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Increasing the Competency of PAKN Teachers Through the Implementation of Technology-Based Learning Management

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Abstract

In the world of education, technology-based learning management is increasingly important. Christian Religious Education teachers in junior high schools in Sentani District can use Kahoot and TeamViewer to increase the effectiveness of the learning process. Through the implementation of a technology-based learning management system, namely Kahoot and TeamViewer. The aim of this community service activity is to provide training for PAK teachers at junior high schools in the Sentani District. The methods used in this activity are the preparation stage, implementation stage and evaluation stage. The results of this Community Servant activity provided an effective contribution or positive influence on increasing the ability of 20 PAK teachers in utilizing technology-based learning administration. So, this ability can be used to improve teaching standards in the classroom. By integrating Kahoot and TeamViewer into PAK teacher development, many benefits can be gained, including increased technology skills among 20 PAK teachers, wider educational accessibility, increased learning efficiency, and increased collaboration.

Keywords: Teacher of Christian Religious Education, Technology, Competency, Learning Management, Middle Schools in Sentani District

INTRODUCTION

Technology-based learning management has become an increasingly important topic in the world of education. Learning at all levels of education in Indonesia is based on the application of innovative learning(Miriam et al., 2023). In this context, Kahoot and TeamViewer are two tools that can be used by Christian Religious Education (PAK) teachers in junior high schools throughout the Sentani District to increase learning effectiveness. However, there are still many PAK teachers who have not utilized this technology optimally.

Some of the problems that arise in the use of this technology are the lack of knowledge and technological skills of Christian Religious Education teachers at junior high schools in the Sentani District, lack of support from the school, and lack of access to adequate devices and internet connections. There are obstacles such as limited technological facilities and teachers' lack of knowledge and skills in using technology. PAK teachers need special training to integrate technology in Christian religious learning. Because teachers' lack of knowledge and skills related to technology can be an obstacle in implementing modern learning approaches. It is necessary to increase technological knowledge and skills for PAK teachers to maximize the benefits of using technology in learning.

There are various benefits from using technology-based learning management for PAK teachers including: First, the use of technology-based learning media, such as Kahoot and TeamViewer, can help teachers present material more quickly, concretely and efficiently(Ochi Marshella Febriani et al., 2021; Rimang & Ulviani, 2023). Second, teachers can increase professionalism in the use of learning media, create a conducive climate, and choose suitable methods and media to support the learning process(Rasam & Sari, 2018; Riana, 2017).

Third, Students can be more motivated and interested in learning when technology-based learning media are used, which will facilitate their acceptance and understanding of the material(Firmadani, 2020; M. Ardiansyah, 2020; Malatuny, 2022). Fourth, teachers can use technology to manage classes, create learning materials, give tests, and manage student grades(Hazal Fitri, 2015; Malatuny, 2020; Nugraha, 2018).

The Community Servant activities designed by a team of lecturers majoring in

PAK have the aim of increasing the competency of PAK teachers in junior high schools throughout Sentani District through the implementation of technology-based learning management. In this context, training on the use of Kahoot and TeamViewer from the Community Servant team of lecturers from the PAK department, STAKPN Sentani to teachers. This means that this activity involves training in the application of digital learning strategies, the use of technology-based learning media, and the integration of technology to increase teaching effectiveness. It is hoped that the results of this Community Servant will contribute effectively to improving the competency of PAK teachers so that they can improve the quality of learning in junior high schools throughout Sentani District.

METHOD

The Community Servant method is carried out by the PAK Department team for PAK teachers in the Sentani District with the following steps: preparation stage, implementation stage, and evaluation stage(Yusmar et al., 2023: 1439).

1. **Preparation phase**

   The Community Servant team conducted surveys and interviews to identify the needs of PAK teachers regarding technology-based learning management and evaluate the level of knowledge, technology skills and obstacles faced by the teachers. The Community Servant team prepared presentation material that included basic concepts of technology-based learning management and the application of tools such as Kahoot and TeamViewer, in addition the team included an explanation of the benefits of using technology in increasing learning effectiveness. The Community Servant team determines a schedule for implementing activities in accordance with the results of the agreement with the PAK teachers and ensures there is sufficient time for interaction and discussion.

