

## TRAINING ON MAKING INTERACTIVE LEARNING MEDIA USING POWERPOINT TO IMPROVE TEACHER COMPETENCE

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### Abstract

This article describes community service activities related to training on making interactive learning media using *PowerPoint* to improve teacher competence. This service activity uses training methods by creating learning media that contain basic competencies, core competencies, learning objectives, learning materials, and learning evaluation. The participants who participated in this training were Catholic religion teachers in elementary and junior high schools totaling 30 participants. The results of this service increase teacher competence in designing and utilizing PowerPoint-based interactive learning media to support the learning process. The results of the evaluation of activities show positively that participants gain new knowledge and can improve their competence. Participants also revealed the use of interactive media *PowerPoint* is easy to understand and can help users in operating learning media. The evaluation questionnaire also showed a positive response from participants, namely an average percentage of 81.4% with the category agree. Teachers can overcome the problem of using learning media through training activities and collaborating in competency improvement activities.

**Keywords:** Interactive Learning Media, *PowerPoint*, Teacher Competence.

### INTRODUCTION

Teaching is a moral endeavor motivated by supporting the full development of students: physically, socially, spiritually, and cognitively; which in turn affects the society in which they live and grow for the common good (Anggal et al., 2022; Madden, 2020). Teaching is also a complex task, where teachers constantly interact with teaching components such as; curriculum, lesson implementation plans, learning media, and also students (Lunenberg & Korthagen, 2009; Sinaga et al., 2023). This requires teachers to pay special attention to their teaching, and the integration of professional and interpersonal knowledge (Goodfellow, 2003). According to Lunenberg and Korthagen (2009), Teaching skills have a central place in the professional actions of a teacher, but they are not enough. In the face of the changes and developments of the times, teachers must make appropriate pedagogical decisions (Lunenberg & Korthagen, 2009; Lumbangaol et al., 2023).

There is a lot written about teacher professionalism and professional development (e.g. Anif et al., 2019; Widayati et al., 2021; Bead et al., 2023c); however, little is known about

Catholic religious teachers' perceptions of continued professionalism, so in this paper Catholic religious teachers are in focus (Haru, 2020). Teachers' views on professional development contribute to their professionalism, and Catholic teachers play an important role in equipping students with a religious character, so professional development is needed for religious teachers themselves. Although, many schools have carried out professional development activities for teachers, in the Ulu Mahakam area, the Catholic Community Guidance of the Ministry of Religious Affairs of the Republic of Indonesia, the Mahakam Ulu Regency Regional Office (Bimas Katolik Kemenag RI Kanwil Kabupaten Mahakam Ulu), is responsible for developing the professional competence of Catholic teachers.

Unlike other teachers, Catholic teachers are required to have additional competence in religious knowledge and catechesis, and pedagogic skills. For example, Catholic religious teachers are required to be proficient in religious knowledge (theory) and (practical) skills. As societal demands change, Catholic religious teachers need to renew their knowledge and skills, which requires these teachers to maintain their connection to the world of pastoral work (Madden, 2020). For religious teachers, religious education today is influenced by Vatican II theology expressed in the Pastoral Constitution on the Church in the Modern World, *Gaudium et Spes* (Second Vatican Council, 1965), and The Dogmatic Constitution of Divine Revelation, *Dei Verbum* (Concilio Ecumenical Vaticano II, 1965).

Making correct pedagogical choices demands awareness of the needs of a particular situation, which can help the teacher find the possibility of prudent action as well (Lunenbergh & Korthagen, 2009). This awareness can be described as practical wisdom, which combines knowledge and action (Ulvik & Smith, 2011). In this case, Catholic religious teachers considered it necessary to have the awareness to improve their competence to the demands and developments of the times (Tilson et al., 2017). So the task of proclamation, which is above all the gospel must be preached with testimony (Paul VI, 1975 *Evangelii Nuntiandi*, art. 21).

The importance of educational tasks in schools explains how important training is for teachers who have responsibilities as educators (Nasution et al., 2023). The professional competence of a teacher is an important prerequisite for the smooth implementation of his education (*Instrumentum Laboris: Congregation for Catholic Education*, 2015 art. 7). So many things are required of teachers, one of which is mastery of learning media, teachers must also be able to accompany students towards noble and mature goals. Catholic teachers, like teachers in general, are also required to pursue different goals simultaneously and face challenges that require a high level of professionalism and deep preparation (*Instrumentum Laboris: Congregation for Catholic Education*, 2015 art. 7).

In addition, it cannot be ignored also that learning is not only limited to school. In the current context, marked by technological developments and new opportunities for formal and informal learning, many schools have lost the hallmarks of education in traditional ways (*Instrumentum Laboris: Congregation for Catholic Education*, 2015 art. 7). It also needs to be recognized that today's society is digital, and thus learning lies in context digital formed by daily meetings with digital-based learning media (Carpenter et al., 2020).

