Utilization of Management Information Systems in Ensuring The Academic Quality of Vocational School

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ARTICLE INFO	ABSTRACT
Keywords: *Academic quality;* *Application;* *Management Information System*	This research aims to know the utilization of management information systems through android application by teachers and students in ensuring the academic quality of the institution. The analysis used is qualitative approach that is by interpreting data interactively and continuously. Research data collection is done by interview, observation and document study. This research found that with the android application it can guarantee academic quality and make it easier for teachers and students to obtain academic information with a simpler system including attendance, evaluation, discussion and delivery of material. However, not all student attitudes can be observed through this application. This system is relatively new and needs further development in order to provide maximum benefits in an effort to ensure the academic quality of the institution.

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1. INTRODUCTION

Management information systems are not new in the world of education. Globalization which affects the delivery of information that is fast-paced and not limited by space and time causes changes in the use of science and technology in providing education. When the world of education is faced with a pandemic, like it or not, academic activities in educational institutions are changing. However, the quality of the institution must be maintained so that the role of management information system technology can help teachers work in providing services to their customers in their institutions the application of academic information systems can increase the effectiveness and efficiency of academic management (Purwanto, 2017).

Therefore, it is very important for schools to implement a management information system revealed that customers always want quality service that can provide satisfaction. So now a management information system is needed in empowering institutions to be of higher quality (Sallis, 2012). Information systems enable countries to be cost-efficient and effective in their education planning. When institutionalized and guided by a clear vision and strategic planning, an Education Management Information System (EMIS) helps policy makers manage an education system to produce quality outputs

(UNESCO, 2014) Education Management Information System (EMIS) helps policy makers manage an education system to produce quality outputs (Enteria & Role, 2018).

So the challenge in this study is how distance learning is in terms of the role of institutions as well as infrastructure in maintaining the quality of education during the pandemic.

Meanwhile, at this time academic activities for face-to-face meetings are very limited. Based on the results in the field, that SMK Yasti answered these challenges by providing convenience in accessing information anytime and anywhere. Of course the application of the SIM cannot be separated from the existing problems, on the other hand the school wants to guarantee quality academic activities with decision making influenced by the use of technology, and school stakeholders who fully understand its use.

However, this cannot be separated from the ability of parents and educators who are still unfamiliar with existing technology and information systems, as well as students who live in rural areas due to lack of signal and low-income families. Given the role of an android-based management information system in increasing the transparency of academic information to customers, in this case students and teachers, however, the unstable wireless fiber network in schools causes difficulties in using the system. With this background, the researcher is interested in how to use an Android-based management information system in ensuring academic quality at SMK Yasti. According to (Hedwig & Polla, 2007) the quality assurance system can be carried out both in its entirety and in tiered form', comprehensive means all processes involved in school administration such as new student admissions, teaching and learning processes, to the process of graduating graduates whose quality is guaranteed. While what is meant by gradual is that schools can carry out quality assurance only in the learning process. Quality assurance can also be carried out in one class, for example, then increased so that the entire process of activities at school can be guaranteed. The stages in quality management are divided into phases, namely: Plan, Do, Check and Action. Based on research (Mergen, Kepler, Silva da Silva, & Cera, 2014) the PDCA approach can be considered a teaching framework. To implement it, one must consider the goals to be achieved, and prepare proper checklists to reach those goals.

2. METHODS

The analysis used is qualitative approach (that is by interpreting data interactively and continuously) the first step is collecting data, the researcher collects several sources of evidence, the necessary data and understands existing social phenomena and clarifies them to informants in the form of drafts and research reports, the second is data reduction, where the researcher sorts the data to be coded and then adjusts which data is needed. Third step is data presentation, After the data is reduced, the next step is the presentation of the data, researchers present data from interviews and observations descriptively to see the overall relationship with existing theories.

According to Ulfatin (2015) explains that descriptive research can be said that all types of qualitative research are descriptive in nature, which aims to describe and describe the characteristics of phenomena, one of the characteristics of this method is narrative and is generally used to answer problems involving what, how, and why questions. This study describes the characteristics of the phenomenon as a whole and comprehensively with an explanation of words and narrative sentences.

This research in collecting data using interview technique, study documentation and observation. This research was conducted at the Vocational High School (SMK) Yasti Sukabumi involving the Principal as a key informant and additional informants are teachers, curriculum and head of the quality assurance institution. Furthermore, the researchers conducted data analysis to make it easy to find and answer the various findings of the problems studied.

3. FINDINGS AND DISCUSSION

Findings

SMK Yasti is a school focused on vocational education, under the auspices of the Tarbiyah Islamiyah Foundation, which has a vision to create independent students with professional, skilled, and moral abilities, with one of its missions being IT-based learning.

In the first stage, namely the quality assurance institution, principals and deputy principals identify academic problems in the midst of limited learning activities during the pandemic. These academic problems are analyzed from the trend of students' minimum mastery results, the learning process, evaluation of students' abilities and the curriculum applied, the principal of SMK Yasti describes various problem topics, the causative factors and the formulation of the problem so that the relevant staff can plan learning activities using a blended learning approach. The teacher council makes lesson plans based on the results of the evaluation or considers online learning in the even semester of the previous academic year and is informed later through the school learning application.

