

Digital Learning Transformation Training to Improve Teachers' Pedagogical Skills at SDN Tlogowaru 01 Malang

Pelatihan Transformasi Pembelajaran Digital Untuk Peningkatan Kemampuan Pedagogik Guru Di SDN Tlogowaru 01 Malang

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Abstrak

Kemampuan guru dalam kompetensi pedagogik harus ditingkatkan. Guru harus selalu berinovasi dalam merancang proses pembelajaran yang dimana pembelajaran merupakan kegiatan utama dalam proses Pendidikan. Guru dijumpai masih menggunakan pembelajaran terfokus bukan pada siswa. Tantangan yang cukup besar bagi para pendidik terutama guru Sekolah Dasar untuk dapat memberikan materi yang menarik dan mudah dipahami oleh peserta didik. Melalui adanya tantangan tersebut maka setiap pendidik dituntut untuk lebih kreatif dalam menyampaikan materi dan menarik perhatian peserta didik. Mencermati kondisi yang terjadi di SDN Tlogowaru 1 maka kegiatan ini bertujuan untuk memberikan Pelatihan Transformasi Pembelajaran Digital Untuk Peningkatan Kemampuan Pedagogik Guru Di SDN Tlogowaru 01 Malang. Peserta pelatihan sejumlah 22 Guru dengan Metode *Participatory Action Research* (PAR). Hasil kegiatan pengabdian pada Masyarakat (PPM) meningkatnya pengetahuan dan keterampilan guru dalam membuat bahan ajar yang interaktif melalui aplikasi flipbook dan scratch. Guru diharapkan dapat mengimplementasikan ke dalam pembelajarannya di kelas masing-masing. Peserta PPM memberikan respon positif kepuasan sebesar 16,36% Sangat setuju, 82,73% Setuju.

.Keyword: Pembelajaran; Pedagogik. Transformasi

Abstract

Teachers' ability in pedagogical competence must be improved. Teachers must always innovate in designing the learning process where learning is the main activity in the education process. Teachers are still found to use learning that is focused not on students. A big challenge for educators, especially elementary school teachers, is to be able to provide interesting and easily understood material for students. Through these challenges, every educator is required to be more creative in delivering material and attracting the attention of students. Observing the conditions that occur at SDN Tlogowaru 1, this activity aims to provide Digital Learning Transformation Training to Improve Teachers' Pedagogical Skills at SDN Tlogowaru 01 Malang. The training participants were 22 teachers with the Participatory Action Research (PAR) Method. The results of Community Service (PPM) activities increased teachers' knowledge and skills in creating interactive teaching materials through flipbook and scratch applications. Teachers are expected to be able to implement them into their learning in their respective classes. PPM participants gave a positive response of satisfaction of 16.36% Strongly agree, 82.73% Agree.

Keyword: Learning; Pedagogy. Transformation

1. Introduction

SDN Tlogowaru 1 public school is located on the outskirts of Malang city. The house is located at Jalan Sekarsari Indah No. 2, Kedungkandang District, and has a land area of 3656 square meters. The number of teachers and teaching staff is 10 people, and there are 168 students in six classes. They also have internet access to help the teaching and learning process. The principal of SDN Tlogowaru 1 not only hopes to shape the character of better students, but also hopes that they can be in line with the school's vision and mission. The school's vision and mission are to become school citizens who believe, are devoted to God Almighty, have noble character, achieve, and have an environmental culture.

Quality learning allows students to maximize their potential [1]. This means that learning must be carried out interactively, inspiring, fun, challenging, and motivating students to participate actively. The learning process must also provide sufficient space for creativity, initiative, and independence according to the talents, interests, and psychological development of students. Learning materials are one of the many elements that support the implementation of learning. Learning materials are divided into different levels of difficulty for each student, which makes it difficult for students to understand. Because of this problem, teachers must have pedagogical skills in delivering materials. The solution is to use learning media that attract students to learn topics that they find difficult to understand.

Technological advances greatly influence the learning of today's millennial generation, from elementary to advanced education [2]. This is related to the use of technology-based learning applications such as flipbooks and scratch. Flipbooks can be used to display interactive simulations that combine animation, text, video, images, audio, and navigation. This makes learning more interactive and attracts students' attention. By utilizing the interactive features of flipbooks, learning can be more fun and attract students' attention. Scratch, a visual programming environment developed by the Massachusetts Institute of Technology (MIT), is intended to teach programming to children and adolescents in a fun and easy-to-use way [3]. Providing interesting and easy-to-understand material to students is quite a challenge for teachers, especially elementary school teachers [4].

