



Analysis of Daily Exam Answers on the Curriculum 2013 Topic Distribution and Management Natural Resources at Pertiwi 1 High School in Padang

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ABSTRACT

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This research aims to find out how teachers assess essay questions that contain elements of analysis and to find out students' answers to essay questions that contain analysis on the distribution and management of natural resources on 2013 curriculum. This research uses mixed research methods. The population in the study was all 11th grade of SMA Pertiwi 1 Padang. The sampling technique in this research used a total sampling technique. The total population is 101 people, while the sample size is 101 people. The data collection techniques used were observation, interviews and documentation. The results of this research show that some teachers do not understand how to assess essay questions that contain elements of analysis on material on the distribution and management of natural resources and that most students do not understand the answers to essay questions that contain analysis. This is based on the lack of complexity in the content of geographic concepts that can be linked in creating questions and answering essay questions that contain elements of analysis on the distribution and management of natural resources.

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INTRODUCTION

Analysis and analytical thinking play crucial roles in literacy and problem-solving. The concept of analysis in the context of literacy, as outlined by (Fitriani et al., 2021), is the activity of reading that involves identifying signs and placing them in dynamic interactions, along with an understanding of the conveyed messages. In this context, analysis becomes a process of deep comprehension of the presented text or information.

Meanwhile, analytical thinking is an individual's ability to differentiate or identify an event or problem into smaller sub-problems. According to (Widodo et al., 2019), this involves the ability to determine logical and reasonable relationships to identify the causes of the problem. In other words, analytical

thinking focuses on the use of data and facts to develop solutions that are rationally informed. Problem-solving, critical thinking, creativity—all refer to this ability. (Tarigan & Ananda, 2023) add a new dimension to the concept of analytical ability by affirming that it includes the ability to detail or break down a problem into smaller components and understand the relationships between these components. By breaking down a problem into smaller components, one can understand in more detail the involved aspects and identify critical points to consider in the analysis. The importance of analytical ability is not limited to the realm of literacy but also has a significant impact on problem-solving in various life contexts. In a complex and ever-changing world, individuals with strong analytical abilities tend to be more effective in overcoming challenges. They can identify the root of problems, break down solutions systematically, and make more informed decisions.

Moreover, analytical ability is closely related to the development of critical and creative thinking. Analytical thinking enables individuals to view a problem from various perspectives and integrate information holistically. Thus, it creates a solid foundation for critical and creative thinking processes crucial in various fields, from business to science. In an era where information is abundant, analytical ability becomes key to filtering, understanding, and responding to information accurately. Therefore, the early development of analytical abilities through education and training can provide a solid foundation for individual development in the future. Thus, analysis and analytical thinking are not just theoretical concepts but practical skills that empower individuals to face the complexity of the modern world. The McKinsey Indonesian's Today report, combined with data from the Ministry of Education and Culture, highlights a concerning trend in the educational landscape of Indonesia. According to the findings, a mere 5% of Indonesian students possess analytical thinking skills, leaving the majority with knowledge-level skills. This significant gap underscores a critical issue in the country's education system, pointing to the urgent need for reforms.

One of the identified causes behind this shortfall is the prevailing lack of emphasis on developing thinking skills in schools. The educational approach in many institutions tends to prioritize rote memorization, resulting in students who excel at answering questions but lack the ability to engage in higher-order thinking. As (Hendayani, 2020) notes, the dearth of demand for cultivating thinking skills has led to a stunted development of analytical capabilities among students. The consequence is a workforce that may struggle with complex problem-solving and critical analysis in the future.

This issue is particularly pronounced in the realm of geography learning at the high school level. Geography education encompasses various approaches, principles, and aspects relevant to everyday life phenomena. However, the competency gap in analytical thinking becomes evident when students resort to memorization as their primary learning strategy. Simply memorizing geographical concepts or materials may yield knowledge that is easily forgotten and lacks depth. The impact of this analytical thinking deficit extends beyond the classroom. In a rapidly evolving global landscape, where adaptability and critical reasoning are essential, the shortcomings in the education system become even more pronounced. Students who are not equipped with robust analytical thinking skills may find it challenging to navigate complex challenges, hindering their personal and professional growth.

To address this issue, there is a pressing need for a shift in the educational paradigm. Schools should actively promote and incorporate activities that foster analytical thinking, encouraging students to go beyond memorization and engage in critical analysis and problem-solving. The curriculum should be designed to emphasize not only the acquisition of knowledge but also the application of analytical skills in real-world scenarios.

Furthermore, teacher training programs should be revamped to equip educators with the necessary tools and methodologies to nurture analytical thinking in students. Professional development opportunities should focus on cultivating pedagogical approaches that promote critical thinking, ensuring that educators can effectively guide students toward developing these essential skills. The low percentage of Indonesian students with analytical thinking skills, as highlighted by the McKinsey report and Ministry of Education and Culture data, underscores a critical need for educational reform. The emphasis on rote memorization and the lack of demand for thinking skills development are identified as root causes. Addressing this issue requires a comprehensive overhaul of the education system, placing a renewed emphasis on analytical thinking in both curriculum design and teacher training. Only through such concerted efforts can Indonesia nurture a generation of students equipped to thrive in the complex challenges of the 21st century.

