

Analysis of Elementary Teachers Understanding on Ijen Geopark

Haidhar Reizal^{✉1}, Atep Sujana², and Wahyu Sopandi³

^{1,2,3} Elementary Education Study Program, School of Postgraduate Studies, Indonesia University of Education, Bandung, Indonesia

✉ haidharreizal@upi.edu

Abstract. This study aimed to analyze and explain the understanding of elementary school teachers in Bondowoso Regency on Ijen Geopark. This study used a descriptive research method with a qualitative approach. The data collection instrument used a questionnaire. The respondents of this study were elementary school teachers in grades I-VI in Bondowoso Regency, totaling 60 elementary school teachers, namely 19 male teachers and 41 female teachers spread over 17 districts from 23 districts in Bondowoso Regency. The results showed that the understanding of elementary school teachers in Bondowoso Regency was considered good in comprehending Ijen Geopark as an integrated local content of thematic learning in schools. This is proven by the total score of elementary school teachers' understanding of Ijen Geopark of 3216. Based on this, it can be concluded that elementary school teachers in Bondowoso Regency have an understanding of Ijen Geopark with a score percentage of 77% and are included in the "good" category. Therefore, elementary school teachers are considered ready to integrate Ijen Geopark local content in thematic learning and are able to carry out thematic learning that links Ijen Geopark as local content in schools.

Keywords: Teacher Understanding, Local Content, Ijen Geopark, Elementary School, Thematic Integrated.

How to Cite: Reizal, H., Sujana, A., Sopandi, W. (2022). Analysis of Elementary Teachers Understanding on Ijen Geopark. *Proceeding The 4th International Conference on Elementary Education*, 4(1), 263-276.

INTRODUCTION ~ The development of Ijen Geopark has a goal in accordance with the meaning of geopark itself, namely preserving the earth and improving the welfare of the community, so the goal is to preserve Geoheritage, Geodiversity, Biodiversity, and Cultural diversity that can be achieved jointly between the government and stakeholders through conservation, education, and sustainable development as well as community social economy empowerment. One of the efforts to develop geoparks is education. The education program is in the form of public education efforts to understand the geological, biological, and cultural diversity of the Ijen Geopark area. As a form of support for educational programs, it needs to be strengthened by distributing Ijen Geopark promotional materials through formal and non-formal

education. According to (Głowacki, 2019), it is tremendously essential for schools to participate in geopark education project; this is as a supplement to knowledge about geopark. Through formal education, Bondowoso Regency government established Ijen Geopark as a Local Content in the learning curriculum in Formal Education Units ranging from Elementary School (SD) to Senior High School (SMA)/equivalent.

Ijen Geopark materials need to be linked to all subjects taught in schools. At the Elementary School level, the local content of Ijen Geopark is taught from grade 1 to grade 6. Learning in elementary school currently uses the 2013 Curriculum, which is applying thematic learning. Thematic learning is the integration of several subjects in which each subject has a Basic Competence (KD) that must be

achieved. The Ijen Geopark local content material that will be taught needs to be adjusted firstly with the basic competencies found at every grade level in elementary schools. The adjustment of the Ijen Geopark local content and Basic Competence material is carried out so that learning is more meaningful and the Ijen Geopark material will be embedded in students. According to (Parwati, 2015) the values of local wisdom in local content materials are a source of student motivation that can bridge the formation of character in students. This can occur because using the surrounding environment can make it easier for students to understand the material contained in Basic Competence. Based on research conducted by (Budiastra et al., 2021) the integration of geopark local content in learning has proven to be effective in improving learning outcomes. The achievement of meaningful learning cannot be separated from the role of the teacher in the classroom.

Teacher, as a professional in his field, is an important figure in the continuity of learning in the classroom. According to (Sujana et al., 2014) teacher obligation is not only to instill concepts and processes during learning activities, but also to be able to instill attitudes to students. Therefore, the teacher is an important aspect in learning activities. As an effort to introduce Ijen Geopark to teachers, the Bondowoso Regency government has a program called geoeducation. Geoeducation is a tourist visit activity in the Ijen Geopark area. Farsani et al., (2014) (cited in Álvarez, 2020) expressed that Geoeducation involves the transfer of knowledge which not only increases understanding but also environmental awareness. The expected result of this

program is that teachers have a view of Ijen Geopark and that way teachers in Bondowoso Regency can integrate Ijen Geopark as local content in learning. In addition, schools are also expected to provide Ijen Geopark Information Corner as a literacy activity in schools. As a supporter to strengthen educational efforts, a teacher is required to be able to guide students in learning activities. Before carrying out learning, a teacher is expected to understand the material they will teach in class.

