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INTERACTIVE LEARNING MEDIA TRAINING USING THE CLASSPOINT APPLICATION TO IMPROVE THE PEDAGOGICAL COMPETENCE OF MADRASAH IBTIDAIYAH MUSLIMAT NAHDLATUL ULAMA TEACHERS IN PALANGKA RAYA

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Abstrak: Guru sebagai agen pembelajaran harus memiliki kesiapan dalam beradaptasi terhadap perubahan proses pembelajaran dan mampu menghadapi segala tantangan di dalamnya. Di era sekarang, guru perlu untuk meningkatkan kompetensi pedagogiknya dalam pemanfaatan teknologi informasi dan komunikasi untuk meningkatkan kualitas proses pembelajaran. Tujuan program pengabdian kepada masyarakat ini adalah untuk meningkatkan kompetensi guru dalam memanfaatkan teknologi melalui pelatihan penggunaan media pembelajaran interaktif aplikasi Classpoint. Metode yang digunakan adalah Participatory Action Research (PAR) dengan empat tahapan kegiatan yaitu persiapan, sosialisasi, pelaksanaan, dan evaluasi. Partisipan program ini adalah sebanyak 27 guru dari Madrasah Ibtidaiyah (MI) Muslimat Nahdlatul Ulama (NU) di kota Palangka Raya. Evaluasi program ini menggunakan kuesioner, pre-test dan post-test dengan target luaran berupa produk media pembelajaran interaktif menggunakan aplikasi Classpoint. Hasil kuesioner menunjukkan bahwa program ini dapat membantu guru dalam meningkatkan pemahaman tentang penggunaan Classpoint sebagai media pembelajaran interaktif berbasis teknologi dengan persentase sangat setuju sebanyak 34,6%, dan setuju 65,4%. Sementara nilai rata-rata hasil pre-test adalah sebesar 54% dan post-test sebesar 64% yang menunjukkan adanya peningkatan pemahaman materi yang disampaikan sebesar 10% setelah mengikuti pelatihan ini. Aplikasi Classpoint dapat menjadi alternatif media pembelajaran interaktif dalam meningkatkan kompetensi pedagogik guru untuk mendukung proses pembelajaran.

Kata Kunci: aplikasi classpoint, media pembelajaran interaktif, kompetensi pedagogik

Abstract: Teachers, as the principal agents of the learning process, must be able to adapt to changes and deal with all challenges. In the current era, teachers need to improve their pedagogical competence in using information and communication technology to increase the quality of the learning process. This community service program aims to enhance teachers' competence in utilizing technology through a training program on using interactive learning media with the Classpoint application. The method used in this program was Participatory Action Research (PAR), which has four stages: preparation, socialization, implementation, and evaluation. The participants were 27 teachers from Madrasah Ibtidaiyah (MI) Muslimat Nahdlatul Ulama (NU) in Palangka Raya city. The program evaluation was conducted by distributing questionnaires, pre-tests, and post-tests, with the target output being an interactive learning media product using the Classpoint application. The questionnaire results show that this program can help teachers improve their understanding of using Classpoint as a technology-based interactive learning media, with a percentage of strongly agree with 34.6%, and agree with 65.4%. The average value of the pre-test results was about 54%, and the post-test was 64%, indicating an increase in understanding by 10% after the training. Classpoint application can be an alternative interactive learning media in improving teachers' pedagogical competence to support the learning process.

Keywords: classpoint application, interactive learning media, pedagogical competence

Introduction

Madrasah Ibtidaiyah Muslimat Nahdhatul Ulama (MI Muslimat NU) is one of the educational units with Madrasah Ibtidaiyah (MI) level or equivalent to Elementary School (SD)

in Panarung Village, Pahandut District, Palangka Raya City, Central Kalimantan. Currently, MI Muslimat NU has not optimally utilized information technology in the teaching and learning process. The results of the questionnaire are shown in Table 1.

