Transformasi: Jurnal Pengabdian Masyarakat, 20 (1), 2024: 12-27
p-ISSN 1858-3571 | e-ISSN 2580-9628

INCREASING TEACHER CREATIVITY THROUGH COMPUTER-BASED LEARNING MEDIA DEVELOPMENT TRAINING

Samrin[1]*, Tandri Patih[1], Halistin[1], Syifa Syira Salsabila[1]
[1]Institut Agama Islam Negeri Kendari, Kendari, Indonesia
*samrin@iainkendari.ac.id

Abstrak: Di Sulawesi Tenggara, pemerintah daerah telah mengadakan pelatihan untuk guru-guru. Namun, program ini belum sepenuhnya diterapkan di sekolah, terutama di daerah pinggiran. Kesulitan dalam menggunakan media pembelajaran berbasis komputer dan metode pembelajaran konvensional mempengaruhi motivasi dan pemahaman siswa. Kegiatan pengabdian kepada masyarakat (PkM) ini bertujuan untuk memberikan wawasan pengetahuan dan meningkatkan pemahaman guru-guru Sekolah Menengah Pertama di Lasolo Kepulauan, Kabupaten Konawe Utara, Provinsi Sulawesi Tenggara dalam memanfaatkan media pembelajaran berbasis komputer berbantuan Microsoft powerpoint, ispring suite software, dan Kvisoft Flipbook Maker, sehingga dapat meningkatkan kreativitasnya dalam melaksanakan pembelajaran di kelas. Metode yang digunakan adalah Participatory Action Research (PAR). Hasil program pengabdian ini menunjukkan 1) Guru-guru merespon sangat baik terkait IAIN Kendari yang memberikan pelatihan terhadap kebutuhan Kerjasama yang diharapkan oleh guru-guru; 2) Terdapat peningkatan pengetahuan dan kreativitas guru-guru dalam mendesain dan memanfaatkan media pembelajaran berbasis komputer berbantuan setelah dilaksanakannya pelatihan. Dari hasil evaluasi program, direkomendasikan untuk perlunya dilakukan kegiatan sejenis, agar guru-guru mampu memanfaatkan teknologi komputer atau teknologi Informasi (IT) dalam proses pembelajaran. Selain itu, perlu juga dilakukan pelatihan pemanfaatan software lain seperti canva, serta media-media pembelajaran lainnya yang dapat dimanfaatkan oleh guru-guru dalam kegiatan pembelajaran dan evaluasi peserta didik berbasis digital.

Kata Kunci: kreativitas guru, media pembelajaran berbasis komputer, pelatihan

Abstract: In Southeast Sulawesi, the regional government has conducted training for teachers. However, this program has not been fully implemented in schools, especially in suburban areas. The difficulty in using computer-based learning media and conventional learning methods affects student motivation and understanding. This community service program aims to provide knowledge insight and increase understanding of junior high school teachers in Lasolo Islands, North Konawe Regency, Southeast Sulawesi Province in utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker so that they can increase their creativity in carrying out learning in class. The method used was the Participatory Action Research (PAR). The results show that: 1) The teachers responded very well to IAIN Kendari, which provided training on the cooperation needs expected by the teachers; 2) There is an increase in teachers' knowledge and creativity in designing and utilizing computer-assisted learning media after the training. It is also recommended that similar activities be carried out so that teachers can utilize computer technology/information technology (IT) in the learning process. In addition, it is necessary to provide training on using other software such as Canva and other learning media that teachers can utilize in digital-based learning and student evaluation activities.

Keywords: teacher creativity, computer-based learning media, training

Introduction

Teachers as instructors play an essential role in fostering students' motivation and interest in learning. The role of facilitator also requires teachers to play a role in maximizing services to their students so that they do not find it difficult to receive and understand the material being

taught. The learning process will also be more effective and efficient (Yestiani & Zahwa, 2020). Referring to this, the Indonesian government, both central and regional, has made efforts to prepare all supporting facilities and various learning tools that support the successful implementation of computerized or digitalized learning. This can be seen from the availability of books/teaching materials for students and teachers that are electronic-based (BSE), as well as educational platforms. Through the regional government of Southeast Sulawesi Province (Sultra), the government has also tried to conduct workshops or training for teachers in Southeast Sulawesi, such as training in curriculum preparation, lesson study programs, preparation of learning modules, creation/development of learning media, teaching aids, and so on. Unfortunately, the sustainability of this program is not visible in the learning process in schools, especially schools on the city's outskirts. Most teachers still seem to feel comfortable with conventional learning conditions, namely by only using printed textbooks and learning media/visual aids provided by the school. Some teachers still struggle to design simple computer-based learning media, such as Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker.

Moreover, for teachers who work in suburban areas of the city or who are in island areas such as the Lasolo Islands area, North Konawe Regency, which is located on the outskirts of Southeast Sulawesi Province, this will certainly have an impact on student's motivation and interest in learning. Furthermore, it will affect students' not maximizing understanding of concepts. By increasing the competence and creativity of teachers, there is no possibility that quality students will be born. As explained by Lestari in Patih et al. (2021), teachers who are professional and qualified will naturally produce students who are also qualified.

