

Analysis of Media Needs Based on Visual Ethnography in Social Studies Learning in Junior High School

Makhsunah *

Faculty of Teacher Training and Education, Universitas Sriwijaya, Palembang, Indonesia

Riswan Jaenudin

Faculty of Teacher Training and Education, Universitas Sriwijaya, Palembang, Indonesia

Makmum Raharjo

Faculty of Teacher Training and Education, Universitas Sriwijaya, Palembang, Indonesia

***Corresponding Author:** 06032682428034@student.unsri.ac.id

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Abstract

This study aims to analyze the needs of teachers and students for *Visual Ethnography-based learning media* in social studies learning in junior high schools. The *Visual Ethnography* approach offers a solution by presenting social and cultural data in an authentic and contextual visual form. The research method employed is a quantitative descriptive approach, supplemented by qualitative data. The research subjects consisted of 17 teachers and 211 junior high school students from nine schools in Sungai Lilin, Bayung Lencir, and Tungkal Jaya Districts, Musi Banyuasin Regency, South Sumatra Province. Data was collected through a needs questionnaire distributed using Google Forms, as well as interviews to obtain a more comprehensive picture of media needs. The results showed that students' needs for interactive, contextual, and visually based learning media related to local culture were in the high to very high category, with an average percentage of 86–93%. In contrast, the need for teachers in this aspect was in the range of 78–88%. The expected media include infographics, ethnographic videos, and visual narratives that are easy to understand and relevant to the student's learning experience. These findings confirm that *Visual Ethnography-based* media can increase learning engagement, understanding of social concepts, and appreciation of cultural diversity. The implications of this study highlight the need to develop innovative learning media based on *Visual Ethnography* to enhance social studies learning that is more meaningful, contextual, and aligned with the characteristics of junior high school students.

INTRODUCTION

Social Science (IPS) learning in junior high schools (SMP) plays a strategic role in shaping students' understanding of the nation's social, cultural, and historical realities (Dirgantoro, 2021; Rahmawati, 2020). Through social studies learning, students are expected to develop social awareness, tolerance, and critical thinking skills in response to social phenomena around them. However, the results of observations and various recent studies show that social studies learning still tends to be conventional and teacher-centered, with the use of text media limited to packaged books. This approach often makes social studies material feel abstract and less contextual, which can make it difficult for students to understand the relationship between the concepts they learn and real life (Güneş, Arıkan, & Çetin, 2020; Fannisa et al., 2023).

This condition creates a gap between social studies learning objectives that emphasize socio-cultural understanding and classroom learning practices that lack visualization. In this context, learning media play a crucial role as a means of transforming information and connecting theory with social reality. Recent research confirms that visual media can enhance students' conceptual understanding by providing a more concrete, interactive, and meaningful learning experience (Marita

et al., 2025; Sari et al., 2022; Premiere, 2023). However, to date, the use of visual approaches that integrate ethnographic values in social studies learning remains relatively limited.

Visual Ethnography, as a research approach and the presentation of socio-cultural data through visual media such as images, videos, and infographics, offers excellent potential to enrich social studies learning (Nur et al., 2024; Huang, 2023; Susilowati & Anistyasari, 2024). This approach not only presents social phenomena in real life but also enables students to understand cultural diversity and societal dynamics through authentic visual experiences (Rahayu et al., 2025). Thus, *Visual Ethnography* can serve as a bridge between social theory and the practice of everyday life, which is much needed in a 21st-century education that emphasizes cultural literacy, creativity, and critical thinking.

The primary issue underlying this research is the scarcity of Visual Ethnography-based learning media that aligns with the characteristics of junior high school students and the socio-cultural context of Indonesia. Most teachers still rely on conventional media, while students show a need for media that is more engaging, contextual, and relevant to their life experiences. This gap creates the urgency to conduct a needs analysis as the first step in developing *Visual Ethnography-based* learning media.

