

# Analysis of Students' Cultural Literacy in Social Science Using the Structure of the Observed Learning Outcome Taxonomy

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## Abstract

Cultural literacy refers to the ability to understand, preserve, and develop both local and national culture. In today's era, society often lacks the foundation to filter external cultural influences, significantly impacting younger generations particularly elementary school students who are still vulnerable. This study aims to analyze the cultural literacy skills of Grade Five students in Science and Social Studies using the Taxonomy of the Structure of the Observed Learning Outcome, as well as the factors that influence these skills. A qualitative descriptive approach was employed, involving 12 students, one subject teacher, and one library officer from Public Elementary School Minggirsari. The researcher served as the key instrument, using data collection techniques such as participant observation, in-depth interviews, document analysis, and tests. The findings revealed that students' cultural literacy skills are generally at the multistructural level of thinking. Several factors influence this outcome, including the application of learning methods, students' interests, environmental exposure, availability of facilities, school policies, and technological development. Future research is suggested to involve a broader and more diverse group of subjects in terms of ethnicity, religion, and socioeconomic background to obtain more comprehensive insights.

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## Introduction

Indonesia is a country that consists of various tribes, customs, arts, religions, and local wisdom (Safitri & Ramadan, 2022). The culture that we have needs to be preserved continuously as the identity of the Indonesian nation. Cultural preservation can be done by introducing regional culture early on to the younger generation. Setianingsih, et al. (2023) explained that cultural literacy is important for people to master in the current era of technological advancement. Today's society lacks the basis for filtering incoming cultural influences. Alfadhil et al. (2021) This has a big impact on the younger generation who are still vulnerable to outside influences, especially in the elementary school age range (Astari, et al., 2024). At that age, children are still unable to filter the good and bad things from the information they receive. Zuliansah, et al. (2023) explained that currently not a few young people are reluctant to show their culture in public, but instead are proud of westernized cultures that are considered modern. The Indonesian nation will eventually lose its identity if there are no preservation efforts from its young generation.

This is in line with the results of initial observations that researchers have made at Public Elementary School Minggirsari. Most students like westernized trends, not only to the extent of liking most of them but also imitating them. In addition, students have an indifferent attitude towards their surroundings. According to the results of interviews conducted by researchers with several students, it was found that students like to watch short videos from social media without assistance from parents. The school has tried to strengthen and improve students' understanding of culture through activities that are integrated in lessons at school, both learning in the classroom and outside the classroom. One of them is in Science and Social class V learning in the social studies content of *Daerahku Kebanggaanku* material. This material broadly discusses regional culture that provides opportunities for students to recognize and learn about their culture through Science and Social Studies, especially social studies materials. Explained in Ghaniem, et al. (2021) in the material of *Daerahku Kebanggaanku*, students are invited to explore and learn about the cultural heritage of their region. In addition, students are invited to recognize and understand the relationship between culture and regional economic activities.

According to previous research with topics related to cultural understanding or students' cultural literacy skills integrated with Science and Social Studies conducted by (Hapsari, et al., 2024) showed good results for integrating culture and local wisdom in learning social studies materials in elementary schools. Students are more actively involved in the learning process, and students' understanding of culture and local wisdom can be applied in students' daily lives. With that explanation, this research related to the classification of students' abilities using Structure of the Observed Learning Outcome (SOLO) Taxonomy conducted by Irfana, et al. (2024) on numeracy material with the results of the research of 8th grade students of Junior High School 9 Nganjuk are at the multistructural Structure of the Observed Learning Outcome (SOLO) Taxonomy level in solving numeracy problems. This shows that students have the ability to understand and utilize some information. Wea & Saputro, (2024) also conducted research related to the analysis of student errors in solving math problems using the SOLO Taxonomy. The results of this study showed that 4 students as the subject of his research showed

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pre-structural, unistructural, multistructural and relational SOLO Taxonomy levels, the level of student errors decreased along with the higher level of understanding. Based on the limitations of previous research related to the measurement of students' cultural literacy skills in Science and Social studies and the application of SOLO Taxonomy in classifying students' cultural literacy skills. This research intends to reveal cultural literacy skills in students through Science and Social studies material My Regional Pride. The difference between this research and existing research is the use of SOLO Taxonomy (Structure of the Observed Learning Outcome) in classifying students' cultural literacy skills, which in previous studies SOLO Taxonomy tends to be used in numeracy or mathematics materials.

