

Community Service for Accounting Teacher Working Forum to Enhance Skills in Creating Learning Videos and Utilising Digital Collaboration Spaces

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Abstract: Teachers need to improve their skills to be able to teach effectively in the digital age. However, a situational analysis shows that accounting teachers at the MGMP SMK Kulon Progo Regency can still not utilise ICT to create video learning materials and digital collaboration spaces. As a solution to these problems, the community service team is committed to conducting community service related to training and assistance in creating video learning materials and utilising digital collaboration spaces using the participatory action research method. The Community service participants were 21 Kulon Progo Regency Vocational School Accounting (MGMP) teachers. The steps for Community service activities are 1) delivery of material on basic concepts of learning media; 2) practice of creating media; 3) material on collaborative learning; 4) practice of collaborative learning and working in accounting learning; 5) practice of designing collaborative learning material using technology; 6) independent work by the teacher for 2 weeks; 6) presentation of the results of independent work; and 7) servants reviewing practical assignments for making learning videos and utilising digital collaboration spaces. The results of Community service activities are: 1) increasing the ability of accounting teachers to make learning videos and 2) increasing the ability of accounting teachers to utilise digital collaboration spaces to support collaborative learning and working. The achievement of Community service results is supported by several factors, namely the solidity of the service team, cooperation agreements between the service team and partners, smooth communication between the service team and partners, as well as the suitability of training materials to the needs of target partners.

Keywords: training; learning videos; digital collaboration; accounting teacher

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INTRODUCTION

Professional teachers meet the minimum academic qualification of a bachelor's degree (S1 or D4) and hold a teaching

certificate. Additionally, teachers are required to possess pedagogical, professional, personal, and social competencies. Once teachers are deemed

professional, they are certified and entitled to better salaries. Professionalism refers to characteristics, competencies, performance, and behaviours that impact teaching effectiveness through the development of these characteristics. Hence, professional development refers to the process by which an individual's professionalism is considered enhanced (Evans, 2019). Evans' explanation points to the overall development of the professional status and enhancement of knowledge, skills, and practice. Similarly, Friedman & Phillips (2004) define professional development as lifelong learning for professionals. Professional development enables and assists teachers in developing a reflective approach to teaching and learning (Grieve & McGinley, 2010).

Professional development encourages teachers to reflect on, update, and expand their commitment to delivering education. In summary, a professional teacher is a certified teacher, meaning they meet academic qualifications and master the necessary competencies such as pedagogical, social, personal, and professional skills. Professional development refers to developing knowledge, technology, and skills to improve the quality of teaching and other professional activities as a professional teacher, such as conducting research or creating educational media.

Information and communication technology (ICT) should support all teacher activities, from planning to implementing and evaluating learning, as per the learning approach recommended by the government using TPACK (technological, pedagogical, and content knowledge). Technology acquires knowledge, both content and methods of delivering content. Teachers can use technology to prepare, conduct, and evaluate learning.

One aspect of utilising ICT is in preparing learning tools. One example is

the development of learning media, where teachers can use ICT to create educational videos. Educational videos are learning media in the form of moving images. Videos are non-print teaching materials rich in information and straightforward because they can be presented directly to students (Daryanto, 2010). Videos add a new dimension to learning by providing a more realistic model to students, offering visual depictions that make learning more accessible. The benefits of educational videos include (1) clearer and more engaging learning, (2) more interactive learning processes, (3) increased time and energy efficiency, (4) improved learning outcomes, (5) flexibility in learning, allowing it to occur anytime and anywhere, (6) fostering positive attitudes towards the learning process and content, and (7) enhancing the teacher's role towards a more positive and productive direction (Aqib & Fikri, 2022).

The use of video for learning is highly suitable, especially since the COVID-19 pandemic hit Indonesia, prompting the government to implement social distancing/physical distancing policies, including in schools. The Ministry of Education and Culture responded to these policies by organising a learning-from-home program (Kemendikbud, 2020), with one solution being educational videos.

