



English Language Learning Model Training Based on ICT through Web-Based Learning in Subject Teacher Consultation Groups (MGMP) in Rokan Hulu Regency

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ABSTRACT

This community service project aimed to enhance English teachers' competencies in integrating Information and Communication Technology (ICT) into teaching through web-based learning. The program was conducted for members of the Subject Teacher Forum (MGMP) in Rokan Hulu Regency, involving 44 participants consisting of teachers and school staff. The training focused on developing basic knowledge and practical skills in creating and managing blogs as interactive learning media using platforms such as WordPress. The methods employed included lectures, hands-on practice, discussions, and pre-test and post-test evaluations. The results indicated a significant improvement in participants' understanding of website-based learning, as shown by increased post-test scores compared to pre-test results. The training successfully stimulated participants' creativity and ability to develop and publish instructional materials online. It is expected that participants will further implement and disseminate these skills to improve the quality of teaching and learning processes. Continued training is recommended to deepen participants' competencies in ICT-based education.

INTRODUCTION

The rapid development of Information and Communication Technology (ICT), particularly the internet, has significantly influenced various aspects of human life, including the field of education. One of the most widely utilized internet-based tools is the weblog (blog), which serves as an accessible platform for sharing information without limitations of time and space. In the educational context, blogs can function as interactive learning media that enable teachers to present instructional materials in a more engaging, flexible, and student-centered manner.

Despite the growing importance of ICT integration in education, many teachers, especially in regional areas, still face challenges in utilizing digital technologies effectively. Preliminary observations in Rokan Hulu Regency revealed that a considerable number of English teachers lacked fundamental knowledge and skills in using websites or blogs as instructional media. Most teachers were unfamiliar with how to design, develop, and publish teaching materials through online platforms. This limitation reduces opportunities to create innovative and interactive learning environments that are essential in modern education.

The role of teachers is crucial in determining the success of the learning process. Effective teaching not only depends on subject mastery but also on the ability to utilize appropriate strategies and media. Previous studies have highlighted that engaging and enjoyable learning environments can significantly improve students' motivation and learning outcomes. The integration of ICT, including web-based learning tools, supports this by enabling the use of multimedia elements, interactive content, and continuous access to learning resources. Therefore, enhancing teachers' digital competencies becomes an urgent necessity.

In response to these challenges, a community service program was designed to provide training on ICT-based English language teaching through web-based learning. The training specifically focused on developing teachers' skills in creating and managing blogs using platforms such as WordPress. Through this program, participants were introduced to fundamental concepts of website development, blog creation, and the integration of instructional materials into online platforms.

This program aimed not only to improve teachers' technical skills but also to encourage creativity and independence in developing digital learning resources. By equipping teachers with these competencies, it is expected that they will be able to design more effective, interactive, and accessible teaching materials. Furthermore, the knowledge gained from the training is expected to be disseminated among peers, thereby contributing to broader educational improvement within the region.

LITERATURE REVIEW

The integration of Information and Communication Technology (ICT) in education has become an essential component in improving the quality of teaching and learning processes. ICT provides opportunities for educators to

create more interactive, flexible, and student-centered learning environments. One of the most widely used ICT tools in education is web-based learning, particularly through the use of blogs as instructional media.

Web-based learning refers to the use of internet technologies to deliver educational content and facilitate learning activities. According to previous studies, web-based platforms enable access to learning materials anytime and anywhere, allowing both teachers and students to engage in continuous learning beyond the classroom. Blogs, as a form of web-based technology, serve as online journals that can be updated regularly and accessed publicly. They allow teachers to organize, present, and distribute instructional materials efficiently while also encouraging student interaction through comments and discussions. The effectiveness of ICT integration in education is closely related to teachers' competencies. Teachers play a central role in designing and implementing meaningful learning experiences. Research has shown that the success of instructional strategies depends not only on the content but also on how the material is delivered and how learners are engaged. Creating an enjoyable and interactive learning environment is crucial to improving students' motivation and retention. Techniques such as incorporating multimedia, interactive quizzes, and online discussions can enhance students' engagement and understanding.

Furthermore, the concept of "learning by doing" suggests that students learn more effectively when they actively participate in the learning process. ICT tools, including blogs, support this approach by allowing learners to explore, create, and share knowledge. Studies have also indicated that the use of digital media can improve critical thinking, creativity, and independent learning skills among students. However, despite the potential benefits of ICT, many teachers still face challenges in its implementation. Limited knowledge, lack of training, and insufficient access to technological resources are common barriers. In many cases, teachers are not adequately prepared to integrate ICT into their teaching practices, which results in underutilization of available technologies. Therefore, professional development programs, such as training and workshops, are essential to equip teachers with the necessary knowledge and skills.