This study will identify students' cultural literacy skills using SOLO Taxonomy. Wea & Saputro, (2024) explained that SOLO Taxonomy is a theory that observes the structure of learning outcomes, the quality of learning outcomes, and analyzes student responses and errors in solving the problems they face. Biggs & Collis, (1982) in their book explained that SOLO Taxonomy has five categories or levels, namely, pre-structural, unistructural, multistructural, relational, and extended abstract. At the pre-structural level, students answer questions by avoiding questions (denial), repeating questions (tautology), firm closure based on transduction. At the unistructural level, students answer based on one relevant aspect of the evidence given, so the conclusions are limited and tend to be dogmatic. This occurs due to inconsistency in handling the two aspects of evidence found. At the multistuctural level, some consistent aspects of the data are selected, but any discrepancies or disconnections are ignored. Some aspects were recognizable but students were unable to put them together. At the relational level, most or all of the evidence is accepted, and attempts are made to unify it. Conflicting data is placed together to explain the given context. At the extended abstract level, students use a lot of data where the data obtained is connected to other data in order to draw relevant conclusions and be able to generalize the results obtained. By using SOLO Taxonomy, this study classifies students' cultural literacy skills more specifically through students' answers, so that it can help teachers in determining appropriate learning and developing it.

Cultural literacy is the ability to understand and the willingness to preserve and develop its culture, both local and national culture (Kemendikbud, 2016). Putri & Nurhasanah, (2023) also conveyed the same thing that cultural literacy is a deep understanding of cultural aspects in the form of language, art, customs, norms, food, and daily life practices that have been inherited. In line with Uswatun & Silitonga, (2020) explanation, which states that cultural literacy is the knowledge and skills to understand and behave towards Indonesian culture as the nation's identity. Cultural literacy does not stand alone, but is related to civic literacy. Where civic literacy brings cultural literacy to life through the rights and obligations of individuals towards their nation. The indicators used to measure cultural and civic literacy according to Lestari, et al. (2022) are four. These indicators are understanding the complexity of culture and citizenship, knowing one's own culture, knowing civic obligations, and caring for culture. It is important for Indonesian people to recognize, know, and preserve and develop the culture that is the identity of the Indonesian nation.

In this case, education has an important role in building students' knowledge of culture through cultural literacy. In order to instill a deep understanding and awareness of the nation's

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culture, cultural literacy needs to be implemented in schools. According the statement by Fahrianur et al., (2023), who define literacy as the ability related to the management and implementation of acquired information in daily life, which is essential for facing various changing conditions and challenges.. To build students' cultural literacy skills, the application of cultural literacy is not only through reading activities. The application of cultural literacy in schools can be integrated in ongoing lessons. One of them is in Science and Social studies in high grades. Pratama, et al. (2024) explains that Science and Social or Natural and Social Sciences is a combination of science and social science that not only provides knowledge but also trains students in thinking thoroughly and connecting phenomena. This is in line with what is described by (Kemendikbud, 2022) that Science and Social is a field of knowledge that studies living and inanimate objects in the universe and their interactions.

Based on the background that has been described, there is still limited research that examines students' cultural literacy skills through social studies learning. In addition, there is still limited research that examines the cultural literacy skills of students classified using the SOLO Taxonomy. This is an interesting new thing for researchers. So this study aims to find out how the cultural literacy ability of grade V students through learning science using the SOLO Taxonomy. Through in-depth analysis, this study has the potential to identify the cultural literacy ability of grade V students through social studies learning by using the SOLO Taxonomy as an analytical framework. In addition, to find out what factors affect students' literacy skills. The research focus was developed to support the research objectives. So that the research objectives can be fulfilled to the maximum.

## Method

Based on the objectives of the research, the research approach used descriptive qualitative. Qualitative descriptive research is research that collects information related to an existing symptom as it is at the time the research is conducted without intending to draw conclusions for the general or generalization (Hikmawati, 2020). This allows researchers to describe in detail and accurately what happens in a particular situation or context, in this study in the form of students' cultural literacy skills through Science and Social Studies activities. The research involved 12 grade V students, 1 grade V Science and Social subject teacher, and 1 Public Elementary School Minggirsari library officer. The researcher acts as a human instrument or key instrument, so that through data collection techniques participant observation with a passive observation model, in-depth interviews with semi-structured interviews for teachers and unstructured with snowball sampling techniques for students, document studies, and tests. So that the instruments used in this study are observation guidelines, interview guidelines, analysis guidelines, and test sheets that refer to cultural literacy indicators. The data obtained were then analyzed using the Miles and Huberman model data analysis technique which consists of several steps, namely, data collection, data reduction, data presentation, and conclusion drawing and verification. Checking the validity of the data is done with triangulation techniques. Triangulation is credibility testing or checking the validity of data from various sources in various ways, and various times (Sugiyono, 2017). The triangulation techniques used are technical triangulation and source triangulation. Technical triangulation means testing the

