# USE OF DIGITAL MEDIA AND TECHNOLOGY IN THE LEARNING PROCESS BY TEACHER SDIT BAITUSSALAM

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ABSTRACT

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#### Key words:

Instructional Media Learning technologies Learning methods The world of education is currently increasingly developing. In the past, learning in schools usually used manual methods, namely teachers explained lessons in class by explaining directly to students . The aim of this research is to determine the use of digital media and technology at SDIT BAITUSSALAM. The research method used is descriptive qualitative. Media and technology in the world of education today is increasingly developing, one of which is at SDIT BAITUSSALAM. The school also has information technology-based facilities and infrastructure available . The technology at SDIT BAITUSSALAM uses computers. Learning media also plays an important role in the learning process to support smooth teaching and improve student learning outcomes . SDIT BAITUSSALAM utilizes learning media available in schools, for example maps, globes, atlases and photos of the Garuda Pancasila bird for classroom learning. Meanwhile, the technology used is LCD projectors and laptops. How to use it: Teachers usually use Kahoot and Quiziz for classroom learning . An interesting learning atmosphere at SDIT BAITUSSALAM, by using the Student Center Learning learning method teachers can invite students to be more active.

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# 1. INTRODUCTION

Media is a communication channel. The word media comes from Latin, the plural form of the word media. Media literally means intermediary, namely an intermediary between the source of the message ( a source ) and the recipient of the message (a receiver). According to Gerlach and Ely, quoted by Azhar Arsyad (2011), media, when understood in broad terms, are people, materials and events that create conditions that enable students to acquire knowledge, skills or attitudes. Teachers, books, texts, and the school environment are media. Based on this definition, it can be said that it is a learning process, a communication process, therefore, learning media is understood as everything that can be used to convey messages (learning materials) to arouse students' attention, interest, thoughts and feelings in learning activities to achieve goals, learning. Technological developments nowadays have progressed rapidly along with increasing advances in science and the use of technology. Technology has penetrated various fields, especially in the field of education. The parties concerned in the world of education must balance and follow current technological advances (Antika, 2014: 253). Teachers must be able to use technology when learning at school. In the current era, teachers are no longer the center of learning or teacher center learning, so teachers must follow developments with the times. Methods that were previously frequently used, such as lectures, must be adapted to learning in the current era. Teacher center learning method, in this method students are required to be more active. Student-centred or student-centered approach, teachers must be able to prepare their role correctly, teachers must help students solve problems when students experience difficulties in learning (Kurniawan, et al. 2018:2). Learning through

a Student approach *Student Centered Learning* invites students to be active, including literacy (Gantrisia et al., 2018).

Technological skills are in line with 21st century learning, one of which is related to the use of technology. Learning in the 21st century uses learning and innovation skills, knowledge skills, media and technology (digital literacy). Abilities and skills are the basis for a teacher's needs. Teachers must be able to adapt to conditions in the current era. If teachers do not keep up with current developments, teachers will be left behind and the learning process will be less effective. The main key to advanced and rapidly developing education is the teacher's ability to process and innovate every learning process taught. Teachers are expected to continue to strive to correct and update their abilities and skills. Education in Indonesia is how the Islamic book produces young people who understand the knowledge being taught, not just be good at remembering material or information. Students are also required to understand and be able to use technology well and wisely in the learning process. Learning media that still adheres to and uses textbooks has begun to be replaced by digital products such as e-books, VR (Virtual reality), AR (Augmented reality), Game Base Learning, Gamification (Effendi, D., & Wahidy, A .2019). VR (Virtual reality) or virtual reality is a technology that can show virtual environments to users, allowing users to experience these environments and to talk in these environments. The virtual environment is presented by a computer, which is visualized by virtual reality glasses. SDIT BAITUSSALAM itself does not use VR (Virtual Reality). SDIT BAITUSSALAM uses AR (Augmented reality) technology, Game Base Learning, Gamification . AR (Augmented reality) or augmented reality is a technique that can combine 2D and 3D virtual objects with real environments. Virtual objects are projected by computer media (*smartphone*) through a camera in real time, giving the impression that virtual objects can be used in a real environment. Augmented reality or often abbreviated as AR is different from virtual reality which is often called VR. Augmented reality simply adds virtual objects instead of replacing what the user sees. The use of AR (Augmented reality) technology at SDIT BAITUSSALAM itself is by using maps, atlases, globes, photos of Pancasila Garuda birds to carry out the learning process. Game Base Learning itself is game-based learning, a serious type of game designed for specific learning purposes. Game-based learning is a form of learner-centered learning that uses electronic or digital games for learning purposes. A game-based learning process, digital games are used as a learning mediation tool, to increase understanding and knowledge competencies, as well as to assess or evaluate material in scientific disciplines. The use of game-based learning is gamification (Prasetya et al., 2013). Gamification is an excellent new approach to use in learning. Gamification is the use of thinking and game elements for activities outside the game itself. The use of this game can have a positive effect, increasing students' understanding and motivation to learn both formally and informally, as has been stated in several previous research results by (Kristiadi & Mustofa, 2017). The process of utilizing digital media and technology at SDIT BAITUSSALAM, teachers' teaching methods are adjusted to the class level, this is in accordance with the aim of this research to determine the use of digital media and technology in the learning process. SDIT BAITUSSALAM utilizes gamification technology, namely by showing learning videos or films to motivate students to be enthusiastic about learning, with that the appropriate learning method used at SDIT BAIUSSALAM is Student Centered Learning, namely learning that is centered on students without relying on direction from the teacher, where the teacher provides a The video is in accordance with the material taught to students so that students will analyze and understand the content of the video, but if students do not understand, the teacher will help students solve the problem, as stated by (Kurniawan, et al. 2018:2).

