Teaching and General Education Studies
ISSN : XXXX-XXXX E-ISSN : XXXX-XXXX

LITERATURE ANALYSIS REVIEW OF THE APPLICATION OF *THE CONTEXTUAL TEACHING AND LEARNING* (CTL) MODEL OF SCIENCE IN ELEMENTARY SCHOOLS

[1]Verdiana Armellia, [2]Ardhianti Rahayu, [3] Dela Herfiana, [4] Nadia Pricilia
[1]Pendidikan Guru Sekolah Dasar (PGSD), [2] Universitas PGRI Silampari
armelliaverdiana@gmail.com

Publish date: 31 December 2024

Abstract: Many science learning activities require students to think critically, actively and creatively. In order for learning to be more meaningful, efforts need to be made to create interesting learning for students. In the classroom teaching process, teachers not only have to use methods and strategies in delivering material, but also master various learning models. However, the model that is often used by teachers in the learning process is the classical model. Therefore, teachers need to change the learning model so that the teaching and learning process becomes more effective and meaningful. Various initiatives have been carried out to improve learning outcomes and the effectiveness of science learning. One of them is by implementing the Contextual Teaching and Learning (CTL) learning model. The cooperative learning model aims to increase cooperation in groups and interaction between students. Therefore, a more in-depth analysis is needed in research to find out the extent to which cooperative learning can improve learning outcomes and how the learning process takes place in elementary schools. This research uses qualitative methods with data collection techniques through literature study. Overall, the application of the CTL learning model in science subjects in elementary schools is highly recommended to improve student learning outcomes.

Keywords: CTL Learning Model, Science

INTRODUCTION

Elementary school education plays a very important role in shaping students' character and outlook on life. At this stage, various knowledge is provided as a basis for continuing education to a higher level. Science, especially Natural Sciences (IPA), is the main subject taught in elementary schools. In science subjects, students learn various concepts and phenomena related to nature (Rezeki et al., 2022:39). Science itself is a science

that studies natural events and phenomena that occur around us. In elementary schools, science has an important role as an introduction to understanding nature and certain natural phenomena, which will later become the basis for science learning at the next level. The Contextual Teaching and Learning (CTL) learning model is an approach that connects subject matter with students' real lives, helping teachers to make learning more relevant (Haryanti et al., 2022). CTL enables learning that relates subject matter to students' direct experiences in everyday life (Marta et al., 2020:151). Therefore, the CTL approach can be applied by teachers in science learning in elementary schools to motivate students to be more active and understand the material in a more enjoyable and meaningful way (Efriani & Aryani, 2024). According to Rorimandey et al. (2020:18), the application of the CTL learning model in science learning involves all components in the Contextual Based Teaching and Learning approach. However, in practice, learning is often still focused on material delivered conventionally, with students working on assignments independently through textbooks, and the learning process is more centered on teachers and textbooks. Lack of attention to student activities creates a mismatch in learning achievement. Based on this, this study aims to assess the extent to which the CTL learning model is applied in science learning in elementary schools, through a literature study of 10 journals published in the last five years. This study is expected to provide an overview of whether the CTL learning model can have a positive impact on science learning at the elementary school level.

METHODOLOGY

This study uses a qualitative approach with data collection techniques through literature studies. The process in literature studies begins by searching for journal references to be reviewed through Google Scholar. Next, the researcher writes the title of the article or journal to be analyzed. In this case, the researcher searches for journals with the keyword "application of the CTL learning model in Elementary Schools". After that, the researcher clicks and downloads several journals that will be used in the review process. The data collection method that we use is to search for 10 articles on journal platforms such as Google Scholar. The initial step taken in collecting data is to identify the theme to be analyzed.

In this study, the theme chosen is the Analysis of Literature Review of the Application of the Contextual Teaching and Learning (CTL) Science Model in Elementary Schools as the focus of the research to be carried out. Data collection using Google Scholar references by writing topics to be analyzed using the provisions of articles from the last 5 years or since 2020 and must be accredited by SINTA. Furthermore, the researcher takes journals that are relevant to the topic being studied. Researchers took 10 journal articles with a time span from 2020 - 2024 using the same theme with the subject matter that matches the title of the researcher. From the 10 journal articles found, researchers will analyze and review them in detail. The technique used in this data analysis is descriptive analysis which functions to describe the facts that are then analyzed and then presented clearly, in detail and accurately so that they are easy to understand. This discussion will describe the findings of the 10 journals that will be analyzed and discussed on related topics. From these findings, there are various methodologies and results from the study. From the results found, it is expected to have a pattern and description that is almost the same as the field studied in this study.