Previous initiatives in teacher training have demonstrated that structured programs focusing on practical skills, such as blog creation and web content development, can significantly improve teachers' competencies. These programs typically combine theoretical understanding with hands-on practice, enabling participants to directly apply what they have learned. Evaluation methods such as pre-tests and post-tests are commonly used to measure the effectiveness of such training programs.

In summary, the literature highlights the importance of ICT integration, particularly web-based learning, in enhancing educational practices. Blogs offer a practical and effective tool for developing interactive learning materials. However, the successful implementation of these technologies depends largely on teachers' readiness and competencies, which can be improved through targeted training programs.

METHODOLOGY

This study employed a community service approach using a training-based method to improve teachers' competencies in utilizing ICT for English language teaching through web-based learning. The activity was conducted at SMPN 01 Rambah, Rokan Hulu Regency, involving 44 participants consisting of teachers and school staff.

The training was designed in the form of a workshop that combined both theoretical and practical sessions. The instructional methods included lectures, hands-on practice, question-and-answer sessions, discussions, and guided exercises. The training materials covered basic concepts of website-based learning, preparation for blog creation, step-by-step guidance in developing blogs, and practical tutorials using the WordPress platform.

To measure the effectiveness of the training, a pre-test and post-test design was implemented. The pre-test was administered before the training to assess participants' initial knowledge of web-based learning and blogging, while the post-test was conducted after the training to evaluate improvements in their understanding. The collected data were analyzed descriptively by comparing the results of pre-test and post-test scores.

The overall procedure of the activity included preparation, implementation, and evaluation stages. In the preparation stage, training materials and instruments were developed. During the implementation stage, participants were actively involved in both theoretical and practical learning sessions. Finally, in the evaluation stage, the results of the tests and participant performance were analyzed to determine the effectiveness of the training program.

RESULT AND DISCUSSION

The training program on ICT-based English learning through web-based learning was conducted successfully with the participation of 44 teachers and school staff from SMPN 01 Rambah, Rokan Hulu Regency. The effectiveness of the program was measured using pre-test and post-test evaluations to assess participants' knowledge of website-based learning and blogging.

The pre-test results indicated that participants' initial understanding of web-based learning was relatively low. Most participants were only able to answer a limited number of questions correctly, with the highest score achieved by a small percentage of participants. For example, only about 16% of participants were able to answer nine questions correctly, and none achieved a perfect score. This finding confirms that the majority of participants had insufficient prior knowledge of ICT, particularly in relation to blog-based learning.

After the training was conducted, the post-test results showed a significant improvement in participants' knowledge and understanding. Approximately 30% of participants were able to answer all questions correctly, while others also demonstrated higher scores compared to the pre-test results. The distribution of scores shifted positively, indicating that the training

effectively enhanced participants' comprehension of website-based learning concepts and practices.

In addition to the quantitative results, qualitative observations during the training revealed that participants became more confident and actively engaged in the learning process. During the practical sessions, most participants were able to create their own blogs, manage content, and understand how to upload instructional materials. This demonstrates that the training not only improved theoretical knowledge but also practical skills.

The results of this study highlight the importance of training programs in improving teachers' competencies in ICT integration. The significant increase in post-test scores indicates that structured training combining theory and practice is effective in enhancing participants' understanding of web-based learning.

The low pre-test results suggest that prior to the training, teachers had limited exposure to digital learning tools, particularly blogs. This finding is consistent with previous studies that identify lack of knowledge and training as major barriers to ICT adoption in education. Without adequate support, teachers may struggle to utilize technology effectively in their teaching practices.

The improvement observed in the post-test results can be attributed to the training methods used in this program. The combination of lectures, hands-on practice, and interactive discussions allowed participants to learn actively and apply their knowledge directly. This aligns with the principle of experiential learning, which emphasizes learning through direct experience. By engaging in practical activities such as creating blogs and uploading materials, participants were able to better understand the application of web-based learning in real teaching contexts.

Furthermore, the training contributed to increasing participants' motivation and confidence in using ICT. The ability to create and manage blogs independently empowers teachers to develop more interactive and accessible teaching materials. This is particularly important in modern education, where digital literacy is a key competency for both teachers and students.

