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Overview of State High School Biology Teacher Learning Jeneponto District

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ABSTRACT: This research aims to determine the description of the teaching and learning process and the problems faced by biology teachers at Jeneponto Regency State High School in teaching biology learning material in class. The method used was a survey using a questionnaire instrument given to 24 biology teachers at Jeneponto Regency State High School. The data obtained was analyzed descriptively qualitatively using SPSS. Based on the research results, it shows that as many as 37.5% of teachers use a constructivist biology learning approach, 25% of teachers use a behavioristic biology learning approach, and 37.5% of teachers use a contextual biology learning approach. 54.17% of teachers have obstacles in implementing biology learning approaches. As many as 87.5% of teachers understand the syntax of the learning model used. As many as 62.5% of teachers use questions in the form of essay tests to measure students' abilities. The results of the analysis in this research can be used as a reference for alternative improvements in biology learning. It is hoped that teachers will always strive to improve the biology learning process in improving student learning outcomes.

Keywords: Learning, Biology, Teacher.

INTRODUCTION

Teachers play a very important role in learning, because teachers are the spearhead in implementing the teaching and learning process in schools (Buchari, 2018). Teachers and students are very dominant determinants in the learning process in general, because teachers and students are very important in the learning process (Setyawan et al., 2020) . The current demand for teachers is to facilitate enjoyable learning for students, both in terms of content, process and student learning styles (Mastuti et al., 2022). Teachers play a very important role in helping students to realize student development (Mursalin & Nurmasyitah, 2017). In managing learning in the classroom, teachers play an important role, because teachers are the implementers of the teaching and learning

process so that success in the learning process determines the quality of the teacher himself (Buchari, 2018).

Lack of understanding of student learning can be caused by several factors. One of them is the lack of role of teachers in the learning process at school which can cause students' understanding to decrease. The role of teachers in the classroom is still very necessary because students still lack the ability to understand what they see and hear (Yestiani & Zahwa, 2020). Teachers and students are very dominant determining factors in general education, because teachers and students play a role in the learning process, where the learning process is the core of the overall educational process which aims to change children's behavior (Buchari, 2018). Teachers play a very important role. Teachers are the implementers of the teaching and learning process so that the success of their teaching really determines the success of education in general. The results of theoretical studies show that learning management in teachers' functional duties will be carried out effectively and efficiently if teachers are able to carry out their role as managers of instruction in creating learning situations through the use of teaching and learning facilities (Buchari, 2018).

Learning is a process of teacher interaction with students and learning resources in a learning environment (Yestiani & Zahwa, 2020). The learning process aims to improve students' abilities and must be carried out optimally through structured and measurable steps (Setiawan, 2019b) . Improving the quality of teacher learning which is currently the reference is by changing the teacher learning process in favor of students (Mastuti et al., 2022). In order to achieve effective learning, what needs to be considered is the role of the teacher in learning. Teachers must condition students, provide motivation, and become facilitators in learning (Nurzannah, 2022). One of the lessons that is an important concern in this research is biology learning. Biology is a branch of science, so what applies in science also applies to biology (Paidi, 2012).

Innovative learning has the potential to increase student engagement and academic performance by making learning more interactive and placing the focus on each student (Mantasiah et al., 2023). Learning can be interpreted as an effort to influence a person's emotions, intellectual and spiritual abilities so that they want to learn with their own will (Tibahary, 2018). Learning has implications in improving strategies for teachers and strategies for students (Purwadhi, 2019).

Learning biology is not just about studying content, but a process so that students don't just know a number of facts, but students are able to use this knowledge in their daily lives. (Arwita et al., 2016). Students' difficulties in learning biology are caused by several factors, including the teacher's teaching style and students' learning habits (Cimer, 2012). Biology learning should not be taught solely as facts and ideas (Redjeki, 2010). Learning biology is considered a difficult subject because there is a lot of material, it has to be memorized and it is identical to Latin. Students often take different ways in the biology learning process to understand the same subject matter (Nurlia et al., 2017).

Teachers' biology learning can enrich students' thinking abilities, develop abilities, consider, improve students' social skills, and better understand the impact of developments in science and technology (Arwita et al., 2016). Science learning has the characteristics of actively involving students, a collaborative approach, and emphasizing students' academic competence (Arwita et al.,

2016). Learning strategies must be determined and developed well to train students' scientific literacy, including explaining natural phenomena, constructing and evaluating experiments, and interpreting data obtained from scientific evidence (Setiawan, 2019a).

The reality in the field shows that there are still many teachers who play a more active role in the learning process. Students have not been directed to become active and independent learners (Arwita et al., 2016). In the learning process, teachers ask more questions than students, even though students are encouraged to ask questions (Widodo, 2010). Empirical data relating to the description of the learning process that occurs in schools causes a lack of our knowledge about what happens in the classroom (Widodo, 2010). The importance of knowing the reality of the biology learning process in the classroom is the basis for developing biology learning. Teachers have professional competence, are educated and trained, and have experience in their field, namely mastering teaching strategies, designing learning activities, and being able to organize classes (Mantasiah et al., 2023).

