

ARTIKEL INSEIDEA 2018-MARTYANA

by dodi mulyadi

General metrics				
18,432 characters	2,634 words	237 sentences	10 min 32 sec reading time	20 min 15 sec speaking time
Score Writing Issues				
37		300 Issues left	<mark>205</mark> Critical	95 Advanced
This text scores of all texts chec	better than 37% ked by Grammar	ly		

Plagiarism



Writing Issues





Unique Words	19%
Measures vocabulary diversity by calculating the percentage of words used only once in your document	unique words
Rare Words	35%
Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.	rare words
Word Length	4.8
Measures average word length	characters per word
Sentence Length	11.1
Measures average sentence length	words per sentence



ARTIKEL INSEIDEA 2018-MARTYANA

International Seminar on Education and Development of

Asia

1st INseIDEA Saturday, July 14th, 2018

http://jurnal.unimus.ac.id

LEARNING REFLECTION ON BASIC MATHEMATICAL SUBJECT IN HIGHER EDUCATION AS THE FINAL STAGE OF LESSON STUDY IMPLEMENTATION

Martyana Prihaswati1, Eko Andy Purnomo2, Sukestiyarno3, and Mulyono4 1,2FMIPA UNIMUS, Semarang, Indonesia, 3,4FMIPA UNNES, Semarang, Indonesia 1martyana@unimus.ac.id, 2ekoandy@unimus.ac.id, 3yarno2009@yahoo.com, 4mulyono_unnes@yahoo.com

Abstract

Students often have math anxiety which results in low learning outcomes. Giving story questions turned out to raise student's difficulties in solving problems, including identifying elements that are known, asked, and adequacy of elements, and making mathematical models of story problems. This indicates that the problem- solving ability of non-mathematics major students in basic mathematics courses is low. Lesson Study Learning based on character education can facilitate the acquisition of solutions to the above problems. The most important stages in lesson study are stages of reflection (see), in which the stages are stated all findings in learning are then given input in order to improve learning.¹⁶ This study uses the descriptive method with a qualitative approach. The activity carried out is to describe the reflection of basic mathematics learning as the final stage of the lesson study implementation. The research variable is in the form of a dependent variable, such as students' problem solving abilities and independent variables, namely student activity and creativity. It was obtained an average problem solving ability of 81.52. While the students' activeness with an average of 8 3.4 categories is very active and the average of students' creativity is 81.3 with a very good category. The character building for students, such as honesty, discipline, creativity, curiosity, enthusiasm, responsibility, tolerance, hard work, democratic, friendly / communicative, independent, religious, caring for the environment, and socially concerned. Hopefully, further research can be carried out to improve abilities understanding's student concepts in basic mathematics subjects.

Keywords: lesson study, reflection, basic mathematics

Introduction

Mathematics is a very avoided subject for the majority of students from various levels of education. Mathematical anxiety arises in students who tend to avoid mathematics. Some of the factors that cause mathematics anxiety include unfavorable classroom conditions, weak teacher ability to deliver materials, mathematics ²⁷ also has many formulas, students cannot solve problems (Anditya,

2016). <u>Students cannot solve mathematical</u> problems in daily life is one indicator of a lack of problem solving skills. A common condition in the world of education is learning that still uses traditional learning methods, such as lectures

(conventional), expository, or drill that are often applied before the exam.

Basic mathematics is one of the basic courses taken by non-mathematics students to support compulsory subjects that require mathematical calculations. The results of interviews with basic mathematics lecturers in nonmathematics majors resulted in the fact that students often have mathematical anxiety which

[results in low learning outcomes. The supply of story problems turns out to cause difficulties for students in solving problems, including identifying elements, questions, and adequacy of elements ⁶³, and make mathematical ⁶⁵ models of story problems. These problems are indicators of problem solving ⁷⁰ ability (Sumarmo, 2012), which means that problem solving ⁷³ abilities ⁷⁴ students in non- mathematics majors in basic mathematics courses are low. The results of learning mathematics, one of which is influenced by problem solving abilities (Novitasari and Leonard, 2017). Understanding the concept raises the lack of activity of students in expressing opinions, student creativity asks, and completes the questions given. This is what underlies the lack of students' character values.

