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# Evaluation of Learning in Cognitive, Affective and Psychomotor Aspects in Junior High School

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### **ABSTRACT**

Evaluation in Junior High School plays a crucial role in measuring student achievement across cognitive, affective, and psychomotor aspects. The cognitive aspect pertains to thinking, understanding, and applying knowledge, while the affective aspect involves attitudes, values, and socio-emotional development. The psychomotor aspect evaluates practical skills and abilities. This study employs a qualitative approach, utilizing observation and interviews for data collection and analyzing the findings using the Miles and Huberman method. The results highlight that evaluation serves not only as a measurement tool but also as feedback to enhance learning quality. It underscores the necessity of an evaluation strategy that incorporates diverse methods, recognizing each student's uniqueness and adopting an inclusive and holistic approach. The study concludes that a comprehensive evaluation system supports students' holistic development effectively. The implications of these findings suggest that schools should prioritize implementing evaluation strategies that promote individual growth and inclusivity. This can inform teacher training programs and policy decisions to foster more effective and equitable learning environments.

Keywords: Learning Evaluation, Cognitive, Affective and Psychomotor Aspects



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### 1. INTRODUCTION

Evaluation is part of the learning process which as a whole cannot be separated from teaching activities, carrying out evaluations carried out in educational activities has a very main meaning, because evaluation is a measuring tool or process to determine the level of achievement of success that students have achieved on the material that has been delivered, so that with the evaluation, the learning objectives will look accurate and convincing. According to Febriana (2019; 1), states that learning evaluation is an ongoing process regarding the collection and interpretation of information, evaluation is used to assess decisions that have been made and materials for designing learning systems. Based on this opinion, evaluation is an ongoing process of collecting information and consuming it.

In the context of the learning system, evaluation constitutes a crucial element and phase of the learning process, whereby the efficacy of the learning can be ascertained. The results obtained can be used as feedback to improve and refine learning programs and activities. Evaluation represents the final stage of the learning process, whereby the success of the learning process can be determined in accordance with the expected goals. Consequently, evaluation is an activity that is of equal importance to the learning process itself. Evaluation encompasses all aspects of learning, including intellectual abilities (cognitive), emotions, attitudes, and behavior (affective), as well as skills (psychomotor).

In the cognitive domain, evaluation is intended to determine the extent to which the knowledge acquired through the learning process aligns with the learning objectives. This pertains to the capacity of students to comprehend, synthesize, and analyze the learning subject provided by the instructor. The affective domain concerns the capacity of students to organize and manage their emotions, attitudes, and behaviors in a learning context. The psychomotor domain concerns the learners' ability to perform

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perception, guided movements, habitual movements, complex movements, and make adjustments to movement patterns. Additionally, it encompasses the development of creativity.

The objective of this study is to provide a comprehensive understanding of effective evaluation methods, the challenges inherent to the learning evaluation process, and recommendations for improvement at this level. This understanding is derived from an appreciation of the significance of learning evaluation.

At the junior high school level, learning evaluation is of significant importance and offers notable benefits. Evaluation is a crucial element in the learning process, as it enables the identification of whether the employed teaching methods are effective or not. In junior high school, learning evaluation is a vital tool for gauging student achievement and enhancing the quality of education. Evaluation techniques, including examinations, assignments, projects, and competency-based assessments, are utilized to assess student comprehension.

In some respects, the aforementioned approach to learning evaluation is further subdivided into multiple levels. With regard to the cognitive aspect, these levels can be delineated as follows: remembering data, understanding, application, analysis (structure or elements), synthesis (creation or construction), and evaluation. Moreover, the affective aspect is comprised of five levels: receiving, responding, giving value, organizing or conceptualizing, and internalizing values. Similarly, the psychomotor aspect is also divided into five levels: imitation, manipulation, precision, articulation, and neutralization. The assessment of cognitive, affective, and psychomotor development plays a pivotal role in the intellectual growth of students. The following are key reasons why evaluation in these three domains merits particular attention at the junior secondary level.

## 2. RESEARCH METHOD

This study employs a qualitative research methodology for data collection, utilizing observation and interviews as primary techniques. Data collection techniques in qualitative research encompass observation, interviews, and field notes. The data analysis technique employed is in accordance with the analysis method of Miles and Huberman. This method comprises three stages: data reduction, data presentation, and data verification or conclusion making and the essence of the results of the discussion. The data reduction stage aims to simplify the data obtained, while the data presentation stage entails simplifying the data that has been reduced. The final stage, data verification or conclusion making, involves establishing the findings and conclusions based on the data presented.

