

## **Learning with the Mosiulika Mosijagai Method at SMKN 2 Palu, Post-Earthquake in Central Sulawesi**

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### **ABSTRACT**

Mosiulika Mosijagai is the Kaili Ledo language in the city of Palu, Central Sulawesi Province. Mosiulika means "Say" Mosijagai means "Beware, be careful." In the assessment of skills, the "Mosiulika Mosijagai" method is still used. Two things are assessed, namely typing speed and typing accuracy. Of the 30 students tested, there were 19 (63.33%) students who completed, which reached a speed of  $\geq 200$  EPM as many as 8 (26.67%). In terms of typing accuracy, of the 30 students who were tested, all of them were complete, and those who reached  $\geq 99\%$  accuracy were 5 (16.67%). Classical completeness is 100% and classical absorption is 96.13%. The results of the knowledge assessment with the Plickers application are, of the 23 students who took the test with 14 questions that were displayed, 11 values were ranging from 0 to 50. Only 2 students were able 50% answered questions, there were even students who did not answer correctly or in other words, the acquisition was 0%. Classical completeness and classical absorption for typing speed and the realm of knowledge have not been achieved. This is due to constraints due to the lack of learning time in post-natural disasters while increasing speed requires sufficient time to increase the number of exercises. As for the incompleteness in the realm of knowledge because students as survivors, who have not fully recovered from the trauma, still find it difficult to fully concentrate on the subject matter.

Keywords: Learning, method, mosiulika mosijagai

### **INTRODUCTION**

Revenue The impact of natural disasters (earthquake, tsunami, and liquefaction) was enormous in Palu City, Sigi Regency, and Donggala Regency, Central Sulawesi, 28 September 2018, with a scale of 7.4 SR. As a result, all forms that stood in that space were shaken and even toppled. In an instant, the buildings collapsed as if to signify that life was coming to an end.

The obstacles are very real. Physically, the school building of SMK Negeri 2 Palu was badly damaged, including its teaching and learning facilities. In that situation, psychologically, students and teachers also experienced tremendous (traumatic) fear of the disaster. Along with that, parents have not allowed their children to go to school.

About their competence, students need proficiency in office technology (Saggaf et al., 2014; Sirait et al., 2019). In particular, office technology is one of the subjects in the Office Automation and Management Skills Competency, Office Management Skills Program, Business and Management Expertise Areas (Andriana et al., 2015; Muslimin et al., 2019). In the curriculum structure, Office Technology subjects are included in the C2 group in the 2013 Spectrum Curriculum. For this reason, one of the basic competencies/skill areas that must be achieved in these subjects is to be able to type 10 fingers at a speed of 200 beats per minute (EPM) and 99% accuracy. Typing is a basic skill that must be possessed by someone who is

involved in the office world. Typing skills are required in many jobs (Hagiya et al., 2016; Košir & Strle, 2017). With these speed and accuracy targets, students are expected to facilitate/expedite their administrative work. For speed and accuracy to be achieved, practicing diligently with strict discipline cannot be avoided.

For students to have enthusiasm in participating in learning actively, effectively, and efficiently, the Mosiulika Mosijagai method, the Plickers application, and Ice Breaking were applied. In its implementation, active, effective, and efficient learning always involves students directly, both physically and psychologically. (Nuraeni et al., 2020; Nurhayati, 2019; Wiharsih, 2015). For students to feel safe in school and comfortable in learning, students continue to be optimized to participate in active learning until the learning objectives that have been set are achieved (Niswaty & Arhas, 2019; Saleh et al., 2019; Syam & Sudarmi, 2019)

This method is an adaptation of Cooperative Learning, which is a combination of the Numbered Heads Together method (modification of the Numbered Heads Together method), and the Cooperative Script method, as well as the Peer Teaching Method (Peer Tutor method). Mosiulika Mosijagai is the Kaili Ledo language in the city of Palu, Central Sulawesi Province. Mosiulika means "Say/say," Mosijagai means "Beware, be careful" (Makkah, 2012). In the application of learning, students are arranged in pairs who later alternately "supervise each other" in doing typing activities and "tell each other" behavior when typing, so that each can try to improve the speed and accuracy of typing. About the Plickers application, efforts are made to make students feel happy even though they have reached the assessment stage (knowledge). It seems that students enjoy it. Also, the teacher is helped because the analysis of the results can be read immediately. Another advantage is that it can save very limited paper.

