



Development of A Contextual-Based Encyclopedia Entitled "Economic Conditions in My Area" For Grade V Students at SD Negeri 45 Lubuklinggau

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Abstract:

Background: The development of teaching materials suited to local context is essential for helping elementary school students understand economic conditions in their region.

Aims: This study aims to develop a contextual-based encyclopedia on the topic "Economic Conditions in My Region" that is valid, practical, and effective for use by fifth-grade students at SD Negeri 45 Lubuklinggau.

Method: This study employed the Research and Development (R&D) method, comprising needs analysis, content development, expert validation, limited trial testing, data collection and analysis, and product evaluation and refinement. Data were collected through observation, interviews, documentation, questionnaires, and tests.

Results: Validation results showed that the developed encyclopedia is suitable for use in learning, with scores of 0.93 for language, 0.93 for media, and 0.97 for content, yielding an average validity score of 0.94 (high category). Practicality test results showed approval rates of 86.67% from individual student responses, 86.67% from small group responses, and 96% from teacher responses, with an average of 89.78% (very practical category). The contextual-based encyclopedia also improved students' understanding of local economic material, as reflected in a pretest score of 47.96, a posttest score of 82.03, and an N-gain score of 0.65 (moderate category).

Conclusion: The contextual-based encyclopedia is suitable for use as a learning medium to enhance fifth-grade students' understanding of the material "Economic Conditions in My Region."

Keywords: Contextual, Encyclopedia, Learning Media, Learning Outcomes, Local Economy

1. INTRODUCTION

The development of basic education in Indonesia is currently marked by the implementation of the Merdeka Curriculum, which emphasizes contextual, competency-based, flexible, and student-centered learning. The curriculum was introduced partly in response to educational challenges such as learning loss during the COVID-19 pandemic and the need for learning recovery (Anastasha & Lasari, 2023; Aufaa & Andaryani, 2023). One important implication of this curriculum is the need for learning materials that connect academic concepts with students' real-life experiences and local environments.

Contextual learning enables students to relate learning content to situations in their daily lives, thereby making

learning more meaningful and facilitating conceptual understanding, motivation, and problem-solving (Prihatini & Sugiarti, 2022; Puspitoningrum et al., 2024; Roni et al., 2022). This approach is particularly relevant to elementary social studies because the subject introduces students to their community, environment, and social-economic life. Learning about the surrounding environment can help students understand broader concepts through experiences that are familiar to them (Dwiyono & Kustono, 2021; Kurniati et al., 2022).

Nevertheless, the application of contextual learning in elementary education is still limited by the lack of instructional resources that reflect students' local environments. Previous studies have reported that teachers often have difficulty providing materials that are appropriate to students' environmental contexts, while commercially available textbooks may present content from particular regional perspectives and therefore do not always reflect local conditions (Aqilla et al., 2023; Faizah & Ramadan, 2024; Fikri et al., 2023). This problem is particularly relevant in regional schools, where differences in facilities, technological access, and teachers' capacity to develop innovative learning media may limit the use of technology-dependent resources (Yolanda et al., 2023). Consequently, learning media that are contextual, practical, and accessible without relying entirely on digital technology are still needed.

Earlier research has underscored the potential of instructional resources rooted in local contexts and

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community wisdom for primary-level education. For example, contextual materials have been developed around local culture, language, science, literacy, and numeracy using various formats and generally received positive evaluations from experts (Dhiku et al., 2023; Loko et al., 2022; Naitili & Nahak, 2023; Risanti & Agustina, 2025; Wero et al., 2021; Yame et al., 2022). Nevertheless, these studies predominantly contextualize learning through cultural, linguistic, scientific, or general local-wisdom perspectives. The economic dimension of students' local environments has received considerably less attention, despite the fact that economic activities such as buying and selling, trade, agricultural production, employment, and household economic activities are directly experienced by elementary school students.