Lesson Study Learning based on the character ⁸¹ education can facilitate the acquisition of solutions to the above problems. The implementation of collaborative ⁸² activities, ⁸³ Lewis (2002) and Hendayana cited by Rustono (2008) mentions there are three stages of learning in lesson study, namely planning (plan), implementing (do), and reflecting ⁸⁴ (see). Various things related to

ISBN: 978-602-5614-24-8 Page 1 ISBN: 978-602-5614-24-8 Page 6 http://jurnal.unimus.ac.id

character ⁸⁵designed and implemented in learning basic mathematics courses. <u>This</u> ⁸⁶begins with cognitive value recognition, affective value appreciation, finally to <u>actual</u> ⁸⁷practice of values by <u>students / students</u> ⁸⁸ daily life (<u>Elfindir</u>, ⁸⁹ et al,⁹⁰

2012). Lesson learning can improve students' problem solving skills compared to the use of conventional learning models (Jurniati, 2009). The learning study that is carried out is a series of learning activities with a character education approach to improve learning so that goals are achieved.⁹³ The most important⁹⁴ stage in lesson study is the stage of reflection (see), wherein at that stage all the findings of learning are presented to be given input in order to improve learning.⁹⁷

The problem becomes the background of the purpose of this study, which is to describe the reflection of basic mathematics learning as the final stage of the implementation of lesson study.⁹⁸

Method

This study used the descriptive method with a qualitative approach. Descriptive method ¹⁰⁰ is a method used to look for elements, characteristics, characteristics of a phenomenon. This method starts with collecting data, analyzing data and ¹⁰¹ interpreting it (Suryana, 2010). While the qualitative approach is an approach which in the research proposal, process, hypothesis, take to the field, analyze the data and conclude the data up to the writing using trends, non numerical calculations, descriptive situational, in-depth interviews¹⁰⁵ , and content analysis.

The activity carried out was to describe the reflection of basic mathematics learning as the final stage of the implementation of lesson study. The research variables were in the form of dependent variables, <u>such as</u>; students' <u>problem</u> <u>solving</u> abilities and independent variables, namely student <u>activity and creativity</u>. The data collection used

observation, questionnaires, and evaluation tests. Observation technique is a complex process, a process that must be composed of various psychological and biological processes (Sugiyono,

2011). Observation techniques are carried out

during the learning process with the main focus is the activity of students in the learning process and problem solving. The questionnaire is a technique of data collection conducted by giving a set of questions or written statements to the respondent to answer them (Sugiyono, 2011). Researchers measured students' creativity in the implementation of learning. While tests were used to measure students' problem solving abilities in achieving learning goals. Lesson learning was carried out on non- mathematical study programs in basic mathematics courses with problem based learning (PBL) learning 126 130 methods that were carried out in four stages with different material at each stage. The material ¹³¹ in stage ¹³² 1 was a positive rounded number, the material ¹³³ in stage 2 was the properties of root shape numbers, stage 3 was given the 139 material of root shape algebraic operations, while stage 4 with the material rationalized the denominator of the shape of the root. The students' activeness in learning is observed and measured by the learning activeness sheets.

0% **₽** y < 20%

Very passive

20% ₽ y < 40%

passive

40% **₽** y < 60%

Quite active

60% **₽** y < 80%

Active

80% ら y ら

100%

Very active



Table 1. The Students' Activeness Criteria

Note : y = students' percentage

The amount of students' creativity can be measured by indicators and scoring

learning creativity.

Table 2. Students' Creativity Criteria

Coefficient

Interpretation

81% - 100%

Very good

61% - 80%

Good

41% - 60%

Quite

21% - 40%

less

0 % - 20%

Very little

3.Results



Research Result Lesson learning reflection is given based on findings during learning activities. The findings and <u>reflections</u>¹⁴³ can <u>be seen</u>¹⁴⁴ in <u>table</u>¹⁴⁵ below.

No. Findings Reflections Results 1. Students have no difficulty in doing LKM and can do it <u>quickly and</u> precisely. There are no significant problems.

Table 3. Findings and Reflection phase 1

2.

Students don't ask

much about the material and questions given.

There needs to be an ¹⁴⁸ ¹⁴⁹ <u>interaction that</u> begins with the lecturer or questions that can provoke students so that they can bring students active in asking questions.



3.
In doing
observations, observers are still
behind the class.
This can disturb the
concentration of lecturers in teaching.
Observers should be ¹⁵² able to observe the learning process on the side of the class.

The character values that appear in stage <u>1</u>, consists of honest, disciplined, creative, uplifting, responsibility, hard work, democratic, and independent. The lesson study learning process phase ¹⁵⁴ was closed with an evaluation test with an average problem solving ¹⁵⁵ ability of 80.5. Referring to the results of reflection phase 1, in this stage 2 learning the lecturer ¹⁵⁷ further increased ¹⁵⁸ interaction with students and ¹⁵⁹ observers observed the learning in addition to the class. The findings and reflection of stage ¹⁶⁰ can be seen ¹⁶¹ table ¹⁶² below.

