Utilization of Educational Technology in The Learning Process in The Sub-District of Tebas, Sambas Regency

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Abstract
This study aims to determine the use of educational technology in the learning process for educators in the District of Tebas, Sambas Regency, the theoretical use of research to contribute to the development and utilization of educational technology and practically to be able to apply the development of educational technology. The research method uses descriptive verification method in the form of case study research. The results of the study indicate that the models, strategies, methods and learning media as well as learning resources most of the educators have mastered and can be applied, and it is necessary to pay attention to the facilities and infrastructure that can support the use of educational technology such as internet facilities, wifi and equipment to support the implementation of learning when they want to apply educational technology in conveying lesson messages and the lack of availability of learning resources in supporting the smooth process of using technology other than the teacher concerned.

Keywords: utilization of education, educational technology, learning process

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INTRODUCTION

Education in Indonesia today is experiencing complex challenges. This is partly due to information and communication technology that has developed along with globalization which can have positive and negative impacts on a nation (Said, 2014). With education, we can improve the quality of human resources that we can use as a benchmark to build a better Indonesia in the future with an education (Meizi Syafri Yendi, 2020). The development of technology today cannot be dammed (Afriansyah, 2019). The development of gadget technology such as smartphones and laptops are making it easier for people to use the internet to get all of them (Gideon, 2018). Technology continues to grow rapidly, for this reason, the demands of professionals in the field of education through various trainings continue to be pursued to be more competent in the use of technology, this was also stated by (Donald, 2002) namely "Many professionals in education, however, know that teachers need training in the operation and use of new technologies if they are to be competent in their work with students and colleagues". In line with that, the autonomy of education and the globalization of education which emphasizes competition and quality began to take place (Julaeha, 2006). Need is the gap between the conditions that should be with the conditions that exist today (Khaerudin, 2014).
The education unit concentrates on the implementation of teaching and learning activities carried out both at school and outside of school (Undang-Undang Republik Indonesia Nomor 20 Tentang Sistem Pendidikan, 2003). As input (students), the learning process takes place with the interaction of educators with students, students with students (learning methods) which are influenced by the school environment (facilities and infrastructure) and will get outputs (results/products) (Aunurrahman, 2009). The learning process mostly demands active participation from students, therefore learning activities are centered on students, educators as motivators and facilitators (Bruce & Marsha, 2011). Conventionally, the teaching and learning process is identical with face-to-face meetings between teachers and students that take place in the classroom. The (Eliya Rochmah, 2018) success or failure of learning is highly dependent on educators and students compared to other factors, because educators and students are actors in learning. Educators are one of the human components in learning that play a role in efforts to form professional human resources in the field of development. Therefore, educators are one element in the field of education that must be able to play an active role, and place them both as professionals, as the demands of a developing society.

Success in learning is strongly influenced by internal factors such as interest in learning and learning styles, while external factors include strategies and learning methods used by educators and learning materials themselves, so that the achievement of learning outcomes is still not as expected (Djamarah, 2010). Various efforts have been made by educators or schools to improve student learning outcomes, but the results are still far from expectations. This is caused by learning that is still not optimal. The learning process carried out by educators today tends to achieve the target curriculum material, more concerned with memorizing concepts, not understanding. This can be seen from the learning activities in the classroom which are always dominated by educators and do not actively involve students in the learning process. Many educators still position themselves as "teacher centered learning" where in the teaching and learning process educators still use conventional methods with lecture techniques (Daryanto, 2013).