Research on contextual media for social studies has also been conducted, including interactive media, digital scrapbooks, and project-based learning approaches (Muhardini et al., 2021; Nurlina & Maharani, 2024; Saputra & Teguh, 2022). However, these studies generally address broad social studies themes, natural appearances, local wisdom, or general learning models rather than specifically presenting the economic conditions of students' own regions. Thus, existing studies provide evidence for the value of contextual learning but leave an important content gap: the systematic development of learning media that specifically connects elementary social studies with the economic characteristics of students' local areas. In addition, previous developments have more frequently employed textbook, worksheet, or digital-media formats, while the use of an encyclopedia as a contextual printed learning resource remains relatively limited (Laksana, 2024).

These limitations indicate that the existing literature has not sufficiently addressed the intersection of contextual learning, local economic content, and encyclopedia-based learning media for elementary social studies. The gap is therefore not simply the absence of another learning material, but the limited integration of these three aspects into a comprehensive instructional resource designed around the economic reality of a specific local community. Addressing this gap is important because contextualizing economic concepts through students' own regional environment may provide concrete examples that are more closely connected to their everyday experiences.

To bridge this gap, this study focuses on the development of an encyclopedia grounded in contextual learning principles entitled "*Economic Conditions in My Region*" for Grade V students at SD Negeri 45 Lubuklinggau. The novelty of this study lies in the development of a printed encyclopedia that systematically integrates local economic conditions in Lubuklinggau into elementary social studies content, rather than merely adapting general material to local culture or local wisdom. The encyclopedia is designed to present economic concepts through information and examples drawn from the students' surrounding

environment, making the material more concrete, relevant, and accessible. In this way, the study contributes a locally grounded learning resource that connects curriculum content with the economic realities experienced by students while remaining usable in contexts where access to digital learning resources may be limited.

Accordingly, this study seeks to design and evaluate a context-based encyclopedia covering "*Economic Conditions in My Region*" for Grade V students of SD Negeri 45 Lubuklinggau. Specifically, the study examines the feasibility and practicality of the developed encyclopedia and investigates students' responses to its use in learning. The study is expected to contribute to the development of contextual social studies learning media by providing an alternative resource that integrates curriculum content, local economic knowledge, and students' everyday experiences.

This gap reinforces the urgency of developing a contextual-based encyclopedia on the material "*Economic Conditions in My Region*" as a learning medium that is relevant to students' needs, engaging, and reflective of the economic conditions in their local communities. This research aims to develop a contextual-based encyclopedia that contains material "*Economic Conditions in My Region*" specifically for grade V students of SD Negeri 45 Lubuklinggau. The main goal of this research is to produce an encyclopedia that is relevant to the local context so that it can effectively meet the learning needs of students. Through a design and preparation process that takes into account the characteristics of students and regional economic conditions, the encyclopedia is expected to be an interactive and easy-to-understand learning medium, while supporting students' economic literacy skills.

In addition, this study also aims to test the effectiveness of the encyclopedia in improving students' understanding of local economic material as well as assessing their level of engagement and motivation to learn during its use. By assessing students' responses and interactions to contextual-based encyclopedias, this study can provide an overview of the extent to which these learning media are able to encourage understanding of economic concepts, increase interest in learning, and form more meaningful learning experiences according to students' needs and social environment.

2. MATERIALS AND METHODS

This research adopted a research and development (R&D) methodology to produce a contextual-based encyclopedia entitled "*Economic Conditions in My Region*" for Grade V elementary school students. The purpose of the development was to produce a learning medium that was valid, practical, and suitable for supporting students' understanding of local economic conditions.

The study followed the ADDIE instructional design model, comprising five consecutive phases: Analysis, Design, Development, Implementation, and Evaluation. This model was chosen because it offers a structured approach to assessing instructional needs, planning and producing educational materials, verifying product validity, conducting classroom implementation, and assessing the final product through feedback from experts and users.