RESEARCH RESULT

The results of research conducted by Ariawan, et al. (2022) with the title "Implementation of the CTL (Contextual Teaching and Learning) Learning Model to Improve Science Learning Outcomes". The problem behind this research is that student learning outcomes are still low. From this study, it can be seen that after the CTL learning model was implemented, student learning outcomes increased, especially in science subjects in elementary schools. This research is also relevant to the results of research conducted by Efriyani., et al. (2024) Implementation of the Contextual Learning Model (CTL) in Science Learning in Elementary Schools. The problem found in this study was that there were still several students who had low learning outcomes, so science learning outcomes were needed using the CTL model. With the discovery of several articles that have been analyzed, it can be seen that the CTL learning model is considered effective in improving the science learning outcomes of elementary school students. Another finding from the article discussing the CTL learning model is research from Kurniasih (2021) "Implementation of the Contextual Teaching and Learning (CTL) Learning Model in Science Learning in Elementary Schools". In this study, the problem found was the low learning outcomes of students, so it was necessary to apply an effective learning model to use. After implementing the CTL model, student learning outcomes increased significantly. Furthermore, research conducted by Lipia et al., (2022) entitled "Implementation of the Contextual Learning Model in Elementary Schools". This research was motivated by the problem of science learning which still uses the lecture model. Furthermore, the findings of the researcher Mulyani (2019) "Application of the CTL learning model in improving understanding of science material at SDN Cijangkar 2". The results of this study showed a significant increase in students' understanding of science subjects. Another study conducted by Rezeki and Haryanti, (2022) "Implementation of the CTL Learning Model to Improve Student Learning Outcomes in Science Subjects at SD N Cimanggu II". The findings of the problem were the low learning outcomes of students at SD N Cimanggu II. So that efforts are needed to improve learning outcomes by using innovative methods such as the application of the CTL model in elementary schools. Furthermore, research from Rorimpadey, (2020). The problems found in this study were the low learning outcomes of students which were still below the KKM or low so that it was necessary to improve the learning process by using a fun learning model so that students could easily understand such as the CTL model in elementary schools. Findings from research conducted by Sriariati, (2019). The problems found in this study were the low learning achievement of students, with this problem there was a need to improve children's achievement results, so there was a need to increase support from the learning process, namely by using the CTL model. Furthermore, research from Susilawati, (2022). The problem studied concerns low student learning outcomes so that modifications are made by using CTL-based student worksheets (LKPD) to improve interest and learning outcomes. Then the last research from Muhsam & Letasado, (2020) entitled "Implementation of the Contextual Teaching Learning (CTL) Learning Model on Style Material for Grade 4 Elementary School Students".

IMPLEMENTATION OF CTL ON STUDENTS

Science Learning Outcomes Implementing the CTL Model in Learning can be applied throughout the curriculum, in any learning area, and in any classroom, regardless of the conditions. describes the steps for implementing learning using CTL. The CTL learning

model is considered effective and can improve learning outcomes because the use of the CTL model involves students so that they play an active role in the learning process by getting the relationship between the material being studied and real life. So that students can easily remember the material and can apply it in everyday life (Astuti & Najuba, 2024:4).

a. CTL STEP

According to Wisudawati and Eka (2014: 50), the steps for implementing CTL in the classroom in general are as follows:

1. Teachers develop students' thinking and help them learn more meaningfully on their own.
2. Explore themselves and build new knowledge and skills.Conduct as many research activities as possible on all scientific topics, both experimental and non-experimental.
3. Stimulate students' curiosity by asking questions.
4. Create a learning community (group learning) in the scientific learning process.
5. Present a model as an example of science learning.
6. Consider ending the meeting.

b. ATVANTAGES AND DISADVANTAGE OF CTL

The advantages of using this model are that learning activities are more productive and have deep meaning in students. In this case, students can think creatively and critically. CTL also makes students work together in groups in this case it can foster motivation in students to follow the learning and can create a fun learning process.

However, in this case, CTL also has disadvantages such as learning activities take longer, students must get guidance from the teacher first, teachers must be able to control the class to avoid less conducive classroom conditions, and time constraints in maximizing the approach by using this CTL model.