Several studies have explored the use of learning media by teachers as a mandatory part of their learning. In addition, the use of learning media to support the learning process has received attention, especially related to visual abilities, such as *PowerPoint*, website platforms, and so on (Minardi & Akbar, 2020). *PowerPoint* has changed a lot in the way teachers teach

in the classroom (Wahyuni et al., 2020). In other words, *PowerPoint* has greatly changed the way teachers engage students and present their learning materials (Bolkan, 2019). However, the use of learning media in primary and secondary school education for purposes related to the learning of Catholic religious teachers is currently limited. The current situation of teachers must be digitally literate, and foster students' digital literacy.

The current phenomenon of the Industrial Revolution 4.0 emphasizes rapid technological progress. It can be seen that all are connected to the internet network system. The reach of information from the outside world feels so real with the role of technological advances today. The world of education always adapts to changes and technological advances that integrate learning. There needs to be innovation in technology development to package the current learning process more effectively, one of which is the development of learning media which is an important part of the learning process and of course, directed at meaningful learning that encourages students to develop the 21st Century.

This article is the result of Community Service (PKM) activities together with partners of Catholic religious teachers at the primary and secondary school levels in Mahakam Ulu Regency. In addition to Catholic teachers, partners who support the implementation of this PKM activity are the Catholic Bimas of the Ministry of Religion of the Republic of Indonesia Regional Office of Mahakam Ulu Regency. The problems faced by partners are; 1) limited ability of teachers to utilize learning media, 2) facilities and infrastructure of learning less supportive media, 3) difficulty finding ideas in determining media that is by learning materials, 4) difficulty of internet access, 5) lack of ability, creativity, and confidence of teachers in making interesting learning media, and 6) lack of appropriate reference materials as a reference for teachers in understanding Catholic learning media. Based on this description, it is necessary to carry out competency improvement activities for Catholic religious teachers at the primary and secondary school levels in Mahakam Ulu Regency.

## **IMPLEMENTATION METHOD**

This PKM activity to increase the competence of Catholic teachers raised the theme of "Development of Interactive Learning Media." The participants of the activity amounted to 30 (thirty) Catholic religious teachers from the elementary school (SD) and junior high school (SMP) levels. This activity will take place in Laham District, Mahakam Ulu Regency, from April 28 to May 2, 2023.

Broadly speaking, this activity method follows the pattern of training activities with three stages, namely: pre-training, training, and post-training stages. *First*, the pre-training stage; prepare training plans, prepare basic training competency instruments and indicators of competency achievement, develop reflection and self-evaluation instruments for trainees, develop training activities, and prepare training materials. Based on this plan, the basic competencies and indicators of competencies to be achieved can be seen in Table 1. Furthermore, reflection and self-evaluation instruments are developed based on indicators of competency achievement. Based on the basic competencies of training and indicators of competency achievement that have been determined, training materials are arranged in quality to provide a complete and deep understanding to participants. All training materials and

materials are organized and distributed through *google drive* so that they can be easily accessed by participants before the training.

**Table 1. Basic Competencies and Training Competency Achievement Indicators**

No	Basic Competencies	Method	Competency Indicators	Achievement Indicators
1.	Understand the concept of interactive multimedia	Lectures; Q&A	Explain interactive multimedia concepts in learning,	
2.	Presenting various types of interactive learning media.	Lectures, Q&A	Describe the types of interactive learning media	
3.	Understand PowerPoint learning media concepts	Lectures, Q&A	Describe the interactive learning media components of PowerPoint	
4.	Search, use, and create effective interactive learning media designs based on Catholic religious learning planning.	<i>Project</i> : Search, observe, and design interactive learning media.	Design interactive learning media using <i>PowerPoint</i> according to the learning implementation plan (RPP) for Catholic religious subjects.	

*Second*, the stage of training implementation. Training activities are carried out offline (face-to-face). During the activity process, participants listened to the facilitator's explanation, question and answer, and discussion, and worked on projects and demonstrations of the results of interactive learning media design projects.



**Figure 1. Training Activity Documentation**

*Third*, post-training stage. At this stage, the participants were asked to reflect on the training experience that followed. According to Gibbs (1988), The reflection cycle is used to guide participants to deliver reflections on the training process. The tool used is a self-evaluation instrument, participants are asked to evaluate each indicator of competency achievement. Furthermore, participants were also allowed to submit oral comments on training activities.

The results of the evaluation of the process of this training activity obtained qualitative and quantitative data. Quantitative data were obtained from participants through participant responses by filling out self-evaluation instruments and analyzed using descriptive statistics. Meanwhile, quality data was obtained through oral responses delivered directly by participants and analyzed using thematic analysis techniques to see what themes were commented on by training participants.