Active learning in post-disaster situations continues to be maximized along with the traumatic recovery process. For this reason, trying to generate friendly psychosocial support. In this case, one of the psychosocial support activities in the Play Therapy activity with the main aim of making children have fun. To provide psychosocial support to students, the authors chose Ice Breaking activities. With Ice Breaking, it is hoped that a dynamic psychological atmosphere can be created, namely directing the students' brains to be in an alpha wave condition, rebuilding the atmosphere so that it is relaxed and pleasant, maintaining the stability of the physical and psychological conditions of students to stay fresh and comfortable in absorbing the information provided. . After the Ice Breaking activity, a little knowledge/information about disaster mitigation was conveyed.

Based on the background that has been stated above, the benefits of focus best practice are numerous. At least, active, effective, and efficient learning through the application of the Mosiulika Mosijagai method. This Plickers and Ice Breaking application aim to provide psychosocial support to students.

Once it benefits students, teachers can enjoy it. From the aspect of the teacher, it can (1) provide psychosocial support to students so that they return to school with a sense of security and comfort; (2) contribute to improving the quality of post-disaster learning; (3) provide information about the use of the Mosiulika Mosijagai learning approach, the Plickers and Ice Breaking applications, especially to peers. Along with that, the unexpected things were (1) students returned to school feeling safe and comfortable; (2) students are active in learning; (3) students achieve learning objectives; (4) students can improve their learning outcomes, and (5) students can get to know the local culture. Schools also feel the benefits, namely (1) overcoming the limited school facilities and infrastructure; (2) can contribute to improving the quality of

education in schools in disaster situations.

The implementation of learning for students of SMKN 2 Palu City received positive appreciation from the community. In general, students who are dumbfounded by disasters can immediately be brought back into clear controlled cognitive activities. The learning that is held can contribute additional knowledge in Office Technology subjects, especially the basic competence of doing 10 finger typing at a speed of 200 EPM and 99% accuracy on the indicator "Increase typing speed to 200 EPM", and Improve typing accuracy up to 99 % ".

## METHOD

### Steps for Best Practice Implementation

1. Preliminary Activities: doing the opening/opening greetings and praying to start learning; class administration (student attendance); students' perceptions; ice breaking; disaster mitigation notification.
  - a. Core Activities
  - b. Evaluation of typing speed and accuracy skills using the Mosiulika Mosijagai method. (Key mastery exercises, increasing speed and typing accuracy also use the Mosiulika Mosijagai method). The steps are as follows: determine each student's code number; prepare the scoring / assessment guidelines (typing speed and typing accuracy); prepare a monitoring format (measurement / assessment) for each student; prepare two scripts, one for warm-up and one for appraisal; divide students in pairs; together with the students, determine who will be the first observers, and who will be monitored; describe the duties of the monitors, and the tasks that are monitored; explain how to fill in the assessment format / tool that has been prepared; those being monitored carry out the activities / tasks that have been determined ( i.e.; 10 finger typing); monitoring, monitoring while recording / filling out the format available; monitor shows a format containing notes during monitoring, while providing suggestions, and helps correct mistakes made by their partners; those being monitored pay close attention to these records and listen to suggestions; from their partner, as well as making improvements for further activities; collecting assessment formats that have been observed by those who have monitored, for conclusions and follow-up on activities that have been carried out; switching roles, from being observers to being monitored. That monitored to be a monitor; when exchanging roles, the teacher arranges/randomizes pairs of students; and so on (from steps 9 to 13).
  - c. Knowledge evaluation activities using the Plickers application. The steps consist of Preparation; Implementation; Reporting:
    - 1) Preparation (done before learning activities)
      - a) Account creation.  
Installing the plickers application on a smartphone via the Playstore, or via the page: <https://get.plickers.com/> via a browser on a laptop, and printing the Plicker card. Next, fill in the requested data or make it easier to fill in by continuing it with a gmail account.
      - b) Class creation.  
The class creation aims to register the names of students who will take part in the daily test by pressing the "add the class" text link. After selecting the text link "add