Ijen Geopark local content is a local content that is integrated in thematic learning, so that the class teacher is the right person to teach in the classroom. Therefore, before integrating the local content of Ijen Geopark with thematic learning at school, the teacher needs to first understand the local content of Ijen Geopark. Teacher understanding of the material can make it easier for teachers to develop Ijen Geopark learning in the classroom. The local content of Ijen Geopark will be more meaningful if the teacher understanding is not limited to knowing Ijen Geopark in general. Instead, teachers are also able to carry out local content learning of Ijen Geopark which is integrated in thematic learning in schools. In the view of (Handayani & Kurniawan, 2007) teacher, as an information center, needs to understand what he will convey about local content material. Based on the perspective of Fermeli et al., (2011) (cited Rodrigues et al., 2013) the main key in the development of Geoeeducation is research on curriculum review, teacher, and student interest in geopark, and the availability of learning modules. In line with research by (Sopandi, 2017) namely learning needs planning that is carried out in such a way that it is able to develop

students attitudes, knowledge, and skills. Based on this, teachers must have an understanding in reviewing the 2013 curriculum, such as syllabus, Core Competencies, mapping Basic Competence with Ijen Geopark material. Teachers are also expected to be able to develop learning modules that are informative, effective, and innovative. The next step is that the teacher can prepare a Lesson Plan (RPP). In addition, the teacher must be able to make participants interested in learning Geopark. This can be supported by determining the models, strategies, and media that will be used in learning activities. Therefore, the objective of this study is to measure elementary school teachers understanding of Ijen Geopark.

METHOD

This study uses a qualitative approach. Meanwhile, the research method used is descriptive method. The use of descriptive-qualitative method aims to obtain information about elementary school teachers' understanding of Ijen Geopark. The population of this research is elementary school teachers from grade I to grade VI in Bondowoso Regency. Sampling was taken randomly, the sample obtained was 60 elementary school teachers spread from 17 sub-districts out of a total of 23 sub-districts in Bondowoso Regency, East Java Province. The data collection technique used in this study was a questionnaire technique. The instrument used in this study was a questionnaire distributed online via Google Form. The data obtained from the sample of the research population was

then analyzed by using the percentage formula and then interpreted.

RESULTS

The results of research conducted by distributing questionnaires to teachers in Bondowoso Regency regarding understanding of Ijen Geopark obtained the following data. Respondents obtained in this study were 60 respondents who were classroom teachers in elementary schools. Respondents in this study were spread across 17 sub-districts with a total of 23 sub-districts in Bondowoso Regency. The number of male respondents was 19 (31.7%) respondents while the number of female respondents was 41 (68.3%) respondents. There is 30% of respondents that are elementary school teachers who teach elementary schools in Bondowoso District and 25% of respondents are elementary school teachers who teach elementary schools in Curahdami District. The level of teaching class of respondents in the study is of 25% of respondents who are teachers who teach in grade 6, 20% are teachers who teach in grades 3 and 5, 13.3% are teachers of grade 2, 11.7% of respondents are teachers of grade 4, and 10 % of respondents are teachers who teach grade 1. Based on the questionnaire distributed, 60 respondents have heard about Ijen Geopark. Respondents in this study consisting of 54 elementary school teachers know that Ijen Geopark will be integrated in learning and the remaining 6 elementary school teachers do not know that Ijen Geopark will be integrated in learning.

