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Learning Training with Gamification to Improve Students' Collaboration Skills at Seboropasar Elementary School in Purworejo

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ABSTRACT

Preparing students to be ready to collaborate in the 4.0 era using available curriculum implementation is one of the teachers' tasks in the classroom. One of the problems that occurs at the Seboropasar State Elementary School in Purworejo district is that students' collaboration skills are still low. For this reason, the introduction of a gamification-based learning model can be the right solution. The aim of this activity is to improve teachers' understanding, knowledge, abilities and skills in carrying out interesting and interactive learning using a gamification approach. The method used in this activity is service learning with 3 stages, namely preparation, implementation and evaluation. This activity was attended by teachers and students Seboropasar State Elementary School teachers. The results obtained from this activity are increased understanding, abilities and skills of teachers in managing learning that is interactive, interesting and able to improve students' collaboration abilities.

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INTRODUCTION

Seboropasar State Elementary School is an elementary school located in Seboropasar Village, Nkombol District, Purworejo Regency. The condition of the elementary school environment is close to the mosque and the Village Head's office so that the harmonization of the elementary school environment with the community is very good. The curriculum used at Seboropasar Elementary School is the 2013 Curriculum and implemented in grades 2, 3, 5, and 6. Meanwhile for grades 1 and 4 the independent curriculum has been implemented. The learning methods and strategies used in some classes are expository learning. This learning strategy emphasizes verbal material from a teacher to students with the aim of students being able to master the learning material optimally.

One of the abilities that can improve skills in the 21st century is the ability to collaborate. Collaboration ability is a way of interacting between several people to achieve a common goal (Ayun, 2021; Ghasya & Kartono, 2020). Collaboration is used as an important skill in achieving effective learning outcomes in learning. Through collaboration, students have the ability to work together and there will be mutual interaction between students and other students to achieve learning goals (Wati, 2022).

Based on observations at Seboropasar State Elementary School, it was found that students' collaboration abilities were still relatively low. Student activities in groups were not carried out well and their collaboration skills were not maximized. Students are also not active in expressing ideas or opinions during discussions; have difficulty drawing conclusions from activity decisions, and lack confidence in making presentations in front of the class. Students' collaboration skills can be trained in learning, either by using media, models, methods, approaches, designs and other learning strategies.

One learning approach that can be used is gamification. Gamification is a learning approach using elements in games or video games with the aim of motivating students in the learning process and maximizing feelings of enjoyment and engagement with the learning process. Apart from that, this media can be used to capture things that interest students and inspire them. to continue learning (Ariani, 2020; Ccoa et al., 2023) .

Based on this background, the aim of this service activity is to improve teachers' skills, knowledge and ability to make changes to the learning process to make it more interesting in the classroom through gamification-based learning. Apart from that, it is also hoped that the collaboration skills of Seboropasar State Elementary School students will increase.

METHOD

The strategy in this training uses a method, namely service learning. The approach used in implementing activities is a mentoring system. The implementation time will be in May 2023. The location is at Seboropasar elementary school, Ngombol District, Purworejo Regency. Participants consisted of 10 teachers. The stages of implementing training activities as seen in Figure 1.



FIGURE 1. The stages of implementing community service activities at Seboro Pasar Elementary School

The preparation stage is to carry out observations first to find out the situation in the school environment and observe the problems that exist in the school environment and those faced by teachers, determine activities related to gamification learning to improve students' collaboration abilities and make

preparations for mentoring activities. Implementation of mentoring activities at Seboropasar State Elementary School by providing assistance related to gamification-based learning models for teachers. At the end of the implementation of the activity, the teacher applies learning in the class that is adapted to the conditions of each class. After that, an evaluation was carried out on the results of the training and reflection on applying gamification-based learning as a learning model that can train students' collaboration skills.

