Analysis of Science Learning Problems in Elementary Schools

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Abstract: Problems are deviations between goals and results. In learning problems influenced by internal and external factors of students. This research method is descriptive qualitative approach. define and analyze narratively. Data through scientific studies reviewed and systematically analyzed. The results show that student problems, namely external factors, come from the family environment. that family Good will give birth to Student Which own character as well as motivation high learning. The school environment has a major role. Teacher as determinant achievement success student. Effort Teacher in increase interest in learning and student achievement including; methods, models, and agar media objective Study can achieve with optimal. Environment public own role form Student character in accordance with culture the people.

Keywords: Analysis; Problem Study; Science Learning

Introduction

Education base is series learning which prioritize understanding draft base (Herini et al., 2023). Draft learned with various effort For avoid misconception or error in understand context in learning (Taufik, nd) (Suparya et al., 2022). Study is effort For acquire knowledge. Learning serves to facilitate students obtain information learning (I. W. C. Sujana, 2019).

Learning in the classroom is inseparable from the activities of the teacher and students. The teacher plays a major role in providing correct information and clear. Education level base started from level age early will influence level next (Eka et al., 2022). Matter the demand Teacher education base own competence in designing A learning. So that learning more effective need approach Study, strategy method, model And Also means as well as environment study (Pane & Dasopang, 2017; Uno & Mohamad, 2022).

Science is the process by which research objects are examined, scientific products are sought and constructed, and technologies that make life easier are created as the application of scientific theories. IPA regulates not only a collection of knowledge in the form of facts, concepts or principles, but also the discovery process. Science learning in elementary schools plays an important role in learning science at the next level, because students' initial knowledge greatly influences students' interests and tendencies to learn science (Saputri, 2021; Widiana, 2016). Science education is one of the subjects that must be taught to students because learning science allows students to act scientifically to solve the problems they face (Rusnadi & Arini, 2013).

The teacher's efforts in learning aim to construct an understanding obtained student. Study Which done student characteristic concrete related with experience real they (Juwantara, 2019). So that Study is process build knowledge No memorize material. Besides that teacher must identify and reflect on science learning that has been done well from teachers themselves and students. In the process of learning many found problem. Problems Study the originate from student, Teacher And environment. Based on background behind the need something assessment related to problems in students and solutions as an effort Teacher as role main on education.

How to Cite:
Method

The method in this research is descriptive method. purity and analyzing narratively with a qualitative approach. Descriptive research is carried out by identifying information related to problems in the field to be explained clearly according to the stated objectives. Activities start with planning and data collection as a basis for research (Jayusman & Shavab, 2020).

Data analysis using literature review. Literature review is a method that is systematic, clear, and in identifying, evaluating, and synthesizing research results and ideas from researchers and practices that have been done before. The purpose of library research is to make an analysis and synthesis of existing knowledge on the subject under study to find empty space that is useful for further research (Ulhaq & Rahmayanti, 2020). Data is obtained by reviewing research sources in the form of journals, book reviews, studies, references and theories. The data will then be analyzed and described systematically, based on theory and empirical tests.

Result and Discussion

The results of the analysis that has been carried out show that problem education science level elementary schools are influenced by two main factors, namely internal factors on the student's personality as well as external factors that come from the environment. The most factor dominating, namely external factors originating from the family environment. The family will shape, color, instill character and become a determinant motivation in learning. A good family will give birth to a good child own character as well as motivation study which tall. Then new Environment school have a major role. The teacher as a determinant of student achievement and success. Teacher must capable in provide facilities learning to students with various their character. The teacher's efforts to increase learning interest and achievement students among them; learning methods, learning strategies, and learning media so that learning objectives can be achieved with optimal. Next Environment public own role form and as environment socialization good participant. Good environment own culture, Which Good will form student character as well as competent.

Learning problems in students are very diverse. diversity problem Study on student in accordance with level their education. Child age early Also own a number of problem Study they including: 1) difficulty study (Learning disabilities). Difficulty Study is exists distraction base One or more Which related with understanding, spoken and written language in children (Azis & Adila, 2019), 2) problem behavior child age early. A number of expert mention social (psychosocial) problems including fear, feeling lonely, quiet, easily discouraged, act aggressively, low politeness and manners as well as temperamental (Na’imah, 2020; Nur’Agami, 2019), and 3) low Skills student (Ghufron & Risnowita, 2015; Massitoh, 2021).

