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The Application of the Contextual Teaching and Learning Model to Improve Learning Motivation Among Fourth-Grade Students at SD Inpres 1 Piru

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ABSTRACT

Students' academic success is greatly influenced by learning motivation as a crucial element. However, learning motivation at the elementary school level still requires stimulation through the implementation of interactive, student-centered learning models. This study aims to examine the effectiveness of the Contextual Teaching and Learning (CTL) model in enhancing the learning motivation of fourth-grade students at SD Inpres 1 Piru. A quantitative approach with a One-Group Pretest-Posttest design was applied in this study, involving all fourth-grade students as research subjects. Data collection instruments included a motivation questionnaire and observation sheets for teacher and student instructional activities. Data analysis utilized the Shapiro-Wilk normality test and the Normalized Gain (N-Gain) test via IBM SPSS Statistics software. The analysis results confirmed that the data followed a normal distribution, with a significance level of 0.141 for the pretest questionnaire and 0.394 for the posttest questionnaire. Based on observations, learning activities proceeded optimally in accordance with the stages of the CTL model. Furthermore, the mean N-Gain score reached 0.8248, which falls within the "high" classification. Based on these findings, the implementation of the CTL model proved effective in boosting the learning motivation of fourth-grade students at SD Inpres 1 Piru. In conclusion, the CTL approach can be relied upon as a learning model option to boost learning motivation at the elementary school level.

ABSTRAK

Keberhasilan akademik siswa sangat di pengaruhi oleh motivasi belajar, yang merupakan salah satu faktor penting dalam proses pembelajara.namun,motivasi belajar pada jenjang sekolah dasar masih memerlukan stimulasi melalui penerapan model pembelajaran yang interaktif kelas dan berpusat pada siswa.penelitian ini bertujuan untuk mengetahui efektifitas model pembelajaran contextuan theaching and learning (ctl) dalam meningkatkan motivasi belajar siswa kelas IV DI SD Inpres 1 Piru penelitian ini menggunakanan penekaan kuantitatif dengan desain one group pretes posttest,yang melibatkan seluruh siswa kelas IV sebagai subjek peneliian.instrumen pengumpulan data yang digunakan berupa angket motivasi belajar serta lembar observasi aktivitas guru dan siswa selama proses pembelajaran.analisis data menggunakan uji normalitas Shapiro wilk dan uji normalzed .gain (N gain)dengan bantuan IBM

SPSS Statistics.hasil analisis menunjukan bahwa data berdistribusi normal,dengan nilai signifikansi sebesar 0,141 pada angket awal (pre-tes)dan 0,394 pada angket akhir (post-tes)berdasarkan hasil observasi,aktivitas pembelajaran terlaksana secara obtimal sesuai dengan tahapan model pembelajaran ctl.selajutnya,diperoleh nilai rata-rata N-Gain sebesar 0,8248 yang termaksud daam kategori tinggi.berdasarkan hasil penelitian tersebut,penerapan model pembelajaran ctl terbukti efektif dalam meningkatkan motivasi belajar siswa kelas IV Di SD Inpres I Piru.dengan demikian,model pembelajaran ctl dapat di jadikan sebagai salah satu alternatif model pembelajran untuk meningkatkan motivasi belajar siswa pada jenjang sekolah dasar.

INTRODUCTION

Students' future development is largely determined by the quality of basic education, which serves as its foundation. The learning environment—including facilities and infrastructure, classroom conditions, teaching approaches, teacher-student relationship dynamics, and social aspects—crucially shapes academic experiences at the elementary school level (Windi Anisa et al., 2020). In response to the challenges of the modern era, educators are now required to shift their roles from mere instructors to facilitators and mentors who can maximize students' talents (Ankesa et al., 2021). Furthermore, the 21st-century educational orientation—which focuses on interpersonal skills, critical problem-solving, and creativity—is projected to shape a young generation that is both innovative and possesses strong character (Vitalocca et al., 2021).

