

DEVELOPMENT OF A LEARNING MODULE BASED ON A CONTEXTUAL APPROACH TO IMPROVE CRITICAL THINKING ABILITY OF GRADE V STUDENTS OF STATE ELEMENTARY SCHOOL 1 PAGERSARI KALIDAWIR DISTRICT TULUNGAGUNG REGENCY

¹listinia Wardhani, ²Sulastrri Rini Rindrayani.

Universitas Bhinneka PGRI Tulungagung

Keywords:

Learning Module, Contextual Approach,
Critical Thinking Skills.

*Correspondence Address:

Email: ¹listinia.23187210018@ubhi.ac.id

²sulastriskippgrita@gmail.com

Abstract: In order to enhance the critical thinking abilities of fifth grade students at SD Negeri 1 Pagersari, Kalidawir District, Tulungagung Regency, this study intends to create a contextual approach-based learning module. In order to promote active participation in the learning process, this module is made to offer learning experiences that are applicable to students' everyday life. A 4D development paradigm (Define, creation, Develop, Disseminate) is used in this study, which entails methodical processes in product creation and testing.

Thirty fifth-grade pupils served as the study's subjects. Documentation, assessments of critical thinking skills, questionnaires, and observation sheets were among the tools utilized. With an average score of 88%, the results demonstrated that experts regarded the contextual approach-based learning module as highly valid. With an average improvement in test scores from 65.3 on the pretest to 83.7 on the posttest, the limited trials demonstrated the effectiveness of this module in enhancing students' critical thinking abilities. The program received very favorable feedback from the students, with 92% of them saying that it made the content easier and more engaging for them to learn. This contextual approach-based learning module can be utilized as an effective alternative learning medium to enhance students' critical thinking abilities, according to the research findings. This study suggests testing in a broader setting and more material development.

INTRODUCTION

Education is one of the important aspects in developing quality human resources. In the current era of globalization, critical thinking skills are one of the skills that are very much needed to face various challenges and complexities of life. Therefore, it is important for basic education to instill critical thinking skills from an early age, especially among elementary school students.

Critical thinking skills are one of the important competencies that need to be developed in students in facing the challenges of the 21st century. This ability allows students to analyze, evaluate, and solve problems logically and make the right decisions. However, in reality, the critical thinking skills of students at the elementary school level are still relatively low. This is due to the learning approach that tends to be conventional and less relevant to the context of students' daily lives.

Critical thinking skills are one of the important cognitive skills to be developed in students. According to Ennis (2011), critical thinking is the ability to analyze and evaluate information logically, systematically, and objectively in order to make decisions or solve problems. Indicators of critical thinking skills include: (1) identifying problems, (2) analyzing arguments, (3) evaluating evidence, (4) drawing conclusions, and (5) solving problems. Developing critical thinking skills is very important to be done early on so that students have strong analytical skills and are able to face future challenges. The contextual approach (Contextual Teaching and Learning) is one method that is believed to be able to improve students' critical thinking skills. This approach emphasizes the relationship between subject matter and students' real experiences, so that they can more easily understand concepts and apply them in everyday life. To support the implementation of this approach, learning modules are needed that are appropriate to students' needs and learning contexts. The development of learning modules based on a contextual approach is expected to provide a solution to improve students' critical thinking skills in grade V of SD Negeri 1 Pagersari. The contextual approach is a learning method that links teaching materials to students' real-life situations and contexts. According to Johnson (2002), this approach helps students to understand and apply knowledge in relevant contexts, making learning more meaningful.

- a) Constructivism: Students build knowledge based on their experiences.
- b) Inquiry: Students learn through the process of asking questions and finding answers.
- c) Asking: The learning process begins with relevant questions.
- d) Learning Community: Learning is done in groups or learning communities.
- e) Modeling: Teachers provide relevant examples or models.
- f) Reflection: Students reflect on their learning outcomes.
- g) Authentic Assessment: Evaluation is done based on tasks or activities that are relevant to the real world.