## **RESULTS AND DISCUSSION**

This PKM activity to increase the competence of Catholic religious teachers uses training methods. This activity is only limited to the development stage in utilizing interactive PowerPoint learning media as a medium for learning Catholicism. The result of this training activity is a PowerPoint-based interactive learning media product based on the results of the needs analysis that has been carried out. At this stage, interactive learning media planning is carried out, namely:

- a) The slide contains a login menu.
- b) The slide contains menus contained in interactive media, namely profile menus, instructions for using learning media, objectives, materials, and questions.
- c) Each slide comes with active navigation buttons as well as animations and is interactive.

Peseta training successfully integrates media design into media *PowerPoint*, prepares images, includes learning materials and supporting videos, inserts evaluation questions (questions), complete each slide with animations and navigation buttons, and create interactive learning media. Bolkan (2019) Explains that interactive learning media equipped with various operational features such as audio, text, images, animation, video, and interactive links, can rejuvenate students to understand the learning material and teachers can adjust their assessments. The results of product development-based interactive learning media *PowerPoint* based on the learning plan of Catholic religious education can be seen in Figure 2.



**Figure 2. PowerPoint Interactive Learning Media Development**

In the post-training stage, after the interactive learning media has been successfully created, a check is carried out first to see if all learning media designs and active navigation buttons are functioning properly. In addition, checks are also carried out on the material presented, the completeness of the material, audio, and video quality, and the correctness of the keywords for the answers to the evaluation questions. After the check is complete, proceed with the distribution of interactive learning media between participants. This is so that participants share learning media materials that can be developed.

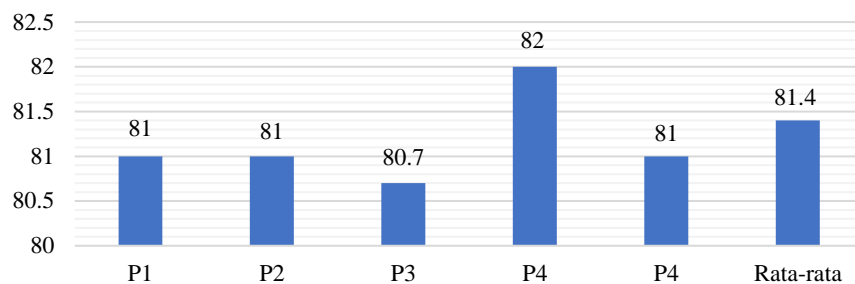
The results of the evaluation of the participants of this training activity showed positive things that participants gained new knowledge and could improve their competence. Participants also revealed that the media used was very good, interesting, and interactive. The suggestion given is that on the front page of the material, it is necessary to add pictures related to the material to make it more interesting for students, and students can immediately focus on the material they will learn. Furthermore, other participants conveyed suggestions that the media that had been designed was good and appropriate, and only needed grammar improvements and the addition of learning videos related to the material so that students could understand the material and help students complete the tasks or cases given.

According to subsequent participants, the use of interactive media *PowerPoint* What is presented is easy to understand and can help users in operating the developed media. Competency achievement indicators correspond to the participant's level of thinking. Components in media products developed using this training method support the improvement of teacher competence in the use of learning media. The material provided and the training media used help teachers understand the material and design interactive learning media easily. Some other studies also say that interactive media is easy to use in its operation (Husna & Dawn, 2022).

Next is the result of participants' responses to training activities through filling out evaluation questionnaires. At this stage, participants evaluate competency achievement indicators consisting of 5 questions. The results of filling out the questionnaire showed that the

positive response from participants was an average percentage of 81.4% with the category agree. Question number 4 related to "PowerPoint-based interactive learning media is easy to design and develop" with a percentage of achievement of 82% which shows qualifications strongly agree.

Participants said that the provision of space to collaborate on learning media would make it easier for teachers to utilize the use of interactive learning media in Catholic religious learning activities. Teachers can overcome their problems through learning and collaborating in teacher competency improvement activities.



**Figure 3. Participant Response to Competency Achievement Indicators**

PkM training activities on the use of interactive learning media for elementary and junior high school Catholic religious teachers were carried out well. This can be seen from the evaluation response submitted that this activity is very useful for teachers in improving their competence. According to Schoor and Bannert (2011) Learning that utilizes media and includes collaborative elements will increase participant motivation in carrying out the learning process. Becker et al., (2020) added that group work will reduce the cognitive load of participants and be able to think well in solving given problems.

## CONCLUSION

This PKM activity increases the competence of Catholic religious education teachers at the elementary and junior high levels in designing and utilizing PowerPoint-based interactive learning media to support the Catholic learning process. Based on the evaluation results of the trainees, it shows positive things that participants gain new knowledge and can improve their competence. Participants also revealed the use of interactive media *PowerPoint* is easy to understand and can help users in operating learning media. The evaluation questionnaire also showed a positive response from participants, namely an average percentage of 81.4% with the category agree. Teachers can overcome the problem of using learning media through training activities and collaborating in competency improvement activities.

Based on the conclusions presented, it can be suggested that teachers create and apply PowerPoint-based interactive media in learning. However, do not forget that there are many other alternative learning media, such as *Keynote*, *PowToon*, *Prezi*, and others that are also widely used in academia.

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