The development of the contextual-based encyclopedia was conducted through five stages. The analysis stage was conducted to identify the learning needs of Grade V students, curriculum requirements, student characteristics, existing learning resources, and the relevance of local economic content to students' daily lives. Data were obtained through classroom observation, interviews with the Grade V teacher, and documentation of relevant school learning materials.

In addition, information concerning the economic conditions of Lubuklinggau was collected through observation of the surrounding environment and relevant secondary sources. The results obtained from the analysis informed the selection of the content, learning objectives, presentation format, language level, and contextual examples to be included in the encyclopedia.

The design phase focused on developing the organizational framework and determining the content of the context-based encyclopedia. The content was organized according to the learning objectives and characteristics of Grade V students. The encyclopedia was designed to present information about economic conditions in the students' local environment through explanations, illustrations, examples, contextual cases, and learning activities.

At this stage, the researchers also designed the visual appearance, page layout, typography, illustrations, language, and organization of the learning material. The design was intended to make the encyclopedia attractive, readable, and relevant to students' everyday experiences. At the development stage, the initial encyclopedia product was produced based on the results of the analysis and design stages. Primary information was obtained through observation of the local environment, while secondary information was obtained from school documents and relevant local information sources. The developed material was adapted to the cognitive level of Grade V students and presented using simple language supported by illustrations and contextual examples. After the initial product was completed, it was submitted for expert validation.

The validation involved three experts, consisting of one language expert, one media expert, and one material expert. The language expert evaluated the clarity, readability, appropriateness, and suitability of the language for Grade V students. The media expert evaluated the visual design, layout, typography, illustrations, presentation, and usability of the encyclopedia. The material expert evaluated the accuracy, relevance, completeness, curriculum

alignment, and contextual suitability of the economic content. The suggestions and comments provided by the three validators were used to revise and improve the encyclopedia before it was implemented with students. The implementation stage involved a limited field trial with 27 Grade V students of SD Negeri 45 Lubuklinggau. The students participated in learning activities using the contextual-based encyclopedia. Before the learning activities, the students completed a pretest consisting of 20 items to measure their initial understanding of the material.

Following the learning sessions, students completed a posttest based on the same assessment framework to determine changes in their understanding after using the developed encyclopedia. During implementation, student participation and responses were observed. Teacher feedback was also obtained to identify the practicality and suitability of the encyclopedia for classroom use. The evaluation stage was conducted based on the results obtained from expert validation and the limited field trial. The evaluation focused on identifying weaknesses and strengths of the developed encyclopedia and determining aspects requiring further revision. The final revision was made based on expert suggestions, teacher feedback, observations, and the results of students' pretest and posttest. The final product was subsequently prepared as a contextual learning medium for Grade V students. The participants in this study consisted of 27 Grade V students of SD Negeri 45 Lubuklinggau during the 2025/2026 academic year. The students participated in the limited trial of the developed contextual-based encyclopedia.

In addition to the student participants, three experts were involved in the product validation process. The validators consisted of one language expert, one media expert, and one material expert. Each validator evaluated the product according to their respective areas of expertise. The material expert assessed the suitability and accuracy of the economic content, the media expert assessed the quality of the encyclopedia as a learning medium, and the language expert assessed the clarity and readability of the language used in the product. The instruments used in this study consisted of expert validation sheets, observation sheets, interview guidelines, documentation, and student achievement tests.

The expert validation sheets were used to assess the feasibility of the encyclopedia from the perspectives of material, media, and language. The observation sheet was used to record students' participation and engagement during the learning process. Interview guidelines were used to obtain feedback from the Grade V teacher concerning the suitability and practicality of the developed encyclopedia. Documentation served to capture the stages of product development and its implementation. Student understanding was measured using a 20-item test administered as a pretest and posttest. The pretest was administered before the use of the encyclopedia, whereas the posttest was administered after the learning activities using the encyclopedia. The

test was designed to measure students' understanding of the material "*Economic Conditions in My Region*."