Law of the Republic of Indonesia No. 20 of 2003 on the National Education System emphasizes that educational activities must be carried out in a focused and planned manner. This approach is crucial for facilitating educational interactions that help students actively develop their natural talents. Accordingly, selecting teaching strategies is key; teachers must use methodologies that not only enliven the classroom atmosphere but also convey deep meaning and stimulate active student engagement.

The *Contextual Teaching and Learning* (CTL) approach is one effective methodological alternative that can be applied in the instructional process. Through this model, educators can bridge academic theory with real-life situations, making the material presented feel more contextual to students' personal experiences (Silitonga & Putra, 2021). As a concept, CTL integrates subject matter with the dynamics of daily life while motivating students to apply that understanding to real-world problems (Welerubun et al., 2022). At the school level, CTL strategies—particularly in the Social Studies (IPS) curriculum—are expected to boost students' active participation and academic achievement (Padillah, 2024). This is based on CTL's strengths, which emphasize practical relevance and give students opportunities to apply their classroom knowledge in real-world social settings (Ertanti, 2020).

In addition to optimizing student participation, *implementing Contextual Teaching and Learning* (CTL) also helps stimulate a passion for learning. This approach is recognized for fostering a more engaging and substantive classroom climate, which in turn strengthens students' affective development and academic achievement (Sumiati, 2023). When instructional material is integrated with objective reality, students tend to show greater enthusiasm and understand the urgency of the knowledge they are learning. In the long term, the educational process becomes more meaningful, fostering self-efficacy (a sense of self-confidence), while also fostering students' independence and accountability toward their learning goals

The inner drive to master new skills, meet academic obligations, and improve capabilities is known as learning motivation. Although internal and external factors

strongly shape this motivation and guide student success, real challenges still frequently arise in the classroom. Phenomena such as declining student interest in lessons, inattention to the teacher's explanations, and a lack of active participation in the educational process remain critical issues (Ali Masripah et al., 2023; Padilah Asyifa et al., 2024).

This low learning motivation was evident during an initial observation in the fourth-grade class at SD Inpres 1 Piru on January 8, 2026. Throughout the learning process, most students appeared passive and unenthusiastic. In fact, some students were found to be dozing off and unfocused because they were bored with the material being presented. This situation was exacerbated by monotonous teaching methods that lacked variety. Consequently, the learning atmosphere became uninspiring, lost its appeal, and gradually eroded the children's enthusiasm and motivation to learn.

Several previous studies show that the *Contextual Teaching and Learning* (CTL) model positively affects the learning process in elementary schools. The study by Welerubun et al. (2022), titled "Contextual Teaching and Learning in Environmental Pollution Education: The Effect on Student Learning Outcomes," demonstrates that the implementation of the CTL model positively influences student learning outcomes because it connects the learning material to students' real-life experiences. Furthermore, Sumiati's (2023) study, titled "The Application of the Contextual Teaching and Learning (CTL) Model to Improve Student Motivation and Learning Outcomes through Active, Meaningful, and Student-Centered Learning," and Padillah's (2024) study, titled "Improving Science Learning Outcomes through the *Contextual Teaching and Learning* (CTL) Approach in Elementary Schools," demonstrate that the use of the CTL model can improve student learning outcomes because the instructional material is linked to real-life situations closely related to students' daily lives.

Although previous research indicates that the CTL model improves learning quality, most studies focus on student learning outcomes, while research specifically examining improvements in learning motivation among elementary school students remains limited. Furthermore, research on the application of the CTL model among fourth-grade students at SD Inpres 1 Piru has not been extensively conducted. Therefore, this study was conducted to address this gap by testing the effectiveness of the *Contextual Teaching and Learning* (CTL) model in enhancing the learning motivation of fourth-grade students at SD Inpres 1 Piru using a One-Group Pretest–Posttest Design and Normalized Gain (N-Gain) analysis. This study's results are expected to reinforce previous findings while providing empirical evidence of the CTL model's effectiveness in enhancing elementary students' learning motivation.