RESULTS AND DISCUSSION

Based on the stages of implementing the gamification learning training service in elementary schools, the following results were obtained

Preparation Stage

In the preparation stage, the team coordinated with teacher and headmaster Seboropasar elementary schools. Next, observation of learning and school conditions was carried out for 1 week. From the results of observations and analysis studies, it was found that learning is still not varied so that students tend to feel bored and lazy to learn and students' collaboration abilities are still low. For this reason, the team made several preparations to support the implementation of this learning, namely

- Brainstorming material on teacher abilities in managing the class, student characteristics and learning materials
- Prepare several forms of games that have been adapted to the characteristics, material and collaboration abilities of students
- Technical guide to preparing learning lesson plans with gamification
- Technical guide for evaluating student collaboration abilities

Implementation Stage

The implementation of mentoring began with a Focus Group Discussion (FGD) conducted by the school and team from the Universitas Muhammadiyah Purworejo (Figure 2). In this activity, teachers were also given training regarding the implementation and evaluation of learning with gamification. However, the use of game elements must at least be adjusted to the analysis of student or instructional needs. Apart from that, it requires the right concept, clear goals and being able to build engagement for students in learning and how to make learning more enjoyable, without the students realizing it (Majuri et al., 2018; Partovi & Razavi, 2019). In assisting classroom actions, the issues or research problems are related to the learning process implemented in the classroom.



FIGURE 2. FGD with the school at the preparation stage

The next activity in this implementation stage is implementation into the classroom. There are 3 different game activities implemented, namely Outing class in class 3, working on group questions with the quizizz application in class 4 and making posters with Canva media in class 5. The outing class game

aims to increase exploration, help students recognize road directions, improve their ability to follow directions, read maps, and build teamwork. This activity teaches students to listen, attend, search, plan strategies & make decisions together so that students learn to accept consequences (Djuhartono et al., 2023; Yansaputra & Pangestika, 2020).



FIGURE 3. Group games with Outing Class

Seboropasar elementary school actually has complete learning facilities such as a projector, projector screen, WiFi and 9 tablets. However, these facilities have not been used optimally. To support this gamification, the use of tablets and laptops as facilitators in learning is further enhanced by using the Quiziz platform learning media to work on questions from the material that has been taught (Figure 4). The Canva platform is to train students' creativity in design using online digital media, and the use of learning videos in delivering material so that students are not bored and are more interested in the ongoing lesson material (Figure 5).



FIGURE 4. Group games with the Quizizz application



FIGURE 5. Play in groups with Canva application

In other research, it is stated that the Quizizz application can be an educational tool that encourages collaboration and communication between students through quizzes (Ccoa et al., 2023; Lestari et al., 2022). The Canva application was chosen by teachers and the team because it is more accessible and has easy-to-use features so it is hoped that teachers can imitate and modify it. Previous research conducted by Wulandari Mudinillah which summarized the use of Canva as a learning media stated that Canva was effectively used as a media that could support the learning process (Latifah et al., 2023; Nurani et al., 2023).

Evaluation Stage

The learning assistance activities with gamification were carried out well. Evaluation is carried out by observing students' activities when participating in learning activities in terms of indicators of collaboration ability, namely being willing to work in heterogeneous groups, each member working together and complementing each other with friends to solve problems and produce ideas, being responsible for carrying out group tasks of which they are part, and being able to make decisions by considering the common interest. Students are working together better in groups, as evidenced by lively discussion activities where students have the courage to express opinions and can also complement each other's answers between friends. Students have also been able to create interactive learning media QuizWhizzer so that it can be applied in class. Students are enthusiastic about the learning material because they enjoy playing games. Findings in other research show that learning that involves children's tendency to play is much more effective because students feel more relaxed (Septiani & Santi, 2022). For children learning while playing, it is important that learning will be effective if it is done in a fun atmosphere (Siberman, 2018). Some of the benefits of games if they are integrated into children's learning activities are that they can increase creativity, problem solving and contribute to the development of self-regulation and collaboration (Ulhusna et al., 2020).

CONCLUSION

Community service activities are running according to planning, mentoring is carried out with participants from Seboropasar State Elementary School teachers to improve classroom management skills with gamified learning so as to improve the quality of learning and meet the requirements of the independent curriculum or other activities. Based on the evaluation results, its application in the classroom is not only able to create an active classroom atmosphere but also increases the students' collaboration abilities.

