrying out the teaching and learning process, teachers can also conduct research on problems in the classroom. Research with the implementation of Wordwall educational game learning media to improve students' understanding at the Indonesian Community Centre Muar.

1. Pre-Cycle Data Analysis

The data from the evaluation results carried out at the end of social studies learning on human materials, places, and environments show that many students still have difficulties in answering evaluation questions. The teacher provided a question sheet as an evaluation instrument, and the results showed that most students had not reached the minimum completeness criterion (KKM), which was a score of 70, with a minimum completion percentage of 75%. Of the 27 students, there were 15 students (55.5%) who did not complete and had not reached the KKM, while only 12 students (44.4%) completed the program. The highest score obtained is 95 and the lowest score is 30. When viewed from all test results, the average class score is 58.5 which is still below the standard of completeness and shows that students' understanding of learning materials is still low. Seeing the level of learning incompleteness which reached 55.5% and the average score was far from the KKM, the researcher felt the need to conduct Classroom Action Research (PTK) as described in the previous chapter. The researcher will apply Wordwall learning media as an effort to improve students' understanding of social studies subjects, especially human materials, places, and environments.

2. Implementation of Cycle I

This research was carried out by researchers and has collaborated with ICC Muar which is focused on social studies learning on human materials, places, and environments.

a. Planning

At this stage, the researcher prepares or what will be done in the research, namely:

- 1) Establish the place to be used in the research.
- 2) The researcher observed data from observations and interviews with the ICC.
- 3) Determine the focus point of research (using Wordwall learning media) on human materials, places, and their environments in social studies lessons.
- 4) Prepare a Wordwall quiz in accordance with social studies lessons with the material.

- 5) Prepare cellphones and laptops that will be used for work.
- 6) Make observation sheet tables for teachers and students during learning.

b. Implementation

1) Meeting 1

Meeting 1 was held on Monday, July 28, 2025, with the following series of activities:

a) Early activities

The teacher opens learning, prays, conducts student attendance, and conveys learning objectives.

b) Core activities

The teacher gives questions related to previous learning, the teacher relates the previous learning material to the material to be given (people, places, and environments), the teacher explains the learning material, namely people, places, and environments. The teacher gives the assignment as the first learning evaluation. Students collect assignments.

c) Final Activities



Figures 1 and 2 Learning Documentation Before Using *Wordwall*

Students conclude that the material that has been studied is guided by the teacher. For follow-up, the teacher gave homework assignments and the teacher closed the lesson with messages delivered to the students.

c. Observation Cycle 1

Observation was carried out by teachers (researchers) with colleagues. In the observation activities that were observed were the activeness of students and teachers in the learning process and the events that occurred during the learning process.

Table 1. Observation Results of 1 Cycle 1 Student

Ye s	Aspects Assessed	Rating				
		1	2	3	4	5
1.	Students actively answered greetings.					√
2.	Students can answer the lighter questions.		√			
3.	Students listen to the material delivered by the teacher well.			√		
4.	Students can do the assignments given by the teacher.		√			
5.	Students actively ask questions during learning.		√			
6.	Students can re-explain the material presented by the teacher.		√			
Total Score				16		
Average				2,6		
Criteria				Enough		

Table 2. Observation Results of Cycle 1 Research Teachers

Yes	Aspects That Are Neglected	Rating				
		1	2	3	4	5
1.	The teacher greeted him.				√	
2.	The teacher conveys the learning objectives to be achieved.			√		
3.	The teacher presents the information of the material to be studied.		√			
4.	The teacher conducts questions and answers about the material presented.			√		
5.	The teacher explained the material about people, places, and the environment.			√		
6.	The teacher conditions the class.			√		
7.	The teacher evaluates the learning outcomes.			√		
8.	The teacher guides the students to make a summary/conclusion.		√			
9.	The teacher closes the lesson with a greeting.			√		
Total Score				26		
Average				2,8		
Criteria				Enough		

d. Reflection

The researcher conducts evaluation and reflection from planning, implementation, and observation activities. The holding of this reflection is expected to find shortcomings and advantages during the learning process so that it can be used to improve further learning.