To address this issue, classrooms require a teaching approach that connects lesson content to students' daily life experiences. This way, lessons no longer feel theoretical or boring; they become more meaningful. The *Contextual Teaching and Learning* (CTL) model is well suited to this need because it encourages students to build their own understanding through direct experience, group discussions, collaboration, and problem-solving relevant to their lives. through direct experience, group discussions, collaboration, and problem-solving that are relevant to their lives. With CTL, students are expected to grasp the material more easily, be more active in class, and have significantly higher learning motivation.

Based on these circumstances, this study was conducted to examine how the implementation of the *Contextual Teaching and Learning* (CTL) model enhances the learning motivation of fourth-grade students at SD Inpres 1 Piru.

METHOD

This study used a quantitative experimental approach, employing *a pre-experimental one-group pretest–posttest design* (Nasihah et al., 2024). The research was conducted at SD Inpres 1 Piru, West Seram Regency, Maluku Province. This study involved two types of variables: the *Contextual Teaching and Learning* (CTL) model as the independent variable and students' learning motivation as the dependent variable. *Contextual Teaching and Learning* (CTL) is a learning approach that emphasizes fully engaging students so they can discover the material being studied and connect it to real-life situations (Rusman, 2017). Meanwhile, learning motivation is understood as a form of drive that influences students throughout their learning activities (Rehman et al., 2020).

This study drew its population from students at SD Inpres 1 Piru, with a specific sample of all fourth-grade students (29 students). Because of the limited number of students, the researcher used saturation *sampling*. To collect data in the field, the researcher used a learning motivation questionnaire and an observation sheet. Subsequently, the collected data were analyzed using SPSS software. This analysis process included a series of tests, ranging from validity and reliability tests of the instruments, a normality test using the *Shapiro-Wilk* method, to the *N-Gain* test, which was used to determine the extent of the increase in students' learning motivation after they learned using the *Contextual Teaching and Learning* (CTL) model.

RESULTS AND DISCUSSION

Results

Based on the validity test results for the 20 items in the learning motivation questionnaire, it was found that all items had a calculated r value greater than the table r value, specifically 0.367 at a 5% significance level with a sample size of 29 respondents. Thus, all items were deemed valid and suitable for use as research instruments.

Furthermore, the reliability test yielded a Cronbach's Alpha value of 0.892. This value exceeds the minimum reliability threshold of 0.70; therefore, the learning motivation questionnaire was found to have a very high level of reliability. Thus, the research instrument was deemed consistent and suitable for collecting research data. Subsequently, a normality test was conducted as a prerequisite for analysis to determine whether the research data followed a normal distribution.

This section examines the extent to which implementing the *Contextual Teaching and Learning* (CTL) model affects the learning motivation of fourth-grade students at SD Inpres 1 Piru. During the research process, the CTL model was applied as the *treatment* to a sample consisting of 29 students. To accurately measure changes in their learning motivation, this study employed a *One-Group Pretest-Posttest Design*. Through this design, students were asked to complete a questionnaire at the beginning (*pretest*) before the program began, as well as a questionnaire at the end (*posttest*) after they had completed the CTL-based instruction.

Table 1. Normality Test

Test of Normality							
		Kolmogorov-Smirnov			Shapiro-Wilk		
Results	Questionnai re	Statistic	df	Sig.	Statistic	df	Sig.
	Initial Questionnair e	.137	29	.175	,946	29	.141

Final Questionnaire	.100	29	.200	.963	29	.394

*.This is a lower bound of the true significance level.
Lilliefors Significance Correction

Based on the Normality Test table, the *Shapiro-Wilk* normality test yielded significance values of 0.141 for the pre-test questionnaire and 0.394 for the post-test questionnaire. Since the significance scores for both questionnaires are above 0.05, it can be concluded that the data obtained before and after the treatment are normally distributed. Meeting the normality assumption also confirms that the basic requirement for proceeding to parametric statistical analysis has been adequately met.