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credibility of data by checking data on the same source using different techniques. Meanwhile, source triangulation means testing the credibility of data or checking the validity of findings by checking the data obtained through several sources (Sugiyono, 2017). Triangulation techniques in this study include observation, interview, and document study techniques. While source triangulation in the study was used in interviews where informants in this study included Science and Social class V teachers, class V students, and library staff.

## Results and Discussion

### Results

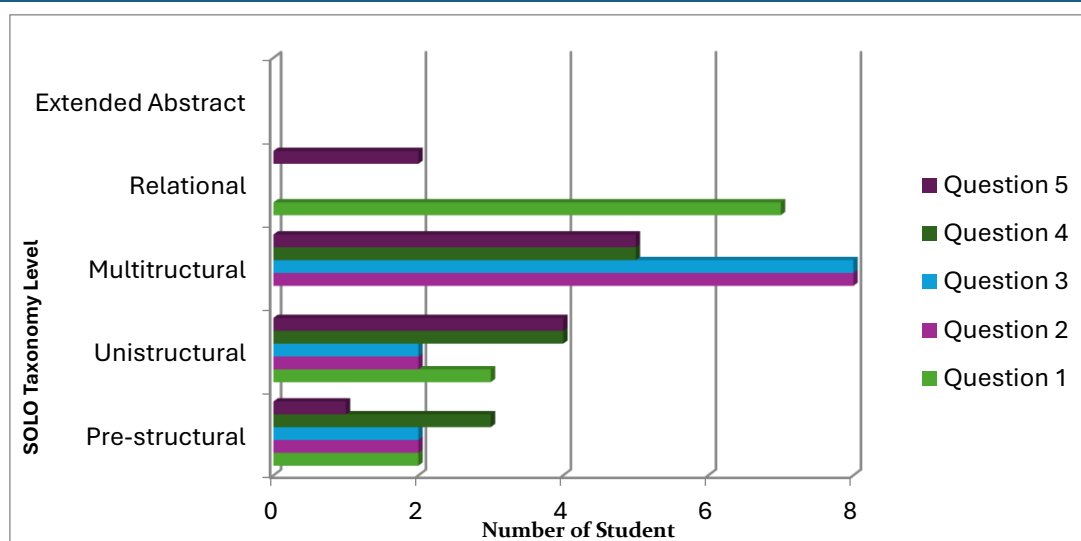
Based on the results of the research, it was found that the data showed that students showed variations in cultural literacy skills. This is based on the results of observations, interviews, and tests that have been analyzed and strengthened by document studies. The researcher conducted the research in January-February 2025 which took place at Public Elementary School Minggirsari. The data coding is done to facilitate the grouping of data and present the data. So the code for observation is denoted by the letter O, document study by the letter D, and interviews by the letter W. Interviews with class teachers were coded WG, interviews with library staff were coded WP, and interviews with students were coded WS.

**Table 1.** Indicators of Cultural Literacy

Indicators	Code
Understanding the complexity of culture and citizenship	LB-1
Knowing one's own culture	LB-2
Knowing civic obligations	LB-3
Caring for culture	LB-4

**Table 2.** SOLO Taxonomy Level

Code	Level	Explanation
TS-1	Pre-structural	Where students answer questions by avoiding questions (denial), repeating questions (tautology), decisive closure based on transduction.
TS-2	Unistructural	Where the student answers based on one relevant aspect of the evidence given, so the conclusion is limited and tends to be dogmatic.
TS-3	Multistructural	Where the students answer by providing several aspects or information that they already know and choose, but there is no effort to connect them.
TS-4	Relational	Most or all of the data is accepted by the student, and an attempt is made to bring it together. Conflicting data is placed together to explain the given context
TS-5	Extended Abstract	Students use a lot of data where the data obtained is connected to other data in order to draw relevant conclusions and can generalize the results obtained.



