

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Students Worksheet

a. Definition of Student Worksheet

Trianto (2010 p. 222) states that the student activity sheet guides students who are used to carrying out investigations or problem-solving. The worksheet contains activities that students must do to maximize understanding to form an essential ability according to specific achievement indicators. Majid (2006 p. 176) suggests that student worksheets are sheets containing assignments that students must do. Student worksheets contain instructions or steps for completing a task based on an essential competency.

According to Prastowo (2011 p. 204), a worksheet is printed teaching material in the form of paper sheets containing material, summaries, and instructions for implementing learning tasks that students must carry out, referring to the essential competencies that must be achieved. According to Susanto (2009 p. 1), student worksheets are teaching materials packaged so that students can learn the material independently.

b. Functions and Objectives of Worksheet

According to Prastowo (2011 p. 205-206), there are at least four functions of the worksheet, namely:

1. Minimizing the role of the teacher but can activate the role of students,
2. Make it easier for students to understand the material provided,
3. A concise and task-rich learning resource for practising,
4. Facilitate the implementation of the learning carried out.

The objectives of the preparation of the worksheet include:

1. Make it easy for students to interact with the material being taught,
2. Presenting tasks that improve students' mastery of the material given,

3. Train the independence of students in learning,
4. Make it easy for teachers to give assignments to students.

c. Requirements for preparing a worksheet

According to Hendro and Jenny (Depdiknas, 2008), good quality worksheets meet didactic requirements, construction requirements, and technical requirements.

1. Didactic terms

The existing worksheet must follow the principles of effective learning, such as:

- a. Pay attention to individual differences so that a suitable worksheet is a worksheet that all students can use differently.
- b. Emphasizes the process of finding concepts to serve as a guide for students, not containing material direct given.
- c. Has a variety of stimuli through various media and student activities to do something such as writing, drawing, having a dialogue with friends, using tools, touching natural objects, and so on.
- d. Can develop social, emotional, moral, and aesthetic abilities so that the learning activities carried out are not only aimed at recognizing academic facts and concepts.
- e. The students' personal development goals determine learners' learning experiences.

2. Construction requirements

In the student worksheet, the use of language, sentence structure, vocabulary, level of difficulty, and clarity must be practical to be understood by the parties using it.

- a. The worksheet must use language appropriate to the age level of students.
- b. The worksheet uses sentences with clear structures.
- c. The worksheet has a sequence of lessons or material following the ability level of students.
- d. The questions that exist are not too open-ended; the recommended questions are fields or answers obtained from information processing.

- e. The sourcebook that is the reference must be in the readability of students.
- f. The worksheet provides a place to provide flexibility for students to write or draw the things they want to convey.

3. Technical requirements

Emphasize the writing, pictures, and appearance of the worksheet compilers,

- a. Writing is used in the worksheet must pay attention to the following matters.
 - 1) The worksheet uses printed letters and does not use Latin or Roman characters.
 - 2) The worksheet uses big, bold letters for writing topics.
 - 3) The worksheet uses a matching ratio of letters and pictures.
- b. Pictures can convey the content or message of the image effectively.
- c. Worksheet appearance must be made attractive.

2.2 Learning Effectiveness

a. Definition of Effectiveness

Effectiveness generally shows how far a predetermined goal is achieved. Following the definition of effectiveness, Moore D. Kenneth in Moh Syarif (2015 p. 1), the effectiveness of a measure which states how far the target (quantity, quality, and time) has been achieved, or the meaning of the percentage of the target achieved, the higher the effectiveness.

In teaching activities, there is the ability to analyze student needs, design effective and efficient learning, activate students through experimental and intrinsic motivation, evaluate learning outcomes, and revise subsequent learning to be more effective to improve student learning achievement.

The definition of effectiveness can be concluded that effectiveness is a measure that states how far the targets (quantity, quality, and time) have been achieved by management, which targets have been determined in advance. It can be matched in learning how far the learning objectives set can be achieved by achieving quantity, quality, and time. In learning activities, it is necessary to consider the

effectiveness, meaning the extent to which the objectives set can be achieved as expected.

b. Characteristics of Effectiveness

According to Firman (1987) states that the following characteristics characterize the effectiveness of the learning program:

1. Successfully led students to achieve the instructional goals that have been determined.
2. Providing an engaging learning experience involving students actively to support the achievement of instructional goals.
3. We have facilities that support the teaching and learning process.

Based on the characteristics of an effective learning program described above, the learning program's effectiveness is not only viewed in terms of learning achievement levels. However, it must also be viewed in terms of processes and supporting facilities.

c. Effectiveness Criteria

Susanto (2007) explains that the effectiveness of learning methods is a measure related to the success rate of the learning process. Effectiveness can be measured by looking at students' interest in learning activities. If students are not interested in learning something, they cannot learn the subject matter. Conversely, if students study according to their interests, it can be expected that the results will be better.