Several previous studies have analyzed the needs of digital-based social studies learning media, such as the use of learning videos, interactive multimedia, or conventional infographics (Ni'matussyahara, 2023; Khaeranda et al., 2024; Amin & Kurniawan, 2020). However, these studies generally have not integrated a visual ethnographic approach that displays explicitly the local cultural context as a learning resource. Therefore, this research presents novelty through the application of the concept of Visual Ethnography in the context of social studies learning at the junior high school level, especially in the material "The Spread of Religion in Indonesia." This material is very relevant because it requires a deep understanding of the cultural diversity and values of tolerance that exist in society.

This research specifically aims to analyze the needs of teachers and students for Visual Ethnography-based learning media in social studies learning in junior high schools. The needs analysis was carried out by reviewing five main aspects, namely the pedagogical aspect, which is related to the effectiveness of media in improving concept understanding and student learning engagement; technical aspects, which include ease of use, interactivity, and integration of media in learning activities; cognitive aspects, which assess the extent to which media can stimulate students' critical thinking skills and conceptual understanding; aesthetic aspects, which include visual display quality, design clarity, and media appeal; and the evaluation aspect, which reviews the media's ability to help teachers authentically assess student learning outcomes.

Theoretically, this research is based on Ausubel's *theory of meaningful learning*, which emphasizes the importance of associating new concepts with the cognitive structure that students already possess, as well as Piaget's *theory of constructivism*, which underlines the active role of students in building knowledge through direct experience. The integration of Visual Ethnography in social studies learning enables the application of both theories through learning experiences based on real visualizations of social and cultural life.

The significance of this research extends to both theoretical and practical aspects. The results of this study are expected to enrich the study of culture-based learning media development with a more contextual visual approach. The research findings can serve as a basis for teachers and media developers in creating innovative teaching materials that align with the characteristics of junior high school students and the learning needs of social studies in the 21st century. Thus, this research contributes to creating a more meaningful and participatory social studies learning process, fostering an appreciation for the social and cultural diversity of the Indonesian nation.

METHODS

This study employs a quantitative descriptive approach, supported by qualitative data, to provide a comprehensive understanding of the needs of teachers and students for Visual

Ethnography-based learning media in social studies education at junior high school. The research design, in the form of a descriptive survey, was chosen because it enabled the systematic mapping of user perceptions, tendencies, and needs.

The research subjects consisted of 17 teachers and 211 junior high school students from nine schools in three sub-districts, namely Sungai Lilin, Tungkal Jaya, and Bayung Lencir Districts, Musi Banyuasin Regency. The sample was determined using purposive sampling techniques based on school readiness and active involvement in social studies learning. The recapitulation of the research subject is presented in Table 1.

Table 1. Distribution of Research Subjects per Sub-district

District	Number of Schools	Number of Teachers	Number of Students	Total Subjects
Candle River	3 schools	6 teachers	70 students	76
Tungkal Jaya	3 schools	6 teachers	70 students	76
Bayung Lencir	3 schools	5 teachers	71 students	76
TOTAL	9 schools	17 teachers	211 students	228

Table 1 shows that the research subjects came from nine schools in three sub-districts with a total of 17 teachers and 211 students. The distribution of each sub-district is relatively even, each involving three schools, with an almost balanced number of teachers and students. Overall, the total number of research subjects was 228 people.

To measure the needs of students and teachers for Visual Ethnography-based learning media, the researcher used a questionnaire developed based on pedagogical, technical, cognitive, aesthetic, and evaluation aspects. This questionnaire is systematically prepared according to the indicators for each aspect and has undergone an expert validation process. The questionnaire grid for student needs is shown in Table 2 below.

Table 2. Questionnaire Grid: Teacher and student needs

Aspects	Pedagogical	Technical	Cognitive	Aesthetic	Evaluation
Learners	1-4	5-8	9-12	13-16	17-20
Teacher	1-3	4-8	9-12	13-16	17-20

Source of modification (Raharjo et al., 2024)

To obtain qualitative data on the needs of Visual Ethnography media, the researcher used semi-structured interviews with social studies teachers. The interviews focused on students' difficulties, learning strategies, learning preferences, and the use of media that were considered adequate. The interview grid was compiled based on indicators that fit the research objectives and was modified from Sholikhah (2020). Details of the grid are presented in Table 4.