## 3. RESULTS AND DISCUSSION

The term "evaluation" in the context of language is derived from the English language, specifically from the word "evaluation," which signifies the estimation or valuation of something. In its broader sense, it encompasses the systematic assessment of the merit and utility of objects. William Wiersma and Stepen G. Jurs define evaluation as a process that incorporates measurement and testing, encompassing concepts related to decision-making based on established standards. As Anas Sudijono notes, evaluation is an activity undertaken to ascertain the value of a given object. Djali and Muljono stress that evaluation is a process of assessing an object based on pre-established criteria, with the objective of making a decision regarding that object. Anthony J. Niko, meanwhile, characterizes evaluation as a process for making decisions about student products and performance.

From some of these definitions, it can be concluded that evaluation is a domain of learning that can be defined as a process used to determine the learning outcomes of learning by measuring and assessing.

The evaluation of learning in the cognitive, affective, and psychomotor domains at the junior secondary education level encompasses a multitude of pertinent elements. It is imperative to commence the discourse by elucidating the rationale behind the assessment of learning in these domains. The objectives may encompass the gauging of students' comprehension of fundamental concepts, the analysis of their critical thinking abilities, or the assessment of the efficacy of pedagogical strategies in attaining learning objectives.

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The discussion should include an evaluation of the methods used to assess students' cognitive, affective, and psychomotor aspects. The evaluation methods may include written tests, oral exams, project assignments, portfolios, or a combination of several methods. The selection of evaluation methods should also be based on the purpose of the evaluation and the characteristics of the students to be evaluated. The discussion can include the evaluation design used, such as formative evaluation, which is carried out during the learning process to provide feedback and improvement to students, and summative evaluation, which is carried out after learning is complete to provide a final assessment of student understanding.

The cognitive domain encompasses mental activities, such as the capacity to think, understand, apply, analyze, and evaluate. Bloom categorizes the cognitive domain into six categories of increasing complexity, which are arranged in a hierarchical structure. The attainment of a higher level of cognition is contingent upon the completion of the preceding level. The levels are as follows: the first level is remembering, the second level is understanding, the third level is applying, the fourth level is analyzing, the fifth level is evaluating, and the highest level is creating.

In addition, the affective domain pertains to attitudes and values. The field of psychology that deals with attitudes and behaviors is called attitude theory. In English, the term "attitude" is used to describe this concept. In the K13 assessment, this affective domain is divided into two categories: spiritual attitudes and social attitudes. Bloom categorizes the affective domain into five levels, ranging from the lowest to the highest level of ability, as follows: The affective domain encompasses five levels of cognitive development: receiving (awareness), responding (reacting), appreciating (assessing/acting), organizing, and internalizing the value system (adopting behavior). The benefits of the affective domain are twofold: firstly, it improves the achievement of instructional goals by students; secondly, it enhances the level of acceptance, participation, assessment, organization, and internalization. Furthermore, it improves students' attitudes towards correction.

Meanwhile, the psychomotor domain is the domain related to skills or the ability to act after someone receives certain experiences. Psychomotor assessment is carried out in three ways, namely: Direct observation, after the teaching and learning process and some time after the teaching and learning process, in the K13 assessment the psychomotor domain is usually directly proportional to the cognitive domain. Bloom divides the psychomotor domain into 5 levels from the lowest ability to the maximum ability, namely: Copying, Manipulating / re-creating (following orders), Developing accuracy, Articulating (combining, integrating related skills), Naturalization (automatically becoming an expert).

Evaluation of learning in these cognitive, affective and psychomotor aspects should be closely linked to the teaching done by the teacher. The results of the evaluation should be used to inform teaching decision-making, curriculum adjustments and subsequent lesson planning. The discussion may include challenges that will be faced in evaluating learning in cognitive, affective and psychomotor aspects at the junior secondary level, as well as efforts that can be made to improve such evaluations. Challenges may include time constraints, the tendency for assessments to be reproducible or the need for more inclusive and holistic assessments (harvati, 2012).