#### 2. RESEARCH METHODS

The method used in this research is descriptive qualitative. The descriptive qualitative research method focuses on problems based on facts carried out by observation, interviews and studying documents. Quoted from the book Qualitative Research Methodology by Dr. Rukin, S.Pd., M.Si. Qualitative research is research that is descriptive and usually uses inductive analysis, expands the research process and uses a theoretical basis so that the focus of the research is in accordance with the facts in the field. In addition, the theoretical basis functions as an overview of the research background and as a topic for discussing research results. The results of data and observations for class 3 which has 31 students, they have been introduced to how to use learning media in the form of *Kahoot* and *Quiziz*, and according to observations there are several students who are still confused about how to apply it or how to answer the questions on the projector (Dr. Rukin, S.pd., 2019).



Figure 1. How teachers teach at school

(a) The teacher uses Kahoot for learning and students answer questions in notebooks.

(b) The teacher uses quiziz for learning and students answer questions in notebooks.

# 3. RESULTS AND DISCUSSION

The process of utilizing digital media and technology at SDIT BAITUSSALAM teaches teachers according to their class level. Grade 1 elementary school usually uses fun games for learning, while upper grades use more serious games such as quizzes, usually tailored to the class. The learning media used by SDIT BAITUSSALAM are also adapted to the subjects and adapted to the students. Learning media uses an alphabet that can be arranged into words and letters, for upper classes the learning media is adjusted to students whether it can be used vertically or not, whether individual or classical media, for example atlases, maps and globes for together. Using learning media from the education department, for example building rooms, beads, this media can be used in groups or individually. Students' learning does not use computers directly, but teachers use LCD projectors. All classes at SDIT BAITUSSALAM already use LCD projectors, if the class LCD is damaged you can use the LCD projector provided by the school. Computer technology by utilizing the Computer Lab in the school. Using the platform online during the pandemic, currently it is not possible to use *the platform* in class, for assignments or work that students are competing to do. When students use mobile phones or mobile phones, teachers cannot supervise all students. Teachers prefer to teach via LCD projector or watch YouTube lessons in the form of films which students hope will be easy to understand. Learning media is important in learning. One of the success factors in learning is the role of learning media as a medium for conveying messages from learning sources to recipients. Classroom learning to increase students' enthusiasm for learning includes Kahoot and Quiziz. The learning media that can be created and utilized from the Quiziz application is interactive multimedia. Quiziz has advantages that can be used as learning evaluation material. This media is also used as a learning medium at home, namely homework that is done while at home (Aini, 2019). Students at SDIT BAITUSSALAM are not allowed to bring cell phones or mobile phones in class. Students can write answers in their notebooks. By paying attention to the LCD projector, students become more enthusiastic about learning. The curriculum used at SDIT BAITUSSALAM is the independent curriculum and the thirteenth curriculum (kurtilas), for the thirteenth curriculum (kurtilas) for classes 2,3,5,6. The independent curriculum starts in 2023. The challenge for teachers in the increasingly rapid development of technology is controlling students using digital media and technology. Sometimes children open learning media and accidentally find inappropriate advertisements appearing suddenly, for this reason parents and teachers need supervision in the learning process at school and at home. The obstacle faced at SDIT BAITUSSALAM is the limited amount of technology which means students have to queue to use it. The facilities and infrastructure at SDIT BAITUSSALAM include a library, field, gym, ICT Lab, skills room, prayer room, LCD projector, learning tools (maps, globes, building blocks, etc.). The school also provides technological facilities, namely computers and laptops which are used by students alternately or when students use a laptop in class that is damaged, students can use the laptop that has been provided at school.