Difficulty Study (Learning disabilities) is problem fundamental on child age early. Difficulty Study related with low level read, write And counting on child (Ridhani, 2022). A number of factor cause of learning difficulties namely factor internal child and factors external. As for the child’s internal factors, namely: low learning motivation, hyperactive, hypoactivity, and genetics. External factors of children's learning, namely: environment, pattern foster, traumatized, nutrition/health, culture, And stimulation. Factor internal and external each other related and influence. Motivation Study student Which low can caused environment Which number so much education. This is also due to low stimulus, wrong parenting. Parenting the wrong thing often happens to parents who have wrong views also. Child for person old Which economic low raised with pattern sober And oriented on physical (Armindita & Firmansyah, 2023). Oriented physique meaning that they will grow up to become workers with physical strength only (Hanim & Ahlas, 2020). In contrast to children for the economy enough (Utaminingsih, 2021). Person old Which own economy Enough precisely tend indulge, so that competitive on self child and power fight low Which resulted motivation low.

Factor external can have an impact on child Which hyperactive or hypoactive. Children who are hyperactive will find it difficult to concentrate in such a child’s learning hypoactive Also will difficult motivated in study (Tentama, 2009). Environment who have poor social interaction, speak harshly, are tolerant low, and no tolerance resulting in children who are hyperactive or child Which trauma (Amka, 2021). Child can traumatized deep If environment condescending or bully (Zakiyah et al., 2017). A culture that has politeness will create children who are polite and on the contrary. Factor other that is health, health child Which equipped with adequate and balanced nutrition will develop children both physically and cognitively. It would be different in an unfulfilled child balanced nutritional intake will cause stunting, which will have an effect on motion psychomotor and psychological (Arda et al., 2023). Factor the growth and development of this child will affect the child for a long time or even be character for child (Siswanto, 2014).

The low Skills child including: Skills speak, numeracy skills and writing skills. It is influenced by
factors internal student And external that is: Teacher And environment learn. Factor internal as discussed in on like motivation, problem, psychology, and genetics covers physique and psychic from family. Factor Teacher And the learning environment is the main cause of the occurrence or obstruction of learning learning child educate. Teacher on child age early must own a number of things including: the ability of this Early Childhood Education Model (A. Y. Sari, 2020), own Skills choose, make And apply media on child educate (Siregar et al., 2020), serve learning with method in accordance with psychology child, election material teach Which appropriate (Shaleha & Yus, 2020), and media selection Which appropriate For child age early (Listia, 2017).

Besides a number of competences which must There is on Teacher AUD matter most important that is curriculum. Curriculum Which arranged on AUD must consider growing the flower. If the curriculum is implemented on AUD no appropriate precisely will add burden on child And cause new problems in children (Siswanto, 2014). Child characteristics age early that is learning Which packed with various modeling. Modeling that is common in early childhood is learning and playing (Nasution & Simaremare, 2019). With Study And play will get two things in children namely cognitive and psychomotor training namely Study And move. In game also educate for attitude Be patient, discipline, and try.

Skills read on child can improved with media. One of the media used in improving reading skills child age early that is media picture. The use of puzzle media which was researched by Nurlilawaty et al. (2019) can improve early reading skills in students. Influence letter cards on reading skills child start age early (Izatusholihah, 2021). From several empirical tests to prove the media and play become A method as effort enhancement Skills read child age early.

Skills write can trained with method activity fingers painting (Children can make doodles to resemble letters, numbers, shapes and pictures. Besides fingers painting skills write can improved by writing steps repeated so that the child’s skills age early can trained and increase (Mustari et al., 2020). Skills Early childhood writing can be improved with the SAS learning method with cards in the read and mathematic corner area. From opinion researcher earlier that enhancement Skills can endeavor with activity fingerpaint, write return, And method SAS use media card.