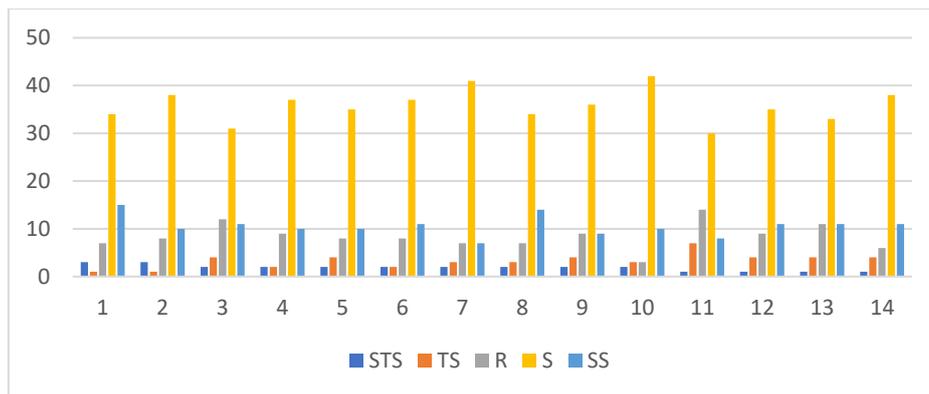


Figure 1. Responses of Elementary Teachers Understanding on Ijen Geopark

In the first question, the teacher has participated in various activities as an effort to understand Ijen Geopark, there are 15 respondents (25%) answered strongly agree, 34 respondents (56.7%) answered agree, 7 respondents (11.7%) answered doubtful, 1 respondent (1.7%) answered disagree, and 3 respondents (5%) answered strongly disagree. Based on this, more teachers have participated in various activities as a form of understanding the Ijen Geopark material. These activities include attending webinars, workshops, and field study activities visiting the Ijen Geopark area in Bondowoso. This is in line with the program planned by the Tourism, Youth, and Sports Office (DISPARPORA) of Bondowoso Regency which provides field visits or Geotours for teachers and students.

The second question regarding the ability of teachers to integrate Ijen Geopark materials in integrated local content learning, there are 10 respondents (16.7%) who answered strongly agree, 38 respondents (63.3%) answered agree, 8 respondents (13.3%) answered doubtful, 1 respondent (1.7%) answered disagree, 3 respondents (5%) answered strongly disagree. Based on these results, most of the teachers in Bondowoso Regency spread over 17 sub-districts have been able to integrate Ijen Geopark material as

local content in thematic learning in the classroom.

The third question is about the teacher ability to determine the 2013 Curriculum Basic Competence that is appropriate to be integrated with the Ijen Geopark Local Content material. From the data obtained, there are 11 respondents (18.3%) who answered strongly agree, 31 respondents (51.7%) answered agree, 12 respondents (20%) answered doubtful, 4 respondents (6.7%) answered disagree, and 2 respondents (3.3%) answered strongly disagree. Based on the data obtained, most teachers do not find it difficult to determine the appropriate Basic Competence to be integrated with the Ijen Geopark material.

The fourth question is regarding the teacher ability to determine appropriate learning strategies to teach Ijen Geopark local content. Based on the results of the questionnaires that have been distributed, the data obtained 10 respondents (16.7%) who answered strongly agree, 37 respondents (61.7%) answered agree, 9 respondents (15%) answered doubtful, 2 respondents (3.3%) answered disagree, and 2 other respondents (3.3%) answered strongly disagree.

The fifth question is about the teacher ability to determine a learning approach that is in accordance with the Ijen Geopark local content material. The results obtained are 10 respondents (16.9%) who answered strongly agree, 35 respondents (59.3%) answered agree, 8 respondents (13.6%) answered doubtful, 4 respondents (6.8%) answered disagree, and 2 respondents (3.4%) answered strongly disagree. The tendency of respondents to be able to determine the learning approach that will be used to teach Ijen Geopark material as local content.

The sixth question is the teacher ability to determine the appropriate learning method to teach Ijen Geopark local content material. Based on the data obtained, there are 11 respondents (18.3%) who answered strongly agree, 37 respondents (61.7%) answered agree, 8 respondents (13.3%) answered doubtful, 2 respondents (3.3%) answered disagree, and 2 respondents (3.3%) answered strongly disagree. The data shows that elementary school teachers do not have difficulty in determining the right learning method to teach the Ijen Geopark material.

The next is the seventh question, this question is about the teacher ability to determine the appropriate model to teach Ijen Geopark material. The data obtained based on the questionnaire are there are 7 respondents (11.7%) who answered strongly agree, 41 respondents (68.3%) answered agree, 7 respondents (11.7%) answered doubtful, 3 respondents (5%) answered disagree, and 2 respondents (3.3%) answered disagree. These results can be concluded that elementary school teachers have understood in determining

the right model and in accordance with the Ijen Geopark material.

The eighth question is about the teacher ability to determine the appropriate learning media with the Ijen Geopark material. The results of the questionnaire showed that there are 14 respondents (56.7%) who answered agree, 7 respondents (11.7%) answered doubtful, 3 respondents (5%) answered disagree, and 2 respondents (3.3%) answered strongly disagree. Viewed from these data, elementary school teachers have been able to determine the learning media that will be used to support integrated thematic learning of local content of Ijen Geopark.

The ninth question is about the teacher ability to develop appropriate learning media to teach Ijen Geopark local content materials. The results obtained are 9 respondents (15%) answered strongly agree, 36 respondents (60%) answered agree, 9 respondents (15%) answered doubtful, 4 respondents (6.7%) answered disagree, and 2 respondents (3.3%) answered strongly disagree. Elementary school teachers can be stated to be able to develop learning media that are in accordance with the Ijen Geopark material based on the data obtained.