The results of the observation showed that teachers did not have the desire to create interactive teaching materials; teachers tend to use a one-way learning approach (lecture); and teaching materials have hardly changed from the previous year. The results of the interview showed that many teachers do not want to learn with new technologies that continue to develop and do not want to take the time to learn them, which makes it difficult to accept. This is not many people know how to use technology to create interactive teaching materials. Teaching materials are materials designed by teachers systematically to help students understand and understand the lesson. Teachers must also use teaching materials to increase students' interest and desire to learn [5]. If there is no effort to improve the quality of learning with fun, there is a lack of attraction for students and a lack of their involvement in the learning process. Students are not interested in understanding ideas because the methods are not interactive and not motivating [6]. The team proposing the Community Service (PPM) activity are lecturers from the State Polytechnic of Malang who will accompany the teachers in the SDN Tlogowaru 1 environment in this PPM activity. Therefore, the introduction of Scratch programming is also held to support the creativity of educators in creating works that can then be implemented into learning to train their students. The activity partner is the Principal of SDN Tlogowaru 1

2. Materials and Method

Community service activity method (PPM) with Participatory Action Research (PAR), where this method prioritizes community empowerment as its object. Participatory Action Research (PAR) approach focuses on community empowerment. The role of lecturers or students as activity facilitators [7]. This activity consists of providing theoretical material (seminars), demonstrations to participants, and conducting direct practice. Participants in the PPM training activities were teachers in the SDN Tlogowaru 1 environment and participation from several other schools, both public and private elementary schools, with a total of 22 teachers. The stages of the activity consist of a) field studies, b) making materials, c) implementing PPM, d) evaluation and e) activity analysis and preparation of reports. Community Empowerment (PPM) teams from universities need to position the community as the primary actors in the development and change process. Lecturers and students should not be seen as dominant actors, but as facilitators who play a participatory role in supporting and empowering the community

3. Results and Discussion

Community service activities were carried out on June 2-3, 2025 in the auditorium of SDN Tlogowaru 1 on Jalan Sekar Sari, Tlogowaru, Kedungkandang District, Malang City, East Java. The PPM team consists of 7 lecturers and students. Where each PPM team member has received their job description. The participants in this community service activity were initially teachers of SDN Tlogowaru 1, then communication between the principal and the school supervisor in the Kedungkandang area was carried out to be able to also participate because this activity can help improve teacher skills in preparing interesting and enjoyable learning.

The first stage of the activity begins with a field study, where this activity focuses on finding the root of the teacher's problem in preparing less interactive learning so that students feel bored, interest in learning has not been seen which has an impact on student learning outcomes being unsatisfactory. Learning is still centered on the teacher while technological developments can support learning. The results of the identification of problems show that many teachers lack motivation to improve pedagogical skills, consider it difficult to learn technology

that can help teaching in understanding the material to students and lack of information regarding the approach to making creative, fun teaching materials.

The second stage of material creation. After identifying the problems in the field, the PPM team then discussed with the principal of SDN Tlogowaru 1 to agree on the solution offered, namely providing training on how to improve teachers' pedagogical skills, introducing digital learning transformations and training on creating interesting teaching material innovations with flipbooks and Interactive Exercises with Scratch.

The third stage of PPM implementation. The implementation on the first day, June 2, 2025, began with a speech from the principal of SDN Tlogowaru 1, which was then continued by a speech from the school supervisor. He said that as educators, they always strive to improve their pedagogical knowledge because if their pedagogical abilities always increase, then their ability to prepare well-planned learning will increase. The development of technology, which is increasingly dynamic every day, requires a responsive attitude from teachers who are adaptive in understanding this. The resource person on the first day, Mr. Adi Candra Kusuma, S.Pd.Si., M.Pd, said that Pedagogy is the ability of educators to control and manage the educational process. Understanding how to carry out teaching and learning interactions in the classroom is important so that educators can teach well [8]. Technology has become a major force in changing the way we learn and teach in the ever-evolving digital era. The process of integrating digital technology into education to improve the quality, effectiveness, and efficiency of learning is known as digital learning transformation. This process covers various parts, starting from the use of e-learning platforms, digital media, and the implementation of online learning and blended learning. With easier and wider access to various devices and applications, education has seen a major change in the learning experience of students. By using technology, educators can create a more interactive, fun and effective learning environment. Digital learning is usually in presenting learning with modules (e-modules). The module structure usually consists of an introduction that attracts students' attention, presentation of the main material with relevant animations, interactive exercises to improve student understanding, and evaluation to evaluate how well the learning objectives are achieved [9]. Training participants are given material on making teaching materials using Canva media which is continued with presentation through flipbooks. Participants are given a basic introduction to Canva and an introduction to flipbooks so that each participant is given the freedom to create one topic of teaching materials to be created. E-module teaching materials are made based on constructivism theory, where educators only need to expand their students' knowledge and give them the opportunity to learn in the way they like [10]. E-modules can be used without printing and can be accessed through online flipbook websites that can be opened through various types of electronic media, including computers, cellphones, and others. Students in elementary schools not only have the ability to read books, but they also have the ability to interact with the e-books they have. This ability makes learning easier for them [11]. The assignment was carried out in groups to facilitate the completion of one chosen topic. On the second day, participants were given material by resource person Mrs. Anindya ST., M.T about Scratch. Technological advances have greatly influenced the learning of today's millennial generation, from elementary to higher education. The use of technology-based learning applications is one example [12]. The learning process is an important component in achieving educational goals



