Utilization of Smart-System in Assessment Management to Support Teacher Performance at SDIT Darul Muttaqien

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Abstract

The management of learning outcomes at SDIT Darul Muttaqien has a management system using information technology so that it helps teachers' work in managing student learning outcomes. The purpose of this research is to analyze how information technology helps teachers' work in managing learning outcomes. This research uses a qualitative approach with interview, observation, and documentation study methods so that it can analyze and describe the use of information technology in managing learning outcomes. The method applied uses in-depth interviews with educational practitioners, direct observation of the process of using technology, and documentation studies related to the implementation of information technology in the context of learning outcomes value management. It was found that there is the use of SmartSystem for scheduling online exams, conducting online exams, analyzing exam answer scores, and reporting learning outcomes scores. In terms of hardware utilization, there is still much that needs to be evaluated. Overall, information technology can help teachers improve their performance, teachers' work becomes more effective and efficient in managing learning outcomes scores.

Keywords: Information Technology, Management of Learning Outcomes, Teacher Performance

Introduction

Teachers have a central position in the world of education. Not only in educating students, teachers must also have competence in preparing for learning to evaluating learning outcomes. Teachers will start to get busy even before the school year starts. The learning plan that is taught by a teacher must be carefully prepared so that the learning carried out can be a foothold for students in digesting and mastering a subject matter. The management of student learning outcomes is in fact a polemic felt by teachers. The number of students taught by a teacher in each school year and the limited time and energy of teachers in managing learning outcomes make teachers take unprofessional actions in their work. One of them is to "shoot the value" in determining the value of students. This makes a learning assessment less objective. UU Number 14 of 2005 concerning Teachers and Lecturers states that professional is a profession or activity carried out by a person and becomes a source of life income that requires expertise, or seeing the advancement of information techno-
logy, many schools have adapted information technology to help provide educational services, especially in managing learning outcomes. This can be an alternative problem solving in improving teacher performance in managing learning outcomes.

Some uses of information technology that can help the process of managing learning outcomes include SPSS or Iteman, Microsoft Excel, E-Report, CBT and the creation of special applications for managing learning outcomes. The following is the explanation.

First, software for item analysis. SPSS or Statistical Product and Service Solutions, which is often used in testing research questionnaires, is able to assist teachers in testing the validity and reliability of items that will be submitted in the exam. Similar to SPSS, Iteman or Item Analysis is also a program used for item analysis by computer. The existence of these two software is rarely known by teachers. Based on the results of the training at SD Negeri 2 Marauke in 2018, it can be seen that the item analysis process using these two applications can help teachers save a lot of time and can also help teachers produce quality questions.¹

Secondly, Microsoft Excel is known to help in managing test scores so that the calculation of scores can be faster and more accurate. Various features can be used to complete various calculation formats, making it very beneficial for teachers. Based on one of the trainings held at SDN 1 Pererenan Bandung in 2019 with teachers as training participants, it was noted that Microsoft Excel can help teacher performance, especially in processing report cards.²

Third, CBT or Computer Based Test which is an alternative to conducting exams without using paper but using a computer. A study related to CBT explained that "The percentage of user feasibility based on usability testing factors sequentially obtained a percentage of 95.57% for the learnability factor 86.48% for the efficiency factor 91.14% for the memorability factor, 90.29% for the Errors factor and 94% Satisfaction".³ Thus it can be concluded that the computer-based test (CBT) application system has good quality and is very feasible for processing student academic data.

Fourth, the creation of an application specifically made to manage the calculation of learning outcomes to become a report card display that is ready to be printed or uploaded to the internet. There is research that confirms

² Andi Saparuddin Nur and Markus Palobo, "Pelatihan Analisis Butir Soal Berbasis Komputerisasi Pada Guru SD," MATAPPA: Jurnal el Bidayah: Journal of Islamic Elementary Education Volume 6, Nomor 1, March 2024
that "The Class Teacher Application (AGK) is effective in filing out report cards based on the 2013 Curriculum at Madrasah Ibtidaiyah in Bireuen Regency because it has reached 70% of what is expected".4

It can be seen that there have been various innovations in the use of information technology in the management of learning outcomes. However, the existence of information technology is also a challenge for teachers as human resources in schools. According to Ranbir, "In fact, digital education needs excellent teachers and the teaching profession needs digital education".5 This means that the application of information technology in the organization of education requires teachers who have competencies that can support the use of technology. Therefore, training and coaching should be conducted for teachers in managing learning outcomes using information technology.

It can be seen that various innovations have emerged in the use of information technology in managing learning outcomes. Referring to the above discussion, other research is needed that discusses the use of information technology in managing learning outcomes scores. This research will focus on the use of technology used in a series of grade management starting from planning, implementation, processing, utilization, to assessment reporting. For this reason, a research site is needed that has used an information technology for managing learning outcomes. There is one elementary school that has utilized information technology in managing student learning outcomes. The school is SDIT Darul Muttaqien which is located in Jabon Mekar Village, Parung District, Bogor Regency, West Java.

**Method**

This research uses a qualitative approach to detail the complex aspects of managing learning outcomes through the application of information technology. The method applied uses in-depth interviews with educational practitioners, direct observation of the process of using technology, and documentation studies related to the implementation of information technology in the context of learning outcomes value management.

The main objective of this research is to thoroughly analyze and comprehensively describe how information technology is used in the management of learning outcomes scores. By focusing on research objects that involve information technology, both in the form of software and hardware, this study aims to reveal the impact and effectiveness of the application of technology in facilitating the process of assessing and reporting learning outcomes.

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Through a qualitative approach, this research seeks to understand the context, dynamics and interactions that occur in the use of information technology in education. The expected results of this research not only include an in-depth analysis of the implementation of information technology, but also provide a rich description of the practical context and its impact on the management of learning outcomes in educational settings.