class" a dialog box will appear. Then, fill in the class name and click "Create Class". If successful, the class that we have created will appear in the menu on the left. Next, click on the name of the newly created class, then select "add student" to add a list of names of students who will take part in the daily test. In entering the names of students, it can be done by typing directly into the column provided, or by copying and pasting the existing excel file then clicking next. The name that has been made will be displayed in the order that it was at the time of creation, then click Done. After selecting done, the class display will list the names and questions that have been created. However, if the question has never been created, the display contains only the name.

c) Preparation of questions

To create questions, then on the account page, select a new set. In the window that appears, fill in the questions and answer choices in the fields provided. In the answer choices, don't forget to choose the correct answer, by clicking on the letter of the answer that is considered correct. In the "add to Queue" menu, the questions that are created can be added directly to the class that has been created. Click "add to Queue" then select the class name that was created. Then it will automatically be included in the list of questions that will be tested in that class. Then re-open the class that was created in the class creation step, click the class name in the left column. The class already contains a list of questions that are ready to be displayed in daily tests.

2. Implementation Stage

In carrying out daily tests in class, the teacher must provide a projector screen to display questions in front of the class. If the laptop is connected to the projector, then on the class page (the step before this implementation), click Play Now. With the help of a projector, students can see the questions that are being asked. To record answers, the implementation steps include,

a) When the questions are displayed, after the interval given by the teacher, students are asked to raise the answer cards that have been distributed to students before the daily test takes place.

b) The teacher scans the answers by opening the plickers application on the smartphone by pointing the cellphone camera on the application towards the students' answers.

c) The teacher can see the students' answers that have been recorded and can also see the graphs of the students' answers after scanning the answers on the live display of the questions.

3) The test result menu can be seen on the scoresheet display.

3. Final Activity

- a. Conclude activities that have been carried out
- b. Planning for remedial and enrichment.

## RESULT AND DISCUSSION

At the evaluation stage, a knowledge assessment and skills assessment are carried out. In the skills assessment, the "Mosiulika Mosijagai" method is still used. Two things are assessed, namely typing speed and typing accuracy. Of the 30 students tested, there were 19 (63.33%) students who completed, which reached a speed of  $\geq 200$  EPM as many as 8 (26.67%). So, classical completeness and classical absorption have not been achieved, even though 8 students reached speeds  $\geq 200$  EPM (value 100). For more details, see Table 1:

**Table 1**

**Results of Typing Speed and Value Class X AP3**

Number	Name	M/F	Speedy (EPM)	Score	Completeness		$\geq 200$ EPM
					Yes	No	
1	Afifah Eka Putri	F	200	100	√		√
2	Agustin Selfianti	F					
3	Aisya Ajeng	F					
4	Aldi Pratama	M	60,6	44		√	
5	Astrid	F	150	75	√		
6	Chiliastia Putri	F	111	55		√	
7	Cindi Regista Putri B.	F	202	100	√		√
8	Eka Rahmawati	F					
9	Elmansah	M	169	84	√		
10	Etriyana	F	200	100	√		√
11	Fachira Umirah	F	160	80	√		
12	Fadian Umraeni	F	97,6	49		√	
13	Geyzka Syalavi G.F.	F	180	90	√		
14	Gina Saskia	F	220	100	√		√
15	Ira Humri Watu	F	94,3	47		√	
16	Maharni Iswadi	F					
17	Melynda	F	216	100	√		√
18	Moh. Fuzan	M	153	76	√		
19	Mohamad Reza R.	M	190	95	√		
20	Moh. Yusril	M	89	45		√	
21	Muh. Said Agil	M	102	51		√	
22	Muhammad Yusuf Al- H.	M	169	84	√		
23	Nabila Salsabila	F					
24	Nur Fadhila	F	254	100	√		√
25	Nurfaega	F	284	92	√		
26	Raya Anarki	F	85,6	40		√	
27	Reina Pricilia Ivana	F	242	100	√		√
28	Rifki	M	144	72		√	