Data collection was conducted systematically during the development and implementation processes. First, observations and interviews were conducted to identify students' learning needs and the teacher's requirements for contextual learning materials. Second, relevant information concerning the economic conditions of Lubuklinggau was collected to develop the content of the encyclopedia. Third, the initial encyclopedia was developed and submitted to three experts for validation. The validators consisted of a language expert, a media expert, and a material expert. Fourth, the encyclopedia was revised based on the validators' comments and recommendations. Fifth, the revised encyclopedia was implemented with 27 Grade V students. Before the implementation, students completed the pretest. The students then participated in learning activities using the contextual-based encyclopedia. After the learning activities, students completed the posttest. Observations, teacher interviews, and documentation were conducted throughout the implementation process.

The collected data were examined through descriptive quantitative and qualitative analyses. Expert validation scores were processed to establish the validity of the developed encyclopedia, whereas qualitative information derived from observations, interviews, and expert feedback was interpreted descriptively to determine the product's strengths, limitations, and areas needing improvement. The validity of the encyclopedia was analyzed using Aiken's V coefficient. The Aiken's V coefficient was calculated based on the ratings provided by the three validators for each validation item. The formula was: $V = \sum s / [n(c - 1)]$ where s represents the score assigned by each validator minus the lowest possible score, n represents the number of validators, and c represents the number of rating categories. The

resulting Aiken's V values were interpreted according to the validity criteria adopted in the study. To examine the improvement in students' understanding after using the contextual-based encyclopedia, the pretest and posttest scores were analyzed using the normalized gain (N-Gain). The N-Gain was calculated using the following formula: $g = (\text{Posttest score} - \text{Pretest score}) / (\text{Maximum score} - \text{Pretest score})$. The N-Gain score was then interpreted according to the predetermined N-Gain criteria. The qualitative findings from expert comments, teacher responses, and observations were used to complement the quantitative analysis and determine the revisions required for the final product. The combination of expert validation, field-trial data, and pretest/posttest results was used to evaluate the quality and suitability of the contextual-based encyclopedia as a learning medium for Grade V students.

Data were analyzed descriptively by data triangulation, while the improvement of student understanding was analyzed using N-gain calculation. The final stage of research involved evaluation and improvement of products based on the results of trials and teacher input so that a contextual-based encyclopedia that is suitable for use in learning is obtained.

The technique of analyzing the feasibility of learning media encyclopedia based on contextual learning is carried out through the provision of validation sheets to media experts, linguists, and subject matter experts and then analyzed using the following formula:

$$V = \frac{\sum s}{[n(c - 1)]}$$

The validation scores were then converted into Aiken's V values using the following formula:

Table 1. Interpretation of Aiken's V Validity Scores for the Context-Based Encyclopedia

Choral coefficients	Interpretation of Validity
$>0,80$	Height
$0,60 \leq v < 0,80$	Quite High
$0,40 \leq v < 0,60$	Good
$0 \leq v < 0,40$	Bad

To calculate the improvement of students' science process skills after participating in learning activities using contextual-based encyclopedia learning media, learning is analyzed using Standard, N-Gain with the following formula:

$$N\text{-Gain (g): } g = \frac{\text{Skor Posttest} - \text{Skor Pretest}}{\text{Skor Maks} - \text{Skor Pretest}}$$

The calculated N-gain values were interpreted using the criteria presented in Table 2.

Tabel 2. N-gain Criteria (g)

Limitation	Category
$g > 0,7$	Height
$0,3 \leq g \leq 0,7$	Medium
$g < 0,3$	Low

3. RESULTS AND DISCUSSION

3.1 Results

The results of the study show that the contextual-based encyclopedia on the material "Economic Conditions in My Region" developed for grade V students of SD Negeri 45 Lubuklinggau has good quality and is suitable for use in learning. The findings of this study can be explained through three main aspects, namely validity, practicality, and effectiveness. These three aspects are the basis for assessing whether the developed

encyclopedia meets the criteria as a learning medium that suits students' needs, is easy to use in the learning process, and is able to improve students' understanding of local economic materials.