3. Implementation of Cycle II

a. Planning

Learning planning in cycle II is actually only a refinement of cycle I planning. Based on analysis and reflection results and considering input from observers about the advantages and disadvantages of the implementation of cycle I. Planning of learning activities in cycle II uses the same research instruments as the research instruments used in cycle I. Action planning for cycle II, researchers as teachers make improvements that will be made. That is, so that the learning process is more optimal. Student learning outcomes as well as student learning completeness can be improved. The improvements that will be made in cycle II are:

- 1) Teachers motivate and pay special attention to less active students.
- 2) The teacher prepares quizzes with different games so that students don't get bored.
- 3) Students are motivated to dare to ask questions if there is material that has not been understood.
- 4) The teacher pays attention to the time so that all activities can be carried out smoothly and at the right time.

b. Implementation

This stage is the implementation of an improved plan, regarding the use of Wordwall learning media with different games. Action 2 learning is a continuation of cycle I action. This activity was carried out learning steps that were carried out in accordance with the plan that had been made, namely:

1) Early activities

The teacher opens learning, prays, conducts student attendance, and conveys learning objectives.

2) Core activities

The teacher explains the learning material, the teacher distributes cellphones and laptops to each student, then the students start the game in unison. Teachers guide and provide direction for students who are struggling. The wordwall will display who got the highest to the lowest score.

3) Final Activities

Students conclude that the material that has been studied is guided by the teacher. Students work on the evaluation sheet individually. The teacher delivers the next material and the teacher closes the lesson with messages delivered to the students.



Figures 3 and 4. Cycle 2 Learning Documentation

c. Observation Cycle II

At the observation stage, the focus of observation is the activities of students and teachers. Observations are carried out using observation guidelines in the form of observation sheets that have been provided. As in cycle I, in this second cycle observations were made on the activities of students and teachers during learning. Observations are made on every change in student behavior during the learning process by making notes that can be used as research data as material for analysis and reflection.

Table 3. Observation of 2 Students

No	Aspects Assessed	Rating				
		1	2	3	4	5
1.	Students actively answered greetings.				√	
2.	Students can answer lighter questions					√
3.	Students listen to the material delivered by the teacher well.				√	
4.	Students can do the assignments given by the teacher.				√	
5.	Students actively ask questions during learning.					√
6.	Students can re-explain the material presented by the teacher.					√
Total Score		27				
Average		4,5				
Criteria		Excellent				

Table 4. Observation Results of Cycle II Research Teachers

Yes	Aspects That Are Neglected	Rating				
		1	2	3	4	5
1.	The teacher greeted him.					√
2.	The teacher conveys the learning objectives to be achieved.				√	
3.	The teacher presents the information of the material to be studied.				√	
4.	The teacher conducts questions and answers about the material presented.					√
5.	The teacher explained the material about people, places, and the environment.					√
6.	The teacher conditions the class.					√
7.	The teacher evaluates the learning outcomes.					√
8.	The teacher guides the students to make a summary/conclusion.				√	
9.	The teacher closes the lesson with a greeting.					√
Total Score		26				
Average		4,6				
Criteria		Excellent				

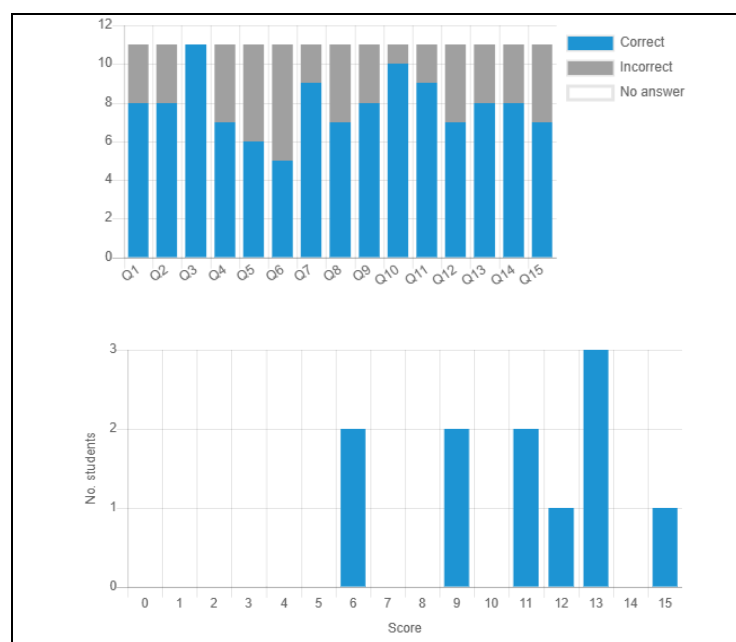
Based on the observation results, the learning process in general went very well after using learning media *Wordwall*. This media has been proven to be able to increase students' motivation to learn. Just by using a mobile phone or laptop, students already look enthusiastic

and excited to participate in learning activities. When the teacher delivers the material, students pay close attention, listen carefully, and actively ask questions. In addition, when working on in-game problems *Wordwall*, if the student's answer is wrong, the app immediately shows the correct answer. This feature helps students to evaluate and correct their mistakes independently.