**Figure 1.** Graph of Student Test Result

Based on the graph, question 1, which is an assessment question with the question code TS-1-LB-1, shows that 7 out of 12 students are at the relational level. Students have a lot of data and there are efforts made to integrate it. The observation results on O-1-LB-1 show that students can recognize, appreciate, and respect the diversity around them very well. However, O-2-LB-1 shows that students' understanding of dynamic culture is still moderate, only a few of my students were able to demonstrate this understanding well in learning. Based on the interview results in WG-LB-1, it shows that students have a moderate understanding to be able to understand the complexity of culture and citizenship. The teacher conveyed that students have a fairly good attitude of tolerance but still not maximized. Likewise, students' understanding of dynamic culture. The same thing was conveyed by the library staff in the interview, in WP-LB-1 it was explained that students' understanding through reading books in the library could be said to be quite good, but still needed to be improved. This is because students when reading their attention is easily distracted. The results of interviews conducted with four students on indicator LB-1 with code WS-LB-1 show students' understanding of the complexity of culture and citizenship is quite good. Students can at least use one known aspect to answer the questions asked. In the results of the document study conducted on the teacher's teaching module with code D-LB-1, it was found that the teaching module was appropriate, this is based on the material contained in the teaching module which teaches regional cultural diversity and local wisdom values, and connects them to the lives of local people through discussions and group assignments. Although it does not yet contain the influence of technological developments. Based on the synchronization between test results with observations, interviews, and document studies on LB-1, students are not yet at the relational level of thinking.

Question 2 with question code TS-2 LB-2 and problem 3 with code TS-3-LB-2 showed the same results, namely, 8 out of 12 students were at the multistructural level. In this question, students follow the question instructions by mentioning the kinds of regional cultures they know without any further explanation. In the observation result with code O-3-LB-2, the data



shows that students can know and understand their own identity as cultured students well. In O-4-LB-2 the observation results also showed good scores in explaining their own identity within the scope of culture. However, in O-5-LB-2 students do not have integrity against cultural influences from outside themselves well, students are at a moderate score. Based on the results of the interview with code WG-LB-2 for interviews with class teachers, the data obtained that students can understand and know their own culture well. The teacher said in the interview "...the children actually like culture, for example when there is a jaranan show the students are enthusiastic to watch...". As for the interview with the library officer with code WP-LB-2, the data obtained that students' knowledge of culture is good, it is conveyed that students have a good interest in reading so that it can be a window of knowledge for students. In addition, the village also has a cultural learning program with the village head that students have participated in. Furthermore, the interviews with 4 students with the code WS-LB-2 showed good results. The four students can mention the kinds of regional cultures that exist in their environment. Students mention more than one example of existing culture, this is an indication that students' knowledge of their regional culture is good. In addition, based on the results of the document study conducted on the teacher's teaching module with code D-LB-2, the data shows that the teaching module is in accordance with the LB-2 indicator. This is based on the material contained in the teaching module invites students to know, understand, and explain their own identity as a cultural society. In addition, the teaching module also contains material about the impact of modern culture which teaches students to have integrity against external influences, although the material contained is still not prominent and maximized. Based on the synchronization between test results with observations, interviews, and document studies on LB-2 indicators, the data obtained are consistent, where students are at the multistructural level of thinking.

In question 4 which has a higher level of difficulty than the previous question with code TS-4-LB-4 shows data that 3 students are at the pre-structural level, 4 students are at the unistructural level, and 5 students are at the multistructural level of thinking. Based on the observation with code O-9-LB-4, students showed very good scores in participating in cultural activities. There was no schedule of cultural activities carried out at school at the time of the research. However, students as a whole wear old clothes or traditional clothes once every two weeks. Furthermore, in O-10-LB-4, data was obtained that students have not been able to show a critical attitude towards the influence of foreign cultures. Students show more of an attitude that does not want to try, students tend to let the opportunities they get to be thrown to their friends. Next, in O-11-LB-4, the data shows that students have good values in practicing their culture in daily life. Students use Javanese in communicating with friends and teachers, and use polite language when talking to older people. based on this explanation, the level of concern for student culture can be said to be good. The results of interviews conducted with class teachers with code WG-LB-4 obtained data that all students participate in cultural activities in the school environment, but have different levels of participation influenced by student character. In addition, based on the description of the class teacher, students can think critically, but not yet maximized. Furthermore, related to the practice of culture in everyday life, the teacher said that