The learning system used by educators in Indonesia basically still uses conventional methods. This is because there is no creativity carried out by teachers in the use of learning methods implemented in the classroom. Usually teachers still predominantly use lecture and memorization methods, which makes students bored during learning (Hasriadi, 2022) . Learning success is determined by various factors, including the teacher. In carrying out the learning process, teachers need to make various preparations and select learning tools so that students can understand the material easily, learning is fun, students are active and interactive with each other (I. K. Sari, 2021). Teachers, as the main agents in the learning process, need to follow these developments and improve their professional competence to face the challenges of this digital era. Implementing innovative learning models is one approach that can help teachers improve professional competence (Lestari & Kurnia, 2023).

This survey research aims to see how the learning process is, both in terms of implementation and evaluation of biology learning at Jeneponto Regency State High School. The results of this research can be used to develop a better learning process.

Formulation of the problem

As explained in the background, teachers play an important role in the learning process that takes place in the classroom, therefore teachers are the center of attention in carrying out main tasks such as choosing learning strategies and approaches, learning models, as well as evaluating student learning processes, so that learning objectives can be achieved well. However, there are still many facts in the field that biology teachers use traditional learning such as lectures and do not use learning models that are appropriate to the context of the subject matter. Therefore, researchers want to know the description of the biology learning process that occurs at Jeneponto State High School. Based on this background, the problem can be formulated as follows:

The problem formulation in this research is:

1. What percentage of biology teachers use constructivist, behavioristic and contextual learning approaches
2. Are there any obstacles for biology teachers in using learning approaches?
3. What form of learning evaluation is used by district high school biology teachers? Jeneponto?

METHOD

The type of research used in this research is a survey method with a qualitative descriptive approach. This research was carried out in the even semester of the 2021/2022 academic year. The population of this research is all biology teachers who teach in high schools in both private and state schools in Jeneponto Regency. The sample in this study was 24 teachers who taught in public and private high schools. The instrument used to collect data is in the form of a questionnaire containing the profile of high school biology teachers, implementation of the biology learning process, application of biology learning models, and evaluation of the learning process used by high school biology teachers in Jeneponto Regency which are then filled in by respondents or high school biology teachers. Next, the research data was recapitulated and analyzed descriptively qualitatively with the help of SPSS so as to get an overview of biology learning at Jeneponto Regency High School.

RESULT AND DISCUSSION

Implementation of Biology Learning

The implementation of learning described in this section includes the approaches and strategies used, obstacles in implementing learning, and evaluation of learning.

The approach used by Jeneponto Regency High School biology teachers in the teaching and learning process can be seen in Table 1.

Table 1. Percentage of Learning Approaches used by Jeneponto Regency High School Biology Teachers

No	Statement Items	N	Results (%)
1	Teachers who use a constructivist biology learning approach	9	37.5
2	Teachers who use a behavioristic biology learning approach	6	25
3	Teachers who use a contextual biology learning approach	9	37.5
Total		**24**	**100**

Based on information collected through observations regarding the percentage of obstacles for Jeneponto Regency High School biology teachers in implementing the learning approach, it can be seen in Table 2.

Table 2. Percentage of Barriers in Implementing the Learning Approach for High School Biology Teachers in Jenepnto Regency

No	Statement Items	N	Results (%)
1	There are obstacles in implementing a biology learning approach	13	54.17
2	There are no obstacles in implementing the biology learning approach	11	45.83
	Total	**24**	**100**

Learning Evaluation

The learning evaluation described in this research is in the form of questions used by Jeneponto Regency High School biology teachers to measure students' abilities.

Based on information collected through observation regarding the percentage of question forms used by Jeneponto Regency High School biology teachers, it can be seen in Table 3.

Table 3. Percentage of Question Forms Used by Jeneponto Regency High School Biology Teachers

No	Statement Items	N	Results (%)
1	The form of questions used to measure students' abilities is multiple choice	9	37.5
2	The form of questions used to measure students' abilities is in the form of a description test	15	62.5
	Total	**24**	**100**

The implementation of learning that will be discussed in this section includes the approaches and strategies used, obstacles in implementing learning, and evaluation of learning.

Based on the results of a survey of Jeneponto Regency High School biology teachers, it was revealed that the approaches, models and strategies that are often used by Jeneponto Regency High School biology teachers in the learning process vary greatly, namely Contextual, Constructivist and Behavioristic approaches. Recapitulation of the results of Jeneponto Regency High School biology teachers' answers in Table 2 shows that 37.5% of teachers use a constructivist and contextual biology learning approach, while 25% use a behavioristic biology learning approach. This shows that the learning approaches used by biology teachers vary depending on the needs for teaching materials outlined in the learning plan (Lutvaidah, 2016). Each learning approach has certain characteristics, and is different from others according to the function and objectives of each approach (Lutvaidah, 2016).