Beyond educational videos, there are numerous offers from government and ICT service providers for learning purposes. These include using collaboration spaces like Google Workspace, Google Sheets, Google Slides, OneDrive, and MS Teams. These ICT service providers also offer collaboration spaces to facilitate joint task completion effectively, allowing teachers to support collaborative learning. In summary, teachers and students are provided with various learning alternatives using different ICT-

based applications and spaces. However, this new habit has its challenges.

The new norm comes with several obstacles. Some of the challenges faced in the educational sector, according to the Ministry of Education and Culture (Kemendikbud, 2020), include (1) a technology gap between schools in big cities and rural areas, (2) limited teacher competency in using learning applications, (3) limited resources for utilising educational technology such as internet access and data quotas, (4) poorly integrated teacher-student-parent relationships in online learning. In summary, aside from internet issues, the use of information technology-based applications remains a significant challenge in online learning.

How do things stand now that COVID-19 is no longer declared a pandemic? Even though schools have returned to in-person learning, the use of information technology in education still needs to be improved. This aligns with the statement from the head of the MGMP (*Musyawah Guru Mata Pelajaran*) or Teacher Working Group Accounting for the Kulon Progo Regency.

The situation analysis presented above provides the service team with an overview to identify the urgent issues partners face that need immediate resolution. Based on the situation analysis, the service team's partner problems and justifications are identified: 1) Accounting teachers in vocational schools across Kulon Progo Regency still need ICT to create educational videos. Some teachers use YouTube to access educational videos others make, but only some create their own. 2) Accounting teachers in Kulon Progo Regency have yet to fully utilise information technology in teaching, particularly in using collaboration spaces. Given these two issues—the low ability of teachers to develop learning media, especially educational videos, and

the use of digital collaboration spaces—there must be support to help teachers enhance their competencies. Furthermore, according to ministry guidelines, teachers should have at least level 2 ICT competency based on the UNESCO Teacher ICT Competencies Framework. Level 2 out of a maximum of 4 requires teachers to be able to prepare learning systems, lesson planning, and learning models with digital or online learning patterns.

Given this urgency, the service team from Universitas Negeri Yogyakarta intends to assist in creating educational videos for accounting and utilising digital collaboration spaces to improve students' collaborative skills. Previous service projects have shown that support activities can increase educators' and education personnel's knowledge in creating technology-infused learning media from 25% to 80% (Nugroho et al., 2022). Additionally, other service projects have shown that training activities can enhance teachers' empowerment by 70%, enabling them to create multimedia-based educational videos (Karyadiputra et al., 2022). Therefore, the main objectives of this service program are twofold: 75% of Community service participants should be able to create educational videos for accounting, and 75% of Community service participants should be able to utilise digital collaboration spaces to support accounting learning. Furthermore, support for using digital collaboration spaces is intended to help teachers promote effective collaborative learning, equipping students with collaborative skills.

METHOD

The activities were carried out in person on September 13, 2023, at SMK N 1 Girimulyo and online via Zoom on September 25, 2023. The participants

were accounting teachers from MGMP Kulonprogo DIY, with 21 teachers attending. The method used in these activities was participatory action research (PAR), which involves stages such as observation, reflection, action planning, action, and evaluation. The strategy employed in this service activity included training on creating videos and utilising digital collaboration spaces. The methods used in the activities were lectures, demonstrations, practice, and assignments. Participants were provided with material through lectures, followed by a Q&A session to confirm understanding. After the material presentation, the service team demonstrated the steps for creating videos and using collaborative spaces. Participants then practised and were assigned tasks to create educational videos and use Google Workspace accounts as a form of digital collaboration.

RESULTS AND DISCUSSION

Implementing community service activities for MGMP Accounting teachers at vocational schools in Kulon Progo Regency went smoothly and successfully. The competence and cohesion of the service team and the support of the target audience were crucial aspects that facilitated the smooth running of these activities. The training materials related to video learning media and collaborative learning in accounting education were highly important for accounting teachers at vocational schools. The direct practice of creating video learning media, practising collaborative learning and working in accounting education, and designing collaborative learning materials using technology were also key focus areas of the community service activities. Documentation of the video learning media creation training and collaborative

learning and working support is presented in Figure 1.