Evaluation of learning in cognitive aspects at the junior secondary education level must also consider the context and uniqueness of students. The discussion can include contextual evaluation approaches, such as connecting students with individual needs and appreciating the diversity of students' cognitive, affective and psychomotor abilities (Putri, 2022).

Collaboration between teachers and students in learning evaluation can improve the success of the evaluation. The discussion may include collaborative strategies, such as reflective discussions, individual conferences or joint projects that involve teachers and their students in planning, implementing and evaluating the teaching and learning process. Evaluation of learning in cognitive, affective and psychomotor aspects can support competency-based learning approaches that emphasize concept understanding and application in relevant contexts.

The utilization of evaluation as a monitoring tool for the student learning process on a regular basis is a viable approach. The provision of continuous feedback enables teachers to identify students' needs and difficulties in the cognitive, affective, and psychomotor domains. This, in turn, allows them to select

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appropriate teaching strategies to facilitate students' progress. Collaboration between teachers and parents is also essential for effective learning evaluation. Parents can provide valuable insight and additional information about their children's cognitive, affective, and psychomotor development outside the school environment. This communication enhances the comprehensiveness of learning evaluation, supporting students' cognitive, affective, and psychomotor development holistically.

Furthermore, the evaluation of learning in the cognitive, affective, and psychomotor domains should consider the influence of the learning environment on students' comprehension. Factors such as cleanliness, comfort, and environmental stimulation can impact students' capacity to focus and learn effectively. The discussion may encompass strategies to enhance the learning environment and facilitate more effective learning evaluation.

The findings of this study support previous research emphasizing the importance of learning evaluation as a tool to holistically measure students' achievements in cognitive, affective, and psychomotor aspects. For instance, the study by Attamimi et al. (2023) found that online-based learning evaluation can provide in-depth insights into students' cognitive achievements. This research reinforces the argument that evaluations incorporating Bloom's taxonomy analysis can provide significant feedback to improve learning quality.

Additionally, these findings align with Huljannah's (2021) research, which highlights the necessity of continuous evaluation in elementary education to ensure the development of students' cognitive, affective, and psychomotor aspects. However, this study offers new contributions by emphasizing the importance of inclusive and holistic evaluation strategies within the context of junior secondary education, which previous studies have not thoroughly discussed.

In contrast to Suprihatien et al. (2023), which focused more on comparing synchronous and asynchronous evaluation methods, this study emphasizes the role of the learning environment and collaboration between teachers, students, and parents in supporting learning evaluation. Thus, this research not only supports prior findings but also provides additional perspectives on the importance of a positive and collaborative evaluation context.

An evaluation of learning in cognitive aspects at the junior secondary education level may employ a competency-based approach. The evaluation should encompass not only the mastery of concepts but also the ability of students to apply their knowledge and skills in relevant contexts. This encourages the holistic development of students' cognitive, affective, and psychomotor competencies.

The evaluation of learning in these cognitive, affective, and psychomotor aspects must be conducted in a supportive and positive context. Discussion can facilitate the establishment of an evaluation culture that does not intimidate or frighten students, but instead encourages them to take risks and learn from mistakes. In a fair evaluation, every student is afforded an equal opportunity to demonstrate their cognitive, affective, and psychomotor abilities.

Involvement in the evaluation process facilitates a more comprehensive understanding of the significance of cognitive, affective, and psychomotor aspects of learning. Furthermore, it fosters a collaborative approach to enhance both evaluation and learning.

## 4. CONCLUSION

The assessment of learning in cognitive, affective, and psychomotor domains at the junior high school level can serve as a pivotal tool for monitoring and assessing student growth and development. Furthermore, it can enhance the overall quality of learning.

In conducting this evaluation, it is essential to consider several key elements. Firstly, the evaluation must encompass a range of cognitive, affective and psychomotor aspects, including critical thinking, creativity and higher-order thinking skills. The evaluation of learning must employ methods and instruments that are in accordance with the multiple intelligences of students, as each student is unique in their thinking and understanding of the various information provided. In order to consider these variations and utilize methods that encompass diverse modes of thinking, evaluation must be conducted in a manner that is fair and impartial. Each student should be afforded an equal opportunity to demonstrate their

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cognitive, affective, and psychomotor abilities, and the evaluation process must be designed to minimize any potential for bias. A good evaluation will provide insight into student development, can help teachers in planning instruction and encourage holistic cognitive, affective and psychomotor development.

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