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# PROCEEDINGS



#### Theme:

"Enhancement and Acceleration on Research and Learning in Mathematics and Natural Sciences for the Utilization of Natural Resources"

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Prof. Dr. Cosmas Poluakan, M.Si. Dr. Rymond J. Rumampuk, M.Si. Dr. Anetha L. F. Tilaar, M.Si. Dr. Heroike D. Rompas, M.Si. Dr. Tinny D. Kaunang, M.Si. Dr. Hetty H. Langkudi, M.Pd. Dr. Alfonds A. Maramis, M.Si.

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### A STUDY OF ELEMENTARY SCHOOL OF SCIENCE LEARNING ALL BATUDAA DISTRICT OF GORONTALO

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#### Abstract

The purpose of this study was to determine: (1) how to design learning science teacher at elementary school all the District Batudaa, (2) the availability of instructional media science in elementary school all the District Batudaa, (3) the efforts of teachers to increase the interest of learners in a elementary school Sub district Batudaa. The research was conducted on teachers elementary school science subjects all the District Batudaa, Gorontalo district, by taking a sample of 36 people. The approach in this study is a qualitative approach with case study. Based on the analysis, it is concluded, (1) the condition of the teacher as the sole source of information for learning, (2) most of the elementary school all the District Batudaa not have a media availability maximum learning science, (3) a teacher at elementary school all the District Batudaa increased interest in learning science learners pursuing several things, namely: a) support and productive learning environment, b) learning environment that fosters improvement of independence, collaborative, and self-motivation, c) the needs of the student, the student's perspective, reflected in the study program, d) students are challenged and supported to develop critical thinking skills, and e) learning to connect students with the community and practices that are beyond the classroom.

Keywords: Teacher designing learning, instructional media, interest in learning

#### 1. Introduction

One of the subjects that also play an important role in the educational insights, skills, and scientific attitudes from an early age for children is teaching science. Science teaching in primary schools is shown basic learning to train students to think critically and logically in scrutinizing every phenomenon that occur in the environment around it. Samatowa (2003: 5) suggest some important aspects that need to be considered by the teacher in terms of empowering children in learning science, among others: (1) the importance of understanding that when you start learning activities, the child has had a variety of concepts, (2) the activities of children through various activities the real nature becomes the main thing in learning science, (3) in any science learning activities that ask an important part, even into the most important part of learning.

#### 1.1 Background

Selection of learning strategies based on the principles of efficiency and effectiveness in achieving the learning objectives and the level of involvement of learners. In connection with these ideas, the researchers have made observations regarding science teaching in elementary schools as well as the population in this study. Based on preliminary observations made can be argued that the implementation of science teaching in elementary schools all the District in Batudaa still faces a number of obstacles. The problems appear to still dominant among teachers in the learning process, the availability of props and practical implementation in science teaching is not optimal in all subjects in elementary school given by the class teacher, the teacher's ability to use props / media is still limited.

### 1.2 Research Objectives

The purpose of this research is to obtain information about: (1) Overview of designing learning science teacher at elementary school all the District Batudaa, (2) description of description of the efforts of teachers to increase the interest of learners in elementary school all the District Batudaa.

#### 2. Review of Literature

### 2.1. Elementary School Science Lessons

#### 2.1.1. Itself of Science

Judging from the physical science is the science that his study is a natural object with all its contents, including the earth, plants, animals, and humans (in Winataputra, 1992: 122). Winataputra (1992: 122) describes several roles science, namely: (1) provide sufficient knowledge to students to know and love the world at the time of their lives, (2) gives stock of practical knowledge, (3) instill attitudes to be applied in life everyday, and (4) gives stock of skills in addition to knowledge about science itself. Related to this, then Paolo and Marten (in Samatowa, 2003: 7) imposes limits on science teaching as observed activity, trying to understand what is observed, using new knowledge to predict what happens.

#### 2.1.2. Learning Science Concepts in Elementary School

The elementary school expected Mutual learning emphasis Temas (science, environment, technology, society) is aimed at learning experience to design and create a masterpiece through the application of science concepts and competencies scientific work wisely. according Ma'mun (in Iskandar, 2009: 100) explains that the learning process is a series of interactions between students and teachers in a series of goals.

#### 2.2. Media Learning Science of Elementary School

Instructional media is everything that people use to distribute roles. Susilana and Riyana argued that the media is an integral part of the learning system and therefore calls for changes in the other components in the learning process. Gagne (in Rahadi, 2003: 10) defines the media as a kind of environmental component that can stimulate their students to learn.

#### 2.3. Interests of Students Learning Elementary to Science

Based on the descriptions, then in this research interest in learning science is a source of motivation that will direct students on what they would do if given the freedom to choose in learning science. Therefore, the efforts of teachers to increase the interest of students should be directed to that, a) develop an attitude of learners are ongoing which gave patterns on selective attention so as to make himself the object of interest, b) floating feeling learners stating that a work activity or object is valuable or meaningful, especially for her and other efforts.

### 3. Research Methods

### 3.1. Place and Time Research

This study was conducted in all elementary school of district Batudaa Gorontalo district in 2009/2010 school year even three feet. All elementary school of Batudaa amounted to 12 school districts.

### 3.2. Approach and Types of Research

The approach used in this research is quantitative descriptive approach. This research is a case study to illustrate and analyze on (1) how to design learning science teacher at all elementary school of districts Batudaa, (2) the availability of instructional media science in all elementary school of Batudaa districts.