Table 1. Results of the Learning Media Usage Questionnaire

No.	Questionnaire Content	Always (%)	Frequent (%)	Sometimes (%)	Never (%)
1	I use learning media when teaching	9,1	0	90,9	0
2	I use varied learning media	0	9,9	90,9	0
3	I use learning media when the teaching material in the book is incomplete	4,5	0	90,9	4,5
4	I use learning media when practising material	9,1	13,6	72,7	4,5
5	I use multimedia-based electronic learning media	0	4,5	77,3	18,2

Source: (Zakharia et al., 2023)

Based on the data obtained in Table 1, MI Muslimat NU teachers often answer "sometimes" to each statement. Based on the first statement, a very high number of 90.9% stated that teachers rarely use learning media. The PKM team also interviewed the use of learning media with the Principal of MI Muslimat NU. The principal's statement is relevant to the data collected through the questionnaire. The principal also said that each class has LCD projector facilities, which would be unfortunate if this facility were not used.

One of the pedagogical competencies that teachers need to improve about learning in the classroom is the ability to create interactive learning media (Tanal et al., 2023). This interactive media attracts students' attention and supports a more dynamic, effective, and fun learning process, thus allowing students to understand the subject matter more quickly (Lestari, 2022; Poerwanti & Mahfud, 2018). The impact of the lack of use of learning media can hinder the achievement of actual educational goals (Qomariyah et al., 2022).

Information technology can provide many conveniences in teaching and learning if appropriately utilized (Kaban et al., 2020). Some teaching materials are difficult to explain verbally or textually, so using information technology makes it easy for teachers to convey teaching materials more effectively and interactively (Rumidjan et al., 2017). This can be done in face-to-face meetings by combining various multimedia elements, such as text, images, audio, animation, and video (Setiyanto, 2023; Wao et al., 2022; Waty, 2023).

Relevant research has been conducted on implementing interactive learning media using Classpoint in English subjects during the COVID-19 pandemic. There was an increase in student learning outcomes in class XI MIPA, namely in cycle II data 81% from the previous results in cycle I with an average of 67.74% (Sundari et al., 2021). Other studies have also increased student learning due to the use of interactive learning media using Classpoint has an impact on improving student learning motivation (Karim et al., 2022; Ekaningtias & Safilin, 2019; Warkintin & Mulyadi, 2019).

Based on the existing problems at MI Muslimat NU, the PKM team recommends training on using learning media for teachers utilizing the ClassPoint application to improve skills in using interactive learning media. Classpoint is an additional application of PowerPoint that allows

teachers to create interactive quizzes, surveys, and other activities that involve students directly in the learning process (Kurniawan & Ika Yatri, 2022; Oktadela et al., 2024). Using Classpoint, teachers can create a more engaging and interactive learning experience, which can help improve student participation and understanding (Thoyibah et al., 2024). On the other hand, students can respond to the teacher's slides using laptops or web-based *mobile* devices, thus creating interactive and fun learning (Abdelrady & Akram, 2022; Setiawan et al., 2023).

Method

This PKM program was conducted to train teachers in creating interactive learning media using the ClassPoint application. The participants of this program were 26 teachers of Madrasah MI Muslimat NU. This program was carried out on July 22, 2023, through face-to-face meetings at the school. The delivery method uses a hands-on practicum method using the Classpoint application installed on the teachers' laptops. Data collection instruments were questionnaires and comprehension evaluation tests with *pre-tests* and *post-tests*.

The method used in this activity is the *Participatory Action Research* (PAR), which consists of four stages: preparation, socialization, implementation, and evaluation. The flow of activities is presented in Figure 1.