Analytical skills can be sharpened, as with most things, through practice. The more frequent the practice, the more trained an individual becomes in analysis. Analytical skills are influenced by an individual's ability to apply, rearrange, and add knowledge to the situation or environment they are in (Setiawan, 2017). Proper school learning will build students' analytical skills. Analytical skills are also influenced and supported by the search for information to find the information used in solving a problem.

RESEARCH METHODE

The research method employed in this study is a mixed method, combining both quantitative and qualitative research methods to collect, process, and analyze data. The population for the research consists of all students in the 11th grade at SMA Pertiwi 1 Padang who are taking geography as a subject.

Table 1.
Research Population

No	Category	Percentage
1	XI IPS 1	31 people
2	XI IPS 2	29 people
3	XI IPS 3	25 people
4	XI IPS 4	16 people
Total		101 people

This research employed total sampling and was conducted during the odd semester of the academic year 2023/2024 in the 11th-grade class at SMA Pertiwi 1 Padang. The types of data in this study include quantitative and qualitative data. Quantitative data were obtained from students' learning outcomes, while qualitative data were obtained through interviews and observation sheets. The data analysis technique employed in this research involved both qualitative and quantitative analyses, structured in several systematic steps.

The steps used in qualitative data analysis, according to Miles and Huberman as cited by Sugiyono, involve interactive and continuous activities at each stage of the research (Lubis & Ritonga, 2023). The activities in qualitative data analysis include data reduction, data display, and data conclusion drawing/verification.

As for the steps in quantitative data analysis, they involve determining the percentage of learning completeness from students' exam scores using the formula: [insert formula here]. The student responses in the geography subject are categorized in Table 3.

Table 2.
Categories of Answer Responses

No	Category	Percentage
1	Not Understand	0 - 40 %
2	Partially Understand	50 -60 %
3	Adequately Understand	70 - 80 %
4	Understand	80 - 90 %
5	Very Understand	> 90 %

RESULT AND DISCUSSION

Based on the results of the analysis that has been carried out, this study succeeded in identifying the obstacles faced by educators in assessing questions at the C4 level, especially on the material of the distribution and management of natural resources. This finding is in line with previous research (Sudirman, 2018) which states that there is still a lack of understanding of educators regarding the use of analytical questions. The implications of this study can be interpreted as confirmation of previous findings, showing that this obstacle is still a major concern in the context of assessment at the C4 level.

Previous research also noted that teachers do not fully understand the urgency of analysis questions, and in this study provide further insight into the impact of this lack of understanding on students' analytical skills (Prameswari & Pradani, 2021). These implications provide a stronger foundation for recommending training programs for educators, with a focus on improving understanding and application of assessment at the C4 level.

Table 3.
Results of the Analytical Thinking Abilities of Grade XI
Students at SMA Pertiwi 1 Padang

No	Category	Percentage (%)
1	Understanding	36,6 %
2	Less Understanding	40,59 %
3	Adequate Understanding	13,8 %
4	Understanding	13,8 %
5	Very Understanding	0 %

Furthermore, the results of this study present data showing the low analytical thinking skills of students on the distribution and management of natural resources. The implication is that this study can reinforce the findings of previous research highlighting the need for more effective learning strategies in developing students' analytical skills at the secondary level. Thus, the results of this study can be considered as an additional contribution to the existing literature.

Table 3 shows that the percentage of students still in the category of not understanding and less understanding is similar to previous research (Virginia et al., 2021). The implication is that students' lack of analytical skills in dealing with C4 problems can be considered an issue that needs ongoing attention. This research enriches the literature with actual data that confirms previous findings, and can provide a foundation for the development of more appropriate learning methods.

The results of this study also corroborate the finding that students are not accustomed to working on problems that contain elements of analysis, in accordance with the findings of previous research. The implication is that this study can be used as a reference for schools in designing learning programs that focus more on analytical exercises to improve students' skills.

By summarizing the findings of this study and linking them to previous research, the results not only provide a deeper understanding of the constraints in understanding analysis at the C4 level, but also provide a strong foundation for improving educational policies and implementing more effective learning strategies. These implications are expected to create broader positive changes in the context of education at the secondary level.

Discussion

Based on the results of the analysis that has been carried out, the researchers can find answers to the problem formulation. Educators still do not understand to assess questions at the C4 level. This is evidenced by the exposure of the interview results that the teacher still understands the urgency of the analysis question. This discovery aligns with earlier research conducted by (Sudirman, 2018) indicating that educators still face challenges in comprehending the effective utilization of analytical questions. The consequences of this investigation can be construed as affirming the outcomes of prior studies, underscoring that this hindrance remains a significant issue within the assessment framework at the C4 level.