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students can show polite manners in accordance with noble cultural values and the use of polite language to older people is good, although they still need to be reminded occasionally. The interview conducted with the library officer coded WP-LB-4 explained that students have a very good level of concern. Students have a habit of protecting the surrounding environment. However, related to critical attitudes, it was conveyed that students were quite critical and actively asked questions. The interviews conducted with 4 students with the code WS-LB-4 found that students have a good concern for culture. However, student participation is still limited to watching and enlivening, not yet taking part in existing cultural activities. Furthermore, based on the results of the document study of the teaching module with code D-LB-4, it shows that the teaching module is in accordance with the indicators of concern for culture. This can be seen from the initial material contained in the teaching module which displays the influence of cell phones to provoke students' critical thinking skills. However, this module has not clearly stated the culture-based activities carried out in learning. Based on the synchronization between test results with observations, interviews, and document studies conducted on the LB-4 indicator, students are more inclined to the multistructural level of thinking.

In question 5 which has a more complex level of difficulty than the previous problem with the code TS-5-LB-3, the data shows that the distribution of students is quite evenly distributed at the pre-structural, unistructural, multistructural and rational levels. The most data shows that 4 students are at the unistructural level of thinking and 5 students are at the multistructural level of thinking. As for the observation results with code O-6-LB-3, students have good grades in understanding their rights and obligations as cultural citizens. Furthermore, in O-7-LB-3 data were obtained that students have a good attitude of responsibility towards the surrounding environment. However, in O-8-LB-3 it was found that students still did not have a good awareness to preserve their culture. Students prefer to throw the opportunities they get to other friends. Based on interviews conducted with the class teacher with the code WG-LB-3, it is found that students can understand their rights and obligations, although not yet optimal and occasionally need to be reminded. Students also have a good understanding of environmental and cultural preservation within the school. Furthermore, interviews with library staff with code WP-LB-3 obtained data that students have a good level of knowing civic obligations. In the library environment, students strictly adhere to the rules that are enforced. The library is a place where students practice their responsibilities through the provisions that are enforced to discipline students. As for the interviews with 4 students with the code WS-LB-3, the results show that students can mention more than one way to preserve culture. Students have a level of knowledge of their obligations as citizens towards their culture from the perspective of an elementary school student. In the document study conducted on the teacher's teaching module with code D-LB-3, it was found that the teaching module had supported students' responsible attitude towards the surrounding environment and students' awareness to preserve their culture. However, the teaching module does not explicitly contain material on the rights and obligations of students in preserving culture. Based on the

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synchronization between test results with observations, interviews, and document studies, in question 5 with indicator LB-3, students are at the multistructural level of thinking.

The competence of students in cultural literacy is not formed in isolation but is influenced by various internal and external factors. The internal aspects include the students' own interests, habits, and discipline, while the external aspects include teaching models, school policies, the learning environment, and the availability of supporting materials such as books. Based on the results of observations, interviews, and document studies conducted in four different learning situations coded O-LB-1 to O-LB-4, a comprehensive picture of these influencing factors can be mapped out. The use of the Problem-Based Learning (PBL) model, student reading interest, technological distractions, school policies, and environmental influences emerge as key elements. This mapping is important before conducting further analysis, as it provides clarity on where influences are coming from and how they manifest in student behavior and understanding. Each code gathered from interviews with teachers, students, and library officers, as well as from document studies, offers specific evidence of how these factors contribute to or hinder cultural literacy. Therefore, this mapping functions as a foundational step in understanding the complexity of the issue before interpreting its implications.

One of the main findings is the consistent implementation of the Problem-Based Learning (PBL) model in classroom teaching. Observations and document studies with codes O-LB-1 and D-LB-1, as well as teacher interviews with code WG-LB-1, confirm that this model is used to encourage active learning. PBL enables students to face real-life cultural problems and explore their solutions, which in theory should enhance cultural understanding. However, the findings also show that not all students are fully engaged in the process. Some remain easily distracted and find it difficult to absorb the material, suggesting that while the model is beneficial, its implementation may not yet be optimal. This is further emphasized by teacher observations that the learning process needs to be more adaptive to student needs. To improve this, teachers must apply varied strategies within the PBL framework and ensure that support is given to students who struggle. Without this, the full potential of the PBL model in fostering cultural literacy cannot be realized. Therefore, instructional design and delivery must be continuously evaluated to support student learning more effectively.