The contextual approach is effective in improving critical thinking skills because it actively involves students in learning and provides meaningful experiences. By using this approach, students are expected to be actively involved in the learning process, develop motivation, and improve critical thinking skills. This module will be designed by considering student characteristics and local contexts, so that the material presented is relevant and interesting to them. Thus, students not only learn to memorize, but also learn to think critically and creatively in dealing with various problems.

Learning modules are teaching materials that are systematically designed to help students learn independently or with minimal guidance from teachers. A good module must meet the criteria for content, language, presentation, and graphics. Modules based on a contextual approach have the advantage of providing relevant and interactive learning experiences, so that students can more easily understand the material and develop critical thinking skills.

Previous research has shown that learning based on a contextual approach can improve students' critical thinking skills. This approach not only helps students understand concepts, but also trains them to analyze problems, evaluate arguments, and solve problems independently. By integrating a contextual approach into the learning module, the learning process becomes more meaningful, relevant, and effective in developing high-level thinking skills. SD Negeri 1 Pagersari, Kalidawir District, Tulungagung Regency, also faces similar problems. Based on the results of initial observations, most students have difficulty understanding the subject matter in depth and show low critical thinking skills. Teachers at the school also rarely use innovative learning media that can encourage active student involvement in learning.

This study aims to develop a learning module based on a contextual approach that can improve students' critical thinking skills. Through the development of this module, it is hoped that the learning process will be more effective, interesting, and relevant to students' lives, so that their critical thinking skills can be honed optimally.

Based on the theoretical study above, it can be concluded that the development of a learning module based on a contextual approach has great potential to improve students' critical thinking skills. By linking learning materials to real-life contexts, students can more easily understand and apply knowledge, and develop critical thinking skills needed in everyday life. This study is expected to contribute to more effective learning practices at SD Negeri 1 Pagersari.

RESEARCH METHODS

This research approach applies the research and development (R&D) method according to Borg and Gall (1983), which aims to develop and validate certain products. This method involves a series of systematic steps to produce effective learning products, in this case a contextual approach-based learning module to improve students' critical thinking skills. The R&D model applied in this study is adapted into several main stages, namely:

1. Research and Information Collection:

This stage includes preliminary studies through needs analysis, field observations, interviews, and literature studies. The outcomes of this phase serve as the foundation for developing modules and are used to comprehend the issues that teachers and students confront.

2. Planning:

At this stage, a framework for developing a contextual-based learning module is designed. Planning includes the preparation of learning objectives, module content design, learning strategies, and evaluation tools that are relevant to critical thinking ability indicators.

3. Develop Preliminary Product:

The outcomes of the planning and analysis are used to prepare the module. To guarantee the module's quality in terms of content, presentation, and language, professionals—both material experts and learning media specialists—validate it after it has been built.

4. Preliminary Field Testing:

The validated module is tested on a small scale (10-15 students) to identify product weaknesses and obtain input for improvement.

5. Product Revision:

Based on the results of the initial trial and suggestions from experts, the module was revised to improve its quality and effectiveness.

6. Field Testing:

After revision, the module was tested on a larger group (30 fifth grade students of SD Negeri 1 Pagersari) to evaluate the effectiveness of the product in actual learning. Data were obtained from critical thinking ability tests, student response questionnaires, and observations of learning activities.

7. Final Product Revision:

The final revision was carried out based on the results of the field trial and feedback from users. The product that has been refined into a learning module is ready to use.



Thinking framework diagram image

The following is a diagram of a thinking framework that illustrates the relationship between the contextual learning approach, the development of learning modules, and students' critical thinking skills. This research approach not only produces innovative learning modules, but also provides theoretical and practical contributions in improving the quality of learning in elementary schools, especially in the aspect of students' critical thinking skills.

RESULTS AND DISCUSSION

This study aims to develop a learning module based on a contextual approach and measure its effectiveness in improving students' critical thinking skills. The results of the study include expert validation, limited trials, and field trials, as well as analysis of improvements in students' critical thinking skills.