29	Sheliny Christian	P					
30	Siti Aisyah Humaira	P	179	89	√		
31	Suci Ramadhani	P	114	57		√	
32	Thias Reazan S.	P	93	46		√	
33	Vivi Anggriani	P	129	64		√	
34	Wicia	P	177	88	√		
35	Windy	P	114	57		√	
36	Zahwa N.	P	265	100	√		√
<b>Amount</b>			<b>30</b>	<b>2280</b>	<b>19</b>	<b>11</b>	<b>8</b>

**Table 2**  
**Classical completeness and absorption of typing speed class X AP3**

<b>Classical Learning Completeness (%)</b>	<b>63,33</b>
Classical Absorption (%)	76,00
≥ 200 EPM (%)	26,67
<b>Highest / Lowest Score</b>	<b>100 / 44</b>

In terms of typing accuracy, of the 30 students who were tested, all of them were complete, and those who achieved an accuracy of  $\geq 99\%$  were 5 (16.67%). 100% classical completeness and 96.13% classical absorption. This means that classical completeness and classical absorption are achieved. This can be seen in Table 3:

**Table 3.**  
**Results of Accuracy and Typing Value for Class X AP3**

Num ber	Name	M/F	Accuracy ( % )	Score	completeness		$\geq 99\%$
					Yes	No	
1	Afifah Eka Putri	F	93,12	95	√		
2	Agustin Selfianti	F					
3	Aisyah Ajeng	F					
4	Aldi Pratama	M	98,9	99	√		
5	Astrid	F	86,6	89	√		
6	Chiliastia Putri	F	99,10	100	√		√
7	Cindi Regista Putri B.	F	95,62	97	√		
8	Eka Rahmawati	F					
9	Elmansah	M	93,5	95	√		
10	Etriyana	F	92,57	94	√		
11	Fachira Umirah	F	95,4	97	√		
12	Fadian Umraeni	F	99,3	100	√		√
13	Geyzka Syalavi G.F.	F	85,78	87	√		
14	Gina Saskia	F	98,80	99	√		
15	Ira Humri Watu	F	97	99	√		

16	Maharni Iswadi	F				
17	Melynda	F	99,2	100	√	√
18	Moh. Fuzan	M	98,50	99	√	
19	Mohamad Reza R.	M	86,36	88	√	
20	Moh. Yusril	M	93,12	95	√	
21	Muh. Said Agil	M	98,7	99	√	
22	Muhammad Yusuf Al- H	M	95,92	97	√	
23	Nabila Salsabila	F				
24	Nur Fadhila	F	99	100	√	√
25	Nurfaega	F	96,19	98	√	
26	Raya Anarki	F	97	99	√	
27	Reina Pricilia Ivana	F	94	95	√	
28	Rifki	M	92,9	94	√	
29	Sheliny Christian	F				
30	Siti Aisyah Humaira	F	80,5	81	√	
31	Suci Ramadhani	F	97,4	99	√	
32	Thias Reazan S.	F	97,2	99	√	
33	Vivi Anggriani	F	96,9	98	√	
34	Wicia	F	96	97	√	
35	Windy	F	99,4	100	√	√
36	Zahwa N.	F	93,8	95	√	
<b>Amount</b>		<b>30</b>		<b>2884</b>	<b>30</b>	<b>5</b>

**Table 4.**

**Classical completeness and absorbency, typing accuracy class X AP3**

<b>Classical Learning Completeness (%)</b>	<b>100,00</b>
Classical Absorption (%)	96,13
≥ 99% (%)	16,67
<b>Highest / Lowest Score</b>	<b>100 / 81</b>