Table 3. Social Studies Teacher Interview Grid

Assessment Aspects	Items
Student Learning Difficulties	1-4
Teaching Attitudes and Strategies	5-8
Student Interests and Preferences	9-12
Media and Learning Models	13-16

Source: (Modified by Sholikhah, 2020)

Data collection was conducted through two techniques: the distribution of needs analysis questionnaires to teachers and students via Google Forms, and the implementation of interviews with social studies teachers to gain a comprehensive understanding of the use of media and the dynamics of interaction in learning. The research variable, in the form of the need for media based on Visual Ethnography, is operationalized through indicators of pedagogical, technical, aesthetic, and local cultural relevance.

Quantitative data were analyzed using descriptive statistics in the form of percentages to see the tendency of teachers and students to need Visual Ethnography-based learning media. To provide a more straightforward interpretation of the questionnaire results, the criteria for the percentage of needs shown in Table 5 are used.

Table 4. Criteria for Interpretation of the Percentage of Needs

Percentage	Interpretation
0%-25%	Absolutely unnecessary
26%-50%	No Need
52%-75%	Need
76%-100%	Very Necessary

Source: modification (Anjarwati et al., 2022)

In addition to quantitative analysis, the interview data were analyzed qualitatively through the process of studying, reducing, and summarizing the teacher's answers. The information from the interviews was then classified based on the similarity of content, such as media needs, constraints on the use of existing media, visual preferences, and school readiness in the application of Visual Ethnography media. The results of this qualitative analysis complement the questionnaire data, providing a deeper understanding of the real needs in the field. This research adheres to the principles of research ethics, including official permission from the school, informed consent from the respondents, and maintaining data confidentiality through the application of anonymity. All research activities were conducted over three months, encompassing the preparation of instruments, data collection, data analysis, and the finalization of the research report.

RESULTS AND DISCUSSION

Results

The Results section presents systematic and objective research findings based on survey data on the needs of students and teachers for Visual Ethnography-based learning media in social studies learning. The total respondents consisted of students from several schools and junior high school social studies teachers with diverse characteristics, ensuring that the research results represented real needs in the context of social studies learning in the field.

1. Students' Needs for Visual Media Ethnography

Descriptive analysis indicates that student needs fall into the high to very high category in all aspects measured. These findings confirm that students require more varied, interactive, and contextual learning materials to support their understanding of social studies content. A complete recapitulation of the percentage of student needs based on each aspect and indicators can be seen in Table 6.

Table 5. Recapitulation of the Percentage of Student Needs Based on Each Aspect

Aspects	Yes	Indicators	Percentage Now (%)	Average aspect ratio	Interpretation
Pedagogical	1	Difficulty Understanding the Material	61%	84%	Tall
	2	Variations of Learning Media	93%		Very high
	3	Teachers' Ability to Develop Infographics	89%		Very high
	4	Infographics Make It Easier to Understand the Material	94%		Very high
Technical	5	Availability of Learning Tools	79%	87%	Tall
	6	Access to Digital Facilities	89%		Very high

Cognitive	7	Personal Device Ownership	90%	87%	Very high
	8	Technical Assistance Needs	91%		Very high
	9	Understanding Social Studies Material	86%		Very high
	10	Learning Experience with Infographics	79%		Tall
	11	Understanding the Function of Infographics	91%		Very high
Aesthetic	12	Interactive Media Helps Learn	92%	93%	Very high
	13	Needs of Interactive Social Media	95%		Very high
	14	Visual Attraction & Local Culture	91%		Very high
	15	Text, Image, and Color Arrangement	93%		Very high
	16	Animation & Interactive Effects Needs	91%		Very high
Evaluation	17	Need for Practice	91%	89%	Very high
	18	Ease of Doing Questions	90%		Very high
	19	Feedback After Answering Questions	84%		Tall
	20	Confidence After Evaluation	91%		Very high
Overall average			88%		

Overall, these findings confirm that students require learning media that are more varied, interactive, aesthetically pleasing, and easy to use to support the social studies learning process. A visualization of the percentage of student needs per aspect is shown in Figure 1.