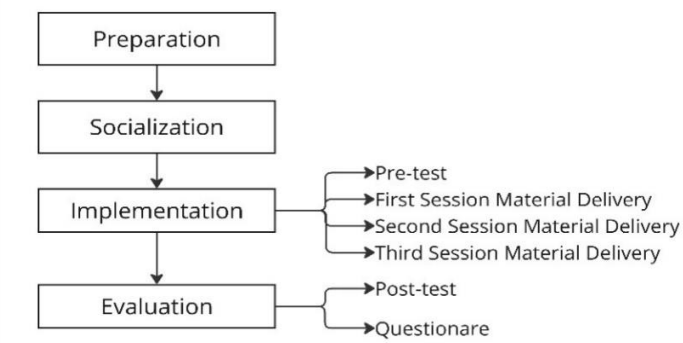


Figure 1. Flow of Classpoint application training activities

At the preparation stage, the PKM team provided a questionnaire on the use of learning media to determine the use of learning media in the school. Then, at the socialization stage, the team conveyed several learning media solutions that could be used to utilize learning media during the teacher evaluation meeting. The team recommended using the Classpoint application because the teachers had previously conducted training on using the Power Point application. Hence, the teaching materials that had been made became more interactive by embedding the features of the Classpoint application in the teaching materials. Furthermore, based on the voting results, an agreement was reached that the learning media training material that became the focus of the study was the use of the Classpoint application. Figure 2 recommends a roadmap for implementing *Information and Communication Technology* (ICT) in education, especially in MI Muslimat NU Palangka Raya.

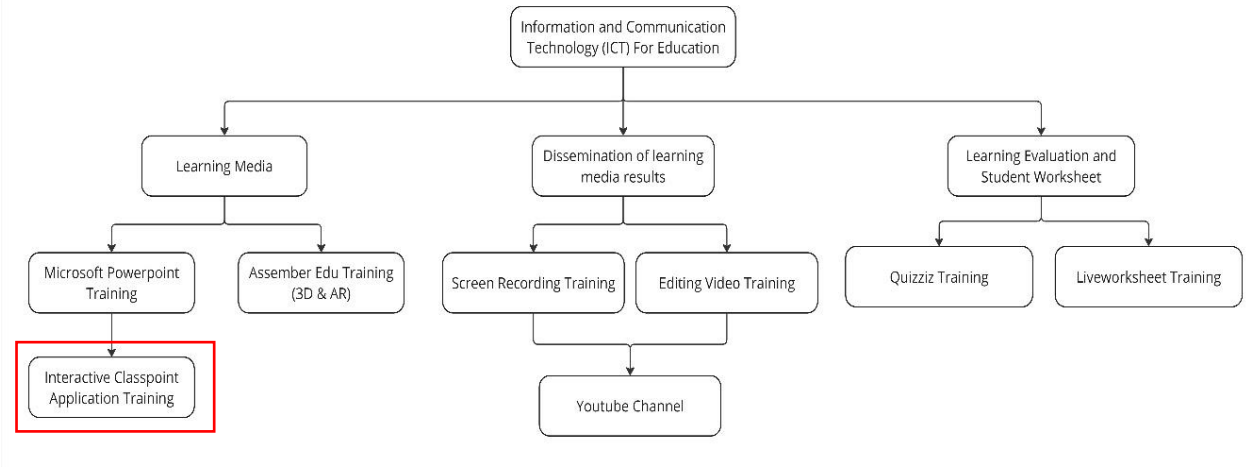


Figure 2. Recommendations for ICT education utilization during socialization

Before the implementation, the PKM Team installed the Classpoint application on the teacher's laptop with the assistance of the student team. At the implementation stage, the PKM team started with a *pre-test,* followed by the material delivery using the LCD projector and audio system that had been prepared. The distribution of material delivery was divided into three sessions. The first session was about creating a Classpoint account, creating classes, and procedures for accessing Classpoint. The second session presented material related to the utilization of features in Classpoint. The third session made interactive questions using the Classpoint *Artificial Intelligence* (AI) feature by linking Bloom's taxonomy theory. The last activity was evaluation and reflection, through distributing questionnaires regarding service activities to teachers and conducting *post-tests* to test understanding of the material presented using the Quizizz platform. The results of the *pre-test* and *post-test* scores were calculated using the N-Gain (*Normalize Gain*) method to determine the effectiveness of the PKM implementation, following the N-Gain calculation formula as in Equation 1. The interpretation of the N-Gain refers to the category shown in Table 2.

$$\text{N-Gain} = \frac{\text{Posttest Score-Pretest Score}}{\text{Ideal Score-Pretest Score}} \qquad \text{(Equation 1)}$$

Table 2. Interpretation of N-Gain Effectiveness

Percentage (%)	Interpretation
<40	Ineffective
40-55	Less effective
56-75	Effective enough
>76	Effective

Source: (Sukarelawan et al., 2024)

The pre-test and post-test instruments were distributed to partners using the Quizizz platform. This instrument consisted of 10 questions, as shown in Table 3 below.