Basically, learning is complex and involves many interrelated aspects. In learning, educators deal with a number of students with various backgrounds, attitudes and potentials, all of which affect the habits of students in participating in learning. For this purpose, an educator needs to choose an approach and learning method that is adapted to the material being taught by taking into account the interests and learning styles of a student. A person's abilities become the main basis for a person to achieve success (Ramadhayanti, 2018). Learning is a conscious process of efforts by individuals to obtain certain behavioral changes, both of which can be observed directly as an experience (practice) in their interaction with the environment, learning is a mental and physical activity that takes place in active interaction with the environment and produces changes in knowledge and behavior, understanding skills and values, and attitudes (Syamsurijal, 2019). Learning resources are origins or things that can support the occurrence of relatively permanent changes in one's knowledge, behavior, or attitudes due to an interaction experience that occurs during the learning process, such as responding, interpreting, responding, and taking lessons from feedback (Imam Fitri Rahmadi, 2018).
In application of learning methods, it is very necessary to use technology as a form of following the current progress of the times (Sukmara, 2021). (Miarso, 2007). In essence, learning technology is "a discipline with an interest in solving learning problems based on a set of principles and using various approaches". Mastery of learning technology is an absolute must for teachers, because the vision and mission of education that is planned without the support of professional teachers and masters of learning technology will produce less than optimal results. In the learning process carried out, teachers must prepare themselves with various knowledge and skills, especially regarding learning design so that learning can run effectively.

The online learning system (SPADA) has helped educators in facing the challenges of technological development (Effendi & Wahidy, 2019). Educational technology has a very crucial role in learning. So, it can be said that the discovery of educational technology education is an inseparable unit (Agustian & Salsabila, 2021). The development of big data-based Technology Research applications will be able to make it easier for researchers to see the potential and problems of each student. Based on this data, researchers will be able to monitor and evaluate students, teachers, teaching materials and learning implementers. The data can be used as part of the preparation of future research activities (Arditya et al., 2013). In improving the quality of learning, there are three things that must be realized, namely: 1. Students and teachers must have access to digital technology within the educational institution environment. 2. There is quality and useful material for teachers and students. 3. Teachers must have knowledge and skills in using digital learning media to help students achieve academic standards and develop their potential (Siregar & Marpaung, 2020). The presence of educational technology (educational technology) does not mean that it will reduce the role of educators, on the contrary, educators are required to be able to optimize the use of educational technology to improve the quality of education. For this reason, educators can develop their professional abilities by utilizing educational technology. This is absolutely necessary, because the world of education is growing rapidly along with the development of science and technology. To increase success in learning, it needs to be designed in such a way as to be achieved as expected, learning design is a dynamic process that can change according to information and evaluations received, aiming to improve student learning outcomes so that learning objectives can be achieved (Hanum, 2013).

Many studies on the existence of technology in improving the learning process have been carried out both from results and evaluations in learning. However, research that examines the learning process both from design, model, media and learning methods does not yet exist, often research is carried out only focused on one of the models and its design. Research that integrates all areas of educational technology is the focus of this research. Thus, researchers are interested in exploring and assessing the use of educational technology in the learning process in the Tebas sub-district, Sambas district.
METHOD

This study describes how the application of educational technology developments in the learning process for teachers at the elementary, junior high and high school levels in Tebas District, Sambas Regency, so that this study uses a descriptive verification method in the form of case study research (Sukmadinata, 2012).

The data and data sources in this study were public teachers who teach at the Tebas sub-district, Sambas district at the elementary, junior high and high school levels and were obtained through interviews and indirect communication using a data collection tool in the form of a questionnaire (Arikunto, 2010).

Data was obtained by collecting elementary to high school level teachers, then given a questionnaire to obtain quantitative data regarding the use of educational technology, while to obtain in-depth data, interviews were used to view and support research data.

RESULT & DISCUSSION

RESULT

<table>
<thead>
<tr>
<th>No</th>
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</table>

As for the components of the use of various learning models in the learning process, respondents who agreed were 42 or 50% of respondents, 32 or 38% of respondents disagreed and strongly disagreed, there were 20 or 24% of respondents and none strongly disagreed.