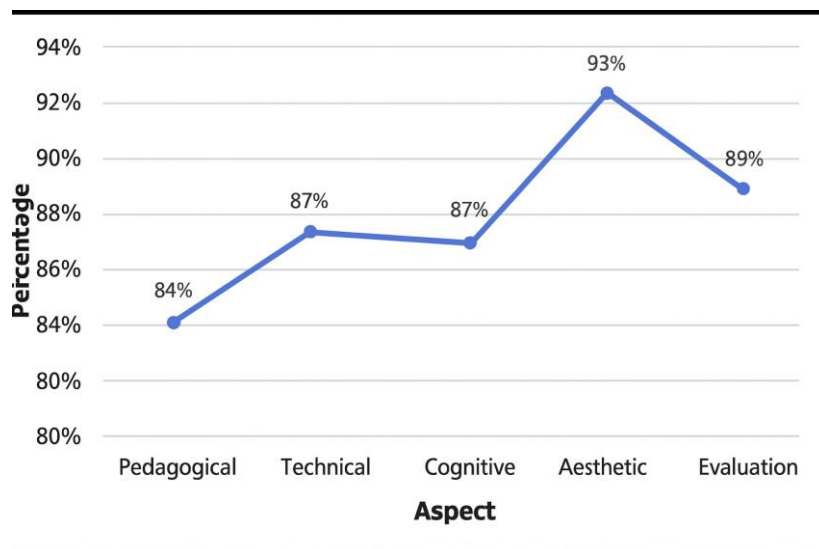


Figure 1. Students' Needs Percentage By Aspect

Figure 1 illustrates the percentage of student needs in five aspects: pedagogical (84.25%), technical (87.25%), cognitive (87%), aesthetic (92.5%), and evaluation (89%). All aspects are in the high to very high category, with aesthetics being the highest. Overall, this picture confirms that students need learning media that is engaging, interactive, and easy to use in social studies learning.

2. Teachers' Needs for Visual Media Ethnography

In addition to students, teachers' needs for learning media were also analyzed. The results show that teachers have a high need, especially in pedagogical, technical, and aesthetic aspects. The recapitulation is shown in Table 7

Table 7. Recapitulation of Teacher Needs Percentage Based on Each Aspect

Aspects	Yes	Indicators	Percentage Now (%)	Average per Aspect	Interpretation
Pedagogical	1	Material Understanding	88%	83,7%	Very high
	2	Curriculum Fit	84%		Very high
	3	Increase Interest in Learning	79%		Tall
Technical	4	The use of interactive media improves students' understanding	84%	80,4%	Very high
	5	Ease of Media Access	82%		Very high
	6	Audio-Visual Quality	76%		Tall
	7	Ease of Use	80%		Very high
	8	Students' access to technology	78%		Tall
Cognitive	9	Supporting Concept Understanding	85%	81,5%	Very high
	10	Facilitate Social Analytics	78%		Tall
	11	The media helps to understand the material	82%		Very high
	12	The media has interactive features	81%		Very high
Aesthetic	13	Visual Display Attractiveness	83%	81,7%	Very high
	14	Cultural Visual Clarity	81%		Very high
	15	Media design according to the characteristics of social studies material	81%		Very high
	16	Media suitability with the needs of students	82%		Very high
Evaluation	17	Supporting Learning Assessments	74%	73,2%	Tall
	18	Giving Feedback	70%		Tall
	19	Interactive media makes it easy to measure learning outcomes	75%		Tall
	20	Media display student learning outcomes	74%		Tall
Overall Average				80,1%	

The visualization of the percentage of teacher needs in each aspect, ranging from pedagogical to technical, cognitive, aesthetic, and evaluation, shows a clear difference in the level of needs and provides a comprehensive picture of the aspects that most need reinforcement in the development of learning media, as shown in Figure 2.