The teacher ability to determine the appropriate Ijen Geopark learning materials to be integrated in learning is the tenth question. Based on the results obtained from the questionnaire, it showed that 10 respondents (16.7%) answered strongly agree with the statement, 42 respondents (70%) stated that they agreed that they were able to determine appropriate learning materials, 3 respondents (5%) answered that they were still in doubt, 3 other

respondents (5%) answered disagree, while the remaining 2 respondents (3.3%) answered strongly disagree that they had not been able to determine the appropriate material. The tendency of respondents to be able to determine material that is in accordance with the Ijen Geopark learning material that will be integrated in thematic learning.

The eleventh question is the teacher ability in compiling learning modules that are in accordance with the Ijen Geopark material. Based on the data obtained, there were 8 respondents (13.3%) answered strongly agree which means that the respondent is extremely capable of compiling learning modules, 30 respondents (50%) answered agree to the statement in which respondents have been able to compose learning modules, 14 respondents (23.3%) of respondents felt doubtful, 7 respondents (11.7%) disagree, and 1 respondent (1.7%) answered strongly disagree. Based on this, it can be concluded that few elementary school teachers have not been able to develop learning modules.

The twelfth question is about the ability to compose an appropriate lesson plan to be used as a learning base for Ijen Geopark. Based on the data obtained, 11 respondents (18.3%) answered strongly agree which means that elementary school teacher respondents were very capable in preparing RPP, 35 respondents (58.3%) answered agree with the statement which means that respondents were able to compile RPP of Ijen Geopark, 9 respondents (15%) answered doubtful about the ability to compose learning lesson plans, and 4 respondents (6.7%) answered disagree, and 1 respondent

(1.7%) answered strongly disagree. Based on this, most of the respondents have been able to prepare RPP in accordance with the Ijen Geopark material. The thirteenth question is about the teacher ability to develop Student Worksheets (LKPD) in accordance with the local content of Ijen Geopark. The data obtained are 11 respondents (18.3%) answered strongly agree, 33 respondents (55%) answered agree where most of the respondents have been able to develop LKPD based on Ijen Geopark, 11 respondents (18.3%) answered doubtful on the ability to develop LKPD, 4 respondents (6.7%) answered disagree, and 1 respondent (1.7%) answered strongly disagree. Based on these data, it can be concluded that most of the respondents have been able to develop LKPD.

The last question is about the teacher ability to carry out thematic learning that is integrated with the Ijen Geopark material. The results showed that 11 respondents (18.3%) answered strongly agree with the statement which means that the 11 respondents had carried out learning and were able to integrate Ijen Geopark materials in their learning activities, 38 respondents (63.3%) answered agree shows that respondents have been able to demonstrate the ability to implement integrated thematic learning, 6 respondents (10%) answered doubtful, 4 respondents (6.7%) answered disagree, and 1 respondent (1.7%) answered strongly disagree. Respondents who answered doubtful, disagreed, and strongly disagreed indicated that a small number of teachers had not been able to carry out integrated learning with Ijen Geopark local content.

Table 1. Category of Elementary Teacher Understanding on Ijen Geopark

Interval	Category
81% - 100%	Very Good
61% - 80%	Good
41% - 60%	Enough
21% - 40%	Less
0% - 20%	Poor

Based on the maximum score obtained from the data collection results, it is 3216. Therefore, according to the perception of 60 respondents on the understanding of Ijen Geopark, the following formula can be used:

$$\frac{3216}{4200} \times 100\% = 77\%.$$

It can be concluded that the value of 3216 and the understanding of elementary school teachers on Ijen Geopark are included in the "Good" interval".

DISCUSSION

The level of elementary school teachers understanding in Bondowoso Regency on Ijen Geopark is included in the "good" category. Based on this, elementary school teachers have understood the Ijen Geopark material that can be integrated in learning. Elementary school teachers in Bondowoso Regency in an effort to understand Ijen Geopark by participating in activities related to Ijen Geopark. The large number of elementary school teachers who have participated in various activities related to Ijen Geopark is none other than because the Bondowoso Regency Government, especially DISPARPORA, held field studies in the Ijen Geopark area. The field study activities are supported by public transportation facilities that go to the Ijen Geopark area. Field study activities are also socialized through the regional coordinator (Korwil) through regular meetings of elementary school teachers. One of the

