Using Information Technology; Efforts in Overcoming Student Learning Difficulties

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Abstract. This study aims to analyze the use of Information Technology in early language development in Madrasah Ibtidaiyah Negeri Model, Jambi and Madrasah Ibtidaiyah Az-Zainiyah II Karanganyar Paiton Probolinggo, East Java. This research uses a qualitative approach with a case study. The results showed that: efforts to overcome student learning difficulties in both madrasah were carried out through several media namely: PowerPoint media, audio in the form of CDs or cassettes and headphones, visual in the form of graphic media containing images, posters, caricatures and audiovisual form of television. Furthermore, the use of instructional media related to information technology, has the use and function of each, adjusting the material being studied or taught to students.

1. Introduction

Today, in a global era, like it or not, the Indonesian people must relate to technology, especially information technology [1]. Developments in Information Technology have had a very significant impact on all aspects of human life. This development has an increasingly open impact and the spread of information and knowledge throughout the world through boundaries, distances, places, space and time [2]. Its influence also extends to various lives, including education. Education is a process that aims to enhance social, cultural, moral and religious values and prepare participants to learn to face challenges and experiences in real life [3]. All are marked by the rapid spread of information and communication in every line of life, including in the world of education [4][5]. The emergence of information technology has spread in every field of human life, including in the world of education [6]. This is because technology has affected everyday human life. Information technology has penetrated and penetrated deeply into various aspects of human life.

The application of information technology in the world of education is a real and factual challenge. It is undeniable that the progress of information technology has many positive impacts on the progress of
the world of education today. Especially computer and internet technology, both in terms of hardware and software, provides many offers and choices for education to support the learning process [7]. The advantages offered not only lie in the speed factor to get information but also multimedia facilities that can make learning more interesting, audiovisual and interactive [8]. In line with the development of internet technology, many learning activities can be carried out by utilizing this technology [9].

Every student who comes to school is nothing but to study in class so that they become knowledgeable people. Most of the development process takes place through learning activities [10]. As a teacher who teaches at school every day, of course, it is not uncommon to deal with children who have learning difficulties [11]. Learning activities for every individual, not always can take place naturally [12]. Sometimes it's smooth, sometimes it's not, sometimes it's quick to grasp what's learned, sometimes it's very difficult.

At a certain level, some students can overcome their learning difficulties, without having to involve others [13]. But in certain cases, because students have not been able to overcome the learning difficulties, then the help of teachers or others is needed by students. A teacher must know the factors of learning difficulties experienced by students before assisting so that the problems faced by students can be resolved as well as possible [14].

As for the factors of learning difficulties, there are two kinds, namely: a) Student internal factors which include disorders or lack of psychophysical abilities of students namely: cognitive, affective and psychomotor. b) External factors include all students situations and environmental conditions that do not support student learning activities. These environmental factors include family, community and school environment [15].

All factors can influence the development of student learning, whether the effect is positive or negative. The power of influence of each factor for each factor is not always the same. The problem of learning difficulties is the core of the problem of education and teaching because learning is the main activity in education and teaching [16]. All efforts in education and teaching are directed so that students learn because through this learning activity students can develop more optimally [17].

To prevent the negative impacts that are worse, which arise due to learning difficulties experienced by students, then with the existence of information technology in learning activities at school, students can find ways to overcome learning difficulties with several diverse student characteristics. Some students can take their learning activities smoothly and successfully without experiencing difficulties but on the other hand, not a few students who experience learning difficulties [18]. When entering a process of learning and teaching in school, students have certain backgrounds that determine their success in following the learning process.

Learning difficulties are more related to the level of normal intelligence or even above normal. Difficulty learning is a condition in a learning process that is marked by certain obstacles to achieve learning outcomes [19]. In general, learning difficulties are a particular condition marked by obstacles, especially learning activities to achieve goals. Thus the reality that is often found in every student in everyday life. Facing learning experienced by students, information technology as a medium of knowledge delivered to their students not only broadens the horizon of thinking but also as a referee in learning activities that have an important role in overcoming the child's learning difficulties by providing convenience to children who have learning difficulties [8].

See the reality that goes on Madrasah Ibtidaiyah Negeri Model, Jambi and Madrasah Ibtidaiyah Az-Zainiyah II Karanganyar Paiton East Java that many students who have difficulty in learning, especially difficulty concentrating in learning, forget in learning and are bored in learning, researchers try to find a way out by using information technology in overcoming learning difficulties in Madrasah Ibtidaiyah Negeri Model, Jambi and Madrasah Ibtidaiyah Az-Zainiyah II Karanganyar Paiton East Java.

Given the importance of this information technology, the researchers aim to find out and analyze the use of information technology in overcoming student learning difficulties in Madrasah Ibtidaiyah
Negeri Model, Jambi and Madrasah Ibtidaiyah Az-Zainiyah II Karanganyar Paiton East Java, then the researcher seeks to provide concrete solutions with several ways in overcoming student learning difficulties. However, in practice in the field, there are many obstacles faced by students in these problems, so they need to get serious attention to the use of existing technology in madrasah.