Creativity is one of the potentials of humans as their self-realization, also commonly referred to as self-actualization (Abdullah, 2016). Creativity, in essence, is a gift given to every human being by Allah SWT. Creativity is in the form of the ability to create and be creative (Masturdin, 2016). Furthermore, Pentury (2017) stated that creativity can be explained as the ability to generate or produce work that is considered new, whether it is completely new or the result of improvements or changes based on something that has been developed previously. Creativity can be recognized and also developed through appropriate and appropriate education. In implementing learning, teachers as educators are objects of creativity for their students, and vice versa. A person's creativity can be born anywhere, anytime, and by anyone (Abdullah, 2016). Creativity is the ability to generate new ideas, see things from points of view that have not been thought of before, and combine existing concepts into a new form of thinking. (Simarmata, 2019). Creativity is the ability to produce innovative ideas that can be applied to solve problems. It is also the ability to identify new linkages between pre-existing elements (Zakiah et al., 2020).

Teachers, as educators, are required to optimize their creativity. A teacher's creativity and activities are necessary to inspire their students (Masturdin, 2016). The creativity of each teacher can be seen when implementing learning. Creating active, creative, and fun learning is the obligation of every teacher as an educator (Syaikhudin, 2013). The creativity of teachers in learning will also be able to foster students' learning motivation. Students will become

enthusiastic in learning, and creativity can prevent them from getting bored (Oktiani, 2017). This was also explained by Pentury (2017), who states that developing creativity in classroom learning will also produce creative students. Oktiani (2017) wrote that a teacher's creativity is not immediately visible. Several efforts are needed to grow and improve a teacher's creativity. One alternative solution that can be implemented is providing guidance and development of teacher competency through workshops, training, seminars, and so on.

The targets of this training program were junior high school teachers in Lasoloo Islands, North Konawe Regency, located on Southeast Sulawesi Province's outskirts. The selection of junior high school teachers in Lasolo Islands as training subjects in the context of community service activities at the Institut Agama Islam Negeri (IAIN) Kendari is because this location is one of the areas supported by IAIN Kendari in the implementation of IAIN's Real Work Lecture and Community Service activities. Kendari. Apart from that, problems were found related to teachers feeling comfortable with conventional learning conditions, namely by only using printed textbooks and learning media/visual aids provided by the school. Some teachers still struggle to design simple computer-based learning media, such as Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker. Therefore, through community service activities based on the Islamic Education Management study program, it is hoped that teachers, especially at Lasolo Islands Junior High School, North Konawe Regency, Southeast Sulawesi Province, can increase their creativity and knowledge in designing and utilizing computer-based learning media.

Paying attention to the condition of teachers in schools, it is deemed necessary for every educational institution and university, in the case of the Institut Agama Islam Negeri Kendari, to carry out activities in the form of community service, by applying the Participatory Action Research (PAR) method with the theme "Increasing Teacher Creativity Through Media Development Training Computer Based Learning", which involved junior high school teachers in Lasolo Islands, North Konawe Regency, which is located on the outskirts of Southeast Sulawesi Province. This Community Service Program aims to provide insight into knowledge about how to utilize computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker in implementing classroom learning. Providing skills and increasing understanding of junior high school teachers in Lasolo Islands, North Konawe Regency, which is located on the outskirts of Southeast Sulawesi Province in utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring suite software, and Kvisoft Flipbook Maker. Apart from that, after this training is carried out, it is hoped that junior high school teachers in Lasolo Islands, North Konawe Regency, which is located on the outskirts of Southeast Sulawesi Province, can apply their knowledge and experience to increase their creativity in carrying out learning in the classroom.

Previous studies relevant to this program include Margasari et al. (2009), who implemented a community service program to provide understanding and skills in developing learning media that meets the requirements for teachers at SMK YPKK I Sleman Yogyakarta. This service program uses computer software, presented using presentation/lecture methods and demonstrations of the work process of developing computer-based media. This program

was very well received and thoroughly participated in by the participants. As participants, teachers benefit from designing and developing better-quality learning media. Furthermore, Resmawan (2015) carried out a community service program targeting increasing the understanding of SMP/MTs Teachers in Kwandang District in creating interactive learning media using PowerPoint and providing PowerPoint-based interactive learning media. The implementation is carried out by demonstrating how to use PowerPoint as a mathematics learning medium. This Community Service Program aims to increase the understanding and skills of teachers regarding the development/creation of interactive multimedia for mathematics learning with the help of PowerPoint, as well as facilitating interactive mathematics learning media with the help of PowerPoint. The teachers enthusiastically participated in this program.