Figure 1 Training on creating video learning media and support for collaborative learning and working

The use of video learning media in accounting education is very important. Video integration as a learning medium has great potential to enhance the learning process and improve learning outcomes. The dynamic and engaging nature of videos and their ability to cater to various learning styles significantly impact students' engagement, understanding, and retention of learning content. This aligns with Mayer's (2009) cognitive theory of multimedia learning, which states that combining visual and auditory elements in videos can facilitate better understanding and retention of information.

Accounting teachers can design videos that encourage active student engagement. Teachers can stimulate critical thinking and analytical skills by incorporating quizzes, interactive exercises, and reflection points within the videos. These interactive elements prompt students to think critically about accounting principles and their applications (Brame, 2016). Teachers can enrich video content by integrating real-world accounting scenarios, case studies, or interviews with industry professionals. This approach provides practical insights into applying accounting principles in various professional settings, enhancing students' ability to connect theoretical knowledge with real-life scenarios (Kizilcec et al., 2013).

Teachers can gather feedback from students regarding the effectiveness and relevance of the video learning material. This feedback allows for iterative improvements and refinements of the video content to better meet students' needs and expectations, ultimately enhancing the learning experience. Teachers can also optimise video learning for accessibility by ensuring compatibility with various devices and platforms. This increases accessibility and flexibility, allowing students to engage with the learning material at their own pace and convenience, both inside and outside the classroom.

In addition to using video learning media, teachers can also optimise collaborative learning and working in accounting education. According to Slavin (2015), collaborative learning offers numerous benefits, including improved critical thinking and problem-solving skills. Various learning strategies can optimise the collaborative learning experience. Commonly used methods include the Jigsaw technique, think-pair-share, problem-based learning, and group projects (Barkley et al., 2014). Furthermore, Harasim (2017) states that incorporating technology-mediated platforms for virtual collaboration can also be beneficial. Integrating technology, including online discussion forums, collaborative document editing, and video conferencing, facilitates collaboration regardless of geographical boundaries (Davies et al., 2013). Technology provides a platform for asynchronous collaboration and can enhance engagement and participation.

Accounting teachers can also optimise collaborative working platforms to support the efficiency and effectiveness of accounting education. This aligns with the findings of Ollila & Yström (2020), which indicate that collaborative working platforms enable geographically dispersed teams to collaborate effectively, ensuring smooth

communication and project management. Integrating project management tools, document storage, and communication features centralises information, streamlines workflows, and boosts productivity (Prifti & Kajan, 2019).

Recent advances in artificial intelligence (AI) and machine learning (ML) further enrich digital collaboration. AI-supported features such as natural language processing, sentiment analysis, and intelligent recommendations enhance user experience and content relevance (Ollila, 2021). AI algorithms can analyse collaboration patterns and suggest optimal team configurations for specific tasks, improving overall team performance (Zhang, 2020). Additionally, ML algorithms can provide insights into user behaviour and preferences, enabling personalised recommendations and adaptive learning experiences (Xing, 2018). These AI-based capabilities contribute to a more efficient and personalised collaboration environment in educational and professional settings.

Despite the numerous benefits of digital collaboration spaces, several challenges must be addressed. Privacy and security issues remain significant concerns, especially when handling sensitive information (Yang & Choi, 2017). Ensuring data protection, regulatory compliance, and user authentication are crucial considerations for the successful implementation of these platforms. Moreover, the digital divide and varying levels of digital literacy among users present challenges in ensuring equitable access and effective utilisation of collaboration tools (Crompton et al., 2017). Training and support are essential to help individuals, including accounting teachers, maximise the potential of digital collaboration spaces.