examples of the socialization carried out was the Regional Coordinator of the District of Curahdami socializing field study activities to the Ijen Geopark area at regular meetings of the Teacher Working Group (KKG). The Regional Coordinator under the auspices of the Bondowoso Regency Education Office recommends that the teacher and student field study activities can be carried out by schools. Several schools have carried out field studies in the Ijen Geopark area; therefore, the school teachers gain knowledge about the Ijen Geopark area they visit. Field Study Activities have several sectors. The school is located in the northern part of Bondowoso; thus, the priority of the visit is to the Ijen Geopark Area in the north of Bondowoso Regency. For instance, one of the schools in Prajekan District which is located in the northern part visited the Ijen Geopark area in the northern sector, namely Lampattah Olar and Batu So'on Solor. This activity also depends on the principal policy. Teachers who have never participated in any activities in an effort to understand Ijen Geopark are caused by several factors. The first factor is the limited time and school fees to carry out field studies in the Ijen Geopark area. The teacher did not obtain information on activities or introduction to the Ijen Geopark program. However, as a teacher according to (Ananda & Fadhilaturrahmi, 2018) teachers must be active in seeking knowledge and information, they should not just sit back and wait.

Ijen Geopark materials in elementary schools must be integrated with thematic learning in schools. Therefore, as a teacher, he or she must have the ability to integrate Ijen Geopark material into Thematic Learning. Most elementary school teachers in Bondowoso Regency are able to integrate thematic learning with Ijen Geopark materials. The capable elementary school teacher has good pedagogical competence. Based on The Minister of Education and Culture No. 16 of 2007 regarding Standards of Academic Qualifications and Teacher Competencies pedagogical competence number 3 is that the teacher is able to develop a curriculum related to the subject/field of development being taught. Point 3.4 states that teacher is able to choose materials for five Elementary/Islamic Elementary School subjects related to learning experiences and learning objectives. Therefore, teachers who are able to integrate Ijen Geopark material in thematic learning have fulfilled one of the pedagogical competencies of Elementary/Islamic Elementary School classroom teachers.

Ijen Geopark material learning activities are learning that is integrated in thematic learning. Therefore, teachers are required to be able to sort out Basic Competence in the national curriculum that is appropriate and can be linked to the Ijen Geopark material. Elementary school teachers in Bondowoso Regency have been able to determine the appropriate Basic Competence to teach Ijen Geopark material. Every elementary school teacher does not have difficulty in selecting Basic Competence because of the 2013 Curriculum Basic Competence mapping that is already available at every grade level. Based on the Basic

Competence mapping, elementary school teachers can relate Basic Competence to the Ijen Geopark material.

The teacher, before carrying out learning activities, needs to determine the appropriate learning strategy. Choosing the right strategy can make Ijen Geopark material learning more effective and efficient. Elementary school teachers in Bondowoso Regency can be stated to be able to determine appropriate learning strategies. This is based on the percentage of elementary school teachers answers to the questionnaire. There are 16.7% of respondents strongly agree and 61.7% agree with the teacher ability to determine learning strategies. Determining learning strategies is an activity that is usually done by teachers before carrying out learning activities. Elementary school teachers have recognized learning strategies. In this case, elementary school teachers need to review the strategies commonly used for the Ijen Geopark material so that learning takes place effectively. Approach is one of the components of supporting learning in the classroom. Choosing the right approach can make learning more meaningful. In teaching the Ijen Geopark material, the approach that has been taken by teachers in Bondowoso Regency is an environmental approach. Ijen Geopark material is a local content material where the material used in learning comes from the local environment. Another approach used by elementary school teachers in Bondowoso Regency is the contextual approach. Based on research of (Adisendjaja. & Romlah, 2012) an approach that can be used in learning about the environment is to use contextual learning (CTL). This approach

is carried out by visiting the Ijen Geopark area directly. As a form of effort to make Ijen Geopark material learning more meaningful, various other approaches can be used. According to (Jufrida et al., 2018) the approach that can be used in learning Geopark is the SETS approach (Science, Environment, Technology, and Society). The SETS approach can shape knowledge in students brains so they can analyze conditions and form new knowledge that produces good results.

The learning method used by the teacher in teaching Ijen Geopark to students at school is the Field Trip method. According to Orion and Hofstein (1994) and Orion (2003) (cited in Henriques et al., 2012) Field Trip activity is an activity that has high educational values and increase students cognitive potential where this activity increases students knowledge of geological areas that contribute to understanding concepts and ideas in class. This method is one of the programs launched by DISPARPORA of Bondowoso Regency as one of Ijen Geopark educational efforts. Students and teachers visit the Ijen Geopark area directly to obtain knowledge from experts who have been assigned to each Ijen Geopark area. So far, this method is still being used by teachers. This is because the Ijen Geopark in Bondowoso Regency has just entered the introduction stage. Therefore, the field study is one of the efforts to introduce Ijen Geopark. Elementary school teachers who are able to determine other learning methods can use other learning methods in learning activities. Teachers can use other methods because not all Ijen Geopark areas can be reached.

Learning activities cannot be separated from the influence of learning models. Ijen

Geopark learning activities can use a variety of available learning models. The use of learning models can make learning activities more meaningful. The use of learning models can make it easier for teachers to form knowledge in students brains. The determination of the learning model should not be arbitrary. Elementary school teachers need to review the material to be taught and also the expected results. When viewed from the goal of Ijen Geopark itself, students as the nation successors need to recognize the potential and natural resources in their environment. Therefore, with the local content of Ijen Geopark, environmental conservation and cultural preservation can always be carried out until later.

Ijen Geopark learning activities will be more interesting if elementary school teachers use the right learning media. Elementary school teachers in the 2013 curriculum are required to be creative and innovative. The presence of local content in Ijen Geopark can be used by teachers as an opportunity to explore their abilities in determining the right learning media. Not only being able to determine the right learning media, but also being able to develop learning media that can make it easier for teachers to teach Ijen Geopark material to students. Currently, the use of Ijen Geopark learning media in Bondowoso Regency is only in the form of photos and videos on the Internet. Teacher is a person who is closest to students at school. Teacher can recognize the characteristics of students in learning. This knowledge can be used by teachers as a basis in developing Ijen Geopark learning media. Based on research by (Samri et al., 2020) the use of electronic multimedia-based thematic

learning media can improve students conceptual understanding of thematic learning materials that are integrated with local content. This can be used as a reference in developing local content learning media for Ijen Geopark.

The materials which are in accordance with the characteristics of the students for Ijen Geopark needs to be chosen. Elementary school teachers in Bondowoso Regency are able to determine appropriate learning materials. This is in line with the teacher ability to develop learning modules. Learning modules definitely need to be provided in Ijen Geopark learning activities. This is in line with the results of the questionnaire, which even though teachers are able to develop their own learning modules, they still need the learning modules provided by the local government. In the view of (Ayuningtyas et al., 2018) the use of booklets and the activity of visiting a place can increase students enthusiasm and understanding. Elementary school teachers are expected to be able to independently develop Ijen Geopark module. This is due to the lack of modules and teaching materials for Ijen Geopark.

Lesson Plan is a crucial component in learning activities in schools. Based on Circular Letter No. 14 of 2019 regarding Simplification of Lesson Plan in the preparation of the lesson plan, it must pay attention on several principles, namely, the principles of efficiency, effectiveness, and student-oriented. On the third point, the teacher can freely choose, create, use, and develop lesson plan independently for the success of student learning. This can be used by teachers to explore their abilities in preparing the Lesson Plan of Ijen Geopark independently. The

preparation of the Lesson Plan of Ijen Geopark can be easily done by elementary school teachers because most of the teacher respondents have understood Basic Competencies, approaches, models, media, materials that will be integrated in the Ijen Geopark materials. However, in collecting data, some teachers suggested that the local government, namely the education office, could provide the Lesson Plan of Ijen Geopark Local Content. This is intended to standardize the Lesson Plan of Ijen Geopark local content.

The Cognitive, Affective, and Psychomotor aspects of students on the local content of Ijen Geopark certainly need to be measured by the teachers. Therefore, teachers must prepare Student Worksheets in learning activities. It can be freely developed by classroom teachers. In the perspective of (Triana & Ruhimat, 2018) geopark learning activities need to be supported by informative student worksheets because the material presented by the teacher is not easily accepted by students. This worksheet is used in the Field Trip method which is able to help students understand learning better.

The rresearch results based on the questions in the questionnaire are in line with the last question, namely the teacher ability to carry out thematic learning that is integrated with the Ijen Geopark material. The implementation of learning activities is certainly supported by several aspects such as mapping Basic Competence, analyzing material, determining strategies, models, and methods, preparing Lesson Plan modules and Student Worksheets. Teachers who have an understanding of learning planning will find it easier to carry out learning activities. Meanwhile, a small

part of the elementary school teachers answered doubtfully and even strongly disagreed with the teacher statement being able to integrate Ijen Geopark material in thematic learning. This is in accordance with research conducted by (Budiastra et al., 2021) stating that elementary school teachers do not understand the importance of integrating local content in learning activities. Based on research by (Basari, 2014) the success of developing local content learning in schools depends on the creativity of teachers. Elementary school teachers in Bondowoso Regency have made efforts to support Ijen Geopark as local content in learning activities such as integrating knowledge related to Ijen Geopark in learning activities, participating in socializing Ijen Geopark to students, and conducting Field Trips to the Ijen Geopark Area.

The data collection in this study cannot be separated from the collection of suggestions obtained from respondents related to learning the local content of Ijen Geopark. Ijen Geopark local content learning activities are not only focused on understanding teachers, but also support from the government or agencies that are responsible and have policies. Respondents convey several suggestions that can be done by the local government and the education and culture office of Bondowoso Regency. Elementary school teachers in Bondowoso Regency, some of the respondents need socialization related to Ijen Geopark learning to be more clarified by providing standardization in the material contained in the Ijen Geopark material, the scope of local content of Ijen Geopark can also be clarified and reviewed more deeply according to grade level, especially in

elementary school. Teachers also need workshop activities on the preparation of lesson plans, modules, integrated learning tools for Ijen Geopark local content that are clear and information is disseminated evenly to all formal education units in Bondowoso Regency, especially remote areas. The government and the Education Office can also form a Special Team in developing the local content of Ijen geopark so that the educational goals in the geopark are achieved and therefore, Ijen Geopark can improve understanding and provide knowledge to students so that it will be more useful in the future. In addition, there are differences in which teachers understanding has been categorized as good in compiling independent modules. However, based on research data, teachers who answered agree and strongly agree about the ability to develop modules still need a module for teachers on Ijen Geopark learning as a teacher reference.

CONCLUSION

The conclusion that can be made from the results of this study is that elementary school teachers in Bondowoso Regency have understood the Ijen Geopark material with a percentage score of 77% and are included in the "Good" category. The teacher understanding shows that teachers, especially at the elementary level in Bondowoso Regency, are ready to implement integrated Ijen Geopark local content learning in thematic learning in grades I-IV. In addition to the teacher understanding in carrying out Ijen Geopark local content in thematic learning in class, it also needs support from local governments, especially agencies that have policies in Ijen Geopark. There are several suggestions to

improve the learning of Ijen Geopark content in learning activities in schools which are the following:

1. Conducting socialization regarding the objectives and scope of local content of Ijen Geopark that are clear and evenly distributed.
2. Conducting workshop, technical guidance, and seminar that can improve the ability of teachers to develop and enhance Ijen Geopark local content learning in schools.
3. Forming a Special Team for the Development of Ijen Geopark Local Content on a regional scale to formal education units so that the mapping of Ijen Geopark materials has special standards.
4. Providing Ijen Geopark modules for teachers and students as literacy and reference for teachers and students on Ijen Geopark materials.

ACKNOWLEDGMENTS

The researchers would like to thank the elementary school teachers in Bondowoso Regency who have been willing to support this research by filling out a questionnaire about elementary school teachers understanding on Ijen Geopark.

REFERENCES

- Adisendjaja, Y. H., & Romlah, O. (2012). *Pembelajaran Pendidikan Lingkungan Hidup: Belajar dari Pengalaman Dan Belajar dari Alam*. 1–11. <https://umayaika.wordpress.com/2012/04/24/pembelajaran-pendidikan-lingkungan-hidup-di-sekolah/>
- Álvarez, R. F. (2020). Geoparks and education: UNESCO global geopark

Villuercas-Ibores-Jara as a case study in Spain. *Geosciences (Switzerland)*, 10(1). <https://doi.org/10.3390/geosciences10010027>

Ananda, R., & Fadhilaturrehmi, F. (2018). Analisis Kemampuan Guru Sekolah Dasar Dalam Implementasi Pembelajaran Tematik Di SD. *Jurnal Basicedu*, 2(2), 11–21. <https://doi.org/10.31004/basicedu.v2i2.42>

Ayuningtyas, T. R., Hilmiah, A. S., & Rohmawati, R. (2018). PEMANFAATAN SITUS PENINGGALAN SEJARAH DI KABUPATEN BONDOWOSO SEBAGAI PENGEMBANGAN SUMBER BELAJAR DI SEKOLAH LANJUTAN TINGKAT ATAS DI KABUPATEN BONDOWOSO. *Historia*, 6(1), 139–150.

Basari, A. (2014). *Penguatan Kurikulum Muatan Lokal Dalam Pembelajaran di Sekolah Dasar*. 2(2), 35–43.

Budiastra, A. A. K., Puspitasari, S., Wicaksono, I., & Erlina, N. (2021). Study of The Local Wisdom Curriculum of Geopark Belitung to Support Local Cultural Values in Context of Natural Science Learning for Elementary School. *Advances in Social Sciences Research Journal*, 8(5), 692–706. <https://doi.org/10.14738/assrj.85.10280>

Farsani, N. T., Coelho, C. O. A., Costa, C. M. M., & Amrikazemi, A. (2014). Geo-knowledge Management and Geoconservation via Geoparks and Geotourism. *Geoheritage*, 6(3), 185–

192.
<https://doi.org/10.1007/s12371-014-0099-7>
- Fermeli, G., Meléndez, G., Calonge, A., Dermitzakis, M., Steininger, F., Koutsouveli, A., Carvalho, C., Rodrigues, J., D'Arpa, C., & Di Patti, C. (2011). Geoschools: innovative teaching of geosciences in secondary schools and raising awareness on geoheritage in the society. *Avances y retos en la conservación del Patrimonio Geológico en España. Actas de la IX Reunión Nacional de la Comisión de Patrimonio Geológico (Sociedad Geológica de España): León, Universidad de León*, 120–124. <http://www.naturtejo.com/ficheiros/conteudos/files/fic2.pdf>
- Głowacki, W. (2019). Newly Emerging Geosites in the Polish Western Outer Carpathians as an Asset for Geoeducation and Geotourism. *Geoheritage*, 11(4), 1247–1256. <https://doi.org/10.1007/s12371-019-00415-9>
- Handayani, E. R., & Kurniawan, D. (2007). Pemahaman Guru Terhadap Muatan Lokal Pendidikan Lingkungan Hidup (Studi Deskriptif pada SMP di Kabupaten OKU Timur) Eka Rahayu Handayani dan Deni Kurniawan. *Jurnal Pendidikan*.
- Henriques, M. H., Tomaz, C., & Sá, A. A. (2012). The Arouca Geopark (Portugal) as an educational resource: A case study. *Episodes*, 35(4), 481–488. <https://doi.org/10.18814/epiiugs/2012/v35i4/004>
- Jufrida, J., Basuki, F. R., & Rahma, S. (2018). Potensi Kearifan Lokal Geopark Merangin Sebagai Sumber Belajar Sains Di SMP. *EduFisika*, 3(01), 1–16. <https://doi.org/10.22437/edufisika.v3i01.5773>
- Permendikbud No. 16 Tahun 2007 tentang Standar Kualifikasi Akademik dan Kompetensi Guru, Pub. L. No. 16, 1 (2007). <https://sumsel.bpk.go.id/?p=1555>
- Surat Edaran No. 14 Tahun 2019 Tentang Penyerahan RPP, 3 (2019).
- Parwati, N. N. (2015). Pengembangan Model Pembelajaran Pemecahan Masalah Berorientasi Kearifan Lokal Pada Siswa SMP Di Kota Singaraja. *JPI (Jurnal Pendidikan Indonesia)*, 4(2), 612–622. <https://doi.org/10.23887/jpi-undiksha.v4i2.6058>
- Rodrigues, J., Carvalho, C., & Catana, M. (2013). *GEOschools Project teaching modules: Teaching Geosciences in the Field - Geoparks and Geosites*. 231–234.
- Samri, F., Rewo, J. M., & Laksana, dek ngurah laba. (2020). Electronic Thematic Teaching Multimedia With Local Culture Based Materials And Its Effect. *European Journal of Education Studies*, 7(12), 625–641. <https://doi.org/10.46827/ejes.v7i12.3474>
- Sopandi, W. (2017). The quality improvement of learning processes and achievements through the read-answer-discuss-explain-and create learning model implementation. *Proceeding 8th Pedagogy*

International Seminar 2017: Enhancement of Pedagogy in Cultural Diversity Toward Excellence in Education, 8(229), 132-139.

Sujana, A., Permanasari, A., Sopandi, W., & Mudzakir, A. (2014). Literasi Kimia Mahasiswa Pgsd dan Guru Ipa Sekolah Dasar. *Jurnal Pendidikan IPA Indonesia*, 3(1), 28-35. <http://journal.unnes.ac.id/nju/index.php/jpii>

Triana, I. J., & Ruhimat, M. (2018). *Understanding of Geography Teacher towards Geopark as Learning Resources*. 251(Acec), 497-500. <https://doi.org/10.2991/acec-18.2018.113>.