Furthermore, Patih et al. (2021) previously carried out community service intending to increase knowledge or understanding and also increase the competency of secondary school teachers in Lembo Village, North Konawe Regency, Southeast Sulawesi, through training in designing and creating questions, as well as online assessments. Implementation is carried out using Google Forms on the Internet. The PKM report also shows a good level of satisfaction from teachers who took part in the training, with a satisfied percentage of 30% and very satisfied of 70%. Compared to the community service programs implemented by Margasari et al. (2009) and Resmawan (2015), the community service will include mathematics subject teachers and teachers of other subjects. Compared to the community service program carried out by Patih et al. (2021), the use of computer technology does not only use Microsoft PowerPoint software but also uses other supporting software, such as iSpring Suite and Kvisoft Flipbook Maker software, which helps change media. PowerPoint-based forms/displays of learning media based on Macromedia, audio-visual, or website-based.

Training that focuses on developing teacher creativity in using learning technology is hoped to improve the quality of learning at the school level. This training not only aims to equip teachers with technical skills but also motivates them to explore their creative potential in presenting learning that is interesting and relevant to current developments. This service is also in line with the government's efforts to improve the quality of education in the digital era. By empowering educators through this training, it is hoped that they can create a more dynamic, interactive learning environment that combines local wisdom with global technological advances. Through this training program, it is expected that the community will realize the importance of the role of teachers in creating inspiring learning in line with the demands of the times

Method

The mechanism for implementing this community service follows the Participatory Action Research (PAR) method. The Participatory Action Research (PAR) method is a research approach that involves active participation from participants or stakeholders involved in the research context. This method consists of conducting research to define a problem and applying information into action as a solution to the problem that has been defined (Rahmat & Mirnawati,

2020). In the context of community service, the PAR method is often used to involve parties directly involved in the development and implementation process of a program. This program was carried out in the Odd Semester of the 2023/2024 Academic Year for two days of training, involving 15 junior high school teachers in Lasoloo Islands, North Konawe Regency, which is located on the outskirts of Southeast Sulawesi Province. The following are general steps in the mechanism for implementing community service using the Participatory Action Research (PAR) method:

First Step	:	Training participants are given an initial test to measure their creativity and knowledge in designing innovative and interesting learning media for students.
Step Two.	:	Training participants are given material regarding the importance of using computer-based media in designing innovative and interesting learning media for students.
Step Three	:	Training participants are motivated by showing examples of ready-made learning media.
Fourth step	:	Training participants are allowed to discuss/ask questions that are unclear or still difficult to understand regarding the use of computer-based media in designing learning media.
Fifth step	:	Training participants are given training in designing learning media based on PowerPoint, Ispring, and Kvisoft Flipbook Maker.
Sixth step	:	Training participants are given a final test to measure the increase in their creativity and knowledge in designing innovative and interesting learning media for students.

By implementing these steps, the Participatory Action Research method ensures that community service is centered on providing external solutions and involves active participation from local communities in every stage of the process. The speaker will deliver material using question-and-answer techniques and training demonstrations. Providing training material on the use of computer-based media discusses the importance of using computer-based media in developing learning media that teachers will use in the classroom. Furthermore, to deepen the material, examples of simulations of creating learning media using Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker were given, and the opportunity was opened for questions and answers. The targets of this program were junior high school teachers in Lasoloo Islands, North Konawe Regency, located on the outskirts of Southeast Sulawesi Province.

Data analysis was carried out using descriptive statistics and inferential statistics. Descriptive statistics were carried out to describe training participants' needs, impressions, and expectations. Descriptive data analysis also describes the mean, variance, and lowest and highest scores for the training participants' understanding and creativity. Next, data analysis using inferential statistics was used to test the increase in understanding and creativity of training participants in designing and utilizing computer-based learning media, using a two-paired sample t-test if the data was normally distributed, and the Wilcoxon test if the data was not normally distributed.

Results and Discussion

Results of Descriptive Analysis of Computer-Based Learning Media Development Training

Implementation of Community Service (PkM) Computer-Based Learning Media Development Training activities, assisted by Microsoft PowerPoint, Ispring suite software, and Kvisoft Flipbook Maker, lasted for two days (Figure 2).

Figure 1. Resource Person Helps Training Participants Design Learning Media

Before the training, tests were carried out regarding knowledge, and a survey was conducted on teachers' creativity in using computer-based learning media, as well as teachers' satisfaction in participating in Community Service (PkM) program in this Computer-Based Learning Media Development Training.

Description of Teachers' Responses in Participating in Computer-Based Learning Media Development Training

Based on the results of data analysis of teachers' responses in participating in training activities on developing computer-based learning media assisted by Microsoft PowerPoint, Ispring suite software, and Kvisoft Flipbook Maker, it is known that descriptively, the majority of teachers responded to training activities on developing computer-based learning media assisted by Microsoft Power. point, Ispring software suite, and Kvisoft Flipbook Maker improve in every aspect asked. The teachers responded very well regarding IAIN Kendari, which assisted/trained them to meet the cooperation needs expected by the teachers. The teachers rated it very well, saying they benefitted from collaborating with IAIN Kendari. Furthermore, the teachers also rated it very well that IAIN Kendari's Human Resources (HR) matched the skills expected in establishing collaboration. Then, IAIN Kendari's human resources were considered very good at collaborating with trainee teachers and working professionally. These results align with the results of a similar PkM implementation carried out by Patih et al. (2021) on Middle School and High School teachers in North Konawe Regency, where the average respondent/teacher strongly agrees with the benefits and hopes for sustainability—community Service Activities activities like this. Teachers at the Junior High School in Lasolo Islands, North Konawe Regency, located on the outskirts of Southeast Sulawesi Province, also expressed their opinions regarding the need for more PkM activities to be carried out in their schools. The teachers also conveyed their impressions and hopes, as seen in Table 1 below.