The validity of contextual-based encyclopedia on the material "Economic Conditions in My Region" shows very feasible results to be used as a learning medium. The validity assessment was conducted across three main aspects, namely the language aspect, the media aspect, and the material aspect.

Table 3. Results of Encyclopedia Validation

No	Validation Aspect	Validity Score	Category
1	Language	0,93	Height
2	Media	0,93	Height
3	Material	0,97	Height
4	Average	0,94	Height

Based on the validation results, the language aspect obtained a score of 0.93, the media aspect obtained a score of 0.93, and the material aspect obtained a score of 0.97. The average overall validity score is 0.94 with a high category. These results show that the developed

encyclopedia has met the feasibility elements in terms of content, presentation, and use of language so that it can be used in the learning process.

Table 4. Results of the Encyclopedia Practicality Test

No	Respondent	Percentage (%)	Category
1	Individual Students	86,67	Very Practical
2	Small Groups	86,67	Very Practical
3	Teacher	96	Very Practical

The practicality results for the context-based encyclopedia were also excellent. The practicality test was carried out through individual student responses, small group responses, and teacher responses. The test

results showed that the individual student responses yielded 86.67%, small groups obtained 86.67%, and teachers obtained 96%. The overall average practicality is 89.78% in the very practical category.

Table 5. Results of the Encyclopedia Effectiveness Test

No	Component	Grades	Category
1	Pretest	47,96	Low
2	Posttest	82,03	Height
3	N-Gain	0,65	Medium

In terms of effectiveness, contextual-based encyclopedias show an improvement in students' understanding. The student's mean pretest was 47.96, while the posttest score increased to 82.03. Based on the calculation of N-gain, a score of 0.65 was obtained with the medium category. These results show that the use of encyclopedias is able to improve students' understanding, although the increase has not yet reached the high category.

3.2 Discussion

The validity findings are in line with several previous studies that affirm that the validity of learning media needs to be seen from the suitability of the material,

language readability, and the quality of media display. This is consistent with the principle of multimedia learning, which emphasizes that learning materials are more effective when verbal and visual information are appropriately organized and integrated to support learners' cognitive processing (Mayer, 1997; Moreno & Mayer, 1999). Ramadhani et al. (2023) explain that an encyclopedia as a learning resource should have a clear content structure, easy-to-understand language, and a display that supports student understanding. The organization of instructional information is important because excessive or poorly structured information may increase learners' cognitive load and interfere with meaningful learning (Sweller, 1988). Validity serves as

the initial basis for learning-product development (Satmaka et al., 2023). Thus, a high validity score on this encyclopedia can be understood as proof that the product has met the initial standards of feasibility before being further tested in terms of practicality and effectiveness.

The percentage of practicality indicates that the encyclopedia is easy to use, easy to understand, and appropriate for classroom learning needs. This practicality is not only related to the appearance of the media, but also to the way the material is presented. From a usability perspective, perceived ease of use is an important factor influencing users' acceptance of an instructional product (Davis, 1989). Simple language, relevant illustrations, and examples that are close to the students' environment make local economics material easier to understand. The use of visual and verbal representations can facilitate learners' ability to select, organize, and integrate information, particularly when the representations are appropriately coordinated (Mayer, 2024). Teachers can also be helped because this encyclopedia provides more concrete learning resources to explain the economic conditions in the area around students. Learning media that is designed in a contextual manner tends to be more acceptable to students and teachers (Muzaki & Mutia, 2023). Contextualization can also increase students' motivation and engagement because learning materials become more meaningful and connected to learners' experiences (Cordova & Lepper, 1996).