Learning planning related to the selection of learning models carried out by teachers is relevant to the use of learning models that use digital media, namely Blended Learning as the main model of learning planning. This is due to differences in geographical conditions that affect the availability of wireless networks. In accordance with the results of research conducted by Manggabarani & Masri (2016) through blended learning, students who currently spend a lot of time surfing in cyberspace will be more interested and motivated in using technology in learning compared to opening a thick book which can cause a saturation effect. By constructing their own understanding, students will become more aware of the concepts of the material they are studying rather than just memorizing the material obtained without interpreting it.

The form of institutional support related to learning planning is the holding of distance learning training based on android applications to equip teachers in preparing lesson plans and digital learning media according to the subjects taught. This can add insight for teachers as well as provide alternatives and options for distance learning. Another form of support that is also provided is the provision of additional wireless fiber networks in the school area.

In the implementation cycle, learning is carried out according to a predetermined plan. But it is undeniable that there are some adjustments that occur during the implementation of learning. Although there are changes, teachers can anticipate by making some variations or changes without reducing the context or meaning of learning. In preparing for change, the teachers took part in webinars and workshops with the theme of online learning during the Covid-19 pandemic and adapting to new habits. At this implementation stage, the discrepancy with the planning stage is the time allocation specified in the learning. What is done to deal with this problem is to provide additional tasks through the application.

Various platforms available to support teacher productivity in learning, namely Sekolahan.id, Zoom cloud, WA, Mentimeter, Youtube and so on can be used by teachers and students in learning by adjusting the conditions for students and the changes or obstacles encountered. This is in accordance with the results of research conducted by Rosali (2020) the main applications that are often used are Youtube, Google Classroom, and the quiz platform, namely Quiziz. The conditions for online learning cannot be as ideal as direct learning. An unstable internet connection becomes a technical obstacle when learning, and also students' learning motivation which continues to decline seen from the response to task collection, activity in class and so on. However, one of the advantages of the online learning model compared to conventional learning is that the time and place of learning are more flexible. When viewed from the acquisition of student scores, online learning using the android application looks effective, although the level of effectiveness has not been measured precisely and with certainty. The implementation of blended learning learning is followed up with an examination, an examination is carried out on the level of attendance and the work carried out on the tasks carried out, if it is still considered inadequate then the teacher plans again to formulate learning improvements that can improve the quality of learning. This is also a form of anticipation or problem solving for the changes experienced by the teacher. Other activities carried out in the inspection cycle are holding regular meetings to discuss the learning process that has taken place in the previous month and work programs in the coming month.

Meanwhile, inspection or monitoring and evaluation in the form of learning achievement and satisfaction instruments will be carried out at the end of the semester by the Quality Assurance Institute. If it is in accordance with the expected goals, then it is continued to improve the quality of learning, if not, it will be continued with changes or modifications of parameters and components in learning. Evaluate and adjust with appropriate methods and media to solve existing problems. In the follow-up cycle, it is determined by the organizational culture of the educational institution. The roles of institutional elements, teachers and students in the school component must be fully interwoven and integrated so that quality management can be achieved for the development of better quality (Azimah & Hakim, 2020).

Analysis

Through blended learning, learning can be easily accessed anytime and anywhere. Trisnayanti et al., (2020) stated the constructivism learning theory that underlies the blended learning learning model. Constructivism learning theory shows the active role of students in building, shaping and developing their own knowledge and understanding of information dynamically, subjectively, and developing based on the experiences experienced by the students themselves. Hermanto et al., (2021) state that the success of the online learning system is highly dependent on several components, including students, lecturers, parents, learning resources, and information technology

These components are integrated so that they can actually produce quality graduates as well. Some informants judged that online learning was effective when applied during the COVID-19 pandemic because it was related to health protocols. However, the level of effectiveness cannot be measured so that the significance is not clear. At the planning stage, the teacher can determine the blended learning model according to the characteristics of students, learning facilities, availability of access to technology, duration of class hours, and mastery of the application by the teacher and make a learning satisfaction

survey by utilizing the android application. Principals and quality assurance institutions can make surveys at the stage of monitoring the implementation of learning in order to detect existing problems. Although blended learning has been proven to be able to maintain the academic quality of students, on the other hand, it must also be seen how psychologically students are a few months after getting access to this learning, and parents can also contribute to the monitoring stage by providing feedback to the school.

4.   CONCLUSION

Based on the results of research regarding the application of an Android-based education management information system in ensuring the academic quality of students at SMK Yasti Sukabumi, the authors can draw the conclusion that the use of the school's academic information system in terms of presenting academic information and services is good, that teachers, students and parents of students have used the application and felt the benefits to keep the learning process running well in a situation where the intensity of face-to-face learning was very limited, being able to see student academic information and also being able to maintain communication with the school.

This system will help administrators, teachers and students seen from the quality of the information presented including its completeness, accuracy, and output form that is easily archived. With regard to academic quality, both in terms of process, content and assessment standards, this application can still guarantee quality service satisfaction to students and parents, especially during the pandemic, it can be seen from the output of students who still managed to reach the minimun completeness criteria in each final assessment, student work results are still recorded properly, information that supports the documentation of curriculum administration is stored neatly, the teachers are assisted in lesson planning, class management and follow-up for each student both related to academic values and moral values because of the consultation features and teacher reports. Information on student attendance can also be accessed directly by parents.

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