SDIT BAITUSSALAM has English as a subject, English teachers at SDIT BAITUSSALAM have almost the same way of teaching as other teachers. The teacher's way of teaching at SDIT BAITUSSALAM must be in a *fun state*, which means that the teacher must teach in a good mood so that the students being taught also look *fun* and do not feel bored while learning in class. Teachers at SDIT BAITUSSALAM also use the song

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method for teaching materials when teaching. The teacher uses laptop or computer technology so that students do not feel bored while learning in class. SDIT BAITUSSALAM in upper grades teachers use video or card learning methods. Teachers also practice with students using their body parts to make it easier for students to absorb the material presented by the teacher. Teachers also use objects around students to make them easy for students to find and understand. The technology used at SDIT BAITUSSALAM is laptops, using the internet, as well as LCDs and projectors. The learning carried out by teachers at SDIT BAITUSSALAM itself is varied and very helpful, such as using a projector screen, this aims to enable students to directly see the screen without having to bring tourists to school. SDIT BAITUSSALAM, when teachers teach, also experiences several challenges in technological developments, such as students having attitudes and manners of paying attention to teachers teaching. Teachers usually do something to make the class more fun by watching a simple movie together. SDIT BAITUSSALAM already uses the independent curriculum, but only a few classes, class 1 and class 4, use the independent curriculum, meanwhile classes other than these classes such as classes 2, 3, 5, 6 still use the 2013 curriculum. SDIT BAITUSSALAM has implemented the curriculum This has been quite a long time, but the independent curriculum will only be implemented in 2023, by utilizing the facilities and infrastructure at SDIT BAITUSSALAM such as: books, worksheets, and textbooks. Students mostly use these 3 tools to carry out learning in the classroom using the 2013 curriculum and the independent curriculum. SDIT BAITUSSALAM already has adequate facilities, such as currently using textbooks.

#### 3.1. Media and technology in the teaching and learning process

Technology is a science that studies the skills and tools used to make it easier for humans to carry out their activities. The role of information technology in teaching and learning activities is a process that can help to convey lessons or knowledge to students in effective teaching activities. This technology is also related to effective learning methods for teachers to achieve maximum learning processes according to educational regulations (Simanjutak, H. (2020)). Along with technological developments, technology has developed which is usually called AR (Augmented Reality), *Game Base Learning, and gamification*.

- AR (Augmented Reality) is a technology that seems capable of combining 2D and 3D virtual objects in a real sphere and then projecting these virtual objects in real time via computer media (Thohari, SKI (2018)). At SDIT BAITUSSALAM itself, we have utilized digital technology in the form of augmented reality (AR). An example of this use is by using maps, atlases and globes for the teaching process.
- 2. Game Base Learning is a learning method, if we translate it into Indonesian, it means a game-based learning method. So, a lesson that is in accordance with the teaching materials and is assisted by technology and displays several achievements when completing the quiz. Game Base Learning is a learning method that uses game applications specifically designed to help the learning process. Games have enormous potential in building motivation in the learning process (Wibawa, ACP, Mumtaziah, HQ, Sholaihah, LA, & Hikmawan, R. (2021)). SDIT BAITUSSALAM also uses Kahoot and *Quiziz*, students are more enthusiastic about learning in class. Students also compete to work on questions ordered by the teacher using a projector.
- 3. Gamification is using elements of game mechanics to provide practical solutions by building interest in certain groups. In more detail, it defines gamification as a concept that uses game-based mechanics, aesthetics, and game thinking to engage people, motivate actions, promote learning and solve problems. By using an LCD projector, students can watch videos about learning films and it is hoped that students will easily understand and be motivated (Simanjuntak, H. (2020)).

#### 4. CONCLUSION

The world of education is currently increasingly developing. In the past, learning at school usually used the lecture method or the teacher spoke in front of students to explain material at length and in depth. However, currently media and technology in the world of education are increasingly developing. Learning media also plays an important role in the teaching and learning process to support smooth teaching. Learning media can also increase teacher creativity. Learning media can also improve student learning outcomes. Students are more happy or interested in the material to be discussed. Students are also younger in understanding what the teacher explains. Students also don't get bored easily when studying in class. Media and technology will be useful if used properly or used in the teaching and learning process to improve the learning process. Apart from that, it is also important for teachers to have interesting learning methods so that students do not feel bored with learning in class. There are many kinds of interesting learning methods so that students don't get bored while learning, such as students being introduced to the surrounding environment, students being taught using practical methods using objects around them, teachers using question and answer methods in class so that students feel close to the teacher. SDIT BAITUSSALAM itself can almost keep up with advanced technology in the current era.

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