Counting skills in early childhood can be trained in a number of ways play. The game used is a number circle game improve numeracy skills. As for the steps, students are given cards circle number, child introduced number with pointing card And mention, Then child start pointing And mention number, on initial stages numbers 1 to 5, 6 to 10 and so on (Oktriyani, 2017). Besides That Also can improved with media videos animation Which proven increase Skills numbered child age early (Oktriyani, 2017). Skills counting can trained And improved with media scientifically based computers as carried out by Listia (2017) are capable increase Skills counting student use media computer.

Learning problems are not only in early childhood. On students too own problem Study Which diverse. diversity problem study on student school base including: interest Study, skills speak which low and ability mathematical Which low. Factor Internal factors are the factors of the students themselves, namely physical factors (physical and health), psychological factors (psychological: interest in learning, talent and motivation), and factor fatigue physique student. In line matter that Imamuddin et al. (2020) internal factors lie in the realm of creativity (cognitive), the realm of taste (affective) and the realm of intention (Psychomotor). As for external factors including: teachers, curriculum, facilities, social environment and judgment. The same thing was explained by (Imamuddin et al., 2020) that the factor external learning problems, namely the family environment, school environment and environment public. Factor internal from student physical and psychic very influenced factor external. Factor physical health physique and development is determined by the family. In the early physical years of the child fulfilled nutrition in a manner balanced will prevent lateness development or known with term stunting (Mustika, 2018). In addition to the physical also affect the psychological or intelligence because slow cognitive development of children. Environmental factors play a big role family for example is education beginning on child. In family the child will learn the language, namely the mother tongue, learn attitudes from the father and mother, and Skills Which Also obtained from father, mother, and older brother. Environment family Which polite will give birth to child which polite thereby also on the contrary.

Environment school or education formal is environment Study for student Which arranged for reach objective Study. School serves as a forum for the formation of knowledge, attitudes and skills on students. Elementary school has a function to provide knowledge concepts base, planting attitude as well as character Which Good, And Skills base which will developed next level. Elementary school education must continue to be improved. When a concept that If an error is received, it will affect the level next or even on life student. Teacher school base must capable give learning Which capable increase motivation student learning. Because with their own strong will on students will
make learning easy. Teachers must be able to present information that is concrete so that no happen misconception or error understanding draft on student (Kusworo & Islamiyah, 2019).

Environment public is environment social which very affect on student learning. As well as influence also on motivation Study student. Environment public Which looked low education or think education needs to be expensive and so on. That matter will affect the low motivation or desire to learn children, besides that influenced factor economy family which urge child for stop study and must work. Environment will coloring attitude student, like clean village environment will create students who care about cleanliness. Conversely students in slums will cause children will be indifferent to cleanliness. Rude environment attitude in saying, no polite and etc also will coloring attitude student.

Various problem study, factor internal, and internal on student become a challenge to a teacher as the holder of learning control on students. With various previous factors it is necessary to take steps, efforts or solutions made by the teacher in learning. Where is learning not centered on teacher but study centered on student. Efforts are made with a contextual model that is construct learning with the real world of students (Suci et al., 2012). In line with study (Sulastri, 2016) learning contextual can improve motivation and student learning outcomes. As done by Wibowo et al. (2022) the application of project-based contextual models can improve student learning outcomes. Application model learning contextual based problem done that with model contextual based problem can increase motivation and think critical student.

Learning media is a tool to support models, methods or strategies learning to achieve more optimal learning goals. Appropriate learning media will increase student motivation. Motivation related tightly with student learning styles so that teachers must be able to concoct a lesson to students according to their learning style (Wibowo, Rahman, et al., 2022). Media function construct understanding on student. Where learning constructivists view that knowledge, attitudes and skills it is not possible to get it installed, but build it gradually (Budyastuti & Fauziati, 2021).

Sciences is a field of science that is directly related to human life and studies everything that exists in the universe. Students who have studied science are expected to be able to understand scientific concepts related to natural phenomena, apply them in real everyday life and develop skills to equip students with a scientific attitude. Teachers usually use conventional methods, media to support the learning process and student activities (Safira et al., 2020).

Elementary school students are in the concrete activity stage, at this stage children develop logical thinking, and are still very attached to observational facts, meaning that children can think logically, but are still limited to concrete objects and know how to do conservation. For example, the characteristics of elementary school students include: 1) like to play; 2) enjoy activities that are full of movement; 3) socialize. This shows that the teacher should plan a serious but relaxed learning model, do a lot of moving activities and study in groups.