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REFERENCES

Ariani, D. (2020). Gamifikasi untuk Pembelajaran. *Jurnal Pembelajaran Inovatif*, *3*(2), 144–149. https://doi.org/10.21009/jpi.032.09

Ayun, Q. (2021). Analisis Tingkat Literasi Digital dan Keterampilan Kolaborasi Siswa dalam Pembelajaran IPA Kelas VII Secara Daring. *Jurnal Didaktika Pendidikan Dasar*, *5*(1), 271–290. https://doi.org/10.26811/didaktika.v5i1.286

- Ccoa, N. M. Q., Choquehuanca, M. E. F., & Paucar, F. H. R. (2023). An Application of the Quizizz Gamification Tool to Improve Motivation in the Evaluation of Elementary School Students. *International Journal of Information and Education Technology*, *13*(3), 544–550. https://doi.org/10.18178/ijiet.2023.13.3.1837
- Djuhartono, T., Ari Wibowo, P., & Haryanto, H. (2023). Class Action Research Workshop With Participant Active Learning for Educators in Gugus 04 Primary School Level Ciputat District South Tangerang City. *ABDIMAS: Jurnal Pengabdian Masyarakat*, *6*(4), 4387–4400. https://doi.org/10.35568/abdimas.v6i4.3803
- Ghasya, A. V. D., & Kartono. (2020). Technical Guidance 21st Century Learning Application to Improve the Pedagogic and Professional Competence of Elementary School Teacher. *Abdimas Umtas: Jurnal Pengabdian Kepada Masyarakat, 4*(2), 754–759.
- Latifah, Triwoelandari, R., & Irfan, F. (2023). Pengembangan Media Pembelajaran Interaktif Canva pada Pembelajaran IPA Berbasis Stem untuk Meningkatkan Kolaborasi Siswa MI/SD. *SPEKTRA: Jurnal Kajian Pendidikan Sains*, *9*(1), 32–43. https://doi.org/10.32699/spektra.v9i1.317
- Lestari, W., Supandi, A., Liberna, H., Ningsih, R., & Eva, L. M. (2022). Penerapan Aplikasi Quizizz Dalam Pembelajaran. *Community Development Journal: Jurnal Pengabdian Masyarakat*, *3*(3), 1462–1465. https://doi.org/10.31004/cdj.v3i3.7863
- Majuri, J., Koivisto, J., & Hamari, J. (2018). Gamification of education and learning: A review of empirical literature. *Proceedings of the 2nd International GamiFIN Conference, GamiFIN 2018*.
- Nurani, D. C., Markos Siahaan, S., Astra Patriot, E., Agung, A., Asyrof, M., Trio Minar, Y., Anggraini, S., & Komarudin, W. A. (2023). Training in Making Interactive Learning Media Using the Canva Application for Elementary School Teachers in Palembang City. *ABDIMAS: Jurnal Pengabdian Masyarakat*, *6*(1), 3060–3063. https://journal.umtas.ac.id/index.php/ABDIMAS/article/view/2858
- Partovi, T., & Razavi, M. R. (2019). The effect of game-based learning on academic achievement motivation of elementary school students. *Learning and Motivation*, *68*, 101592. https://doi.org/10.1016/j.lmot.2019.101592
- Septiani, A., & Santi, A. U. P. (2022). Pengaruh Aplikasi Quizwhizzer Terhadap Minat Belajar Siswa Kelas IV pada Materi Sumber Energi. *Prosiding Seminar Nasional Penelitian LPPM UMJ*, *1*(1).
- Siberman, M. L. (2018). Active learning 101 cara belajar siswa aktif. Nuansa Cendekia.
- Ulhusna, M., Putri, S. D., & Zakirman, Z. (2020). Permainan Ludo untuk Meningkatkan Keterampilan Kolaborasi Siswa dalam Pembelajaran Matematika. *International Journal of Elementary Education*, *4*(2), 130. https://doi.org/10.23887/ijee.v4i2.23050
- Wati, M. (2022). Pengaruh Model Pembelajaran Problem Based Learning Berbantuan Media Mobile Learning Terhadap Kemampuan Kolaborasi Matematika Siswa Kelas IV SD. *Indonesian Journal of Educational Science (IJES)*, *5*(1), 56–64. https://doi.org/10.31605/ijes.v5i1.1834
- Yansaputra, G., & Pangestika, R. R. (2020). Peningkatan sikap sosial positif melalui outing class permainan tradisional interaktif. *Aksiologiya: Jurnal Pengabdian Kepada Masyarakat, 4*(2), 174–180.