Table 1. Recapitulation of Respondents' Needs, Impressions, and Expectations of Community Service Activities that Have Been Carried Out

Respondent's Needs	Respondents' Impressions	Respondents' Expectations
There is a need for assistance/training on the use of IT in the teaching and learning process for teachers in schools	The material presented by the resource persons adds new knowledge to respondents/trainees	With this training, in the future respondents/trainees hope for the continuation of activities like this, considering This program can provide additional knowledge in designing learning media
There is a need for training in the use of computers in schools	The material presented by the resource person was beneficial and added new insights regarding designing computer-based learning media	
There is a need for training on the use of Canva software in learning, the use of media in learning, and digital-based evaluation of student tests	The program is excellent so that as a teacher you can easily find out how to use computer media as a learning medium for teachers at school	
There is a need for basic training related to designing learning media	The training held was very useful for respondents/trainees	
	Through this PkM Program, respondents/training participants can find out how Ms. Powerpoint as a computer-based learning medium	

Based on Table 1, it is known that teachers at the Junior High School in Lasolo Islands, North Konawe Regency, Southeast Sulawesi, need training activities on the use of computers and the use of information technology (IT) in the learning process. Teachers are also interested in using Canva software and other learning media in digital-based learning and student evaluation activities (Figure 2). Training using Canva software can increase teacher competence in creating learning media. As stated by Fitriani et al. (2022) in the findings of their research, Canva training in creating learning media was well organized and increased teachers' abilities in creating learning media. In this training, participants also said that the material presented by the resource persons was beneficial and could add new insight/knowledge to designing computer-based learning media. Hence, the teachers hoped that this program could continue. Riskiawan et al. (2016) explained that this training can provide teachers with skills in developing teaching tools in multimedia-based media.

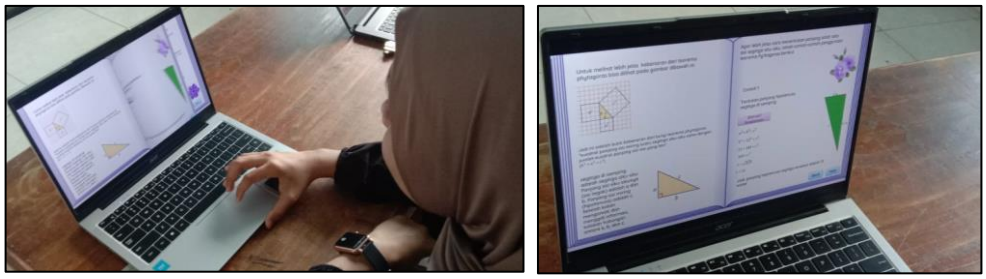

Figure 2. Training Participants Have Been Able to Design Computer-Based Learning Media

Based on information on respondents' needs, it is also known that teachers need to increase their skills and knowledge in the use of technology, whether in the use of computers, Canva software, learning media, or teaching media design. Training that meets these needs can positively improve school learning quality. From the respondents' impressions presented in Table 1, it can be concluded that the training held successfully provided benefits and new knowledge to the participants. In particular, the material presented by the resource person was considered effective in increasing knowledge and insight, especially related to the design of computer-based learning media. The service activities were considered very good, helping teachers to utilize computer media as a learning tool at school efficiently. In general, the participants considered the training to be beneficial. Through the Community Service (PkM) program, respondents were able to understand how Microsoft PowerPoint works and functions as a computer-based learning medium. This conclusion shows the success and positive value of the training that has been held. Based on Table 1, it can be concluded that participants expect similar training to be conducted regularly in the future. This is due to the belief that this program provides additional knowledge in designing learning media. This conclusion reflects the participants' aspirations to continue developing their knowledge and skills in learning design and shows that they found the training valuable and helpful.

In general, Table 1 reflects that respondents recognize the positive value of this training and expect continuation and development in terms of computer-based information technology education. As Firdaus et al. (2023) found that this type of training needs to be carried out again for teachers and school principals, especially to strengthen learning capacity in educational units. Teachers must actively develop and disseminate the results of this training to fellow teachers. Apart from that, facilities and infrastructure are needed to support the implementation of computer-based learning media in the classroom.

Description of Teachers' Knowledge and Creativity in Utilizing Computer-Based Learning Media

In this PkM program, teachers were asked to answer several questions related to computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker, and several statements related to teachers' creativity in designing and utilizing computer-assisted learning media. Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker. The questions were given with a pre-post design before and after

participants were given training material and practice designing computer-based learning media. The results of the training participants' responses can be seen in Table 2 below.