Internal factors that cause elementary school students to learn science subjects include interest, motivation, self-confidence, study habits and ambition. External factors that affect students are: the number of foreign terms, the material is too dense, students feel they have to memorize material, learning facilities are limited, students have difficulty understanding material without media access, the teacher dominates the learning process, the mastery of the teacher's material concepts is weak and too monotonous. The problem with internal factors in learning science for elementary students is that the material is difficult and less interesting to learn. Science material presented in textbooks is such that it looks complicated and less attractive, thereby reducing students' interest and motivation in learning. Teachers are not very fluent and effective in using learning models or methods. Teachers are used to using traditional learning methods, a learning environment that supports the learning process and the lack of student activity in class causes low learning outcomes (Safira et al., 2020). The teacher is the spearhead of learning. The learning process without preparation and study plans will cause students to obtain optimal learning outcomes. Even though the teacher chooses the cooperative learning model, the type must be adapted to the material (Zahroh et al., 2020). The basic problems of learning science in elementary schools are 1) the teacher's learning model that uses mindsets and comfort zones; 2) the teacher's ability to observe student characteristics in implementing learning media; 3) Lack of existence of laboratory facilities and/or infrastructure to improve the quality of learning; and 4) availability of learning resources, flexibility and affordability of learning resources, as well as the existence of science education facilities and/or infrastructure in elementary schools.

Parents are external factors that play a very important role in life student. The entire reflection of a student comes from the family. Guidance parents as well as motivation and accompaniment to student very important matter the because parental responsibility is absolute. Environment society also colors the youth's manners, character, and motivation to learn.
colored public. Student Which life among education will be more motivated to learn. Students who are in a market environment will be motivated to develop business skills. Even children who live in the world of the night will also have the same character similar. But as teacher should be able to become tutor which reliable as system among taught father education national Ki Hajar Dewantara, in front give example, in the middle gives motivation, and behind gives encouragement. Middle school teachers can collaborate between homeroom teachers, subject teachers and guidance counseling teacher. So that any student learning problems can try the solution.

Teachers must know every characteristic of children at elementary school age so they can know the condition of their students. The characteristics of student development are: intellectual and emotional, language, social, moral and attitude, religious awareness, as well as physical and motor. Efforts that need to be made to achieve the developments that occur in elementary school students, teachers need to develop learning activities that provide concrete experiences. The model used is contextual (I. M. Sujana, 2016), a problem-based learning model, a problem-based model projects (R. T. Sari & Angreni, 2018), and so on. Through the right model can increase motivation to learn, improve critical thinking towards problem, think creative to project, and enhancement draft in context and constructed, so that learning outcomes will be optimal. In addition, the model or method that is very close and important in learning is the media. The form of media means conveying learning information from the teacher to his students. As for media Which can overcome problem Study, including: e-modules (Laili et al., 2019), animation media (Sukiyaya & Sukoco, 2013), presentation media, interactive media (Syabri & Elfizon, 2020), video media (Nurwashidah et al., 2021), KOMSA media (Science Comics) and multimedia. These various media have the advantage of making it easier for teachers and student in activity Study. And media the proven in a manner empirical can overcome clear the land Study.

Traditional (teacher-centered) learning methods that are commonly used do not provide students with direct and flexible experiences. PBL (Problem Based Learning) is a teaching and learning activity that requires students to think and solve problems directly. The teacher gives material to students related to the problem given, but students must seek new knowledge to solve the problem. The steps of the PBL model that encourage students to actively participate in learning are given by presenting problems to students to manage their knowledge in order to successfully apply thematic learning models. Therefore, the PBL model is effectively applied to science learning in elementary schools (Amris & Desyandri, 2021).

Conclusion

Results analysis show problem elementary school students in science learning are influenced on factor internal from self-student and external. Factor external coloring factor internal student. One of the problems of low influential learning motivation on ability, Skills And achievements results Study. Teacher demanded capable look for solution problem Study with step learning Which innovative, creative, so that learning objectives can be optimal. This research expected give contribution in identify part small problem in learning science in elementary schools.

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