d. Reflection Cycle II

Cycle II Class Action Research has been carried out with the same steps as the steps in cycle I. The thing that distinguishes cycle I from cycle II is its planning. The planning of cycle II is based on the results of reflection in cycle I. The results of student work in cycle 2 are as shown in the graph below:

Graphs 2 and 3. Results of Students' Wordwall Work



The graph shows that there is a fairly good increase in the results of student work through Wordwall learning media. At the beginning of use, the average score of students was still in the category of sufficient, because some students were still adjusting to the appearance and way of playing Wordwall. As time went by, the chart showed a steady increase in value. Almost all students showed improvement from the first meeting to the next. This can be seen from the increasing number of students who are able to complete the game with faster time and more precise answers. The increase not only shows that students understand the material better, but also shows that there is a real effort from students. They seem more motivated to learn because the game format in Wordwall makes the learning process feel more fun and

challenging. Many students repeatedly try to play the game to get better grades. Siswa is also getting more active and focused, because they want to get the highest score. This effort can be seen from students rereading the material before playing, discussing with friends when finding difficult problems, students try many times to reach the maximum score.

Table 5. Student Learning Value Results

Description	Results of Student Learning Value Material People, Places, and the Environment	
	Cycle I	Cycle II
Highest Score	95	100
Lowest Score	30	50
Average Score	58,5	84,8
Presentation of Completeness	51,85%	81,48%

The table of student learning value results in Cycle I and Cycle II shows a significant increase after the application of *Wordwall* learning media. In Cycle I, the highest student score was 95, the lowest score was 30, and the average class score was 58.5. These results illustrate that most students still do not understand the material well and are not familiar with the learning media used. Entering Cycle II, there was a sharp increase in learning outcomes. The highest grade increased to 100, the lowest grade rose to 50, and the average grade reached 84.8. This average increase shows that students have been able to adapt to the use of *Wordwall media*, as well as better understand the material presented. Students also look more active, enthusiastic, and able to solve problems more accurately and quickly. In terms of learning completeness, in Cycle I there are still many students who have not reached KKM, while in Cycle II the majority of students have achieved completeness. This condition indicates that educational game-based learning such as *Wordwall* is able to increase students' motivation, focus, and understanding, thus having a direct impact on increasing their learning value achievement. Overall, the comparison between Cycle I and Cycle II proves that the improvement of actions, game variation, and increased motivation provided by teachers gives very positive results to improve student understanding. Wordwall media has proven to be effective in helping students master social studies material about people, places, and the environment through a more interesting and interactive learning process.

Discussion

The results of the study show that the use of *Wordwall* learning media has a significant influence on improving students' understanding of social studies materials about people, places, and environments at ICC Muar. At the preliminary stage, most students are not able to understand the material well. This is evidenced by 15 out of 27 students (55.5%) who have not reached the KKM. The low learning outcomes are caused by several factors, such as students' lack of focus during learning, and teaching methods that are still monotonous. This condition causes students to have difficulty understanding concepts in their entirety, so more interesting and interactive learning media are needed to help improve their understanding. As a first step in improvement, in Cycle I, teachers began to apply *Wordwall learning media* as an innovation in the learning process. The results of the observation show that the activities of teachers and students are still in the category of adequate. Students still seem to be adjusting to the look and way *the Wordwall game works*, so some of them are not active in asking questions, discussing, or working on problems. On the other hand, teachers' activities are also not fully optimal, especially in terms of classroom conditioning and providing learning motivation. The application of *Wordwall* in Cycle I is an important foundation that introduces students to a more interactive and fun way of learning.