<table>
<thead>
<tr>
<th>No</th>
<th>Learning model</th>
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<td>Mastery of Study Materials</td>
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<td>Motivating Students in Learning</td>
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<td>6</td>
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<td>Closing Effective Learning</td>
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</table>

Based on the results of the study, it can be stated that the existing subject teachers always begin to implement the learning process effectively, where as many as 76 respondents or 90% stated strongly agree, as many as 5 respondents or 6% agreed and 3 respondents stated strongly agree. respondents or 4% disagree, if they have started the learning process effectively.
Table 3. Method

<table>
<thead>
<tr>
<th>No</th>
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<td>The use of various learning strategies and methods has been designed in the lesson plans</td>
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<td>Use of various types of learning methods</td>
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</table>

Based on the results of the study, it can be stated that most of the existing educators always design learning methods according to the topic of the lesson being delivered, where as many as 68 respondents or 81% answered strongly agree, and as many as 68 respondents or 81% answered strongly agree, as many as 12 respondents or 14% answered agree, and who answered disagreed as many as 4 respondents or 5%, while those who answered strongly disagreed did not exist.

Table 4. Media

<table>
<thead>
<tr>
<th>No</th>
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<td>Learning Technology Development</td>
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<td>6</td>
<td>Learning Media Facilitates the Learning Process</td>
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</table>

Based on the results of the study, it can be stated that the existing subject teachers, respondents or 15% answered agree, and those who answered disagree and strongly disagree did not exist.

For components of making learning media in the learning process, some respondents answered strongly agree as many as 38 respondents or 45% and who answered agreed as many as 22 respondents or 26% and those who answered disagreed as many as 24 respondents or 29% and those who answered strongly disagreed did not exist.

Table 5. Learning Resources and Learning Outcomes

<table>
<thead>
<tr>
<th>No</th>
<th>Learning model</th>
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<td>2</td>
<td>Structured learning resource management</td>
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<td>The Latest Learning Resources Through Educational Technology</td>
<td>43</td>
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<td>4</td>
<td>Learning outcomes</td>
<td>69</td>
<td>11</td>
<td>4</td>
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<td>5</td>
<td>Evaluation of Learning Outcomes</td>
<td>50</td>
<td>22</td>
<td>12</td>
<td>-</td>
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</tbody>
</table>

Based on the results of the study, it can be stated that educators think that learning resources are the main key in the learning process, most of the respondents answered strongly agree, namely 76 respondents or 90% and those who answered agreed were 8 or 10%, while those who answered disagreed and strongly disagreed there isn't any.
DISCUSSION

Learning Model

Instruments The learning model in this study has four components, namely the learning model and its development, the use of various learning models in the learning process, the planning of learning activities by incorporating appropriate learning models and the selection of learning models that are in accordance with the subject matter and school environmental conditions.

Based on the results of the study, it can be stated that educators always study the learning model and its development in accordance with the demands of technological developments, from 84 respondents who stated strongly agree that educators always pay attention to, study the development of the model, to be applied in the learning process as many as 62 respondents or 84%, who agreed as many as 15 respondents or 18% and who stated disagreed as many as 7 respondents or 8% and strongly disagreed, this means most teachers strongly agree, agree that they will always pay attention and study every development of the learning model that occurs.

As for the components of the use of various learning models in the learning process, respondents who agreed were 42 or 50% of respondents, 32 or 38% of respondents disagreed and strongly disagreed, there were 20 or 24% of respondents and none strongly disagreed. agreed. it means that the use of various models in the learning process by educators mostly agree and disagree, this is on the grounds that information about the development of models and various models is very lacking due to the limited references and resource persons available.

Components of planning learning activities by including appropriate learning models obtained answers from respondents, namely as many as 80 respondents or 95% stated strongly agree in planning learning activities by including appropriate learning models, and those who agreed were 4 respondents or 5% who said they did not agree and strongly disagree, it means that most of the respondents strongly agree in making the lesson plans that the learning model that will be used is always included.

The last component is the selection of learning models that are in accordance with the subject matter and conditions of the school environment, most of the respondents answered agree, namely 43 respondents or 51%, and 35 respondents did not agree or 42%. while those who strongly agree are only 6 respondents or 7% and those who strongly disagree are none. Many disagree or strongly disagree with this component because they are still not very familiar with it.

Based on these components, in general the researcher can conclude that some learning models have been mastered by the teacher and can be applied, and some have not been fully implemented and understood, given the lack of available literature to study these learning models.