CONCLUSION

Based on the results of the literature review of ten selected journals regarding the application of the Contextual Teaching And Learning (CTL) learning model in science learning in elementary schools, it can be concluded that the use of the CTL learning model can provide benefits and positive impacts on student learning activities, motivation and critical thinking, especially on improving learning outcomes in elementary school students. Based on the literature review that has been conducted by researchers from ten research journals, it is recommended to use the CLT learning model effectively, and it is recommended to conduct further research on the Contextual Teaching And Learning (CTL) learning model to perfect the CTL learning model in science learning in elementary schools.

REFERENCES

Ariawan, I. B. K. M., Lestari, N. A. P., & Dharma, I. M. A. (2022). Implementasi Model Pembelajaran CTL (Contextual Teaching And Learning) untuk Meningkatkan Hasil Belajar IPA. *Indonesian Research Journal On Education*, *2*(1), 238–245. https://doi.org/10.31004/irje.v2i1.264

Astuti, R., & Najuba, N. (2024). Penggunaan Model Pembelajaran Contextual Teaching and Learning (CTL) untuk Meningkatkan Hasil Belajar dan Keaktifan Siswa. *Prima Magistra: Jurnal Ilmiah Kependidikan*, *5*(1), 1-7.

dan Implementasinya Pada kurikulum Tingkat Satuan pendidikan (KTSP). Jakarta: Kencana.

Danial, E., & Warsiah. (2009). Metode Penulisan Karya Ilmiah. Bandung: Laboratorium Pendidikan Kewarganegaraan.

Efriyani, R., & Aryani, Z. (2024). Penerapan Model Pembelajaran Kontekstual (CTL) Dalam Pembelajaran Ipa di Sekolah Dasar. *Jurnal Insan Cita Pendidikan*, *2*(2), 1-4.

Kurniasih, D. (2021). Implementasi Model Pembelajaran Contextual Teaching And Learning (CTL) Dalam Pelajaran IPA Di Sekolah Dasar. In *Social, Humanities, and Educational Studies (SHES): Conference Series* (Vol. 3, No. 4, pp. 285-293).

Lipiah, D., Septianti, N., Yuwono, R., & Atika, R. (2022). Implementasi model pembelajaran kontekstual di sekolah dasar. *Tsaqofah*, *2*(1), 31-40.

Muhsam, J., & Letasado, M. R. (2020). *PENERAPAN MODEL PEMBELAJARAN CONTEXTUAL TEACHING LEARNING (CTL) PADA MATERI GAYA BAGI SISWA KELAS 4 SEKOLAH DASAR*. *3*(2), 53–57.

Mulyani, I. (2019). Penerapan Model Belajar CTL Dalam Meningkatkan Pemahaman Materi IPA di SDN Cijangkar 2. *Jurnal Perseda*, *2*(2), 32–46.

Rezeki, N. S., & Haryanti, Y. D. (2022). PENERAPAN MODEL PEMBELAJARAN CTL UNTUK MENINGKATKAN HASIL BELAJAR SISWA PADA MATA PELAJARAN IPA DI SDN CIMANGGU II. *Mirabilis: Journal of Biology Education*, *1*(2), 38-46.

Rorimpandey, W. H. (2020). Penerapan Model Pembelajaran (CTL) Contextual Teaching and Learning Untuk Meningkatkan Hasil Belajar Ipa Siswa Kelas IV SD Inpres Perumnas Uluindano. *Edu Primary Journal*, *1*(3), 17-17.

Sriariati, G. K. (2019). Model Pembelajaran Contextual Teaching and Learning (Ctl) Untuk Meningkatkan Prestasi Belajar. *Jurnal Santiaji Pendidikan (JSP)*, *8*(2), 81–89. https://doi.org/10.36733/jsp.v8i2.166

Susilawati, W. O. (2022). Pengembangan Lembar Kerja Peserta Didik (LKPD) Berbasis Contextual Teaching and Learning (CTL) di Sekolah Dasar. *Edukatif : Jurnal Ilmu Pendidikan*, *4*(3), 4922–4938. https://doi.org/10.31004/edukatif.v4i3.2909

Trianto. (2021). Mendesain Model Pembelajaran Inovatif-Progresif: Konsep, Landasan,