Departing from the results of the reflection of Cycle I, several improvements were applied in Cycle II. Teachers began to increase students' motivation to learn, vary the form of *Wordwall* games so that students don't get bored, and improve time management during the learning process. Teachers give students a wider opportunity to ask questions when they don't understand the material. Improvements to this action have a significant impact. This can be seen from the increase in student activity which was originally in the category of quite increasing to the very good category with a score of 4.5. Students appear to be more focused, actively respond to the teacher's questions, and are able to re-explain the material in their own language. Teacher performance also increased significantly, with an observation score of 4.6 in the very good category. The increase in student learning outcomes between Cycle I and Cycle II is also very clear. In Cycle I, only 14 out of 27 students achieved scores above KKM or 51.85%. This percentage indicates that most students are still in the adjustment stage and need further guidance. After improvements were made in Cycle II, learning completeness increased significantly. A total of 22 students managed to achieve a complete score or 81.48%. This almost 30% increase shows that the use of *Wordwall media* is very effective in improving students' understanding, especially on human materials, places, and environments. This surge in completeness is in line with the increase in student and teacher activities in the learning process.

The improvement in student understanding can also be seen from the graph of the results of *the Wordwall* work at each meeting. At the beginning of use, some students still take a long time to complete the game and many answer wrong. However, in the following meetings, the students' grades increased and the processing time was getting faster. Many students take the initiative to repeat the game to get the highest score. This indicates that there is an internal drive or intrinsic motivation that is growing. Students also start to reread the material before playing and discuss with friends if they find difficult problems. The automatic feedback feature on *Wordwall* that displays correct answers when students answer incorrectly helps them correct mistakes directly, making the learning process more effective. The findings of this study are in line with Sudijono's opinion that students' understanding increases when they are able to reinterpret the material learned.¹⁸ This is evident in students in Cycle II who can describe the material in their own language. Sudjana also emphasized that learning media can clarify the presentation of material so that it is easier for students to understand.¹⁹ Putri & Hamimah's research also strengthens the results of this study by stating that *Wordwall* is effective in increasing students' interest and understanding because it is interactive, challenging, and fun.²⁰

The application of *Wordwall* in learning at ICC Muar is supported by several factors, such as the availability of gadgets owned by most students, the ease of use of the application, and the enthusiasm of students in participating in games. However, obstacles also arise in Cycle I, especially when students still have difficulty adapting to new learning media and less conducive classroom conditions. These obstacles can then be overcome through intensive guidance from teachers, game variations, and continuous learning motivation. These improvements make learning more interactive and fun, so that it has a direct impact on student learning outcomes. The increase in understanding that occurred in Cycle II was also reflected in the decrease in the number of students who needed remedial. If in the pre-cycle there are 15 students who have not completed, then in Cycle II the number has decreased drastically to only 5 students. A total of 22 students managed to achieve the very good category with high scores. This shows that the majority of students not only experience improved understanding, but are also able to achieve optimal learning performance. *Wordwall* provides ample space for students to practice independently, focus, and keep trying until they achieve the best results. The increase in the number of complete students and the decrease in remedial students confirm that the use of *Wordwall* not only improves student understanding, but is also able to change the overall quality of learning. The results of this study are in line with modern

¹⁸ Sudijono, *Introduction to Educational Evaluation*.

¹⁹ Sudjana, *Assessment of the Results of the Teaching and Learning Process*.

²⁰ Nana Meisah Putri and Hamimah Hamimah, "Development of Interactive Multimedia Wordwall Using the Problem Based Learning (PBL) Model in Science Learning," *Journal of Practice Learning and Educational Development* 3, no. 1 (2023), <https://doi.org/10.58737/jpled.v3i1.99>.

learning theory which states that interactive media can significantly increase motivation, engagement, and understanding of concepts.

CONCLUSION

This study confirms that the application of *Wordwall learning media* can be an effective solution to increase students' understanding of social studies materials about people, places, and the environment at ICC Muar, Malaysia. The implementation of *Wordwall* not only improves academic achievement, but also changes the quality of the teaching and learning process to be more interactive, engaging, and student-centered. Through two cycles of action, it can be seen that this educational game-based learning consistently increases student engagement, focus, and motivation, thus having a direct impact on improving learning completeness. These findings show that the use of simple but relevant technology can overcome learning barriers in the educational context of migrant children who have limited access to quality learning resources. This study recommends that *Wordwall* or similar media be implemented in a sustainable manner as part of the learning strategy in community schools. Teachers are advised to vary the form of play and integrate it with other pedagogical approaches to keep learning engaging and meaningful. For further research, it is recommended to develop studies on different subjects, expand the number of samples, and explore the long-term impact of the use of educational games on students' cognitive development and learning motivation

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