The effectiveness of the learning method is a measure related to the success rate of the learning process. The effectiveness criteria in this study refer to:

- a. Completeness of learning can be complete if at least 75% of the total students have obtained a value of ≥ 60 in improving learning outcomes.
- b. The learning model effectively increases student learning outcomes if, statistically, student learning outcomes show a significant difference between initial understanding and post-learning understanding (significant gain).

- c. The learning model is effective if it can increase interest and motivation if, after learning, students become more motivated to study harder and obtain better learning outcomes. As better as students learning in pleasant conditions.

So learning completeness is defined as an approach to learning that requires students to master all competency standards, essential competencies, and predetermined indicators. Completeness of learning can be seen individually or in groups.

2.3 Perception

a. Definition of perception

Perception, in general, is the process of acquiring, interpreting, selecting, and organizing sensory information. In psychology, perception can also be defined as the process of acquiring, interpreting, and organizing sensory information about other people. According to Sarwono (2011), what is obtained, interpreted, selected, and regulated is sensory information from the social environment, and the focus is on other people.

According to Telford (2008), perception is perceiving other people and what makes a person recognizable. Through perception, individuals try to find out about other people. Perception can also be interpreted as learning about how individuals form impressions and make conclusions about other people.

Perception is a stimulus process that can come from outside the individual and come from the individual concerned. According to Richard (2008), perception contains integrated activities, everything in the individual, such as experience, thinking ability, and other aspects will play a role in perception.

Based on the explanation of the theory above, it can be concluded that perception is a view or assessment of oneself, of others, obtained from learning and experience that motivates individuals to interact or behave with the surrounding environment in the hope that it can be beneficial to the environment.

b. Perceptual Aspects

According to Robbins (in Yazid, 2017), each person's perception is different because of evaluation indicators as a response to external stimuli captured by the senses. These aspects are divided into two kinds, namely:

- a. Acceptance is an indicator of the occurrence of perception in the physiological stage, namely the functioning of the senses to capture stimuli from outside the individual then evaluates.
- b. Evaluation is stimuli from outside captured by the senses, then evaluated by the individual. This evaluation is very subjective. Individuals judge a stimulus as something complex and tedious. However, other individuals rate the same stimulus as something good and pleasant.

Based on the description above, it can be concluded that aspects of perception absorbing or capturing stimuli or objects outside the individual by observing, understanding the objects that have been previously absorbed and left an impression, and assessing the overall object by comparing insights and experiences that individuals believe in.

c. Factors influencing perception

Sarwono (2011) stated that several factors influence a person's perception, namely:

- a. Attention, it does not capture all the surrounding stimuli at once but focuses only on one or two objects. The focus of attention between one another will cause differences in perception.
- b. A person's mental readiness for stimuli that will arise.
- c. Needs, momentary or permanent needs in the individual will affect the person's perception. Different needs will cause different perceptions for each individual.
- d. The assessment system, it applies in society, also affects perceptions.
- e. Personality type; it patterns possessed by individuals will produce different perceptions. Forming perceptions are influenced by individuals with one another or with one group with another group.

2.4 Relevant Research on Investigating The Use of Students' Worksheets

Research related to this title: "Riza (2007), *"Meningkatkan Motivasi Belajar Siswa Dengan Penggunaan LKS Mata Pelajaran Kebudayaan Islam Kelas IV MDA Darussalam Pasir Pangaraian"*. Based on the results of data analysis, it can be seen that the qualitative average percentage of student learning motivation has increased before the action, the result is 49.1%, and after the action, the result has increased by 70.9%, where it shows that worksheets can increase students motivation. Besides that, it is essential if the teacher implements the worksheets by the planned provisions.

Jannati, 2015. *"Pengaruh Penggunaan Lembar Kerja Siswa (LKS) berbasis Keterampilan Generik Sains Terhadap hasil belajar biologi siswa"*. From the results of research with data analysis test using t-test, at the significant level of 0.05, the results obtained $t_{\text{count}} (1.87) > t_{\text{table}} (1.66)$ so that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. It shows that using generic science skills-based student worksheets has a significant effect on students' biology learning outcomes on the concept of Archaeobacteria and Eubacteria.

Astuti, 2016. *Efektivitas Penggunaan Lembar Kerja Siswa Pada Pembelajaran Matematika Pokok Bahasan Bilangan Bulat Ditinjau Dari Hasil Belajar dan Pemahaman Siswa Kelas VII Compassion SMP Joannes Bosco Yogyakarta*. The results of the research show that (1) the use of student worksheets is effective in learning the subject of integers in terms of the learning outcomes of students of class VII Compassion SMP Joannes Bosco Yogyakarta, (2) the use of worksheets can help students understand the learning of this subject. Analysis of the measurement data of the effectiveness of using worksheet is viewed from the learning outcomes. As a whole, it shows that student learning outcomes are outstanding, namely 78.26%.