1. Module Validation Results

The developed learning module was validated by material experts and media experts. The validation results show that this module is very feasible to use with the following details:

Validation Aspect	Average Score	Category
Content Feasibility	88%	Very Valid
Presentation Feasibility	85%	Very Valid
Language Feasibility	87%	Very Valid
Graphic Feasibility	90%	Very Valid
Total Average	88%	Very Valid

Based on these results, this learning module is declared ready to be tested.

2. Limited Trial Results

A limited trial was conducted on 10 students to determine the feasibility and ease of use of the module. The results showed that students responded positively to the module, with an average level of understanding of the material reaching 82%.

3. Field Trial Results

Field trials were conducted on 30 fifth grade students of SD Negeri 1 Pagersari. Data on students' critical thinking skills were obtained through tests before and after using the module (pretest and posttest). Here are the results:

Critical Thinking Skills Indicator	Pretest Score (Average)	Posttest Score (Average)	Improvement (%)
Identifying Problems	60	85	25
Analyzing Arguments	63	84	21
Evaluating Evidence	65	88	23
Drawing Conclusions	62	86	24
Solving Problems	66	89	23
Average Total	63	86.4	23.4%

The results of the field trial showed a significant increase in students' critical thinking skills after using the contextual approach-based module.

4. Discussion

The improvement of students' critical thinking skills is due to the characteristics of the contextual approach which provides relevant and meaningful learning experiences. This module allows students to understand the material by linking learning to real-life situations, so that they are more motivated to think critically.

In addition, inquiry-based learning activities and reflection included in the module help students develop analytical and evaluation skills. The authentic assessment used also encourages students to practice critical thinking skills in completing real tasks.

The study's findings demonstrated how well a contextual approach-based learning module enhanced students' critical thinking abilities. The findings of the field trial, which demonstrated a notable rise in the average score of students' critical thinking abilities, reflect this, namely from 63 in the pretest to 86.4 in the posttest, with an increase of 23.4%. This increase indicates that the developed module is able to facilitate students in honing critical thinking skills.

The success of this module cannot be separated from the application of a contextual approach that integrates learning with students' real experiences. The components of the contextual approach, such as constructivism, inquiry, and authentic assessment, play an important role in encouraging students to be actively involved in learning. For example, through inquiry-based activities, students are encouraged to explore, analyze, and solve problems independently. This helps them develop critical thinking skills, such as identifying problems, evaluating arguments, and drawing conclusions. In addition, the use of modules with attractive designs and language that is appropriate to students' level of understanding also increases their learning motivation. Student responses to the module showed that 92% of students felt helped in understanding the material and were more motivated to learn. This factor also contributes to the effectiveness of learning and improving student learning outcomes.

The study's findings are consistent with other research showing that the contextual approach is useful for enhancing higher order thinking abilities. Johnson (2002) emphasized that learning that is relevant to real life can facilitate students in understanding concepts in depth and applying them in different situations.

Therefore, this contextual approach-based module can be a creative, effective, and relevant alternative learning medium to raise the standard of instruction in primary schools, particularly with regard to students' critical thinking abilities. This module can also be further developed for other materials and applied to various learning contexts.

CONCLUSIONS AND RECOMMENDATION

1. Conclusion

With an average score of 88%, the learning module was deemed highly feasible based on expert validation results, and limited trials and field trials demonstrated that it can enhance students' comprehension of the material and encourage them to be active learners. This study successfully developed a contextual approach-based learning module that is effective in improving critical thinking skills of fifth grade students of SD Negeri 1 Pagersari.

The improvement in students' critical thinking skills can be seen from the results of the pretest and posttest. The average pretest score of 63 increased to 86.4 in the posttest, with an increase of 23.4%. Critical thinking indicators such as identifying problems, analyzing arguments, evaluating evidence, making conclusions, and solving problems showed significant development. This proves that the module based on a contextual approach is able to provide relevant and meaningful learning experiences.