Based on classroom observations, the implementation of the *Contextual Teaching and Learning* (CTL) model during the teaching-learning process was assessed as proceeding very well. Educators appeared to follow the CTL stages systematically, particularly when connecting lesson material to real-life situations familiar to students. The students also responded very actively. This was evident in their enthusiasm for asking questions, engaging in discussions, collaborating in groups, and presenting their group work to the class.

Table 2. Implementation of the Stages of the *Contextual Teaching and Learning* Model

No	CTL Component	Aspects Observed	Yes	No
1	Constructivism.	The teacher provides students with opportunities to learn from their environment, real objects, or events occurring around them.	✓	
		Teachers give students the opportunity to share experiences they have they have related to the the	✓	
2	Learning community	The teacher divides the students into several groups.	✓	
		The teacher guides students to work together in groups.	✓	
3	Modeling	Teachers guides students to pay attention to the steps of the experiment in the worksheet.	✓	
4	Inquiry	Teachers guides students to formulate experimental problems.	✓	
		Teachers guide students throughout the assignment process	✓	
		The teacher give students the opportunity to present the results of group.	✓	
5	Asking	The teacher asks the students a question	✓	
		The teacher gives students the opportunity to answer the question	✓	
6	Reflection	The teacher gives students the opportunity to summarize the results of the activities that have carried out.	✓	
		Teachers guide students in summarizing the lesson material.	✓	
7	Authentic Assessment	The teacher observes and assesses student group performance.	✓	
		The teacher gives recognition to each group	✓	

Based on the teacher's activity observation sheet, all stages of the *Contextual Teaching and Learning* (CTL) model were found to have been optimally implemented throughout the class. The teacher successfully integrated the seven main pillars of CTL in a coherent sequence, from constructivism and the learning community to modeling, inquiry, the questioning process, reflection, and authentic assessment. In practice, the teacher created opportunities for students to explore knowledge through real-world experiences, collaborate in teams, conduct independent investigations, and engage in active dialogue. At the end of the session, the teacher also facilitated a review of the lesson and a comprehensive evaluation of the students' performance. This series of activities confirms that the CTL model was implemented consistently in the classroom, in accordance with the learning scenarios designed from the outset.

Table 3. Student Participation in the CTL Learning Model

No.	Indicator or aspect observed	Score			
I	**Initial activities**	**1**	**2**	**3**	**4**
1	Students begin class with a prayer				✓
2	Students respond to the teacher's praise (constructivism)				✓
3	Students listen attentively as the teacher explains the learning objectives to be achieved				✓
II	**Learning Activities**				
4	Students are enthusiastic when discussing in groups (learning community)				✓
5	Students pay close attention to the steps of the activity (modeling)				✓
6	Students are able to successfully complete their work in groups (modeling)				✓
7	Students actively express their opinions and ask questions				✓
8	Students are able to complete their work well (inquiry)				✓
9	Students are actively involved in presenting their work (inquiry)				✓
III	**Conclusion**				
10	Students are able to write a summary of the conclusions from the learning activities that (reflection)				✓
11	Students conclude the learning session with success				✓
	TOTAL			36	

In the student activity observation table, all assessed indicators achieved the maximum score of 4 (the "very good" category), for a total accumulated score of 36. This result clearly shows that the students participated optimally in every phase of the learning process, from the opening stage through the main content to the closing session. Throughout the process, the students appeared enthusiastic during discussions, responded well during question-and-answer sessions, worked cohesively to complete group tasks, and presented their work and formulated conclusions confidently. These findings confirm that the *Contextual Teaching and Learning* (CTL) model has effectively boosted student engagement and active participation in the classroom.

The findings from the observation sheets align with the results of *the N-Gain* test, which was used to measure the extent of the increase in students' learning motivation following the implementation of the *Contextual Teaching and Learning* (CTL) model. The *N-Gain* scores obtained in this study do not merely indicate a quantitative increase in motivation scores. More than that, these figures show the extent to which the CTL model boosts active engagement, interest, and stimulation of student learning through classroom activities directly integrated with real-life situations.