Figure 1 Implementation of Community Service Activities (PPM)

This community service activity is in line with [13] the increasing ability of teachers to use hyperlinks, download and insert sound, text, images, and videos, and create quizzes via Wordwall, Kahoot, and Quizizz; this is then integrated into the learning module and packaged in a flipbook. The activities carried out [14] regarding For the subject of sets, use the kvisoft flipbook maker application to create e-module teaching materials. Activities [15] identify the effectiveness of Canvapada-based digital flipbook teaching materials in social studies subjects in class VII of SMP Muhammadiyah 2 Purwokerto.

The fourth activity is evaluation, where in this activity training participants are given feedback regarding the implementation of PPM activities as follows.

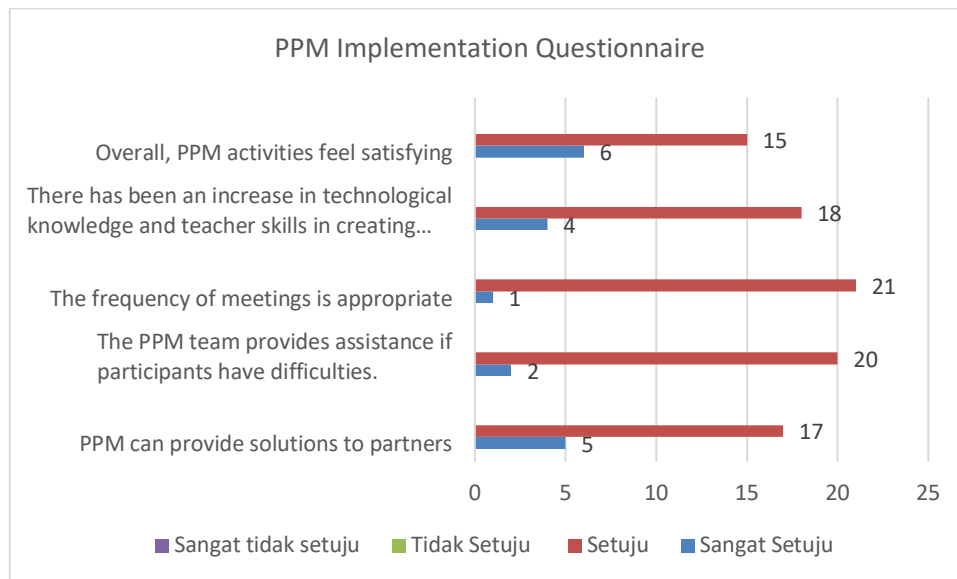


Figure 2 PPM implementation questionnaire

Based on the questionnaire that the training participants from 22 teachers mostly gave a positive response Where 16, 36% Strongly agree, 82.73% Agree. The PPM team hopes that after the implementation of this activity all teachers have high motivation to be able to present interactive learning by creating interesting teaching materials through flipbooks and Scratch. If the teacher is proficient in operating this application, they can give group presentation assignments to students with certain subject cases and then present them with interactive media. The fifth stage is analyzing and compiling reports as documentation of community service activities. The report is compiled systematically and made in the form of a scientific article publication.

4. Conclusion

Teachers' ability in pedagogical competence must be improved. Teachers must always innovate in designing the learning process where learning is the main activity in the education process, because through this learning activity it is expected that educational goals can be achieved and good learning outcomes can be achieved. The benefits obtained from the activities include: PPM partners will gain knowledge benefits and be motivated to carry out Digital Learning Transformation to Improve Teachers' Pedagogical Ability at SDN Tlogowaru 01 Malang such as making teaching materials with flipbooks and Interactive Exercises with Scratch. Community service activities (PPM) increase teacher knowledge and skills in creating interactive teaching materials through flipbook and scratch applications. Teachers are expected to be able to implement it into their learning in their respective classes. PPM participants gave a positive response of satisfaction of 16.36% Strongly agree, 82.73% Agree. PPM activities need to be continued to understand the implementation carried out by teachers. Identifying obstacles faced by providing intensive assistance outside of PPM activities.

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