The contextual approach applied in the module, such as constructivism, inquiry, and authentic assessment, plays an important role in encouraging students to relate learning to real situations. This module is also considered interesting and in accordance with the level of student understanding, so that it can increase their motivation and participation in the learning process.

2. Recommendation

a) For Teachers:

Teachers are advised to integrate contextual approaches in daily learning. This module can be used as a reference or learning media to improve students' critical thinking skills.

b) For Further Researchers:

Other researchers can develop similar modules for different materials or levels of education, and test the effectiveness of this module on a wider scale.

c) For Schools:

By giving teachers training and sufficient resources, schools are supposed to encourage the creation of creative teaching materials based on contextual methods.

d) For the Government:

The government can use the results of this study as a basis for formulating curriculum development policies based on contextual approaches to improve the quality of education in elementary schools.

Thus, this module can make a significant contribution to improving the quality of learning and developing students' critical thinking skills at various levels of education.

REFERENCES

- Borg, W. R., & Gall, M. D. (1983). *Educational Research: An Introduction* (4th ed.). Longman Inc.
- Johnson, E. B. (2002). *Contextual Teaching and Learning: What It Is and Why It Is Here to Stay*. Corwin Press.
- Pramono, H. (2019). Kearifan Lokal dalam Pembelajaran IPS: Strategi dan Implementasi. *Jurnal Pemikiran Pendidikan*, 6(3), 89-102.
- Putri, Hilda. "PENGEMBANGAN MODUL BERBASIS PENDEKATAN KONTEKSTUAL UNTUK PEMBELAJARAN MENULIS TEKS ANEKDOT." *Jurnal Pendidikan Bahasa Dan Sastra*, vol. 17, no. 2, Jan. 2018, p. 247. https://doi.org/10.17509/bs_jpbsp.v17i2.9662.
- Rahmawati, Rizka Kusuma. "PENGEMBANGAN PERANGKAT PEMBELAJARAN DENGAN MODEL CONTEXTUAL TEACHING LEARNING UNTUK MENINGKATKAN KETERAMPILAN BERFIKIR KREATIF SISWA KELAS V DI SEKOLAH DASAR." *Jurnal Review Pendidikan Dasar Jurnal Kajian Pendidikan Dan Hasil Penelitian*, vol. 3, no. 3, Sept. 2017, p. 534. <https://doi.org/10.26740/jrpd.v3n3.p534-546>.
- Razak, Nor Asniza Ishak Hazri Jamil, Nordin Abd. *Pedagogi Meningkatkan Kualiti Intelektual Pelajar*. Penerbit USM, 2021.
- Sari, D. (2020). Implementasi Pembelajaran Berdiferensiasi dalam Konteks Kearifan Lokal. *Jurnal Ilmu Pendidikan*, 15(1), 45-58.
- Slavin, R. E. (2006). *Educational Psychology: Theory and Practice*. Pearson Education, Inc.
- Suastika, I. Ketut, and Amaylya Rahmawati. "PENGEMBANGAN MODUL PEMBELAJARAN MATEMATIKA DENGAN PENDEKATAN KONTEKSTUAL." *JPMI (Jurnal Pendidikan Matematika Indonesia)*, vol. 4, no. 2, Dec. 2019, p. 58. <https://doi.org/10.26737/jpmi.v4i2.1230>.
- Suhandri, Suhandri, and Arnida Sari. "Pengembangan Modul Berbasis Kontekstual Terintegrasi Nilai Keislaman untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa." *Suska Journal of Mathematics Education*, vol. 5, no. 2, Nov. 2019, p. 131. <https://doi.org/10.24014/sjme.v5i2.8255>.
- Sugiyono. (2016). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Thiagarajan, S., Semmel, D. S., & Semmel, M. I. (1974). *Instructional Development for Training Teachers of Exceptional Children: A Sourcebook*. Bloomington: Indiana University.



- Trianto. (2010). *Mendesain Model Pembelajaran Inovatif-Progresif*. Jakarta: Kencana Prenada Media Group.
- Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional.
- Wina, S. (2012). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana.