

PASPOR MUSEUM GEOLOGI: ANALISIS DESKRIPSI LEMBAR KERJA SISWA

Passport of Geology Museum: a Description Analysis on Pupils' Worksheet

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Abstrak: Kegiatan siswa TK dan SD mengamati, memahami, dan menginterpretasikan benda-benda ilmiah di Museum Geologi berpeluang untuk membangun berbagai keterampilan berpikir. Hal ini bisa dilakukan jika siswa diberikan pertanyaan-pertanyaan yang bersifat menyelidik yang mampu mengkonstruksi pengetahuannya. Oleh karena itu, penelitian ini bertujuan untuk mendeskripsikan prototipe yang disebut Paspor Museum Geologi dan pendapat dari para ahli, guru, dan siswa terkait penggunaannya. Penelitian ini bersifat deskriptif yang menceritakan paspor secara rinci. Instrumen yang digunakan dalam penelitian ini adalah observasi lapangan dan wawancara. Hasil penelitian menunjukkan bahwa paspor memiliki banyak fitur menarik yang membuka banyak kesempatan bagi siswa untuk menuliskan kegiatan pengamatan mereka di museum. Siswa mampu mengungkapkan perasaan dan ketertarikannya terhadap museum. Selain itu, baik pakar maupun guru memberikan tanggapan positif terhadap pembuatan paspor tersebut. Mereka mengatakan bahwa paspor di Museum Geologi sangat membantu. Itu adalah platform untuk membimbing siswa dalam menemukan dan mengoptimalkan pengamatan sensorik mereka. Siswa juga sangat senang menggunakan paspor karena dapat dimengerti. Paspor Museum Geologi sangat berguna dan bermanfaat bagi guru dan siswa.

Kata kunci: Passport, Museum Geology, Siswa TK, Siswa SD

Abstrack: Kindergarten and elementary school students' activities of observing, understanding, and interpreting scientific objects at the Geology Museum have the opportunity to build various thinking skills. This can be done if students are given probing questions that are able to construct their knowledge. Therefore, the study aims to describe a prototype called the Passport of the Geology Museum and opinions from experts, teachers, and pupils. The research was descriptive that told the passport in detail. The instrument used in this study was observation field notes and interview. The result showed that the passport had many interesting features that open many opportunities for pupils to write down their observation activities in the museum. Pupils were able to tell their feeling and interest in the museum. Besides, both experts and teachers gave positive feedback on the passport. They told that passport in the Geological Museum was so helpful. It was a platform to guide pupils in finding and optimizing their sensory observation. Pupils were also very happy to use passports because it was understandable. The passport of the Geological Museum is very useful and helpful for both teachers and pupils.

Keyword: *Passport, Geology Museum, Kindergarten Pupils, Primary School Pupils*

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INTRODUCTION

The visual display has its own charm for elementary and kindergarten pupils. The pupils tend to remember and even retain information about the objects they are interested in (Winarni, Hambali, and Purwandari, 2020; Childers, Porter, Dolan, Whitehead, and McIntyre, 2020; Wicks, Paynter, and Westerveld, 2020; Liu and Liu, 2020). This also happens when pupils are invited to visit the Geology Museum. Various objects became the center of their attention, especially those related to the history of Earth's life which featured various fossils of ancient animals such as dinosaurs. So many questions in their minds that various versions of the explanation emerged. Although pupil visits are accompanied by a guide, the guide only serves as an explanation provider. The guide does not have access to get feedback from what he has explained. Therefore, pupil visits to the Geology Museum need to be equipped with worksheets so that they can collect various kinds of data.

A worksheet is a formal form of an activity at school. Giving worksheets while enjoying the displays in the museum is certainly not a strategic step. Therefore, innovation is needed in

packaging worksheets to make it more attractive and certainly fun for them. Making a worksheet in the form of a passport can be an option. This passport is in the form of a book containing the pupil's identity along with a column for expressing opinions. These columns are also filled with short probing questions (Undersander, Lund, Langdon, and Stains, 2017). Pupils can also not only write their opinions through writing but also through pictures. A visit to a geological museum equipped with a passport result in a concept known as educational tourism.

The research from Rahayu and Murti (2020) reveals that teachers generally do not have a clear motivation when bringing pupils to the museum. This indicates that teachers must understand educational tourism. Educational tourism is a program where pupils visit a tourist location with the main aim of gaining a direct learning experience at the tourist attraction. (Mustapa, 2021; Yunansah, Kuswanto, & Abdillah, 2020) Educational tourism is an activity that is usually carried out by educational institutions. Pupils who visit the Geological Museum should get hands-on learning experiences. Where pupils can gain a lot of knowledge from objects

collection objects, information on display collections and multimedia facilities contained in the Geology Museum that are useful for lessons at school and everyday knowledge. If the activities in the museum are not able to present the learning process, the museum will become a static warehouse for storing artifacts (Parisi-Moreno, Llonch-Molina, and Selfa, 2021; TemiZ, 2021; Namli Altintas and Ç. Kozaner Yenigül; 2020).

Museums must demonstrate their social relevance and use by developing their public service functions and becoming more knowledgeable about the needs of their visitors and more adept at providing enjoyable and rewarding experiences. The Geological Museum should have a more focused system for educational tourism (TemiZ, 2021). Pupils must continue to study with a passport but it is fun and different from the learning they can do in school every day.

The Geological Museum Bandung as a place of education and entertainment has to be equipped with a kind of worksheet. Based on the finding, choosing the right media to introduce museums to pupils, especially kindergarten and elementary school pupils is im-

portant. The results of the analysis of this media become a reference for teachers, parents, and education practitioners in introducing museums. Thus, the researchers focused on the description of the passport of Bandung Geology Museum as a guidebook for early childhood. Thus, the resulting analysis will be used by teachers, parents, and educational practitioners to make them easier to choose the characteristic of the passport that should be inserted. So children can learn and understand the material well when conducting educational tourism activities in the museum with a passport. The main research questions are, (1) What features are included in the passport of Geological Museum Bandung? and (2) What do experts, teachers, and pupils think about the passport of Geological Museum Bandung?

METHODS

This research is a descriptive study that investigates the features of a passport and the opinion of experts, teachers, and pupils. It tried to analyze the features of the passport and give it the assessment. There were experts in Science Education and three Science teachers who were involved in analyz-

ing and reviewing the passport. Besides, there were five aged 7-10 years old who were involved in the interview. Five of them were museum visitors. Generally, the data was collected through kinds of instruments such as the rubric of assessment and interview questions. The data triangulation was conducted to conclude the findings.

RESULTS AND DISCUSSION

The Features of Passport

The passport of the Geology Museum consists of nineteen pages. The cover presents the character named *Si Cecep*, an abbreviation *Cepat* (fast), *Cermat* (accurate), *Pintar* (smart). The character was made to represent the value that wants to be built and also to attract the children.



Figure 1. The cover of the Passport There were nineteen pages of the passport. They consist of some

pages that require pupils to write or draw what did they see and think in the blank square as shown in the Figure 2. They are some spaces to record pupils' activities. The appearance of the pages allows pupils to write their understandings freely and be fun.



Figure 2. the space to record activities

On one of the pages, the passport also requires pupils to write their feeling when they were in an earthquake stimulator. Pupils wrote their feeling merely. There was a follow-up question, e.g., why did they feel afraid? Or what is the earthquake? Those follow-up questions were expected to rise up some reactions from pupils. The worksheet in the form passport did not be burden for pupils to enjoy their vacation in Geology Museum. At the end of the passport, pupils were asked their choices on the best spots in the museum as shown in Figure 3.



Figure 3. The space to say favorite spot

Opinion on Expert, Teachers, and Pupils

The science education expert said that the instructions contained in the passport were correct. This is because kindergarten pupils have limitations in communicating, especially in providing explanations. Their vocabulary is still very limited. The use of this passport should not be intended to collect data in the form of pupils' ability to understand science but should be a medium to communicate pupil interest in observing the phenomena presented in the museum. The use of emoticon icons is also a wise choice. However, this does not prevent pupils from providing a more complete explanation. This passport provides space for all pupils to record

their sensory activities in the museum. The sensory and motor development of kindergarten pupils is more important than the ability to understand scientific explanations. If the observation activities carried out by pupils are optimal, then communicating science in a complex language will be easy. Pupils will understand phenomena with reading comprehension (Liu & Liu, 2020).

Teachers have another perception that with the existence of a passport, kindergarten pupils have the first experience in communicating and documenting their observations even in a simple way. Kindergarten pupils may need a teacher's help in writing something in their passport. Teachers need to provide briefings or instructions to kindergarten pupils which may be done repeatedly. To conduct an assessment of pupil writing, teachers need to study harder because understanding the language of kindergarten pupils will be more difficult than pupils at other levels (Parisi-Moreno, Llonch-Molina, and Selfa, 2021).

The information obtained from the passport is their feeling when visiting the museum. The teacher said that after visiting the museum the teacher needed to take time to communicate

with the pupils. This time is considered appropriate because it is a way to collect the most memorable information for pupils as well as the most interesting because it is asked even though the observations have been carried out for a long time (Ivanova et al., 2020). After this session, the teacher will find it easier to correlate material content related to pupil observations in the museum so that learning becomes livelier and more enthusiastic (Wang & Jiang, 2020; Skalstad & Munkebye, 2021).

Meanwhile, the interview results showed that not all pupils were able to write what they understood, especially for kindergarten pupils. Some pupils showed their pictures in the space box. The interview gave us information that pupils enjoy their vacation in Geology Museum although they have to fill in the passport. The passport is easy to use and works well. Passports show how pupils construct pupils knowledge through the contained probing questions, even pupils were able to find out and reconstruct unintended knowledge. Basically, passport records pupils' understandings of the science phenomenon observed in the Geology Museum. This finding also proves that pictures can be an alternative to describe science

phenomena (Wigglesworth, 2017; Keifert and Stevens, 2019). This was an example of an interview on the history of dinosaurs.

Interviewer: Why do you love dinosaurs?

Pupil : They are huge and strong.

Interviewer: Why we didn't see them now?

Pupil : They dead. They fight.

The pupil who answered the question gave a love emoticon icon on the passport. It means that the passport already gave the contribution to pupils' thinking skills. The process of building science understanding was not instant. It takes time and needs a process. The use of passports gave teachers perspective on how to treat pupils well in the class.

Besides, pupils tend to like the activity sheets made by the teacher, then through the passport, all pupils can understand the directions given by the teacher and learning educational tours can run effectively because children get instructions directly from the worksheet.

Passport of children's activity sheets that will be used to facilitate children in learning so that they can understand the material well when conducting educational tourism activities at the geological museum of Bandung City. Besides being easy to learn by

children, the products developed are expected to be able to develop various aspects of children's skills including scientific skills through educational tours to the geological museum in Bandung.

CONCLUSION

Passport of Geology Museum could construct pupils' knowledge through the contained simple probing questions, even pupils were able to find out and reconstruct unintended knowledge by writing and drawing pictures. They had a fun and interesting

activity in the Geology Museum although they had to fill in their passport.

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