The use of blogs as a learning medium offers several advantages. Blogs allow teachers to present materials in various formats, including text, images, and multimedia content, which can enhance students' engagement. Additionally, blogs provide opportunities for continuous learning beyond the classroom, as students can access materials anytime and anywhere. This flexibility supports the development of independent learning skills among students.

However, despite the positive outcomes, several challenges remain. The training was conducted within a limited time frame, which may not be sufficient to cover more advanced aspects of web-based learning. In addition, sustained support and follow-up programs are necessary to ensure that participants continue to develop their skills and effectively implement them in their teaching practices.

Overall, the findings demonstrate that ICT-based training programs, particularly those focused on web-based learning, play a crucial role in improving teachers' knowledge, skills, and readiness to integrate technology into education. Continuous professional development and institutional support are essential to maximize the impact of such initiatives.

CONCLUSION AND RECOMMENDATION

This community service program on ICT-based English language teaching through web-based learning has been successfully implemented and has demonstrated positive outcomes. The findings indicate that before the training, most participants had limited knowledge and skills in utilizing websites and blogs as instructional media. This was reflected in the low pre-test results and participants' initial unfamiliarity with web-based learning concepts.

After participating in the training, there was a significant improvement in both participants' understanding and practical abilities. The post-test results showed higher scores, and participants were able to create and manage blogs as interactive learning media. This confirms that the training program was effective in enhancing teachers' competencies in integrating ICT into their teaching practices.

Moreover, the training fostered greater motivation and confidence among participants to utilize digital technologies in developing instructional materials. The ability to design and publish web-based learning content is expected to contribute to more engaging, flexible, and accessible learning experiences for students. Overall, the program has provided a meaningful contribution to improving the quality of teaching and learning processes through the integration of ICT.

Based on the results of this program, several recommendations can be proposed:

1. **Follow-up Training Programs:** It is recommended to conduct advanced and continuous training programs to deepen teachers' skills in ICT, particularly in developing more interactive and multimedia-based learning materials.
2. **Institutional Support:** Schools and educational institutions should provide adequate facilities, such as stable internet access and technological resources, to support the implementation of web-based learning.
3. **Practical Application in Teaching:** Teachers are encouraged to actively apply the knowledge gained from the training in their daily teaching practices, especially in developing and utilizing blogs as learning media.
4. **Collaboration and Knowledge Sharing:** Participants should share their knowledge and experiences with colleagues to expand the impact of the training and promote a culture of digital learning within the school environment.
5. **Further Evaluation and Research:** Future programs should include more comprehensive evaluation methods and longer observation periods to assess the long-term impact of ICT integration in education.

FURTHER STUDY

Although this community service program has demonstrated positive results in improving teachers' knowledge and skills in ICT-based learning, several areas remain open for further study. Future research is recommended to explore the long-term impact of web-based learning implementation on both teachers' performance and students' learning outcomes. A longitudinal study design could provide deeper insights into how sustainable and effective the integration of blogs and other digital tools is in classroom practices over time.

In addition, further studies may focus on expanding the scope of participants by involving teachers from different regions, educational levels, and subject areas. This would allow for a more comprehensive understanding of the effectiveness of ICT training programs across diverse educational contexts.

Another important area for future research is the development of more advanced web-based learning models, including the integration of multimedia elements, interactive features, and learning management systems. Investigating how these innovations influence student engagement, motivation, and achievement would be valuable for enhancing instructional quality.

Moreover, future studies should examine the challenges and barriers faced by teachers in implementing ICT after training, such as limited infrastructure, time constraints, or lack of institutional support. Understanding these factors can help in designing more effective and sustainable training programs.

Finally, it is recommended that future research employ more rigorous research designs, such as experimental or quasi-experimental methods, to measure the effectiveness of ICT-based training interventions more objectively. Combining quantitative and qualitative approaches would also provide richer and more comprehensive findings.

REFERENCES

Hutchinson, E. Sarah and Sawyer, C. Stacey, 2000, *Computers, Communications & Information*, McGraw-Hill Companies Inc.

Indonesia Services Education HP Tim, 2001, *Manajemen Sistem Belajar di Dunia Maya*, Majalah Info Komputer.

Jeffcoate Judith, 1995, *Multimedia In Practice: Technology and Applications*, Prentice Hall International (UK) Limited.

Long Larry and Long Nancy, 2000, *Computers*, 7th Edition, Prentice-Hall Inc.

M.H Jogiyanto, 1995, *Pengenalan Komputer*, Andi Offset Yogyakarta.