No.

Findings Reflections Result 1. Students discuss the materials and there are still some groups that don't understand. When the discussion activities, the lecturer must surround the class by looking at and asking about the difficulties of each group. Especially for groups whose group members tend



to be quiet.

Table 4. Findings and Reflection Phase 2

2.

There are two

students who ask about the problems given.

The lecturer can

explain it in front of the class so that all the students know information about the problems given. The hope is that other students can also ask so there is reciprocity and feedback in the class.

3.

There are some

students who do not pay attention to the lecturer when explaining.

There are several

factors that cause students not to pay <u>attention</u>.¹⁷⁴ learning model that must be changed because it is less pleasant or <u>a factor</u> of the student ¹⁷⁶ the student ¹⁷⁶ In the future, maybe the <u>learning model can</u> be varied with games or other fun things.

4.

There are 3 groups

that are not discussing because one of the members seems lazy to work on the ¹⁸⁰ MFI and assigns the task to other group members.

In this case the

lecturer ^{must} act decisively, especially for students who submit their assignments to other ¹⁸² groups. The lazy student can be appointed to present the results of the discussion with the group.

The character values that appear in stage 2, which are honest, disciplined, creative, curiosity, hard work, and independent. As in stage 1, stage 2 learning ended with an evaluation test with an average problem solving ability of 81.2. The results of reflection stage 2 were applied in stage 3 to improve learning, including lecturers pointing to students who seemed lazy to present it in front of the class. The findings and reflections in step 3 can be seen in the following table.

International Seminar on Education and Development of

Asia

1st INseIDEA Saturday, July 14th, 2018

No.

Findings

Reflections Results

1.

Students experience



difficulties when given the problem of root shape addition operations. For example when given a question $\sqrt[191]{v}$, many still answer were with $\sqrt[193]{v}$. While the answer should be $\sqrt[193]{v}$.

This shows a lack of understanding of the material concept of root-form algebraic operations. Material deepening is needed to bridge the problem. In the learning process, lecturers can provide material before giving problems to be discussed.

2.

There is a tendency to copy answers from other groups

3. There are <u>3</u> groups whose answers are all wrong

4.

Lack of collaboration in groups



Table 5. Findings and Reflections Phase 3

□3. Students are more active in expressing opinions during the learning

process.

The character values that appear in stage 3 consists of creative, curiosity, enthusiasm, responsibility, tolerance, hard work, and democratic. Stage 3 learning ended with an evaluation test with an average problem solving ability of 80.75. The results of the reflection in stage 3, namely the deepening of the material was implemented in stage 4, before the implementation of PBL learning with a character education approach, given an explanation of the material rationalizing the root form denominator by the lecturer. The findings and

reflections in stage 4 can be seen in the following table.

No.

Findings Reflection Results 1. Students begin to understand the concept of root form and problem solving.²¹⁹

Improved learning occurs that can foster activeness, creativity, and problem-solving abilities to increase.

2.

Students are more



creative in asking questions and discussing solving problems because they have received an explanation beforehand.

Table 6. Findings and Reflections phase 4 The character values that appear in stage 4, consists of honesty, discipline, creativity, curiosity, enthusiasm, responsibility, tolerance, hard work, democratic, friendly / communicative, and independent. Stage 4 learning ended with an evaluation test with an average score of problem solving ability of 83.63. The average student activeness and creativity of the four stages, namely the activity of students with an average of 83.4 categories is very active while 234,235 the average creativity of students is 81.3 with a very good category.

Discussion

The results showed an improvement in learning which resulted in the development of creativity and activeness of students, as well as an increase in students' problem solving skills after the implementation of lesson study as shown in the following table. Table 7. The results of the average problem solving ability

Problem solving ability

Phase 1

Phase 2

Phase 3 Phase 4 Score 80.5 81.2 80.75 83.63 Average score

81.52

The table shows a significant increase in the average problem solving ability in stage 4. This is because the improvement of learning carried out from the results of reflection on the learning process stage 3 where the average value of problem solving ability had decreased. The decrease was caused by the understanding of students' concepts in low root form algebraic operating material. In accordance with Mustofa's research, et al (2016) which states that lesson study based learning can improve student problem solving skills. Lesson learning can also foster student activity and creativity. The results of student activity analysis can be seen in the following figure.