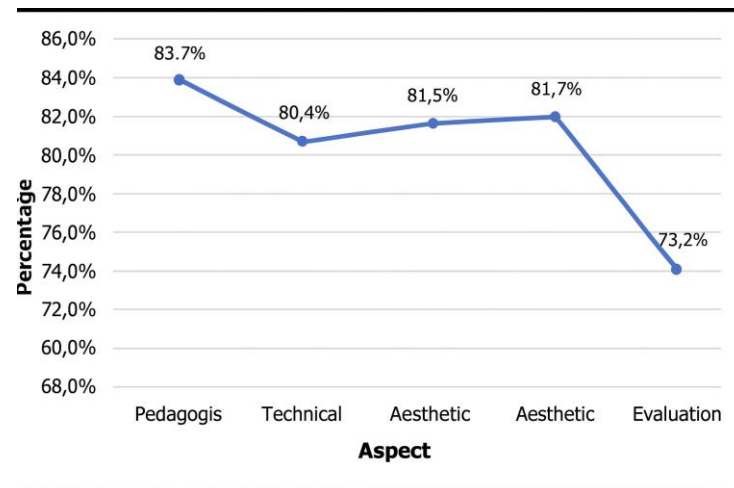


Figure 2. Teachers' Needs Percentage By Aspect

Figure 2 illustrates the percentage of teacher needs in five aspects: pedagogical (83.67%), technical (79.33%), cognitive (81.5%), aesthetic (82%), and evaluation (72%). All aspects are in the high to very high category, with the pedagogical aspect being the highest. Overall, this picture illustrates that teachers need clear, accessible, and effective learning media to support the learning process.

In addition to the questionnaire, this study also conducted interviews to assess the needs of teachers. The results show that teachers need interesting media, interactive teaching strategies, and materials that make it easier to understand concepts, which align with student characteristics. A summary of the interview results is presented in Figure 3.

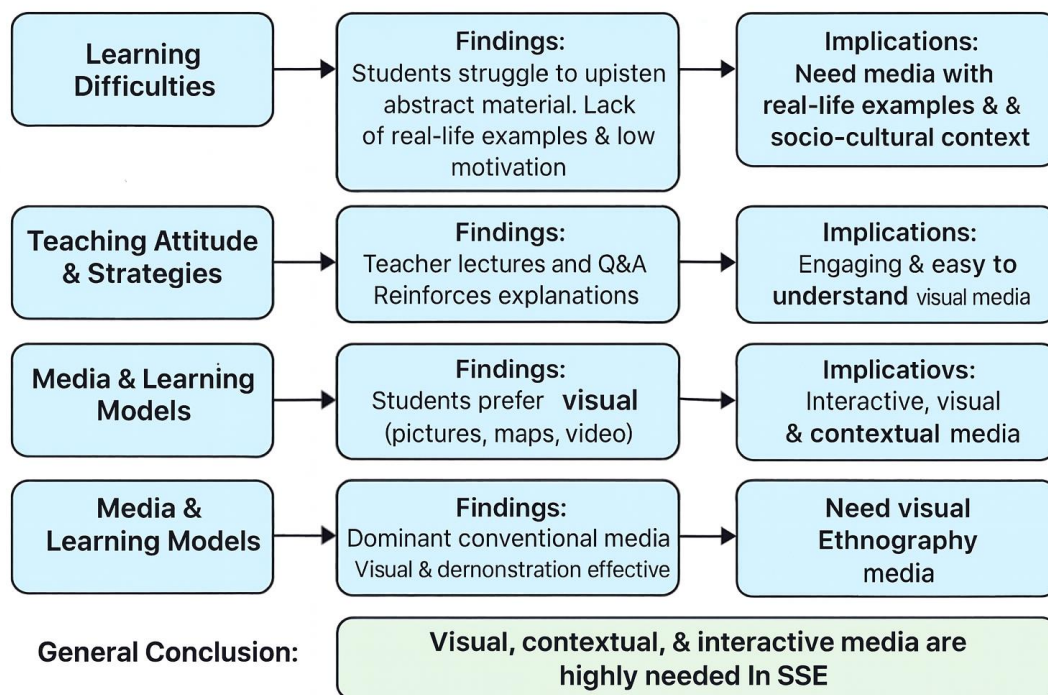


Figure 3. Summary of Social Studies Teacher Interview Results

Based on Figure 3, the results of interviews with social studies teachers indicate that four main aspects significantly impact the social studies learning process in the classroom. In terms of students' learning difficulties, it was revealed that students still encounter obstacles in understanding abstract material, such as history and geography, due to a lack of real-world examples and low motivation to

learn. This condition requires the use of learning media that present concrete and relevant examples in the socio-cultural context of students. In terms of attitudes and teaching strategies, teachers generally still rely on lecture and question-and-answer methods and often provide re-explanations to students who do not understand the material. Therefore, an attractive and easy-to-understand visual medium is needed to support a more effective teaching strategy.