Table 2. Statistical Description of Teachers' Knowledge in Utilizing Computer-Based Learning Media

Statistic	Respondent Knowledge	
	Pre Training	Post Training
Mean	8,33	12,11
Variance	2,00	10,11
Lowest Score	7,00	8,00
Highest Score	11,00	17,00

Table 2 shows the average of teachers' knowledge in utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker increased after the training was carried out, from a score of 8,33 to 12,11. The variance (variance), lowest, and highest scores of their knowledge also increased. The diversity of teachers' knowledge before the training was carried out was 2,00, which shows that the teachers' knowledge in utilizing computer-based learning media before the training was relatively the same/not different from one teacher to another. Then, after the training was carried out, it was seen that the diversity of teachers' knowledge was 10,11. This shows that after training each teacher's knowledge has varied or is more different from one teacher to another.

Table 3. Statistical Description of Teachers' Creativity in Designing and Utilizing Computer-Based Learning Media

Statistic	Respondents' Creativity	
	Pre Training	Post Training
Mean	47,89	58,00
Variance	58,11	18,25
Lowest Score	36,00	47,00
Highest Score	60,00	60,00

Table 3 shows the average of teachers' creativity in using computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker has increased after the training was carried out from a score of 47,89, increasing to 58,00. Likewise, their lowest creativity scores also experienced an increase. However, the highest score did not improve, and the variety (variance) of their creativity decreased, which explains that the creativity of teachers at the Junior High School in Lasolo Islands, North Konawe Regency, Southeast Sulawesi, was relatively the same after the training activities were carried out. The diversity of teachers' creativity before the training was carried out was 58,11, which shows that the teachers' knowledge of using computer-based learning media before the training was very different from one teacher to another. Then, after the training, it was seen that the diversity of teachers' creativity was 18,25. This shows that after the training, the creativity of each teacher regarding the use of computer-based learning media assisted by Microsoft PowerPoint, Ispring

software suite, and Kvisoft Flipbook Maker tends to be the same between one teacher and another.

Description of Teachers' Satisfaction with PkM Activities in Computer-Based Learning Media Development Training Organized by the Islamic Education Management Departement (MPI) IAIN Kendari

In the implementation stage, teachers' satisfaction with implementing computer-based learning media development training assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker is also a concern. The description of the increase in teacher satisfaction can be seen in Table 4 below.

Table 4. Statistical Description of Teacher Satisfaction in PkM Activities

Statistic	Respondent Satisfaction	
	Pre Training	Post Training
	17,67	19,56
Mean	9,00	1,78
Variance	12,00	16,00
Lowest Score	20,00	20,00
Highest Score	88,33%	97,78%

Based on Table 4, the average satisfaction of teachers with PkM IAIN Kendari activities has increased after participating in this training, from 17.67 to 19.56. Likewise, their lowest satisfaction score also increased. However, the highest score did not improve, and the variance of their satisfaction decreased. This explains that the satisfaction of teachers at the Junior High School in Lasolo Islands, North Konawe Regency, Southeast Sulawesi, was relatively the same after the training activities were carried out. Based on the service satisfaction criteria by Buton et al. (2019) in Table 5, the level of teacher satisfaction with all PkM activities carried out by IAIN Kendari before the implementation of the PkM activities for computer-based media development training is known to be in the very satisfied criteria with a percentage of 88,33% and then increased by 97,78% (very satisfied) after implementing this program. The overall satisfaction level achieved a significant increase. This explains the high enthusiasm of the participants towards implementing computer-based learning media development training activities assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker.

Table 5. Respondent Satisfaction Level Criteria

Percentage	Satisfaction Criteria
0% - 20%	Dissatisfied
21% - 40%	Less Satisfied
41% - 60%	Quite Satisfied
61% - 80%	Satisfied
81% - 100%	Very Satisfied

(Buton et al., 2019)

Results of Inferential Analysis of Computer-Based Learning Media Development Training

To see more clearly the increase in knowledge, creativity, and satisfaction of teachers in Lasolo Islands, North Konawe Regency, Southeast Sulawesi, after attending training, research hypotheses were tested using inferential statistics. Before testing the hypothesis, the data normality assumption is first tested using the Kolmogorov-Smirnov and Shapiro-Wilk tests.

Test the Assumption of Data Normality

The results of testing the normality of research data (knowledge, creativity, and respondent satisfaction) can be seen in Table 6 below.

Table 6. Data Normality Test Results

Variable	Normality Test			
	Kolmogorov-Smirnov		Shapiro-Wilk	
	Statistic	Sig.	Statistic	Sig.
Respondents' Knowledge Before Training	0,260	0,081	0,867	0,113
Respondents' Knowledge After Training	0,168	0,200	0,931	0,489
Respondents' Creativity Before Training	0,161	0,200	0,970	0,895
Respondents' Creativity After Training	0,347	0,003	0,557	0,000
Respondents' Pre-PKM Service Satisfaction Before Training	0,227	0,199	0,810	0,027
Respondents' PkM Service Satisfaction After Training	0,519	0,000	0,390	0,000

Table 6 shows that only the pair of respondent/teacher knowledge variable data (before and after training) meets the normal distribution assumption, with a significance value of the Kolmogorov-Smirnov test of 0,081 for data before training and 0,200 for data after training, which greater than the value α = 0,05 (accept H0). The results of the Shapiro-Wilk test also show a significance value of 0,113 before training and 0,489 after training, which is greater than the value of α = 0,05 (accept H0). For data on respondents' creativity and satisfaction variables, it is known that only the data before the training were normally distributed (significance value > α = 0,05).