2. **Implementation Stage**

   The activities will take place in the computer laboratory on the STAKPN Sentani campus on April 20 2023 at 10.00-13.00 WIT involving the Community Servant team from PAK department lecturers who focus on explaining the concept of IT-based learning management and demonstrating the use of these tools. The Community Servant team gave 20 PAK teachers time for a question-and-answer session after the lecture so that they could ask questions related to the material and application of technology as well as providing a direct practice session on using Kahoot and TeamViewer so that they tried it directly with the guidance of the Community Servant team.

3. **Evaluation Stage**

   The Community Servant team evaluates activities by measuring the understanding and skills obtained by PAK teachers. The Community Servant team publishes the results of activities and their benefits, both in the form of reports and articles so that knowledge can be shared with the educational community as inspiration and collective learning.

RESULTS AND DISCUSSION

Carrying out the activities which took place in the computer laboratory on the STAKPN Sentani campus, the Community Servant team from the PAK department lecturers explained the concept of IT-based learning management and demonstrated the use of Kahoot and TeamViewer for 20 PAK teachers in junior high schools throughout the Sentani District. The Community Servant team explained that research shows that in building a thriving education management system in schools, learning management must be implemented effectively, as important as learning itself.(Nurfadillah et al., 2023).

Apart from that, implementing learning management can also be done to increase student learning motivation(Sriwijayanti & Efendi, 2022). One potential strategy to improve the learning experience in the school environment is to integrate an IT-based

learning management system(Elok Endang Rasmani et al., 2023; Malatuny et al., 2020).
The Community Servant team further explained the two technology-based learning platforms as follows:

1. **Kahoot as a Learning Innovation**

*Kahoot*is a learning innovation that has been proven optimal in increasing students' enthusiasm for learning. As an online quiz platform, Kahoot plays an important role in creating an interactive and fun learning experience(Nurdiansyah et al., 2021; Rahmah et al., 2023; Wang & Tahir, 2020; Wijayanti et al., 2023; Zoebaidha, 2020). Kahoot is also a web-based application that allows users to create, share, and participate in online quizzes. With its user-friendly interface, Kahoot has become popular among teachers and students as a dynamic learning tool(Fazriyah et al., 2020; Lisnani & Emmanuel, 2020)

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Picture1
PkM Team Explains Material About Kahoot!

The main functions of Kahoot are:

a) *Kahoot*allows users to create interactive quizzes with questions that students will answer. Teachers can set time options for each question, add images, and personalize quizzes according to learning needs(Dina, 2023; Iman, 2020);
b) Created quizzes can be easily shared via a unique link or code. This allows students to access quizzes from their respective devices(Hadi et al., 2023; Saidah et al., 2022);
c) One of Kahoot's main features is its interactivity, students can answer questions using their own devices, such as smartphones, tablets, or computers. Live scores are displayed, creating a competitive element that stimulates the spirit of learning(Hadi et al., 2023; Nurwendary et al., 2023);
d) Teachers can track and analyze quiz results in real-time. This provides deep insight into students' understanding of the learning material, allowing for further adjustments in teaching(Ariani et al., 2023; Iman, 2020).

It has been proven that Kahoot has become an innovative and useful learning tool. By utilizing technology to create interactive learning experiences, Kahoot makes a positive contribution to the development of education in the digital era.

Apart from that, the team explained the stages of using Kahoot including:

a) Users must access Kahoot via the website addresshttps://kahoot.com
b) If you don't have an account, click the “Sign Up” button at the top right of the page.
c) If using a Google or Microsoft account, click “Continue with Google”.
d) If you use a special Kahoot account, click "Not got an account?".
e) Determine the reason for using Kahoot to create a free account.
f) *Create a Kahoot*Click to create a new quiz.
g) Select the "Settings" menu to change the name, description, image and language used.

h) Click "Question Type" to create various types of questions.
i) Click "Time Limit" to set a time limit for participants when answering questions.
j) Add questions in the top column.
k) Search for a video on YouTube, set the duration and start time of the video, then click "Add".
l) Log in to your Kahoot account.
m) On the Kahoot creator menu, click "Add questions" and select "Quiz".
n) Type the Game PIN listed on the host screen and press Enter to start the game.
o) Type a nickname in the required column.