Furthermore, in terms of students' interests and preferences, it was found that students preferred materials presented through visual media, such as images, maps, and videos, compared to text. These findings suggest the need for interactive, visual, and contextual learning media to enhance student engagement and interest in the learning process. Meanwhile, in terms of media and learning models, the use of conventional media, such as whiteboards and textbooks, remains dominant; however, visual media and learning models, including discussions and demonstrations, are also considered effective in enhancing understanding.

Overall, the study's results, which included student questionnaire data, teacher questionnaires, and in-depth interviews, demonstrated consistency in showing that the social studies learning process requires more varied, visual, interactive, and contextual media support. Both teachers and students emphasized the need for learning media that can present real-world examples, clarify abstract concepts, and enhance motivation and learning engagement. The high need for pedagogical, technical, cognitive, aesthetic, and evaluative aspects indicates that Visual Ethnography-based media have great potential to address the challenges of social studies learning in the classroom. Thus, these findings become a strong basis for the development of Visual Ethnography media as an innovative alternative to improve the effectiveness of social studies learning as a whole.

Discussion

Based on the research results, both students and teachers exhibit a high need for the development of learning media based on *Visual Ethnography* in social studies education. These findings confirm that visual, interactive, contextual, and aesthetic media are needed to help students understand abstract concepts and build a more authentic learning experience (Jaenudin et al., 2021). These results align with the notion that visual media can significantly enhance attention, comprehension, and information retention in learning (Raharjo et al., 2023; Paturanga, 2023; Jaleniauskiene, 2023; Desi, 2020). Moreover, the *Cognitive Theory of Multimedia Learning* emphasizes that the visualization and integration of real-world contexts are highly effective in strengthening conceptual understanding (Mayer, 2024; Doherty, 2022; Fiorella et al., 2019; Husna & Zahroh, 2023).

The tendency of high needs not only appears in students, but also in teachers. The results of the questionnaire recapitulation, which covers 20 indicators, show that teachers require media support in all aspects, particularly in pedagogical, technical, and cognitive areas. In the pedagogical aspect, teachers need media that can clarify concepts and help overcome the limitations of conventional learning resources (Raharjo, Erna Retna Safitri, et al., 2023), as also found in the analysis study of interactive media needs at SD Negeri 7 Lahat (Supriyadi et al., 2025). From the technical aspect, device readiness, ease of access, and ease of use are important requirements that affect the smooth learning process, in line with the finding that teachers need administrative support and digital technology that is easy to operate (Raharjo, Safitri, et al., 2023); (Susnita, Jaenudin, & Syarifuddin, 2024). This finding is also in line with research that confirms teachers' technical competence in using digital devices has a direct effect on the success of implementing educational technology (Raharjo et al., 2024).

Meanwhile, in the cognitive and aesthetic aspects, teachers require media with visuals that are clear, contextual, and relevant to the characteristics of social studies material, as demonstrated by the development of AI-based E-LKPD media, which demands a strong and easy-to-understand visual presentation (Murwani et al., 2025). From an evaluation aspect, teachers also want an assessment feature that can provide quick feedback and support formative assessments (Jaenudin et al., 2020).

Thus, the needs of teachers show that Visual Ethnography-based media must not only be visually appealing, but also functional, easy to use, and support all stages of learning.