Statistical Hypothesis Testing to Increase Teachers' Knowledge in Utilizing Computer-Based Learning Media

The data on teachers' knowledge in computer-based learning media meets the normal distribution assumption. Therefore, hypothesis testing can be done using the two-paired sample t-test. The results of the data analysis can be seen in Table 7 and the hypothesis tested is as follows:

H_0 : There was no increase in teachers' knowledge of utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker after the training.

H_1 : There was an increase in teachers' knowledge in utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker after the training.

Table 7. Two Paired Samples t Test Results for Knowledge Variables

Variable Pairs	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Respondents' Knowledge Before Training- Respondents' Knowledge After Training	3,778	3,032	1,011	1,447	6,109	3,74	8	0,006

Based on Table 7, the significance of the two-paired sample t-test is 0.006 < α = 0.05. So, it can be said that there has been an increase in teachers' knowledge of utilizing computer-based learning media, assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker, after the training (reject H_0). By rejecting the null hypothesis (H_0), it can be concluded that the training effectively increased teachers' knowledge regarding the use of Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker in developing learning media.

This training is carried out to help teachers become familiar with and find it easier to design computer-based learning media, as explained by Riskiawan et al. (2016), training and mentoring like this are carried out to make it easier for teachers to understand the training material. The training's focus on understanding and mastering these tools has had a positive impact, helping teachers understand the concepts and benefits of computer-based learning media. Firdaus et al. (2023) found that participants' understanding of the concepts and benefits of learning media increased after the training, particularly PowerPoint-based learning media. This training provides new knowledge and practical support in designing computer-based learning media. Apart from that, this training not only increases knowledge but also provides a deeper understanding of the concepts and benefits of learning media, especially PowerPoint-based learning media. Thus, the results of this data analysis indicate that the training in developing computer-based learning media has succeeded in increasing teachers' knowledge, providing practical support, and deepening their understanding of the concepts and benefits of computer-based learning media. This improvement is expected to support teachers in applying technology in their learning process more effectively.

Statistical Hypothesis Testing to Increase Teacher Creativity in Utilizing Computer-Based Learning Media

The data on teachers' creativity in using computer-based learning media does not meet the normal distribution assumption. Therefore, the hypothesis testing can be carried out using non-parametric statistics, namely the two related sample Wilcoxon test. The results of the data analysis can be seen in Table 8 and the hypothesis tested is as follows:

H_0 : There was no increase in teachers' creativity in designing and utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker after the training.

H_1 : There was an increase in teachers' creativity in designing and utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker after the training.

Table 8. Results of the Two-Sample Wilcoxon Test on Teacher Creativity Variables

Statistic	Respondent Creativity Test Before Training - Respondent Creativity Test After Training
Z	-2,524
Asymp. Sig. (2-tailed)	0,012

Based on Table 8, it is known that the significance value of the Wilcoxon two-sample test is 0,012 < α= 0,05. So, it can be said that there has been an increase in teachers' creativity in designing and utilizing computer-based learning media, assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker, after the training was implemented (reject H_0). By rejecting the null hypothesis (H_0), it can be concluded that the training effectively improved teachers' skills and creativity in designing and utilizing computer-based learning media.

These results indicate that the training carried out effectively improved teachers' skills and creativity in designing computer-based learning media. As explained by Riskiawan et al. (2016), this type of training is carried out to provide skills to teachers in developing teaching tools, such as multimedia-based learning media. This training is informative and can be applied practically in developing learning media in accordance with contemporary needs that demand the use of technology. Thus, the training in developing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker has succeeded in increasing the creativity and skills of teachers. These improvements could potentially create a more innovative and engaging learning environment for students.

Statistical Hypothesis Testing of Increased Teacher Satisfaction Regarding Community Service Activities Computer-Based Learning Media Development Training

The data on teacher satisfaction regarding PKM training activities for the development of computer-based learning media does not meet the normal distribution assumption. Therefore, hypothesis testing can be carried out using non-parametric statistics, namely the two related sample Wilcoxon test. The results of the data analysis can be seen in Table 9 and the hypothesis tested is as follows:

H_0 : There was no increase in teachers' satisfaction regarding the PkM training activities for developing computer-based learning media assisted by Microsoft PowerPoint, Ispring suite software, and Kvisoft Flipbook Maker after the training was implemented.

H_1 : There was an increase in teacher satisfaction regarding the PkM training activities for developing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker after the training.