Table 3. *Pre-test* and *post-test* questions

No.	The Questions or Statements
1	Can Classpoint log in using a personal Gmail account?
2	Classpoint is an add-in application
3	Here are the features of Classpoint
4	The following image is a feature of Classpoint, namely?
5	The red-boxed image is a tool for?
6	When you present using Classpoint by adding annotations to the slides, are the annotations saved automatically when you exit the presentation mode?
7	What are two ways students interact with your presentation slides when using Classpoint? (answer two options)
8	If you want to enter a student's answer, what should you click on in the following image?
9	What technology does Classpoint use to create questions for students in seconds?
10	What is "Pick a Name" used for?

Results and Discussion

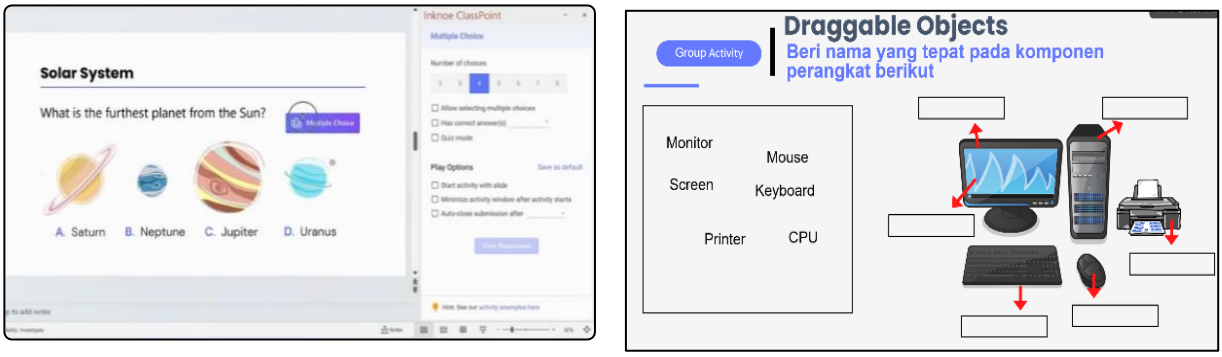
The PKM team divided the delivery of material into three sessions. The following division of material delivery can be seen in Table 4.

Table 4. Division of tasks

Presenter	Teaching Materials	Duration
Elia Zakharia, MT	▪ Classpoint account creation ▪ Class Creation ▪ Class accessing	1 Hour
Abdul Hadi, S.T., M.Kom	Practice of the Classpoint feature: ▪ *Word Cloud* ▪ *Short Answer* ▪ *Image Upload* ▪ *Slide Drawing* ▪ *Multiple Quiz* ▪ *Draggable Object* ▪ Blackboard ▪ Creating questions using Artificial Intelligence (AI)	2 Hours
Dewanto Zulkarnain, M.Pd	Relationship between Classpoint and Bloom's Taxonomy	1 Hour

Figure 3. Material Presentation

This training was conducted in approximately 4 hours. The approach to making this implementation time effective is by directly practising the features in the Classpoint application. The following photo documentation of the delivery of the material can be seen in Figure 3, and examples of the practice of Classpoint features are presented in Figure 4.



(a) (b)

Figure 4. Some practical examples of Classpoint's interactive features are (a) *multiple quiz* feature, (b) *draggable object* feature

The PKM team used the *pre-test* as the initial instrument for data collection. *The post-test* is used as a comparison instrument, which is intended to see the level of effectiveness of PKM activities. The *pre-test* and *post-test* data collected will be calculated using the N-Gain Method. The following is Table 5 of the *pre-test* and *post-test* results, along with the N-Gain value of PKM participants.