#### 3.3. Data and Data Sources

Data in the study consisted of: (1) Data about the image of teachers in designing learning (2) data availability science teaching elementary media.

#### 3.4. Data Collection Procedures

- 1. Observation (Observation) Learning Process direct general conditions all elementary school of Batudaa district and observe the learning situation.
- 2. Interviewing some of the principals, science teachers, and students in several elementary school districts throughout Batudaa.
- 3. Technical questionnaire / questionnaire is the principal instrument used to collect research data.
- 4. Documentation in the form of cameras, walkman, and diaries.

#### 3.5. Data analysis

Technical analysis of the data used in this study is technically qualitative data. The steps in analyzing this data is

- a. Presentation of data. In this section the data made into a set of structured information and providing the possibility of drawing conclusions and taking action.
- b. Withdrawal Conclusion. Inference is made to interpret the data descriptive analysis.

#### 4. Results and Discussion

#### 4.1. Results

#### 4.1.1. Data Research

Crawl data from respondents using questionnaires as the main instrument, in addition to the data obtained from observations and interviews.

#### 4.1.1.1. Teachers Designing Science Learning.

As for the draft to be prepared teachers are as follows: (1) Identify the general purpose of learning (2) Implement the learning analysis (3) Identifying the behavior of inputs and characteristics of learners (4) to formulate performance objectives (5) Develop test items reference benchmark (6) Develop a learning strategy (7) Develop and select learning materials (8) Design and implement formative evaluation (9) Revise learning material (10) Designing and implementing summative evaluation. Based on the above indicators, 53% of

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teachers stated are always designing learning science, 30% of teachers stated often, 11% of teachers stated occasionally, 5% of teachers stated sparse, and 1% never. This shows that the majority of all teacher in elementary school of Batudaa districts have the ability in designing learning science although there are also teachers who have not been designing science

## 4.1.1.2. Availability Media Learning Science

From the results obtained that 23 respondents or 63.89% stated that learning is used adequately increase the ability of learners. Instead, 7 respondents or 19.44% stated inadequate and 16.67% or 6 respondents said inadequate. Statement of 18 respondents stated adequate any learning activity undertaken sufficient to effectively utilize instructional media, 16 respondents said inadequate and 2 others declared inadequate. The third statement 27.78% stated that the contents of adequate instructional media already qualified in explaining any subject matter presented, 61.11% of respondents said inadequate and 11.11% said inadequate. The fourth statement 75.00% of respondents said inadequate that any media that is used to attract the attention of learners in the learning process and the implementation of the 25.00% of respondents said inadequate. Based on the percentage of over 45% of teachers expressed the availability of adequate media for learners in learning science, 42% of teachers stated inadequate, and 13% of teachers stated inadequate. This shows that the majority of all public elementary school districts Batudaa not have the availability of adequate media for learners in learning science.

#### 4.1.1.3. Efforts to Increase the Interest of Learners

Based on indicators that have been determined 59% said always working to increase the interest of students in learning science, 33% of teachers stated frequent often, 7% of teachers stated sometimes, 1% of teachers stated sparse and no teacher said never. This shows that the majority of elementary school teachers Batudaa districts throughout the country have the ability in an effort to increase the interest of students learning science.

#### 4.1.2. Research Findings

### 4.1.2.1. Teacher Designing Learning Science of Elementary School

Most public elementary school teachers all Batudaa districts have identified a common goal in designing the implementation of learning science teaching.

### 4.1.2.2. Availability Media Learning Science of Elementary School

Most public elementary school districts all Batudaa not have the availability of adequate media for learners in learning science.

### 4.1.2.3. Teacher Efforts to Increase the Interest of Learners

Teacher Efforts to Increase the Interest of Learners that students develop an attitude that makes him the object of interest selectively, develop feelings of students who express a worthwhile activity and develop a motivational state that requires direction behavior.

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#### 4.2. Discussion

## 4.2.1. Teacher Designing Learning Science of Elementary School

In the process of designing the learning, the teacher connects learning with the world, students are invited to think and act scientifically, Where students meet with new vocabulary, a new term, a new experience, formulas, and so on.

### 4.2.2. Availability of Elementary Science Teaching Media

Good learning media must meet several requirements, among others: should increase learner motivation, should stimulate learning to remember what they have learned in addition to providing stimulus to learn.

### 4.2.3. Efforts to Increase the Teachers' Interest in Learning Learners

Internal factors affecting the interests and learning activities, as well as a learning experience. This is an initial capital for students in further learning activities.

#### 5. Conclusion and Implication

#### 5. 1. Conclusion

- Learning in elementary school was designed to explore the world of the learners to use the language, the way of thinking, experience and knowledge of learners.
- 2 Most of the elementary school of Batudaa not have a media availability maximum learning science.
- 3. Can increase the interest of students in science learning.

#### 5.2. Implications

- Implications for science teaching in elementary school. The implication is that (a) setting a preliminary design study (b) learning orientation (c) Adjustment teaching materials (d) availability of instructional media science.
- 2. Implications for the learning environment of students. The implication is that (a) Perspective on learners (b) Management of the class.
- Suggestions. The elementary science teachers are encouraged to design a learning process that takes into account the competence of learners. Science learning so laden with concepts that require higher reasoning, in order to accomplish learning outcomes in optimal.

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This is to certify that

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