Table 9. Results of the Wilcoxon Test for Two Paired Samples of Teacher Satisfaction Variables

Statistic	Respondents' Community Service Satisfaction Before Training - Respondents' Community Service Satisfaction After Training
Z	-2,032
Asymp. Sig. (2-tailed)	0,042

Based on Table 9, the significance value of the Wilcoxon two-sample test is 0,042 < α = 0,05. So, it can be said that there was an increase in teacher satisfaction regarding PkM training activities for developing computer-based learning media, assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker, after the training was implemented (reject H_0). By rejecting the null hypothesis (H_0), it can be concluded that training positively impacts teachers' perceptions and satisfaction regarding the use of Microsoft PowerPoint, iSpring Suite Software, and Kvisoft Flipbook Maker in developing learning media.

Community service activities such as training using computer devices, whether developing computer-based learning media or creating computer-based questions, are considered satisfying for teachers. It can be concluded that teachers are satisfied with the training on the use of computer equipment. They also see it as an effective solution to overcome challenges in developing learning media. As stated by Patih et al. (2021), these programs are beneficial and provide solutions to problems faced by teachers. The teacher was also very satisfied with this program and hoped for further activities. Training increases satisfaction and offers concrete solutions to problems teachers face in developing computer-based learning media. Teachers' requests for further activities reflect their desire to continue developing skills and knowledge related to using technology in learning. Thus, the conclusion from the results of the data analysis confirms that the training in developing computer-based learning media has succeeded in increasing teacher satisfaction and is expected to become the basis for developing further activities that are more effective and sustainable.

Based on the needs, impressions, and expectations of teachers at the Junior High School in Lasolo Islands, North Konawe Regency, which is located on the outskirts of Southeast Sulawesi Province, as well as the results of data analysis, it is necessary to carry out similar activities, so that teachers can utilize computer technology/Information technology (IT) in the learning process. There is also a need to provide training on the use of Canva software and other learning media that teachers can utilize in digital-based learning and student evaluation activities. Apart from the implications of the results of this community service, several things are limitations in its implementation, including the difficulty of access to the location where the service is taking place and teachers' lack of readiness to participate in training activities, where some participants do not bring laptop devices when taking part in the training. The training

participants also hope that activities like this can continue in the future because this training provides additional knowledge in designing learning media.

Conclusion

Based on the results of the service, several conclusions can be drawn, namely: 1) The response of the majority of teachers to the training program for developing computer-based learning media assisted by Microsoft PowerPoint, Ispring suite software, and Kvisoft Flipbook Maker increased in every aspect asked. The teachers responded very well regarding IAIN Kendari, which assisted/trained them to meet the cooperation needs expected by the teachers. The teachers also rated it very well, saying they got good benefits from collaborating with IAIN Kendari. Then, IAIN Kendari's human resources were considered very good at collaborating with trainee teachers and working professionally; 2) There is an increase in teachers' knowledge in utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker after the training was carried out; 3) There was an increase in teachers' creativity in designing and utilizing computer-based learning media assisted by Microsoft PowerPoint, Ispring software suite, and Kvisoft Flipbook Maker after the training was carried out; 4) There was an increase in teacher satisfaction regarding PkM training activities for developing computer-based learning media assisted by Microsoft PowerPoint, Ispring suite software, and Kvisoft Flipbook Maker after the training was carried out. The level of satisfaction of teachers with all Community Service activities carried out by IAIN Kendari before the Community Service activities were carried out, the computer-based media development training was found to be in the very satisfied criteria with a percentage of 88.33%, and then increased by 97.78% (very satisfied) after carrying out this Community Service program. Through this training, participants gained new skills to be applied in their daily work, increased efficiency and effectiveness in designing more interesting computer-based learning media, and improved student learning quality. This training can also be a forum for teachers (trainees) to develop their professional competencies. Continuous professional development is a substantial investment to ensure teachers can provide high-quality education and continue to grow in their careers.

Acknowledgement

We thank the Ministry of Religious Affairs of the Republic of Indonesia for funding this community service program. Thanks are also addressed to the parties involved who helped carry out this research, especially junior high school teachers in Lasolo Islands, North Konawe Regency, Southeast Sulawesi Province.

References

Abdullah, R. (2016). Pembelajaran Dalam Perspektif Kreativitas Guru Dalam Pemanfaatan Media Pembelajaran. *Lantanida Journal*, *4*(1), 35. https://doi.org/10.22373/lj.v4i1.1866

Buton, M., Kaunang, R., & Jocom, S. G. (2019). Analisis Tingkat Kepuasan Konsumen Terhadap Pelayanan Warunk Bendito di Kawasan Megamas Manado. *Agri-Sosioekonomi*, *15*(1), 159.