In line with the needs of teachers, the needs of students also appear strong in pedagogical, technical, cognitive, aesthetic, and evaluation aspects. The pedagogical aspect is a core competency that teachers must have to manage learning effectively (Raharjo et al., 2024). Students' needs are strong in pedagogical, technical, cognitive, aesthetic, and evaluation aspects. In terms of pedagogical and cognitive aspects, students require visual and interactive media that facilitate their understanding of abstract social studies materials, such as history, religious studies, and geography. These results align with research indicating that visual media can enhance conceptual understanding compared to conventional methods (Haq & Madany, 2025; Hayatullah et al., 2025). From a technical aspect, the support of digital facilities and personal devices is also a key factor, indicating that technological readiness is a primary prerequisite for the success of multimedia-based learning (Avedzi, 2025; Ssebanakitta et al., 2025; Waang, 2023). Aesthetic aspects, particularly those that are visually appealing and rooted in local culture, have been demonstrated to enhance learning motivation (Cheng Liu, 2025; Lyra et al., 2016; Su, 2025). Additionally, a study on the importance of visual appeal in triggering active student engagement found similar results (Khaleel et al., 2020). In the evaluation aspect, the need for interactive question exercises, accessibility, and feedback aligns with research that emphasizes the importance of evaluative features in digital media to support independent learning (Winarti & Putro, 2024).

From the teacher's perspective, the results of the interviews indicate that they require media that not only support teaching strategies but also facilitate the delivery of abstract concepts, tailored to the characteristics of students. The teacher emphasized the need for media that display real socio-cultural contexts, especially for materials such as "The Spread of Religion in Indonesia," which demands an understanding of cultural diversity and the value of tolerance. These findings are reinforced by research that says that culturally context-based learning media helps students develop social empathy and cross-cultural understanding (Medina & Chania, 2024). Additionally, other research confirms that *Visual Ethnography* facilitates in-depth visual documentation of local culture, making it highly relevant to social studies learning (Dharma et al., 2024).

The findings of this study align with various previous studies that emphasize the effectiveness of digital and visual learning media in enhancing students' understanding of concepts and motivation. These studies state that interactive media increases participation and understanding of social studies materials (Dharma et al., 2024). Similar research also emphasizes that visualizing local contexts in learning can strengthen the connection between subject matter and students' real lives (Nurul Afni & Kurniana Bektiningsih, 2024). However, this research makes a new contribution through the integration of *Visual Ethnography*, which has not been widely adopted in social studies learning at the junior high school level. This approach enables the elevation of local culture as an authentic source of learning, while enriching value-based learning experiences and social realities.

Overall, these findings suggest that Visual Ethnography-based learning media have the potential to enhance the quality of social studies learning. This media needs to consider pedagogical, technical, cognitive, aesthetic, and evaluative aspects to be effective and in line with the needs of students and teachers.

CONCLUSION

This research highlights the importance of developing learning media that effectively integrate cultural realities with the learning needs of students in social studies classes. The results obtained show that *the Visual Ethnography-based* approach not only offers new alternatives but also opens up more meaningful learning spaces, as it brings a learning experience closer to the lives of students. Thus, this study provides an understanding that media innovation not only adds visualization but also builds connections between knowledge, culture, and social context.

The theoretical contribution of this research lies in affirming that the integration of local cultural elements in learning media can expand the way students interpret information, while strengthening the relevance of social studies materials to real-world social contexts. Methodologically, this study suggests that a needs analysis can be a strong first step in designing a truly user-oriented medium, benefiting both students and teachers.

This research also provides important practical implications for the development of social studies media in schools. The findings show that learning will be more effective if the media used is not only visually rich but also able to lead students to understand the diversity and dynamics of social life through real examples and representations. Therefore, the development of *Visual Ethnography-based* media can be one feasible strategy to apply in the context of 21st-century learning.

The limitation of this research lies in its exploratory nature, which is limited to analyzing the initial needs of a select number of students and teachers. This study has not empirically tested the effectiveness of media in the classroom as a whole, and its implementation is limited to certain social studies materials. Additionally, the variation in different social and cultural contexts between schools has not been fully taken into account, which limits the generalizability of the results.

In the future, further research is needed to test the effectiveness of *Visual Ethnography-based media* empirically through experiments or classroom implementations on a broader scale. Similar research can also be extended to other social studies materials or to various educational levels to explore the potential for adaptation.

In closing, this study emphasizes that the update of learning media serves not only as a technical innovation, but also as an effort to strengthen the connection between learning and the socio-cultural reality of students. *Visual Ethnography-based media* has the potential to be an important bridge to more authentic, contextual, and meaningful social studies learning.

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