After a knowledge assessment was held with the Plickers application, the result was that, of the 23 students who took the test with 14 questions that were displayed, there were 11 value variants, ranging from 0 to 50. Only 2 students were able to answer 50% of the questions, there were even students who did not answer correctly at all, or in other words, the acquisition was 0%. Classical completeness and classical absorption have not been achieved. For more details, see Table 5:

**Table 5.**

**Recap of the Achievement of the Knowledge Score of Class X AP3**

<b>Number</b>	<b>Score outcomes</b>	<b>Total Students</b>
1	0	1
2	7	3
3	10	1
4	14	4

5	15	1
6	21	5
7	25	1
8	29	2
9	36	2
10	43	1
11	50	2
<b>Amount</b>	<b>250</b>	<b>23</b>

**Table 6.**

**The completeness of the value of classical knowledge and absorption of class X AP3**

<b>Classical Learning Completeness (%)</b>	<b>0,00</b>
Classical Absorption (%)	10,87
Nilai Terendah	0
<b>Highest Score</b>	<b>50</b>

## Discussion

In the Mosiulika Mosijagai method, there are three combined methods, namely Numbered Heads Together, Cooperative Script, and Peer Teaching methods. The name of the Mosiulika Mosijagai method is local wisdom, introducing the local culture of Kaili Ledo in the city of Palu, Central Sulawesi. Along with that, the nurturant effect that can be generated through the application of the Mosiulika Mosijagai method, includes: 1) Facilitating students to make social adjustments; 2) Allows students to learn about attitudes, skills, information, social behavior, and views of life (increasing social sensitivity and solidarity); 3) Improve discipline, honesty and responsibility behavior; 4) Increase positive attitudes towards learning and learning experiences; 5) Improving cooperation and tolerance; 6) With the Plickers Application as one of the learning innovations (assessment) in the Industrial Revolution 4.0 Era; 7) Students receive psychosocial support, which is a necessity and must be provided to survivors during a post-disaster period.

There is no perfection. Besides there are supporting factors, namely the Rapid Typing Application, and students are happy with something new, especially those related to IT. However, there are also inhibiting factors, namely, in the aftermath of the earthquake, the duration of learning is very less, whereas to reach the required speed you must have plenty of time to do exercises and exercises. Also, students have not fully recovered from the trauma caused by the earthquake, tsunami, and liquefaction that hit the Central Sulawesi region. Meanwhile, the internet network sometimes experiences problems.

Related to the limitations, a follow-up was carried out with remedial. By giving remedies to students whose basic competency achievements have not been completed. In practice, the remedial learning stage is carried out through remedial teaching (classical), or peer tutoring, or assignments, and ends with a test. Furthermore, the remedial test is carried out three times, and if after three times the remedial test has not yet reached completeness, the remedial is carried



out in the form of an assignment without a written test.

In addition to remedial, enrichment is also given, especially for students who have reached the completeness value are given learning. For that, enrichment is carried out in the following steps. Students who achieve a value of  $n$  (completeness)  $< n < n$  (maximum) are given material that is still within the scope of basic competencies with deepening as additional knowledge. Along with that, students who achieve a value of  $n > n$  (maximum) are given material that exceeds the scope of basic competencies with deepening as additional knowledge. Alhamdulillah, the obstacles/obstacles were overcome. All students receive educational services that are fair, informed, and comfortable even though they sometimes have to lie down together when the earthquake shocks return.

## CONCLUSION

The application of the Mosiulika Mosijagai method, the Plickers, and Ice Breaking application can make class X AP3 students active, effective, and efficient in following learning during post-disaster. Through this method, typing speed and accuracy can be doubled. This happens because the Plickers application makes students happily participate in evaluations with psychosocial support in the form of Ice Breaking and disaster mitigation that helps escort students to participate in fun learning activities. However, by providing knowledge about disaster mitigation, they feel more secure because they know what to do before and when experiencing a disaster. With that sense of security, of course, students will have the confidence to carry out activities as before, including following lessons at school.

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