https://doi.org/10.35791/agrsosek.15.1.2019.23590
Firdaus, F., Zulhajji, Z., A Karim, S., Yusuf Mappeasse, M., & Imran, A. (2023). Pelatihan Pembuatan Media Pembelajaran Berbasis Komputer Bagi Guru SD Di Kecamatan Salomekko Kabupaten Bone. *Jurnal Pengabdian Masyarakat*, *1*(1), 23–28. https://doi.org/10.59562/abdimas.v1i1.298
Fitriani, Faisol, A., Wamiliana, Notiragayu, Chasanah, S. L., & Kurniasari. (2022). Pelatihan Canva Dalam Pembuatan Media Pembelajaran Bagi Guru- Guru SMK Di Bandar Lampung. *Jurnal Pengabddian Kepada Masyarakat Tabikpun*, *3*(3), 193–202. https://doi.org/10.23960/jpkmt.v3i3.96
Margasari, N., Alteza, M., & Musaroh. (2009). Pendampingan Dalam Pengembangan Media Pembelajaran Sebagai Salah Satu Upaya Untuk Memperoleh Sertifikasi Bagi Guru-Guru SMK YPKK I Sleman Yogyakarta. In *Kegiatan Pengabdian Pada Masyarakat* (Issue April). https://staffnew.uny.ac.id/upload/132309679/pengabdian/lampiran-cum-c-upload-1.pdf
Masturdin. (2016). Kreativitas Guru Menumbuhkan Motivasi Belajar Siswa dalam Upaya Peningkatan Hasil Belajar Aqidah Akhlak di MTSN Rukoh Darussalam Banda Aceh. *Jurnal Pendidikan*, *7*(2), 1–18. https://doi.org/http://dx.doi.org/10.22373/pjp.v7i2.3869
Oktiani, I. (2017). Kreativitas Guru dalam Meningkatkan Motivasi Belajar Peserta Didik. *Jurnal Kependidikan*, *5*(2), 216–232. https://doi.org/10.24090/jk.v5i2.1939
Patih, T., Sangila, M. S., Boy, L., Masdin, Kadir, A., Halistin, & Nurhalizah, D. (2021). Pelatihan Pembuatan Soal dan Penilaian Daring Bagi Guru SMP dan SMA di Desa Lembo Kabupaten Konawe Utara. *Jurnal Pengabdian Masyarakat Ilmu Keguruan Dan Pendidikan (JPM-IKP)*, *4*(2), 2–7. https://doi.org/https://doi.org/10.31326/jmp-ikp.v4i2.1047
Pentury, H. J. (2017). Pengembangan Kreativitas Guru dalam Pembelajaran Kreatif Pembelajaran Bahasa Inggris. *Jurnal Ilmu Kependidikan*, *4*(3), 265–272. https://doi.org/http://dx.doi.org/10.30998/fjik.v4i3.1923
Rahmat, A., & Mirnawati, M. (2020). Model Participation Action Research dalam Pemberdayaan Masyarakat. *Jurnal Ilmu Pendidikan Nonformal*, *06*(01), 62–71. https://doi.org/http://dx.doi.org/10.37905/aksara.6.1.62-71.2020
Resmawan. (2015). Pelatihan Pembuatan Meddia Pembelajaran Matematika Interaktif Berbasis Powerpoint Bagi Guru-Guru SMP/MTs Se-Kecamatan Kwandang. In *Laporan Pengabdian Kepada Masyarakat* (Vol. 13). https://repository.ung.ac.id/get/singa/2/39/Pelatihan-Pembuatan-Media-Pembelajaran-Matematika-Interaktif-berbasis-PowerPoint-bagi-Guru-Guru-SMPMTs-se-Kecamatan-Kwandang.pdf
Riskiawan, H. Y., Setyohadi, D. P. S., & Arifianto, A. S. (2016). Pelatihan Pengembangan Media Pembelajaran Berbasiss Multimedia Untuk Meningkatkan Kualitas dan Kreativitas Guru SMA. *Jurnal Pengabdian Masyarakat J-DINAMIKA*, *1*(1), 48–52. https://doi.org/10.25047/j-dinamika.v1i1.134
Simarmata, E. (2019). Upaya Meningkatkan Kreativitas dan Hasil Belajar Melalui Pembuatan Lagu Pada Siswa Kelas VII SMP Negeri 5 Padangsidimpuan T.A 2016/2017. *Jurnal Education and Development*, *7*(4), 215–222. https://doi.org/https://doi.org/10.37081/ed.v7i4.1395
Syaikhudin, A. (2013). Pengembangan Kreativitas Guru dalam Proses Pembelajaran. *Jurnal Lisan Al-Hal*, *7*(2), 313–330. https://doi.org/10.46963/alliqo.v5i02.238
Yestiani, D. K., & Zahwa, N. (2020). Peran Guru dalam Pembelajaran pada Siswa Sekolah Dasar. *Fondatia: Jurnal Pendidikan Dasar*, *4*(1), 41–47. https://doi.org/10.36088/fondatia.v4i1.515
Zakiah, N. E., Fatimah, A. T., & Sunaryo, Y. (2020). Implementasi Project-Based Learning Untuk Mengeksplorasi Kreativitas Dan Kemampuan Berpikir Kreatif Matematis Mahasiswa. *Teorema: Teori Dan Riset Matematika*, *5*(2), 286. https://doi.org/10.25157/teorema.v5i2.4194