Although the results of practicality are very high, it should be understood that the practicality test still has limitations. Testing conducted on a limited group has not yet fully described the use of the encyclopedia in a broader classroom context. Therefore, larger-scale trials are needed to see if the product's practicality remains consistent when used in different classrooms, schools, or learning conditions. This is important because the effectiveness of media use is determined not only by the quality of the product, but also by the teacher's readiness, student characteristics, learning time, and the teaching strategies used. Previous research has shown that teachers' knowledge, self-efficacy, pedagogical beliefs, and school culture influence how instructional technologies and learning resources are integrated into classroom practice (Ertmer & Ottenbreit-Leftwich, 2010). Similarly, the integration of instructional resources requires an appropriate combination of content, pedagogy, and technology rather than simply introducing a new learning product (Mishra & Koehler, 2006). Consequently, the practicality of an encyclopedia should be understood as an interaction between the characteristics of the product and the context in which it is implemented.

The improvement in learning outcomes shows that the contextual approach in the encyclopedia helps students understand the material through the relationship between the concept of learning and daily life. The material "Economic Conditions in My Region" becomes easier to understand when students can relate it to

economic activities they encounter in the surrounding environment, such as markets, small businesses, buying and selling activities, community work, or local economic potential. This finding is consistent with research showing that contextualizing instruction by using students' prior knowledge and everyday experiences can facilitate conceptual understanding and learning performance (Rivet & Krajcik, 2008). Context-based approaches have also been found to provide learning outcomes comparable to conventional approaches while improving students' attitudes toward learning (Bennett et al., 2007). Local context-based learning can increase the relevance of the material because students not only learn concepts in the abstract, but also see how they relate to the reality they are familiar with. This is also consistent with the principles of place-based education, which emphasize connecting learning processes with the physical, social, cultural, and experiential characteristics of the places where students live and learn (Riveiro-Rodríguez et al., 2021; Yeminia et al., 2025).

The contextual orientation of the encyclopedia may also contribute to students' motivation and engagement. Student engagement is multidimensional and includes behavioral, emotional, and cognitive dimensions, all of which can be influenced by features of the learning environment (Fredricks et al., 2004). In this respect, the use of local economic examples may make the content more meaningful because students can recognize the objects, activities, and social situations described in the encyclopedia. Such relevance can support students' willingness to participate actively in learning rather than merely receiving information passively.

However, an N-gain score of 0.65 also indicates that the use of encyclopedias has not fully resulted in an increase in understanding of the high category. This condition can be influenced by several factors, such as students' initial ability, media use time, teacher assistance, and learning strategies used during the learning process. The interpretation of learning gains should therefore consider the learning process and the instructional conditions under which the media is implemented. Hake (1998), for example, demonstrated the usefulness of normalized gain as an indicator of conceptual improvement while also showing substantial variation in learning gains across instructional approaches and learning contexts. In other words, a valid and practical encyclopedia still needs the support of an active learning process so that learning outcomes can be improved more optimally. Therefore, the medium N-gain obtained in this study should not be interpreted as a limitation of the encyclopedia alone, but rather as evidence that the media functions within a broader instructional system.

The effectiveness of learning media needs to be seen through the results of pretest and posttest, but it must also consider the context of learning implementation. Assessment and feedback are important components of the learning process because systematic formative assessment can contribute substantially to learning improvement (Black & Wiliam, 1998). In addition,

student learning outcomes are influenced by the extent to which learners actively engage with the learning activities. This supports the argument that the effectiveness of an encyclopedia cannot be separated from how teachers facilitate interaction, questioning, discussion, reflection, and application of the information presented in the media.

Based on the overall results, contextual-based encyclopedias can be declared valid, very practical, and quite effective in improving students' understanding. High validity indicates that the product is feasible in terms of language, media, and material. Very high practicality indicates that the product is easy for students and teachers. Meanwhile, the effectiveness with the medium N-gain category shows that the product has had a positive impact on improving understanding, although it still needs to strengthen learning strategies to make the results achieved more optimal. This interpretation is consistent with the broader literature showing that the effectiveness of educational innovations depends not only on the quality of the instructional material itself but also on how innovations are implemented within schools and classrooms (Blumenfeld et al., 2000).