Table 5. Results of *pre-test*, *post-test,* and N-Gain values

No.	Participants	*Pre-test*		*Post-test*		N-Gain
		Score	Accuracy (%)	Score	Accuracy (%)	
1	Antonio	4800	73	4200	64	-20.00
2	Dinarayhana	4800	73	4200	64	-20.00
3	Eka	4200	64	5300	73	30.56
4	Elvia	1800	27	3600	55	30.00
5	Erma	3000	45	4900	73	39.58
6	Halimatus	3600	55	5500	82	45.24
7	Halipah	5400	82	4900	73	-20.83
8	Lisayani	6600	100	7800	100	100.00
9	Mahrida	3600	55	4200	64	14.29
10	Mardiyah	2400	36	3600	55	22.22
11	Megawati	5400	82	4900	73	-20.83
12	Muyassarah	2400	36	4200	64	33.33
13	Noor Salimiyah	4200	64	3600	55	-16.67
14	Noor	1800	27	0	0	-30.00
15	Nurfia	4800	73	5000	73	6.67
16	Nurul	3600	55	5100	73	35.71
17	Grace	1200	18	7800	100	100.00

No.	Participants	*Pre-test*		*Post-test*		N-Gain
		Score	Accuracy (%)	Score	Accuracy (%)	
18	Raihanah	4200	64	3600	55	-16.67
19	Sadam	3000	45	0	0	-62.50
20	Sala	2400	36	4800	73	44.44
21	Salmah	3000	45	3600	55	12.50
22	Sari	4200	64	4300	64	2.78
23	Siti Rukoyah	3000	45	4300	64	27.08
24	Siti Khanah	2400	36	2400	36	0.00
25	Thomas	3600	55	0	0	-85.71
26	Vida	3000	45	3600	55	12.50
					Average	10.05
					Minimal	-85.71
					Maximum	100.00

The pre-test results in Table 5 show that only a few teachers at NU Muslimat had good accuracy, with only six out of 26 teachers scoring above 70%. This result shows that NU Muslimat teachers' initial understanding of Classpoint is still low. The PKM team also took summary data on the percentage of *pre-test* answer accuracy by question. This data will be used in the evaluation stage to analyze PKM topics with a low accuracy rate. Here is Figure 5 mapping the percentage accuracy of answers based on questions.