The team also helps teachers by providing tutorial links from YouTube about using Kahoot so that they can learn independently if the explanations and practices during activities are still not understood and used effectively.

Picture2
PAK Teachers Pay Attention to the Material

2. TeamViewer for Desktop Access Solution

At this point, the Community Servant team explains the use of TeamViewer in learning to present and manage the movement of presentation pages or material that has been designed in PowerPoint form on a laptop which can be accessed via cellphone, thereby replacing the function of the presentation pointer as a tool for managing the movement of presentation pages.

Picture3
PkM Team Member Explains Using TeamViewer

*TeamViewer*is an application that makes it easier for users to operate a PC or cellphone remotely using the internet network(Mukmin, 2023; Studio, 2010). The way Teamviewer works is quite easy, users only need an internet connection, ID and password.

To use TeamViewer from laptop to cell phone, users must follow these steps:

a. Download and install the TeamViewer application on your laptop and cell phone
b. If you don't have an account, create a TeamViewer account
c. After installation, configure the TeamViewer application on your laptop and cell phone

d. Open the TeamViewer application on both devices
e. On the laptop, enter the Android cellphone ID, and click Connect

Through these steps, users can use TeamViewer to access and control HP devices from a laptop.

Picture4
PAK Teacher Practices the TeamViewer Application

After explaining the material, the Community Servant team gave the teachers time for a question-and-answer session so they could ask questions related to the material and application of technology as well as providing a direct practice session using Kahoot and TeamViewer so they tried it directly with the team's guidance.

Next, the Community Servant team evaluated the activities by measuring the understanding and skills of 20 PAK teachers in optimizing the Kahoot and TeamViewer platforms, including:

Table 1. Evaluation Results Regarding Materials and Practices for Using the Kahoot Platform

Indicator	Results
Definition of Kahoot	90% of teachers understand what Kahoot is
Kahoot Function	85% of teachers understand the function of Kahoot
Stages of using Kahoot	85% of teachers understand the stages of using Kahoot
Skills using Kahoot	85% of teachers have skills using Kahoot
Have Kahoot independently	85% of teachers have Kahoot independently

Meanwhile, the results of the evaluation of the material and practice of using the TeamViewer application, the Community Servant team found significant results:

Table 2. Evaluation Results Regarding Materials and Use Practices
TeamViewer application

Indicator	Results
TeamViewer definition	90% of teachers understand what TeamViewer is
TeamViewer function	90% of teachers understand the functionality of TeamViewer
Stages of using TeamViewer	90% of teachers understand the stages of using TeamViewer
Skills using TeamViewer	95% of teachers have the skills to use TeamViewer
Has TeamViewer independently	95% of teachers have TeamViewer independently

Based on the evaluation carried out by the Community Servant team regarding the level of understanding of the material and practice of using the Kahoot Platform and TeamViewer Application, a general conclusion can be drawn that the results of this Community Servant activity provide a positive impact or an effective solution for increasing the competence of PAK teachers regarding the implementation of technology-based learning management , so that in turn it is practiced to improve the quality of learning in the classroom.

CONCLUSION

The implementation of technology-based learning management, using the Kahoot platform and the TeamViewer application, has had a positive impact on increasing the competency of PAK teachers in junior high schools throughout the Sentani District. This means that this Community Servant activity has effective results in increasing the competency of PAK teachers to implement technology-based learning management, and has the potential to improve the quality of learning in the classroom.

The Community Servant team succeeded in providing materials and practices for using the Kahoot platform and TeamViewer application. Most teachers understand the definition of Kahoot and TeamViewer, understand their functions, understand the stages of use, are skilled in using them and have these accounts independently. In addition, the use of Kahoot and TeamViewer in developing PAK teachers has significant benefits in improving teacher technology skills, expanding learning access, increasing learning efficiency, and increasing collaboration between teachers.

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