The findings also suggest that the encyclopedia should not be positioned merely as a static reading resource. Its potential can be strengthened when it is integrated with learning activities that require students to use the information presented in meaningful ways. For example, contextual learning can be developed through group discussions, observation, comparison of local economic activities, and simple investigations. Project-based learning is particularly relevant because it engages learners in complex and authentic tasks that can connect academic concepts with real-world situations. A meta-analysis of 30 studies involving 12,585 students found a medium-to-large positive effect of project-based learning on academic achievement compared with traditional instruction (Chen & Yang, 2019).

For further research, it is hoped that this encyclopedia can be developed through more active learning, for example group discussions, simple projects based on the surrounding environment, observation of local economic activities, or problem-solving tasks related to student life. The strategy can help students not only read information in an encyclopedia, but also process, compare, and apply regional economic concepts in real-world situations. Research on authentic learning experiences also indicates that meaningful learning activities can contribute to the development of learners' confidence and their ability to apply learning resources in pedagogically meaningful ways (Valtonen et al., 2015). In this way, the encyclopedia not only serves as reading material, but also as a medium that encourages more in-depth student engagement.

The integration of active learning strategies is also supported by evidence that student engagement is responsive to contextual and environmental conditions (Fredricks et al., 2004). Furthermore, learning environments that support autonomy, competence, and relatedness can contribute to students' intrinsic

motivation and positive educational outcomes (Ryan & Deci, 2020). Therefore, future development of the encyclopedia should consider not only adding more information or illustrations, but also embedding activities that encourage students to make decisions, solve problems, discuss findings, and connect local economic phenomena with broader economic concepts.

The role of teachers also remains important in determining how successfully the encyclopedia is implemented. Teachers need sufficient pedagogical knowledge to transform the encyclopedia from a source of information into a learning tool that supports inquiry and student participation. Previous studies have emphasized that teacher preparation, professional knowledge, and authentic experiences are important conditions for successful integration of instructional technologies and learning resources (Tondeur et al., 2012; Uerz et al., 2018). Teacher motivation and perceptions of the usefulness of an instructional resource can also influence how consistently and meaningfully it is used in classroom practice (Backfisch et al., 2021). Thus, future implementation should provide teachers with appropriate guidance regarding lesson planning, classroom activities, questioning techniques, and assessment procedures.

Thus, a contextual-based encyclopedia on the material "Economic Conditions in My Region" has the potential to be a relevant learning medium for elementary school students. This product is able to connect learning materials with the environment around students, so that learning becomes closer, concrete, and easier to understand. However, the effectiveness of its use still needs to be supported by the role of teachers, the design of appropriate learning activities, and continuous evaluation so that the improvement of learning outcomes can reach a higher category. The importance of teacher competence and support is also consistent with previous research showing that effective implementation of educational resources requires teachers to have appropriate knowledge, confidence, pedagogical beliefs, and institutional support (Barton & Haydn, 2006; Ertmer & Ottenbreit-Leftwich, 2010).

3.2.1 Implications

This research has interrelated theoretical and practical implications. Theoretically, these findings reinforce contextual learning theory that emphasizes the importance of connecting academic concepts with students' real experiences, while providing empirical evidence that local context-based media is feasible to be developed as an alternative to social studies learning media in primary schools. The findings are consistent with the growing literature on contextual and place-based education, which emphasizes the importance of connecting formal learning with students' experiences, environments, and communities (Rivet & Krajcik, 2008).