Analisis Keaktifan dan Kreatifitas



keaktifa²⁷² keaktifan,

1,83.4

kreatifitas,

1,81.3

Report was generated on Thursday, Feb 13, 2020, 01:51 PM

Page 20 of 40



kreatifitas²⁷⁵

n

Figure 1. The results of student activity and creativity analysis

The character education approach ²⁷⁸ implemented in learning can bring up student character values, including honesty, discipline, creativity, curiosity, enthusiasm, responsibility, tolerance, hard work, democratic, <u>friendly /</u> communicative, and independent. However, the value of the dominating

character is creative and hard work, ²⁸⁰ because solving problems requires students' creativity and hard work.

4. Conclusion And Suggestion

Conclusion

The results of the study provide the following conclusions:

1. It was obtained problem solving ability

average 81.52. While the students' activeness got 83.4 and the categories is very active. Besides, the students' creativity is 81.3 with a very good category 2. Implementing character on students which consists of honesty, discipline, creativity, curiosity, enthusiasm, responsibility, tolerance, hard work, democratic, friendly / communicative, independent, religious, caring for the environment, and social caring.

Suggestion

Further research can <u>be done</u>²⁹⁷ to improve students' ability to understand concepts in basic mathematics courses.

[]REFERENCES

Anditya, R. 2016. Faktor-faktor Penyebab Kecemasan Matematika. Fakultas Keguruan dan Ilmu Pendidikan : Universitas Muhammadiyah Surakarta.

Elfindir, dkk. 2012. Pendidikan Karakter. Jakarta: Baduose Media.

Jurniati. 2009. Penerapan Model Pembelajaran Lesson Study Praktikum Wisata Untuk Meningkatkan Penguasaan Konsep Dan Berpikir Kreatif Siswa Kelas X SMA N 1 Langgam Pelalawan. Jurnal Geliga Sains Vol. 3, No. 1, hal. 1-9.

Lewis, <u>Chaterine</u>²⁹⁸C, 2002. Lesson Study: A Handbook for Teacher-Led Improvement of Instruction. <u>Oackland</u>²⁹⁹CA: Education Department, Mills College (online). http://www.lessonresearch.net (diakses pada 25 April 2014).

Musianto, L.S. 2002. Perbedaan Pendekatan Kuantitatif dengan Pendekatan Kualitatif dalam Metode Penelitian. Jurnal Manajemen & Kewirausahaan Vol 4, No. 2, Hal. 123-136.

Mustofa, Z., dkk. Penerapan Strategi Pembelajaran Problem Based Learning Melalui Lesson Study Untuk Meningkatkan Keterampilan Memecahkan Masalah Mahasiswa. Jurnal Pendidikan Biologi Vol. 8, No. 1, Hal. 32-37.

Novitasari, L. & Leonard. 2017. Pengaruh Kemampuan Pemahaman Konsep Matematika Terhadap Hasil Belajar Matematika. Prosiding. Seminar Nasional Pendidikan Matematika. Jakarta.

Rustono, 2008. Meningkatkan Kemampuan Mahasiswa Menerapkan Strategi Pembelajaran melalui Lesson Study di Sekolah Dasar. Jurnal Pendidikan Dasar Nomor 10 – Oktober 2008.

Sugiyono. 2011. Statistika Untuk Penelitian. Alfabeta. Bandung. Sumarmo, U. 2012. Pendidikan Karakter serta Pengembangan Berfikir dan Disposisi Matematika dalam Pembelajaran Matematika. Prosiding. Seminar Pendidikan Matematika. NTT.

Suryana. 2010. Metodologi Penelitian: Model Praktis Penelitian Kuantitatif dan Kualitatif. Universitas Pendidikan Indonesia.



1.	INseIDEA → inside	Misspelled Words	Correctness
2.	, which	Punctuation in Compound/Complex Sentences	Correctness
3.	elements → items, features, parts, factors	Word Choice	Engagement
4.	elements,	Punctuation in Compound/Complex Sentences	Correctness
5.	This	Intricate Text	Clarity
6.	major → primary	Word Choice	Engagement
7.	can facilitato → can facilitate	Improper Formatting	Correctness
8.	the acquisition	Improper Formatting	Correctness
9.	to the → to the	Improper Formatting	Correctness
10.	the above → the above	Improper Formatting	Correctness
11.	The most → The most	Improper Formatting	Correctness
12.	important → critical, essential	Word Choice	Engagement
13.	<mark>stages</mark> → steps, scenes	Word Choice	Engagement
14.	are stated	Passive Voice Misuse	Clarity
15.	in order to → to	Wordy Sentences	Clarity
16.	learning → education, knowledge	Word Choice	Engagement
17.	problem solving → problem-solving	Misspelled Words	Correctness
18.	was obtained	Passive Voice Misuse	Clarity
19.	problem solving → problem-solving	Misspelled Words	Correctness