Approaches, strategies, methods and techniques are components of education that support the professionalism of teachers or school education personnel. The success of implementing education is very dependent on the teacher's ability to choose an approach to plan a strategy mastery learning program, choose and determine methods according to the material and techniques in teaching (Harisnur & Suriana, 2022). Choosing to use various strategies and

approaches is very important because it determines whether the learning process will run well in the future. Because the cognitive and affective aspects of learning objectives have different characteristics but are related to each other (Anggraeni, 2019).

According to the biology teacher at Jeneponto Regency High School, the reason for using contextual learning is because the school has learning resources that support the learning process and can be used directly by students, so that students can understand what they are learning and the learning process becomes meaningful (S. M. Sari et al., 2021). The contextual approach (contextual teaching learning) is a learning concept that emphasizes the connection between learning material and real life, so that students are able to connect and apply learning outcome competencies in everyday life (Sihono, 2004; Yerizon et al., 2019). The teacher's main task is to make learning easier for students by providing adequate learning facilities and resources (Yestiani & Zahwa, 2020). Teachers not only deliver learning material in the form of memorization, but organize learning environments and strategies that enable students to learn (Sopian, 2016; Vermunt et al., 2023).

The constructivist approach is often used by biology teachers at Jeneponto Regency High School. According to the biology teacher, using a constructivist approach, students can actively participate in the learning process, students can develop their learning process independently, and students have the ability to develop their own knowledge. Constructivist learning includes collecting data, formulating and testing hypotheses, and working together in groups, inviting students to visit locations outside the classroom (Tsai et al., 2023). The constructivist learning model is a view of the learning process in which the learning process begins with the occurrence of cognitive conflict (Sundawan, 2016).

Constructivist learning, students build their own knowledge, find steps in finding solutions to material that must be mastered by students, both individually and in groups (Kiliç & Gürdal, 2010). Constructivist learning emphasizes that in the learning process, students can build knowledge with new knowledge acquired (Santos & Castro, 2020). The constructivist character requires students to build their own knowledge, so that students have competencies that can be empowered in their own learning process (Fatih Ayaz & Şekerci, 2015). The characteristics of constructivist learning are (1) active learning; (2) is authentic and situational; (3) interesting and challenging; (4) linking old knowledge with new information; and (5) reflecting knowledge (Kumar Shah, 2019; Masgumelar & Mustafa, 2021).

Based on the results of the analysis in Table 2, it is clear that some teachers (54.17%) have obstacles in implementing the biology learning approach and the remainder (45.83%) have no obstacles in implementing the biology learning approach. According to biology teachers, the obstacle in implementing a biology learning approach is the difficulty in determining the methods and media used in biology learning. In the learning process carried out by teachers, there are many kinds of problems or difficulties faced, one of which is processing the teaching materials presented in the learning process and preparing learning tools which must be in accordance with the applicable curriculum (Munawir et al., 2022; Ubaidillah et al., 2022).

Management of learning in the classroom can be done by varying teaching methods and adjusting the sub-topics that will be taught in the class (Hasan, 2015) . Difficulties commonly experienced by teachers include teacher readiness in developing lesson plans, material to be studied, preparing

teaching materials, use of learning methods or strategies, and learning assessment or evaluation techniques (Rahmi et al., 2023). The application of appropriate learning models can foster students' attention and enjoyment of lessons, increase and foster students' motivation to do assignments, and understand students' lessons well (Auliah et al., 2023). In implementing learning, the teacher has carried out all the stages in learning as stated in the RPP. However, teachers experience obstacles in the use of learning media which are still less available, the choice of learning methods is less varied, and the management of material to be given to students is still not adapted to each student's ability level (Wahyuhastufi, 2016).

Learning evaluation is very important in a learning process. Based on the results of observations on biology teachers at Jeneponto Regency High School, it shows that 37.5% of teachers use multiple choice questions to measure students' abilities, and 62.5% of teachers use questions in the form of essay tests to measure students' abilities. The teacher's ability to manage the learning process determines student learning outcomes (Pandiangan et al., 2018). In learning there is an evaluation process, an educator cannot be separated from the use of instruments. This instrument has a very important function and role in determining the effectiveness of the learning process (Edelenbos & Buuren, 2005). The evaluation process includes two things, namely measurements and tests (Taşdemır et al., 2009) . When conducting an evaluation, educators must carry out measurements in which they must also use tools commonly called tests. Evaluation is an identification activity to see whether a program that has been planned has been achieved or not, is valuable or not, and can also be seen to see the level of efficiency of its implementation (Fadilla et al., 2023).

CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that the learning approaches used by biology teachers in the learning process vary greatly. 37.5% of teachers use a constructivist and contextual biology learning approach, while 25% use a behaviorist biology learning approach. Some teachers or as many as 54.17% had obstacles in implementing a biology learning approach and 45.83% had no obstacles in implementing a biology learning approach. In general, biology teachers in evaluating students' abilities use instruments in the form of essay tests.

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