**Result and discussion**

**Result**

In this article, researchers found several research findings, namely:

*First Finding*, The actualization of management control or supervision at the Insan Cita Serang Integrated Islamic Boarding School in improving the quality of education is based on the Ihsan values in the Hadith of the Prophet. This incident can be observed by the lack of progress in activities so there is a need for supervision and evaluation so that the quality of education can improve by the vision and mission of the institution.

*The second Finding*, the form of actualization of supervisory management includes five aspects; leadership of madrasah heads, teachers, students, collaboration networks, and curriculum. These five elements are the main objects of research because they are the foundation for institutions to develop well.

**Discussion**

**Teachers’ Perception of Smart-System as an Assessment Planning System**

In typing questions, teachers experienced several problems such as a lack of skills in using functions in Microsoft Word, difficulty understanding how to insert images or shapes, not understanding how to tidy up typing, and there were teachers whose laptop keyboards were damaged so they had to use an on-screen keyboard. So it appears that the main problem in typing questions is the lack of skills in using Microsoft Word and there are parts of the laptop that are damaged so that it interferes with the typing process.

Furthermore, as mentioned in the previous section, the typing of questions does not need to be too neat because each item will be transferred to an online exam system called Smart-System. All questions typed by teachers are multiple-choice questions to make the exam easy to administer and the output of exam results from Smart-System easy to process. That way, teachers are greatly helped because they no longer need to type questions in a neat format as before when using the PBT (*Paper Based Test*) exam method.

**Teachers’ Perception of Smart-System as an Online Testing System**

The process of processing learning outcomes is further helped by the Smart-System in the 2020-2021 school year. Teachers no longer need to manually analyze the number of points per answer on each exam. In addition, the test scores will be calculated...
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All the results of the analysis of student answers and test scores will be summarized in a file that can be downloaded and opened in the number processing software. Compared to other number processing software, Microsoft Excel is used by almost all teachers at SDIT Darul Muttaqien. Microsoft Excel can read ".xls" type files so that it can display the data in the file. The scores of the analysis results and the total score of the student exam results are summarized neatly and clearly in Microsoft Excel. Thus, teachers can copy the data and can input it by pasting it directly into the Arasbe score processing application. So, in this case it can be seen that there is an increase in teacher performance in processing scores. This function is in accordance with what Khusnuddin explained that Microsoft Excel has advantages, namely numerical data processing and analysis will be faster and more accurate; computer-based data processing in the form of digital data, so the dissemination of information on the results of data processing can also be done digitally; and the dissemination of assessment results can be done online, so that it can be accessed at any time by those who need it.6

In its use, the teachers felt that the Smart-System was good in terms of the quality of the functions. The things that teachers feel like make it easy for teachers to carry out exams, reliable in conducting online exams, flexible in use, and have a fast response when to be used. This means that it can be categorized that Smart-System functions very well.

Teachers also appreciate the quality of Smart-System data and information. The system provides good data accuracy, is timely in processing data (no delays), and produces complete information. Therefore, it can be concluded that Smart-System has excellent data and information quality.

Next is about teachers' satisfaction with the Smart-System. The satisfaction felt by teachers in using this system includes providing effectiveness, efficiency, increased productivity, and work motivation; providing ease of use; and can help work well. So, these results show that teachers are very satisfied with the utilization of Smart-System.

Operators’ Perception of Operating the Smart-System

In carrying out their duties, operators who also double as teachers have experienced several problems, including:

1. When inputting questions, the operator must be observant in entering each item. Sometimes the operator had to look for the appropriate question picture from the internet because the picture of the question that the teacher gave to the operator could not be copied. The operator also had to remove the multiple choice numbering so that the choices were copied properly.
2. Technical problems in uploading questions and once constrained in downloading the score output but these things can be overcome technically by discussing with other level operators.

3. The categorization of questions in Smart-System is not good. That is because Smart-System is used by all levels from SDIT to TMI, so the questions that have been created are mixed together, only categorized in terms of subjects. So the operator sees this as a shortcoming in terms of appearance.

4. The operator must schedule a follow-up exam for students who did not take the exam at a predetermined time, so that the score output is not separated from other students, so the operator waits for students to finish taking the follow-up exam.

5. In the process of uploading report cards to the SmartSystem, there are times when class teachers send report card files at the end of the day before the report card distribution day. So at that time the operator may work overtime until late at night.

6. Sometimes the class teacher is less careful in filling in the report card, so the operator must be observant in rechecking when the report card file in the form of ".pdf" will be uploaded to the Smart-System. If the operator is not observant, then the wrong report card must be taken down and must be corrected first by the class teacher before being uploaded again by the operator.

From these constraints, it can be concluded that adjustments need to be made, both in terms of system development and problems related to class teachers. Thus, the problems will be resolved.

**Conclusion**

In this research, there are several findings obtained during the research process. The findings in question are as follows.

1. The use of IT at SDIT Darul Muttaqien has expanded its application. If previously it was only used to assist the learning process, it has now been applied in the form of an education management information system, an online examination system, and a learning outcome score processing application.

2. Smart-System is the name for a system that function as an education management information system and an online examination system. As an education management information system, Smart-System is useful for storing student personal data, managing student tuition bills, and reporting learning outcomes. Meanwhile, as an online examination system, Smart-System is useful in setting the exam schedule, inputting the exam questions, allowing students to take exam online, and producing the analyzed exam output.

3. There is an operator in charge of inputting questions into Smart-System, scheduling exams, and downloading the output file of exam analysis results from Smart-
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System. This operator is a teacher appointed by the Vice Principal for Curriculum. The teachers selected are those who are proficient in operating computers.

Reference