20.	, and	Punctuation in Compound/Complex Sentences	Correctness
21.	average → percentage, standard, proportion	Word Choice	Engagement
22.	<mark>a very good</mark> → an outstanding, an excellent, a perfect	Word Choice	Engagement
23.	category → group, class, grade, type	Word Choice	Engagement
24.	friendly/communicative	Improper Formatting	Correctness
25.	be carried	Passive Voice Misuse	Clarity
26.	understanding's → understanding	Incorrect Noun Number	Correctness
27.	, mathematics → ; mathematics, , and mathematics, . Mathematics	Punctuation in Compound/Complex Sentences	Correctness
28.	Students cannot	Improper Formatting	Correctness
29.	cannot solve → cannot solve	Improper Formatting	Correctness
30.	solve mathematical	Improper Formatting	Correctness
31.	problem solving → problem-solving	Misspelled Words	Correctness
32.	traditional learning	Improper Formatting	Correctness
33.	learning methods	Improper Formatting	Correctness
34.	such as → such as	Improper Formatting	Correctness
35.	as lectures → as lectures	Improper Formatting	Correctness
36.	or drill → or drill	Improper Formatting	Correctness
37.	drill,	Punctuation in Compound/Complex	Correctness



		Sentences	
38.	are often → are often	Improper Formatting	Correctness
39.	are often applied	Passive Voice Misuse	Clarity
40.	Basic mathematics	Improper Formatting	Correctness
41.	$\frac{\text{mathematics is}}{\text{mathematics is}} \rightarrow \text{mathematics is}$	Improper Formatting	Correctness
42.	is one → is one	Improper Formatting	Correctness
43.	one of → one of	Improper Formatting	Correctness
44.	of the → of the	Improper Formatting	Correctness
45.	the basic \rightarrow the basic	Improper Formatting	Correctness
46.	basic → necessary	Word Choice	Engagement
47.	non	Unknown Words	Correctness
48.	mathematics majors	Improper Formatting	Correctness
49.	majors resulted	Improper Formatting	Correctness
50.	resulted in → resulted in	Improper Formatting	Correctness
51.	$\frac{1}{100} \frac{1}{100} \rightarrow 1$ in the	Improper Formatting	Correctness
52.	the fact → the fact	Improper Formatting	Correctness
53.	$\frac{fact that}{fact that}$ → fact that	Improper Formatting	Correctness
54.	students often → students often	Improper Formatting	Correctness
55.	often have → often have	Improper Formatting	Correctness
56.	have mathematical	Improper Formatting	Correctness
57.	mathematical anxiety	Improper Formatting	Correctness



58.	anxiety which → anxiety which	Improper Formatting	Correctness
59.	, which	Punctuation in Compound/Complex Sentences	Correctness
60.	in low → in low	Improper Formatting	Correctness
61.	cause difficulties	Improper Formatting	Correctness
62.	difficulties for	Improper Formatting	Correctness
63.	olomonts → items, features, parts, factors	Word Choice	Engagement
64.	elements,	Punctuation in Compound/Complex Sentences	Correctness
65.	make mathematical	Improper Formatting	Correctness
66.	mathematical models	Improper Formatting	Correctness
67.	models of \rightarrow models of	Improper Formatting	Correctness
68.	of story → of story	Improper Formatting	Correctness
69.	story problems → story problems	Improper Formatting	Correctness
70.	$\frac{\text{problem solving}}{\text{problem-solving}}$	Misspelled Words	Correctness
71.	which means → which means	Improper Formatting	Correctness
72.	means that \rightarrow means that	Improper Formatting	Correctness
73.	$\frac{\text{problem solving}}{\text{problem-solving}}$	Misspelled Words	Correctness
74.	abilities → skills	Word Choice	Engagement
75.	non	Unknown Words	Correctness
76.	is influenced → is influenced	Improper Formatting	Correctness