2. Information Technology and Student Learning Difficulties

Information technology is said to be the result of man-made engineering of the process of delivering information from the sender to the recipient so that the information transmission will be faster, wider distribution and longer storage [20]. Thus, the definition of information technology that is famous in the ears of humans is part of a long chain of term developments in the world of Information Systems. Therefore, information technology does refer more to the technology used in conveying and processing information in the world of education in learning [21], this is part of an information system itself. Information technology is in general very easy to understand as a whole as information processing based on computer technology that develops rapidly in the learning environment [22].

Information technology is no longer a foreign material in the world of education but has become important and very supportive in the world of education. The rapid development of information and communication technology has penetrated various aspects of human life, including touching the world of education [23]. Therefore, schools and teachers cannot avoid this trend only because of budget problems or issues of limited access and insight. The use of information and communication technology in learning activities needs to be endeavoured by the teacher following the abilities of each school and the teacher concerned [24]. Internet training and certain applications such as Microsoft Office, especially power points or applications to make animations are important for teachers in each school to be able to carry out information technology-based learning [22].

Difficulty learning is a symptom that appears in students marked by low learning achievement or below established norms and disruption in one or more of the basic psychological processes that include understanding and using spoken or written language [25].

Learning difficulties refer to a group of difficulties that are manifested in the form of real difficulties in the skills and use of listening, speaking, reading, writing, or reasoning abilities [26]. In other words, learning difficulties are generic terms that refer to a group of heterogeneous disorders, which appear in the form of various difficulties in listening, speaking, reading, writing, reasoning [27].

This disorder is intrinsic meaning it is within the individual concerned, and is considered to be caused by a malfunctioning of the central nervous system. Although learning difficulties may occur together with other disability conditions such as sensory impairments, mental disabilities, social and emotional disorders or environmental influences such as cultural differences, improper teaching, and others, learning difficulties are not a direct result of the influence of factors the [28].

3. Research Methods

This research uses a qualitative approach with a case study. Researchers try to describe and analyze the use of information technology in overcoming student learning difficulties in Madrasah Ibtidaiyah Negeri Model, Jambi and Madrasah Ibtidaiyah Az-Zainiyah II Karanganyar Paiton Probolinggo East Java, Indonesia. Researchers in this case, actively go directly to the field and interact with subjects in Madrasas. Data collection techniques are done through observation and in-depth interviews. while the analysis of the data goes through three stages: Data Reduction, Data Presentation and Verification.

4. Results and Discussion

The results showed that, efforts to overcome student learning difficulties in Madrasah Ibtidaiyah Negeri Model, Jambi and Madrasah Ibtidaiyah Az-Zainiyah II Karanganyar Paiton Probolinggo done through First, the use of PowerPoint media. PowerPoint is one of the methods used in both madrasah to overcome learning difficulties in students. PowerPoint is a means to make it easier for teachers to deliver teaching material to students in the form of unique text, diverse images and at the same time video. PowerPoint is very effective in the learning process because in addition to the teacher in
Madrasah Ibtidaiyah Negeri Model, Jambi and Madrasah Ibtidaiyah Az-Zainiyah II Karanganyar Paiton Probolinggo can explain at once with text that can be seen by students, besides that sometimes the limited material available in the textbooks provided can be added to the PowerPoint slides to facilitate and minimize student learning difficulties.

Second, the use of audio media. Audio is a learning media based on hearing and is used both madrasah, to stimulate the attention, thoughts, feelings and wishes of students so that the learning process occurs. There are several benefits gained from this media that can train your memory and re-express ideas or explanations that have been listened to, audio is one way in both madrasah overcome the learning difficulties of their students. Both madrasah have used audio media in the form of CDs or tapes and headphones on several subjects, one of which is Indonesian, Arabic and English which are very effective at applying audio to poetry material, conversation, listening to stories and retelling stories. This is proven that students are very enthusiastic and enthusiastic in following the learning process using audio media and makes it easier for teachers to deliver learning material so that they can overcome difficulties in student learning.

Third, the use of visual media. Visual media is in the form of graphic media to attract attention, clarify the presentation of the lesson, illustrate a fact or concept that is easily forgotten. This graphic media contains image elements. This visual media is used by the teacher in both madrasah on several subjects to improve the learning process and make it easier for students to understand the material presented. Visual usage must be following the subject matter to be delivered. The teachers use graphic media in natural science, social studies, arts and culture lessons that display pictures, posters, caricatures that support the learning process. Students who are almost all very fond of books that display pictures are greatly helped by the existence of this media, it is one way to overcome the learning difficulties of students in the learning process.

Fourth, the use of audiovisual media. In addition to audio and visual media, audio-visual media is also effective in supporting the learning process that is strides to overcome difficulties in student learning outcomes. Audiovisual is a media that has sound elements and picture elements, one of the audiovisual media used is television. The both madrasah also use this media as a way to overcome difficulties in the learning process, such as those used in Indonesian subjects in library rooms that use television to analyze news content, and students are greatly helped by having this media accompanied by teacher explanations.

5. Conclusion

Information technology is a Wasilah that can answer some of the problems that exist in the world of education, especially madrasah who have learning difficulties with their students. This information technology can overcome the learning difficulties of students because information technology used as a learning medium can facilitate the learning process in madrasah. Students become more active and creative in their learning, so the teacher can accompany and explain learning material easily and comfortably. Information technology can overcome student learning and make students continue learning and follow the learning process to completion, no one feels sleepy, feels bored, even the student's learning process is increasing. This, due to the use of information technology in the learning process, adapts to the learning styles of each student.

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