Learn Strategy

The learning strategy instrument in learning has seven components, namely educators always start learning effectively, educators are able to master the substance or material or content of teaching subjects or subjects that are their areas
of expertise, educators can apply effective learning approaches/strategies, educators can apply approaches/effective learning strategies. can utilize learning resources/media in learning, educators always motivate/maintain student involvement in learning, I always use correct and appropriate language in learning, and educators can end learning effectively.

Based on the results of the study, it can be stated that the existing subject teachers always begin to implement the learning process effectively, where as many as 76 respondents or 90% stated strongly agree, as many as 5 respondents or 6% agreed and 3 respondents stated strongly agree. respondents or 4% disagree, if they have started the learning process effectively.

Mastery of educators on the substance or subject matter which is their area of expertise, most of them answered strongly agree, namely 65 respondents or 77%, who agreed as many as 19 respondents or 23% and strongly disagreed, none. For the component of implementing an effective learning approach/strategy, most of the respondents answered strongly agree as many as 68 respondents or 81%, as many as 10 respondents or 12% answered agree and as many as 6 respondents or 7% answered disagree. while those who answered strongly disagree did not exist.

For the components of the use of learning resources/media in learning, most of the respondents answered strongly agree as many as 54 respondents or 64% and those who answered agreed as many as 30 respondents or 36% and those who answered disagreed strongly disagreed.

For the component of giving to motivate/maintain involvement and students in learning, most of the respondents answered strongly agree that 78 respondents or 93%, as many as 2 respondents answered agree or 2% and answered disagree 4 respondents or 5%. while those who answered strongly disagree did not exist.

For components of correct and appropriate use of language in learning, most of the respondents gave a strongly agree answer, namely 80 respondents or 95% and gave an agree answer as many as 4 respondents or 5%. Respondents who gave answers that did not agree and strongly disagreed did not exist.

As well as the components of ending the learning process effectively, according to the lesson plan, most of them answered strongly agree or 82 respondents or 98% and answered agree as much as 2 respondents or 2%. while those who gave the answer disagree and strongly disagree did not exist.

Based on these components, in general, the researcher can conclude that most of the learning strategies are highly considered and have been mastered and can be applied by educators, and some have not been fully implemented and understood, given the lack of understanding in terms of these learning strategies, given that there are still teachers who have difficulty distinguishing between the concept of learning strategies with learning models, methods and techniques.

**Learning Methods**

The learning method instrument in this study has three components, namely designing learning methods according to the topics being taught, following learning methods that continue to develop in accordance with developments in educational technology, and utilizing various interesting learning methods according to student characteristics students.
Based on the results of the study, it can be stated that most of the existing educators always design learning methods according to the topic of the lesson being delivered, where as many as 68 respondents or 81% answered strongly agree, and as many as 68 respondents or 81% answered strongly agree. as many as 12 respondents or 14% answered agree, and who answered disagreed as many as 4 respondents or 5%, while those who answered strongly disagreed did not exist.

Most of the teacher components in following and understanding learning methods that continue to develop in accordance with the development of educational technology answered strongly agree, namely 60 respondents or 71%, who agreed as many as 24 respondents or 29% and those who gave answers disagree strongly disagree none.

The components of the use of various interesting learning methods and according to the characteristics of students, most of the respondents answered strongly agree as many as 70 respondents or 83%, as many as 14 respondents or 17% answered agree and as many as 6 respondents or 7% answered disagree, while those who answered strongly disagree nothing. Based on these components, in general, the researcher can conclude that most of the learning methods are highly considered, developed and utilized and continue to be mastered and can be applied by educators, and some have not been fully implemented and understood, given the lack of experiments carried out they do.

Learning Media

Instructional media instruments in learning have six components, namely the importance of learning media to help educators and students in the learning process, creating learning media in the learning process, with interesting learning media, lesson messages can be conveyed according to the lesson plan. Utilizing educational technology that continues to develop to find and create learning media, computer media and LCDs in the learning process and use of media by involving students in the learning process.

Based on the results of the study, it can be stated that the existing subject teachers. respondents or 15% answered agree, and those who answered disagree and strongly disagree did not exist.