In addition to the learning model, access to and interest in reading materials also play a critical role. Interview results with library staff coded WP-LB-1 and WP-LB-2 reveal that the collection of cultural books in the school library is limited. The lack of diverse cultural reading material makes it difficult for students to expand their understanding beyond what is taught in class. Moreover, students' low interest in reading, as noted in multiple interviews, further limits their engagement with cultural knowledge. Reading is a vital tool for exploring cultural perspectives, traditions, and values, and its absence significantly weakens students' ability to develop literacy skills. Thus, schools need to enrich library resources with culturally themed materials and foster reading habits through interactive programs. Activities such as cultural book fairs, storytelling sessions, or reading competitions could help boost interest and engagement. Improving reading culture requires collaboration between teachers, librarians,

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and even parents. Without such efforts, students will remain dependent on limited classroom instruction, which is not enough to fully develop cultural literacy.

Technological advancement also presents a double-edged sword in the development of students' cultural literacy. On one hand, technology can provide access to rich and diverse cultural information. On the other hand, uncontrolled use, especially for entertainment, distracts students from meaningful learning. Observations coded O-LB-2 show that students often discuss viral news or trending games during lessons. Interviews with the class teacher coded WG-LB-2 suggest that the use of mobile phones outside of school hours significantly influences students' learning focus, which is hard for teachers to manage without parental involvement. This issue highlights the importance of digital literacy as part of the school curriculum. Teachers and parents need to work together to guide students in using technology responsibly and productively. By redirecting the use of digital devices toward educational content, technology could support rather than disrupt cultural literacy. Schools can also introduce digital cultural literacy projects to promote critical thinking and cultural awareness. Thus, proper management of technological exposure is crucial in shaping students' learning behavior.

Another significant factor is the role of the school environment and its cultural policies. Observations and interviews coded O-LB-3 and WG-LB-3 show that students actively participate in school programs related to culture, such as cleaning duties or community learning events. These activities not only encourage discipline but also introduce students to the importance of cultural preservation and communal responsibility. The role of local figures, such as Pak Lurah, in cultural programs helps bridge formal education with real-world cultural practices. This synergy strengthens students' emotional and intellectual connection to their cultural roots. Additionally, policies such as wearing traditional clothing and using polite language, as noted in O-LB-4 and WG-LB-4, foster respect for cultural norms. Library officers also mention that consistent exposure to such habits shapes students' attitudes and awareness over time. These findings suggest that the school's cultural environment is a powerful agent in shaping students' cultural literacy. Thus, institutional commitment to cultural values must be sustained and embedded in everyday school life.

Interestingly, interviews conducted with students (WS-LB-1 to WS-LB-4) did not yield substantial information regarding students' own awareness of what influences their cultural literacy competence. This might suggest that students are not yet fully conscious of how their environment, habits, or learning experiences contribute to their understanding of culture. The lack of reflection may stem from a curriculum that does not explicitly encourage students to evaluate their cultural learning processes. In order to address this, reflective activities such as personal journals, cultural interviews, or group discussions should be integrated into the learning process. Encouraging students to think critically and introspectively about their cultural experiences can help develop metacognitive skills. These skills are essential in cultural literacy as they promote deeper understanding, empathy, and identity formation. With more structured opportunities to reflect, students can begin to recognize the value of their cultural

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knowledge and how it evolves. Therefore, enhancing student self-awareness is a necessary step toward building a more holistic and meaningful cultural literacy education.

## Discussion

Cultural literacy is the ability to understand and willingness to preserve and develop the culture it has, both local and national culture (Kemendikbud, 2016). Uswatun & Silitonga, (2020) also said that cultural literacy is the knowledge and skills to understand and behave towards Indonesian culture as the nation's identity. In line with what was conveyed by Putri & Nurhasanah, (2023) that cultural literacy is a deep understanding of cultural aspects in the form of language, art, customs, norms, food, and daily life practices that have been inherited. Cultural literacy or understanding related to culture can be integrated through learning in the classroom, one of which is in Science and Social studies. Natural and Social Sciences is one of the sciences that is closely correlated with phenomena in human daily life. Where, this cannot be separated from the relationship between individuals and even from the dynamics of development in their society (Amini, et al., 2023). Through Natural and Social Science Education, students will learn how to socialize, adapt or adjust, collaborate, communicate and how to think critically and analytically (Widodo, in Hapsari et al., 2024). In order to foster attitudes that are in accordance with the values of Natural and Social Sciences, it can use regional culture and local wisdom as a learning resource. Yulia et al. (2024) stated that learning should be directed towards developing students' ability to recognize cultural diversity, starting from their own culture. Therefore, it is necessary to have a learning module that presents the local richness found in their surrounding environment, in order to understand the potential of other national cultural treasures.