77.	problem solving → problem-solving	Misspelled Words	Correctness
78.	<mark>abilities</mark> → skills	Word Choice	Engagement
79.	asks,	Comma Misuse within Clauses	Correctness
80.	This	Intricate Text	Clarity
81.	the character	Determiner Use (a/an/the/this, etc.)	Correctness
82.	of collaborative	Improper Formatting	Correctness
83.	collaborative activities	Improper Formatting	Correctness
84.	and reflecting → and reflecting	Improper Formatting	Correctness
85.	character → Character	Improper Formatting	Correctness
86.	This	Intricate Text	Clarity
87.	the actual	Determiner Use (a/an/the/this, etc.)	Correctness
88.	students/students	Improper Formatting	Correctness
89.	Elfindir,	Comma Misuse within Clauses	Correctness
90.	ot al → et al.	Comma Misuse within Clauses	Correctness
91.	problem solving → problem-solving	Misspelled Words	Correctness
92.	is carried	Passive Voice Misuse	Clarity
93.	are achieved	Passive Voice Misuse	Clarity
94.	important → crucial, critical	Word Choice	Engagement
95.	stage,	Comma Misuse within	Correctness

		Clauses	
96.	in order to → to	Wordy Sentences	Clarity
97.	learning → education, knowledge	Word Choice	Engagement
98.	The problem becomes the background of the purpose of this study, which is to describe the reflection of basic mathematics learning as the final stage of the implementation of lesson study.	Wordy Sentences	Clarity
99.	Descriptive → The descriptive	Determiner Use (a/an/the/this, etc.)	Correctness
100.	method → way	Word Choice	Engagement
101.	, and	Punctuation in Compound/Complex Sentences	Correctness
102.	non → known, no	Misspelled Words	Correctness
103.	non numerical → nonnumerical, non-numerical	Misspelled Words	Correctness
104.	in-depth interviews	Improper Formatting	Correctness
105.	and content → and content	Improper Formatting	Correctness
106.	such as → such as	Improper Formatting	Correctness
107.	problem-solving	Misspelled Words	Correctness
108.	problem solving	Improper Formatting	Correctness
109.	activity and → activity and	Improper Formatting	Correctness
110.	and creativity \rightarrow and creativity	Improper Formatting	Correctness
111.	The data → The data	Improper Formatting	Correctness
112.	data collection	Improper Formatting	Correctness



113.	collection used	Improper Formatting	Correctness
114.	are carried	Passive Voice Misuse	Clarity
115.	problem solving → problem-solving	Misspelled Words	Correctness
116.	were used	Passive Voice Misuse	Clarity
117.	problem solving → problem-solving	Misspelled Words	Correctness
118.	was carried	Passive Voice Misuse	Clarity
119.	courses with → courses with	Improper Formatting	Correctness
120.	with problem → with problem	Improper Formatting	Correctness
121.	problem based → problem-based	Misspelled Words	Correctness
122.	problem based → problem based	Improper Formatting	Correctness
123.	based learning → based learning	Improper Formatting	Correctness
124.	learning methods	Improper Formatting	Correctness
125.	methods that \rightarrow methods that	Improper Formatting	Correctness
126.	that were → that were	Improper Formatting	Correctness
127.	were carried → were carried	Improper Formatting	Correctness
128.	carried out → carried out	Improper Formatting	Correctness
129.	$\frac{1}{2}$ out in	Improper Formatting	Correctness
130.	in four → in four	Improper Formatting	Correctness
131.	material → content, article	Word Choice	Engagement
132.	stage → step, phase	Word Choice	Engagement
133.	$material \rightarrow$ content, article	Word Choice	Engagement



134.	stage → step, phase	Word Choice	Engagement
135.	stage → step	Word Choice	Engagement
136.	was given	Passive Voice Misuse	Clarity
137.	material → content, element, substance	Word Choice	Engagement
138.	stage → step	Word Choice	Engagement
139.	material → content	Word Choice	Engagement
140.	shape → way, form	Word Choice	Engagement
141.	is observed	Passive Voice Misuse	Clarity
142.	Indicators and scoring learning creativity can measure the amount of students' creativity	Passive Voice Misuse	Clarity
143.	reflections → thoughts, observations	Word Choice	Engagement
144.	be seen	Passive Voice Misuse	Clarity
145.	table → Table	Misspelled Words	Correctness
146.	quickly and → quickly and	Improper Formatting	Correctness
147.	given → are given	Incorrect Verb Forms	Correctness
148.	the interaction, or an interaction	Determiner Use (a/an/the/this, etc.)	Correctness
149.	interaction that	Improper Formatting	Correctness
150.	This	Intricate Text	Clarity
151.	the concentration	Determiner Use (a/an/the/this, etc.)	Correctness
152.	should bo → should be	Improper Formatting	Correctness