The evaluation of the Community service activities aims to determine the level of achievement and success of the

program. This community service program's main objectives are to improve the ability to create educational videos and utilise digital collaboration spaces among participants. The service team measured the ability of MGMP Accounting teachers in vocational schools in Kulon Progo Regency to create educational videos and use digital collaboration spaces before (pre) and

after (post) the service activities. Data collection was conducted through performance observation during the service activities and questionnaires. These measurements were compared to assess the achievement of the Community service program's objectives. The overall evaluation results of the Community service program's achievements are presented in Figure 2.

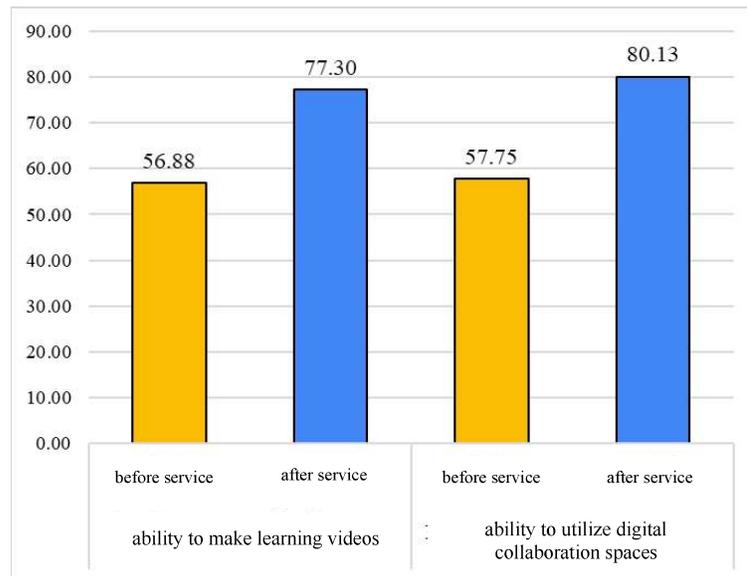


Figure 2 Evaluation results of the community service program achievements

The reflection results indicate that several supporting factors played a significant role in the success of the Community service activities for MGMP Accounting teachers in Kulon Progo Regency.

1. First, establishing a solid cooperation agreement between the service team and MGMP Accounting in Kulon Progo Regency was the primary foundation for achieving the goals. This agreement led to the formation of an Initial Implementation (IA), which allowed for efficient and structured collaboration.
2. Second, the ease of communication and coordination between the service team and MGMP

Accounting in Kulon Progo Regency created a collaborative work environment. Smooth communication facilitated the effective exchange of ideas, information, and needs.

3. Third, the alignment of the material with the needs of MGMP Accounting teachers in Kulon Progo Regency demonstrated the service team's deep understanding of the participants' challenges and expectations. The participants' enthusiasm reflected the quality and relevance of the teaching materials and methods.

Thanks to the strong support from the aforementioned factors, the community

service activities successfully created a conducive learning environment and positively impacted the development of teachers' abilities in collaborative learning. However, several hindering factors that could affect the program's effectiveness were also identified.

1. First, there are internal factors originating from the participants. Some participants had time constraints or personal resource limitations that affected their ability to provide prompt reviews of the materials. This could hinder the learning process and skill improvement.
2. Second, the service team might need help providing intensive support to each teacher due to the large number of participants. The lack of time and individual attention could limit the optimal development of teachers' skills.

The service team addressed these hindering factors in collaboration with the participants through solid cooperation and efficient communication. For future service activities, the service team and participants need to design more efficient strategies and optimise available resources to maximise the outcomes of the community service activities.

CONCLUSION

Strong cooperation agreements, efficient communication, and alignment of materials with the teachers' needs are the main supporting factors for the success of the community service activities for MGMP Accounting teachers in vocational schools in Kulon Progo Regency. This agreement established a solid foundation for efficient collaboration while smooth communication facilitated effective information exchange. The alignment of materials with participants' needs created a valuable learning experience. The

program successfully created a conducive learning environment with strong support from these factors. It positively impacted the development of teachers' skills in creating accounting learning videos utilising collaborative learning and working in accounting education.

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