For components of making learning media in the learning process, some respondents answered strongly agree as many as 38 respondents or 45% and who answered agreed as many as 22 respondents or 26% and those who answered disagreed as many as 24 respondents or 29% and those who answered strongly disagreed did not exist.

For components of interesting learning media, learning messages can be delivered according to the lesson plan, some respondents answered strongly agree, namely 34 respondents or 40%, as many as 30 respondents answered agree or 36% and 15 respondents answered disagree or 18%. while those who answered strongly disagreed 5 respondents or 6%.

For the component of the use of educational technology that continues to grow to find and create instructional media, some respondents gave a strongly agree answer, namely 30 respondents or 36% and agreed answers as many as 25 respondents or 30%. respondents who gave answers disagree as many as 20
respondents or 24% and strongly disagree there are no as many as 9 respondents or 11%.

Computer components and LCD media in the learning process, some answered strongly agree or 28 respondents or 33% and answered agree as many as 32 respondents or 38%. while those who gave answers did not agree as many as 20 respondents or 24% and those who answered strongly disagreed as many as 4 respondents or 5%.

As well as the components of media utilization by involving students in the learning process, most of the respondents answered strongly agree or 79 respondents or 94% and answered agree as many as 5 respondents or 6%. while those who answered disagreed and those who answered strongly disagreed did not exist.

Based on these components, in general the researchers can conclude that most of the learning media are very concerned and have been mastered and can be applied by teachers, and some have not been fully implemented and understood, it’s just that many teachers are lazy to make these media, because of busyness and lack of materials or facilities available at schools or teachers' homes which are far from the city.

**Resources and Learning Outcomes**

There are five components in the instrument of learning resources and outcomes, namely learning resources are the main key in the learning process, management of learning resources must be well organized and structured, availability of learning resources, acquisition of student learning outcomes, subject matter that educators teach, and evaluation of learning outcomes. subjects taught by educators.

Based on the results of the study, it can be stated that educators think that learning resources are the main key in the learning process, most of the respondents answered strongly agree, namely 76 respondents or 90% and those who answered agreed were 8 or 10%, while those who answered disagreed and strongly disagreed nothing.

Based on the results of the study, it can be stated that educators think that the management of learning resources must be well organized and structured, most of the respondents answered strongly agree, namely 70 respondents or 83% and those who answered agreed were 14 or 17%, while those who answered disagreed and strongly disagreed there isn't any.

Based on the results of the study, it can be stated that educators think that the availability of learning resources in the learning process, some respondents answered strongly agree, namely 43 respondents or 51% and those who answered agreed were 14 or 17%. who answered disagreed as many as 20 respondents or 24% and strongly disagreed as many as 7 respondents or 8%. Based on the results of the study, it can be. It is stated that educators think that the acquisition of student learning outcomes in the subject matter that I teach, most of the respondents answered strongly agree, namely 69 respondents or 82% and those who answered agreed were 11 or 13%, while those who answered disagreed were 4 respondents or 5% and strongly disagree none.
Based on the results of the study, it can be stated that educators think that the evaluation of the acquisition of learning outcomes for teaching subjects most of the respondents answered strongly agree, namely 50 respondents or 60% and those who answered agreed, as many as 23 or 27%, while those who answered did not agree as many as 12 respondents, and strongly disagree no. Based on these components, in general, the researcher can conclude that learning resources and learning outcomes in the learning process are mostly highly considered and quite available and the learning outcomes obtained by students are mostly very satisfying, although there are some subjects that are quite satisfactory.

CONCLUSION

Based on the results of the research and discussion of the research results that have been stated, some conclusions can be drawn as follows. Some learning models have been mastered by educators and can be applied, and some have not been fully implemented and understood, given the lack of available literature to study these learning models. Most of the learning strategies have been considered and have been mastered and can be applied by educators, and some have not been fully implemented and understood, given the lack of understanding in terms of these learning strategies, given that there are still educators who have difficulty distinguishing between the concept of strategy and learning models.

CONFLICT OF INTEREST

Concerning the research, authorship, and publication of this paper, the author(s) reported no potential conflicts of interest.

REFERENCES