Practically, teachers can use this encyclopedia as a reference in developing learning media that is relevant to students' local environment, so that regional economic material no longer feels abstract. The use of

contextual examples can help teachers facilitate connections between academic concepts and students' everyday experiences. In addition, the visual and textual organization of the encyclopedia should be maintained carefully because the combination of words and visual representations can influence how students process instructional information (Moreno & Mayer, 1999).

For curriculum developers, this research encourages the importance of preparing teaching materials that are responsive to regional conditions and potentials. Such an orientation is particularly relevant to social studies because many of its concepts can be directly observed through community activities and local economic phenomena.

Meanwhile, for future researchers, testing on a wider scale and the integration of active learning strategies are needed so that the effectiveness of using the encyclopedia can increase to a higher category. Future research should involve broader and more varied participant groups, incorporate comparison groups, extend the implementation period, and employ a wider range of learning outcome assessments. Future studies should also examine student engagement and motivation because these factors may mediate the relationship between the use of learning media and learning outcomes. The findings imply that the development of learning media should be accompanied by teacher professional development and implementation support. The success of an educational product depends not only on whether it is valid and practical, but also on whether teachers understand how to integrate it into appropriate pedagogical activities. Research on teacher technology integration consistently emphasizes the importance of teacher knowledge, confidence, pedagogical beliefs, authentic experience, and institutional support (Henriksen et al., 2021). Therefore, future development of the contextual-based encyclopedia should include teacher guidance, activity suggestions, assessment instruments, and examples of classroom implementation to maximize its educational value.

3.2.2 Research Contributions

This research contributes in the form of a contextual-based encyclopedia product to the material "Economic Conditions in My Region" which has been tested to be valid, very practical, and effective enough to be used as a learning medium for elementary school grade V students. Theoretically, this study strengthens the application of a contextual approach in the development of social studies learning media based on local potential. Practically, this encyclopedia provides alternative learning resources that connect economic materials with students' real lives, so that they can be a reference for teachers, teaching material developers, and researchers in developing contextual learning media based on local wisdom at the elementary school level.

3.2.3 Limitations

This research has several limitations that need to be considered. First, the participants were limited to Grade

V students of SD Negeri 45 Lubuklinggau, so the results of the research cannot be generalized to different school or regional contexts. Second, the practicality test was carried out on a limited group, so it did not fully describe the use of the encyclopedia on a broader class scale. Third, an N-gain value of 0.65 indicates that the improvement in student understanding is still in the medium category, which indicates that the encyclopedia is not optimal if used without the support of active learning strategies and adequate teacher assistance. These limitations can be the basis for improvement and development in future research.

3.2.4 Suggestions

In light of the study's limitations, several recommendations are proposed. For future researchers, it is recommended to conduct trials on a wider scale in different schools and regions so that the results of the study can be generalized. For teachers, it is recommended to integrate the use of the encyclopedia with active learning strategies, such as group discussions, observation of local economic activities, or neighborhood-based projects, to increase the effectiveness of its use. For the developer of teaching materials, it is recommended to develop a similar encyclopedia on other materials and levels of education while still paying attention to the context and local potential of each region.

4. CONCLUSION

This research produced a context-based encyclopedia on the material "Economic Conditions in My Region" which is suitable for use as a learning resource for Grade V students of SD Negeri 45 Lubuklinggau. The validation results showed an average validity score of 0.94 with a high category, the results of the practicality test obtained an average of 89.78% with the very practical category, and the results of the effectiveness test showed an N-gain value of 0.65 with the medium category. Overall, this contextual-based encyclopedia has proven to be valid, very practical, and quite effective in improving students' understanding of local economic materials, and has the potential to be a relevant and meaningful alternative learning medium for elementary school students.

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6. AUTHOR CONTRIBUTION STATEMENT

The first author was responsible for conceptualizing research, product development, data collection, data analysis, and writing the initial manuscript. The second author provided guidance, validation of research concepts, and revised and improved the manuscript. The third author provided guidance, supervision of the implementation and revised the final manuscript. All authors have read and approved the final manuscript.

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