Earlier investigations also highlighted the incomplete grasp of the importance of analytical questions among teachers. In this current study, additional perspectives are offered regarding the consequences of this

deficiency on the analytical skills of students (Prameswari & Pradani, 2021). These findings offer enhanced support for suggesting educational programs for teachers, specifically targeting the enhancement of comprehension and implementation of assessments at the C4 level.

Table 3 indicates that the percentage of students falling into the categories of insufficient understanding and a lack of comprehension aligns with findings from prior research (Virginia et al., 2021). This suggests that the deficiency in students' analytical skills when dealing with C4 problems persists and requires continued attention. The current study contributes to the existing literature by presenting concrete data that validates earlier discoveries, thereby establishing a basis for the formulation of more effective teaching methodologies. The outcomes of this research also validate the observation that students are not accustomed to tackling problems involving analytical elements, consistent with the outcomes of preceding studies. This implies that the study can serve as a guideline for schools in crafting educational programs that prioritize analytical exercises to enhance students' proficiency.

While in terms of student answers, the ability to think analysis of students can be seen from the data on student learning outcomes obtained after conducting written tests in the form of daily tests in solving geography questions on the material of distribution and management of natural resources. The analytical thinking skills measured in this study consisted of 5 questions. The analysis questions tested to students were 5 description or essay questions made by the teacher. The use of essay questions in this study so that students really answer questions according to their abilities, the time limit for answering questions is 90 minutes. The results of the analysis thinking ability trial obtained data in the form of student answers which were then analyzed by the researcher.

Based on the table of the results of the ability to think analysis of class XI students who take geography subjects at SMA Pertiwi 1 Padang, namely with the average percentage category of students in class XI IPS 1, XI IPS 2, XI IPS 3 and XI IPS 4 in the category of not understanding 36.6%, the category of less understanding 40.59%, the category Quite understand 13.8%, the category understand 8.9%, and the category very understand 0%. The test results reveal that students still struggle to tackle analytical questions (C4 level) related to the topics of distribution and management of natural resources. Furthermore, they face challenges in analyzing the geographical concepts embedded in these questions. This difficulty stems from their lack of familiarity with solving problems involving analytical elements. This observation is consistent with previous research, such as the study conducted by (Sudirman, 2018), which

highlighted educators' insufficient understanding of the effective use of analytical questions.

Moreover, the students' inability to analyze concepts within the questions is attributed to the perceived lack of complexity in the interconnected concepts and their struggle in responding to essay questions that involve analytical components within the context of distribution and management of natural resources. This finding echoes the earlier research, emphasizing that the identified obstacle remains a prominent concern in the assessment landscape at the C4 level. The persistence of these challenges underscores the need for interventions to enhance both educators' comprehension of analytical questioning techniques and students' proficiency in handling analytical elements within geographical problem-solving scenarios.

(Badiah et al., 2022) research findings align with the previous study, indicating that the individual student pass rate stands at 31.85%, while the non-pass rate reaches 61.15%. The classical pass rate for 11th-grade students at SMAN 2 Tambang is also consistent at 31.85%. The percentage of indicators with the highest pass rate is 100%, whereas the indicators with the lowest pass rate are at 30.37%. In this context, Badiah's research provides additional confirmation of the challenges faced by 11th-grade students at SMAN 2 Tambang in understanding the topics of distribution and management of natural resources.

The classical pass rate of 31.85% from Badiah's study reflects consistency with the previous findings, indicating an overall challenge for students in mastering this particular subject matter. Both studies collectively underline the need for improvements in teaching approaches and assessments in the educational environment. The variation in percentage indicators from Badiah's research, with the highest pass rate at 100% and the lowest pass rate at 30.37%, offers a more detailed insight into specific areas within the material that may require more attention. In the context of the previous study, these findings strengthen the argument that students' understanding of various indicators in the context of the distribution and management of natural resources needs focused improvement.

This connection indicates that the issues in understanding and passing rates among students at SMAN 2 Tambang are not isolated incidents but have become persistent concerns. Therefore, a more holistic and integrated approach is necessary to enhance students' understanding of geography concepts and analytical skills at this level. Improvement measures should encompass changes in teaching methods, regular implementation of analytical questions, and enhanced training quality for educators to provide more effective guidance to

students. Thus, it is expected that learning outcomes and student pass rates can experience sustained improvement.

CONCLUSION

The results of this study indicate that some teachers still lack understanding of how to assess essay questions that contain analytical elements in the material on the distribution and management of natural resources. Additionally, a significant number of students also have insufficient understanding of answers to essay questions that involve analysis. This is based on the less complex nature of the geographical concepts that can be connected in creating essay questions and answering them, particularly those that involve analysis in the context of the distribution and management of natural resources.

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