153.	1,	Punctuation in Compound/Complex Sentences	Correctness
154.	lesson study learning process phase	Intricate Text	Clarity
155.	problem solving → problem-solving	Misspelled Words	Correctness
156.	, learning	Punctuation in Compound/Complex Sentences	Correctness
157.	the lecturer \rightarrow the lecturer	Improper Formatting	Correctness
158.	further increased	Improper Formatting	Correctness
159.	, and	Punctuation in Compound/Complex Sentences	Correctness
160.	stago → step	Word Choice	Engagement
161.	be seen	Passive Voice Misuse	Clarity
162.	table → Table	Misspelled Words	Correctness
163.	, and	Punctuation in Compound/Complex Sentences	Correctness
164.	that don't → that don't	Improper Formatting	Correctness
165.	class by → class by	Improper Formatting	Correctness
166.	by looking → by looking	Improper Formatting	Correctness
167.	looking at → looking at	Improper Formatting	Correctness
168.	the class → the class	Improper Formatting	Correctness
169.	class so → class so	Improper Formatting	Correctness

170.	so that → so that	Improper Formatting	Correctness
171.	that all → that all	Improper Formatting	Correctness
172.	, SO	Punctuation in Compound/Complex Sentences	Correctness
173.	<mark>is</mark> → are	Faulty Subject-Verb Agreement	Correctness
174.	attention to	Wrong or Missing Prepositions	Correctness
175.	$\frac{1}{2}$ an element, a consideration	Word Choice	Engagement
176.	the student → the student	Improper Formatting	Correctness
177.	learning model → learning model	Improper Formatting	Correctness
178.	model can → model can	Improper Formatting	Correctness
179.	<mark>3</mark> → three	Improper Formatting	Correctness
180.	other group → other group	Improper Formatting	Correctness
181.	the lecturer	Determiner Use (a/an/the/this, etc.)	Correctness
182.	$to other \rightarrow to other$	Improper Formatting	Correctness
183.	curiosity → curious	Confused Words	Correctness
184.	The character values that appear in stage 2, which are honest, disciplined, creative, curiosity, hard work, and independent.	Incomplete Sentences	Correctness
185.	stage → step, phase	Word Choice	Engagement
186.	problem solving → problem-solving	Misspelled Words	Correctness
187.	be seen	Passive Voice Misuse	Clarity

188.	INseIDEA → inside	Misspelled Words	Correctness
189.	Students experience	Improper Formatting	Correctness
190.	example,	Punctuation in Compound/Complex Sentences	Correctness
191.	many still → many still	Improper Formatting	Correctness
192.	<mark>still answer</mark> → still answer	Improper Formatting	Correctness
193.	with	Inappropriate Colloquialisms	Delivery
194.	This	Intricate Text	Clarity
195.	of the → of the	Improper Formatting	Correctness
196.	deepening is → deepening is	Improper Formatting	Correctness
197.	is needed → is needed	Improper Formatting	Correctness
198.	to bridge → to bridge	Improper Formatting	Correctness
199.	$\frac{bridge the}{de} \rightarrow bridge the}{delta}$	Improper Formatting	Correctness
200.	material before	Improper Formatting	Correctness
201.	problems → issues	Word Choice	Engagement
202.	<mark>3</mark> → three	Improper Formatting	Correctness
203.	Students are → Students are	Improper Formatting	Correctness
204.	are more → are more	Improper Formatting	Correctness
205.	consists → consist	Incorrect Noun Number	Correctness
206.	creative → creativity	Confused Words	Correctness
207.	average problem	Improper Formatting	Correctness

208.	problem-solving	Misspelled Words	Correctness
209.	problem solving	Improper Formatting	Correctness
210.	solving ability	Improper Formatting	Correctness
211.	ability of → ability of	Improper Formatting	Correctness
212.	was implemented	Passive Voice Misuse	Clarity
213.	character education	Improper Formatting	Correctness
214.	education approach	Improper Formatting	Correctness
215.	<mark>given an</mark> → given an	Improper Formatting	Correctness
216.	the material → the material	Improper Formatting	Correctness
217.	material → content	Word Choice	Engagement
218.	be seen	Passive Voice Misuse	Clarity
219.	problem solving → problem-solving	Misspelled Words	Correctness
220.	they have → they have	Improper Formatting	Correctness
221.	have received → have received	Improper Formatting	Correctness
222.	4,	Punctuation in Compound/Complex Sentences	Correctness
223.	friendly/communicative	Improper Formatting	Correctness
224.	problem solving → problem-solving	Misspelled Words	Correctness
225.	the activity → the activity	Improper Formatting	Correctness
226.	of students → of students	Improper Formatting	Correctness
227.	students with → students with	Improper Formatting	Correctness