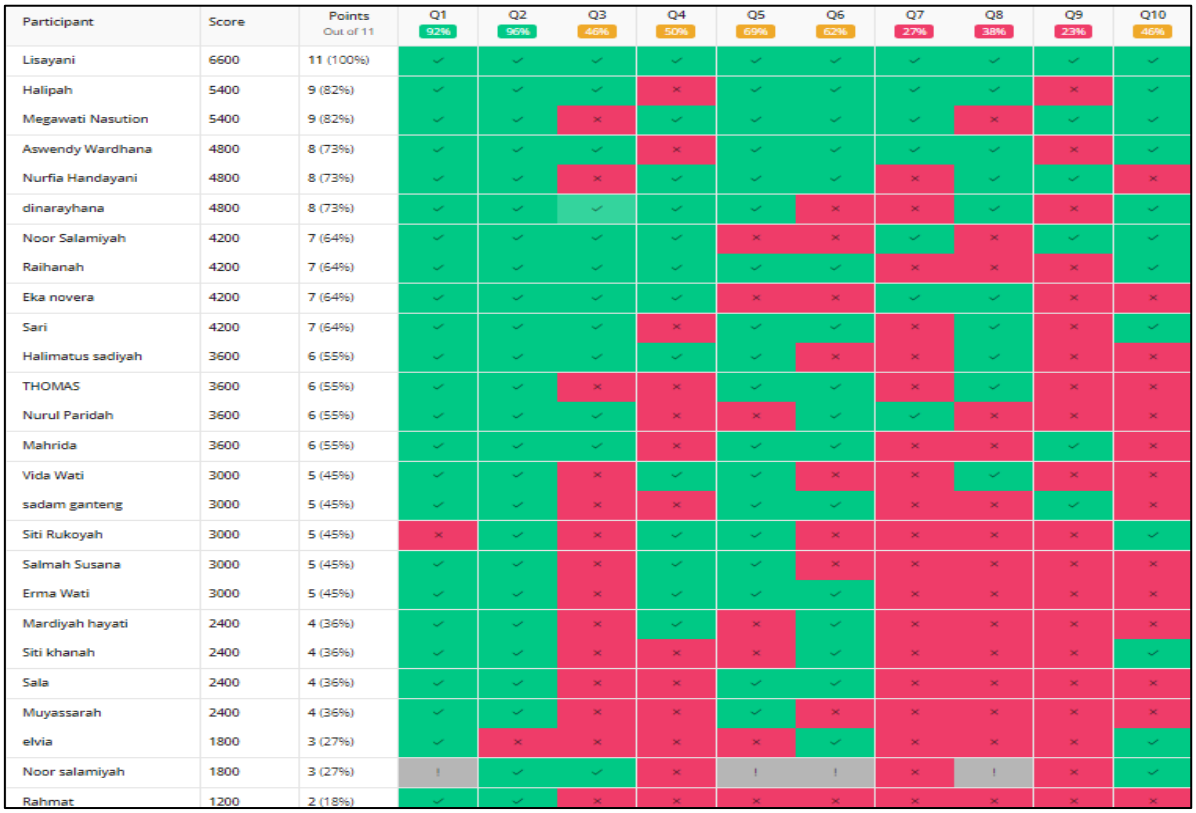


Figure 5. Percentage accuracy of *pre-test* answers based on questions

In Figure 5, it can be seen that only the first and second questions have a good percentage of answers. The percentage of answers in questions 3, 4, 5, 6, and 10 is fairly low. The percentage of answers in questions 7, 8, and 9 is very low.

Based on the *post-test* results in Table 5, there is an increase in the results of PKM NU Muslimat participants. If, previously, only 6 out of 26 participants had answer accuracy above 70%, in the *post-test* results, 10 out of 24 PKM participants had answer accuracy above 70%. Another improvement is that only four people have an accuracy below 50%, and in the previous *pre-test,* 12 people had an accuracy below 50%.

Based on the results of the N-Gain calculation in Table 5, it can be seen that the increase in PKM participants' understanding of Classpoint by 10.05% is included in the ineffective category based on Table 2 regarding the interpretation of N-Gain effectiveness. Some participants answered the *pre-test* and *post-test* perfectly, with a maximum score of 100%. Some participants did not take the *post-test,* so they got a minimum score of -85.71%.

Based on the N-Gain results, the PKM team dug deeper into the data from Quizizz to analyze the *post-test* question topics that were difficult for participants to understand. Based on the duration of time participants answered the questions, the PKM team found four question topics with the lowest answer accuracy, which was below 50%. The PKM team found a similar data pattern for these questions, which is that the answer time is quite long. Table 6 shows the results of the average *post-test* answer time.

Table 6. Average time to answer the *post-test*

Question (P)	Word count	Time (seconds)	Accuracy (%)
P1	9	8	92
P2	7	12	92
P3	5	16	63
P4	7	18	54
P5	9	10	79
P6	22	18	79
P7	15	25	46
P8	15	21	42
P9	13	17	42
P10	6	16	71

Based on the average time to answer from Table 6, the PKM team concluded that participants had difficulty understanding the question's meaning because it contained many terms, and the number of words in it was relatively long. The PKM team tried to compare the form of questions on topics with a high accuracy rate. Questions with a shorter form and not using foreign terms get better answer results.

Based on Table 6, the PKM team found that only P6 scored well at 79%, with a word length 22. The question in P6 is classified as easy to understand because it is interpreted directly in the question. Furthermore, the PKM team found that questions P1, P2, P3, P4, P5, and P10 scored above 50% using a short word count of under ten. The questions also used terms that were easy to understand.