Based on the material that students get and learn related to Natural and Social Sciences based on culture and local wisdom can provide strengthening and development of student knowledge related to their regional culture. The level of student ability can be measured through an analytical framework that identifies student answers using SOLO Taxonomy, then student answers are analyzed and identified the level of thinking ability. Wea & Saputro, (2024) explained that SOLO Taxonomy is a theory that observes the structure of learning outcomes, the quality of learning outcomes, and analyzes student responses and errors in solving the problems they face. SOLO taxonomy has 5 levels or levels in classification, namely, pre-structural, unistructural, multistructural, relational and extended abstract.

Based on the results of observations, interviews, document studies and tests, it was found that students were at the level of multistructural thinking skills. Students have the ability to understand the problems they face. At the multistructural level, students answer problems based on several aspects they know, some aspects of consistent data are selected, but any differences or disconnections are ignored. So that the answers given by students are correct but less relevant. The multistructural thinking level means that students are still using more than one piece of information they know without any effort to combine it in solving the given problem (Wafasari, el al., 2024). Irfana et al., (2024) also explained that when students are at the level of multistructural thinking, it means that students have been able to apply some information related to questions to solve problems.

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Students' cultural literacy skills are influenced by various things, both within students and from outside. Based on the results of observations, interviews, and document studies and tests that have been conducted, data is obtained that students' cultural literacy skills are influenced by various things. This influence does not only come from outside the student, but also from within the student himself. These factors include, the interest and motivation of students, the environment, both the family, school, and community environment. As well as facilities, policies and technological developments. This was also discussed by Santoso et al., (2024) that through the problem-based learning model or PBL, it can increase students' cultural literacy through the learning process. Minarti et al., (2023) also conveyed the same thing, that PBL can develop students' critical thinking, student activeness, and student learning outcomes. This is also explained by Mawadah et al. (2024) that the PBL model provides an improvement in the learning process of students, especially in improving literacy skills.

Qualified reading rooms, diverse reading volumes, and library funding allocation policies are very influential in the literacy movement carried out in schools (Kartikasari, 2022). In addition, students' interest in reading is also something that needs to be considered, this is explained by the library staff that students' interest in reading needs to be increased. Anugrah, et al. (2022) explained that the interest in reading is an encouragement that arises or a great desire in a person that makes him have a feeling of pleasure in reading activities so that he can direct someone to read of their own volition. Suryana et al. (2022) explained that fostering children's interest in reading is a basic prelude to increasing the current interest in reading in society. In this case, the policies made by the school greatly affect the actions of students which also affect their understanding of culture. Iskandar, et al. (2024) explained that policies implemented by schools that support the integration of cultural literacy can create an environment that supports students' cultural literacy skills. Safitri & Ramadan, (2022) also explained that through school policies, civic values can be developed. In addition, parents also have an influence on students' cultural literacy skills. Kartikasari, (2022) explained that the success of literacy implemented in schools is influenced by the role of parents. In addition, Setiawati & Lestari, (2023) also explained that the community environment is one of the driving factors in the process of cultural literacy and citizenship.

## Conclusion

This study reveals that the integration of culture and local wisdom in Science and Social learning at the elementary level significantly contributes to strengthening students' cultural literacy, especially when analyzed through the lens of the Structure of the Observed Learning Outcome Taxonomy. The positioning of students at the multistructural level indicates a cognitive tendency to accumulate information without yet establishing conceptual links, suggesting a developmental phase in their cultural understanding. This finding highlights the theoretical contribution of using Structure of the Observed Learning Outcome Taxonomy as a diagnostic tool in mapping students' cultural literacy, offering a framework for educators to design learning that fosters deeper cultural connections and higher-order thinking in primary education. It is suggested that further research could include various regions with diverse cultural backgrounds, both in terms of ethnicity, religion and socioeconomic status. This will

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provide a more comprehensive and representative picture of students' cultural literacy skills across Indonesia.

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