228.	with an \rightarrow with an	Improper Formatting	Correctness
229.	an avorago → an average	Improper Formatting	Correctness
230.	categories is → categories is	Improper Formatting	Correctness
231.	<mark>is</mark> → are	Faulty Subject-Verb Agreement	Correctness
232.	is very → is very	Improper Formatting	Correctness
233.	very active → very active	Improper Formatting	Correctness
234.	active while → active while	Improper Formatting	Correctness
235.	while \rightarrow . In contrast,	Hard-to-read text	Clarity
236.	while the → while the	Improper Formatting	Correctness
237.	the average → the average	Improper Formatting	Correctness
238.	avorago → ordinary	Word Choice	Engagement
239.	<mark>a very good</mark> → an outstanding, an excellent, a perfect	Word Choice	Engagement
240.	category → group, class, grade, type	Word Choice	Engagement
241.	, which	Punctuation in Compound/Complex Sentences	Correctness
242.	problem solving → problem-solving	Misspelled Words	Correctness
243.	of lesson → of lesson	Improper Formatting	Correctness
244.	study,	Punctuation in Compound/Complex Sentences	Correctness
245.	as shown → as shown	Improper Formatting	Correctness

246.	shown in → shown in	Improper Formatting	Correctness
247.	$\frac{1}{1}$ in the	Improper Formatting	Correctness
248.	problem solving → problem-solving	Misspelled Words	Correctness
249.	problem solving → problem-solving	Misspelled Words	Correctness
250.	This	Intricate Text	Clarity
251.	from the → from the	Improper Formatting	Correctness
252.	the results → the results	Improper Formatting	Correctness
253.	results of → results of	Improper Formatting	Correctness
254.	of reflection → of reflection	Improper Formatting	Correctness
255.	reflection on → reflection on	Improper Formatting	Correctness
256.	$\frac{1}{2}$ on the	Improper Formatting	Correctness
257.	the learning → the learning	Improper Formatting	Correctness
258.	3,	Punctuation in Compound/Complex Sentences	Correctness
259.	problem solving → problem-solving	Misspelled Words	Correctness
260.	solving ability	Improper Formatting	Correctness
261.	ability had → ability had	Improper Formatting	Correctness
262.	had decreased → had decreased	Improper Formatting	Correctness
263.	The decrease → The decrease	Improper Formatting	Correctness
264.	decrease was → decrease was	Improper Formatting	Correctness
265.	was caused	Passive Voice Misuse	Clarity

266.	In accordance with → By, Following, Per, Under	Wordy Sentences	Clarity
267.	et al → et al.	Comma Misuse within Clauses	Correctness
268.	which	Pronoun Use	Correctness
269.	problem solving → problem-solving	Misspelled Words	Correctness
270.	be seen	Passive Voice Misuse	Clarity
271.	Analisis → Analysis	Confused Words	Correctness
272.	keaktifa	Unknown Words	Correctness
273.	<mark>keaktifan</mark> → ketotifen	Misspelled Words	Correctness
274.	kreatifitas	Unknown Words	Correctness
275.	kreatifitas	Unknown Words	Correctness
276.	The character → The character	Improper Formatting	Correctness
277.	character education	Improper Formatting	Correctness
278.	education approach	Improper Formatting	Correctness
279.	friendly/communicative	Improper Formatting	Correctness
280.	work,	Punctuation in Compound/Complex Sentences	Correctness
281.	<mark>lt was</mark> → lt was	Improper Formatting	Correctness
282.	was obtained → was obtained	Improper Formatting	Correctness
283.	was obtained	Passive Voice Misuse	Clarity
284.	obtained problem	Improper Formatting	Correctness

285.	problem-solving	Misspelled Words	Correctness
286.	problem solving	Improper Formatting	Correctness
287.	solving ability	Improper Formatting	Correctness
288.	, and	Punctuation in Compound/Complex Sentences	Correctness
289.	<mark>is</mark> → are	Faulty Subject-Verb Agreement	Correctness
290.	a very good → an outstanding, an excellent, a perfect	Word Choice	Engagement
291.	Implementing character	Improper Formatting	Correctness
292.	character on → character on	Improper Formatting	Correctness
293.	on students → on students	Improper Formatting	Correctness
294.	students which → students which	Improper Formatting	Correctness
295.	hard work → hard work	Improper Formatting	Correctness
296.	friendly/communicative	Improper Formatting	Correctness
297.	be done	Passive Voice Misuse	Clarity
298.	Chaterine → Catherine	Misspelled Words	Correctness
299.	Oackland → Oakland	Misspelled Words	Correctness
300.	diakses	Unknown Words	Correctness