In the last session of PKM at MI Muslimat NU, the PKM team also provided a satisfaction questionnaire on the implementation of PKM and the material presented. The results of the questionnaire will be used to evaluate the program, as well as determine the direction of the next PKM. The following Table 7 lists the questionnaire statements using a Likert scale.

Table 7. Questionnaire to measure the level of satisfaction

No.	Statement
1.	I am satisfied with the Community Service activities organized by STMIK Palangka Raya on "Implementation of Interactive Learning Multimedia Using Classpoint for Mi Muslimat Nu Palangka Raya Teachers".
2.	In my opinion, the material presented is new.
3.	The features in Classpoint are effortless to use
4.	The material presented is very relevant to my needs.
5.	Every complaint/question/problem I raised was assisted and followed up properly by the resource person/team member involved.
6	The material presented by the resource person can be implemented later when teaching in class.
7	This program helped me improve my understanding of using Classpoint as a learning media.
8	After participating in this activity, I am motivated to create interactive learning multimedia using Classpoint.

The PKM team used a questionnaire to determine the participant's level of satisfaction with this PKM. This questionnaire was distributed using Google Forms after the PKM was completed. The results of the questionnaire are presented in Figure 6.

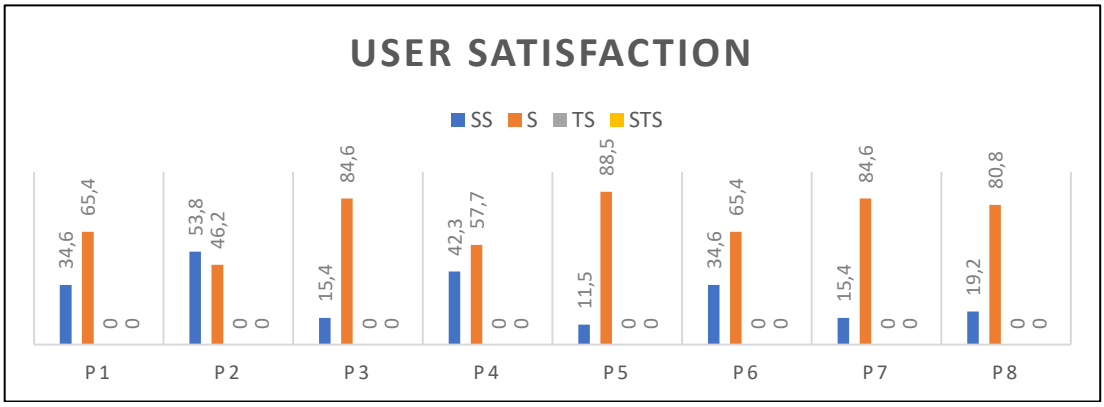


Figure 6. The percentage of user satisfaction

Based on the data in Figure 6, participants indicated that they were satisfied with the PKM at MI Muslimat NU. This is indicated by the absence of participants who answered TS (Disagree) and STS (Strongly Disagree) on each statement. On average, participants answered S (Agree) on all statements, although some answered SS (strongly agree). As a follow-up to this program, the PKM team facilitated assistance in using the Classpoint application by creating a *group discussion* using the Whatsapp *platform* so that teachers could consult if they needed further assistance regarding using the Classpoint application.

Conclusion

Training on interactive learning media using Classpoint has been carried out well, with direct practice for teacher teaching media according to their respective scientific fields. This is evidenced by a 10% increase in understanding in the *pre-test* and *post-test*, from 54% to 64%. Based on the questionnaire results at the end of the PKM, the teachers were enthusiastic and satisfied with this activity. However, there are shortcomings in terms of time and the content of the *pre-test* and *post-test* questions. Some foreign terms and syllables are classified as long, namely above 13 syllables, making it difficult for PKM participants to understand the PKM team's intentions. This training can provide an alternative for teachers to develop more interactive teaching media to improve one of the pedagogical competencies: the ability to create interactive, practical, and fun learning media for students.

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