Table 4. N-Gain Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation
Ngain_Score	29	.64	1.10	.8248	.11951
Ngain_Percent	29	64.29	110.00	82.4821	11.95053
Valid N (listwise)	29				

Data analysis using SPSS yielded an *N-Gain* value of 0.82. This value is categorized as a high improvement because it falls within the range of $g \geq 0.70$. These results indicate that implementing the *Contextual Teaching and Learning* (CTL) model effectively boosts the learning motivation of fourth-grade students at SD Inpres 1 Piru. Therefore, it can be concluded that the CTL learning model has been proven to increase students' learning motivation

Discussion

Based on the research findings, the implementation of the *Contextual Teaching and Learning* (CTL) model has been shown to boost the learning motivation of fourth-grade students at SD Inpres 1 Piru. This surge in motivation occurs because CTL integrates lesson material with real-life experiences familiar to students' daily lives, thereby creating a more meaningful learning process. In this context, students are no longer merely passive recipients of information from the teacher but actively participate in constructing concepts through discussions, question-and-answer sessions, group collaboration, and problem-solving.

These findings are supported by Welerubun et al. (2022), who explain that the *Contextual Teaching and Learning* (CTL) approach links learning materials to students' real-life contexts, making learning more meaningful and helping students better understand the concepts being studied. Furthermore, Sumiati (2023**)** states that implementing CTL positively impacts learning motivation because students are actively involved in the learning process through contextual activities. This active involvement fosters interest in learning, increases student participation, and strengthens motivation to engage in learning activities.

The findings of this study are also supported by Agrifina et al. (2024), who state that learning motivation is one of the key factors in improving the learning outcomes of elementary school students. Students with high learning motivation tend to be more active, enthusiastic, and diligent in participating in the learning process. This aligns with this study's findings that implementing the *Contextual Teaching and Learning* (CTL) model creates meaningful learning experiences that foster increased student learning motivation.

Optimal implementation of the CTL syntax also supported increased student learning motivation. In this process, teachers help students construct knowledge through

real-world experiences, team collaboration, inquiry-based learning, a culture of questioning, regular reflection, and authentic assessment. Such a classroom environment has been proven to spark students' enthusiasm, self-confidence, and active participation throughout the learning process. These various activities align with the essence of constructivist theory, which emphasizes that cognitive understanding is independently constructed by students through real-world experiences and active interaction with their learning environment.

This study's findings are further supported by Dewi Lestari's (2024) research, which confirms that implementing the CTL model can create a more meaningful learning atmosphere, thereby increasing student motivation. In line with this, Suprihatin (2019) explains that a surge in learning motivation will be achieved if the learning process can involve students' active participation and provide functional learning experiences. Therefore, these results further reinforce previous findings that the *Contextual Teaching and Learning* model is an effective learning strategy for boosting students' learning motivation at the elementary school level.

The significance of these research findings is empirically demonstrated by an N-Gain score of 0.8248, which falls into the "high" category. This figure indicates that implementing the CTL model significantly increases students' learning motivation after the learning process. Therefore, the Contextual Teaching and Learning model is highly recommended as an instructional strategy to stimulate students' learning motivation, given that its characteristics have been shown to foster an active, meaningful, and student-centered learning environment.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research results, the data analysis and discussion show that implementing the *Contextual Teaching and Learning* (CTL) model has been highly effective in increasing the learning motivation of fourth-grade students at SD Inpres 1 Piru. This success is demonstrated by the optimal engagement of both teachers and students throughout the learning process, with students actively involved, enthusiastic, and responsive at every stage of the CTL syntax. Furthermore, an N-Gain score of 0.82 empirically supports the model's effectiveness, which falls within the "high improvement" criteria. By integrating subject matter with real-life contexts, the CTL model created a functional, interactive, and student-centered learning atmosphere, thereby triggering a significant surge in learning motivation.

In light of these research findings, several recommendations can be proposed to improve the quality of learning in the future. Teachers are advised to consistently apply and develop the CTL learning model across other subject areas closely related to students' real-life experiences. School principals are also expected to provide structural support, including adequate resources and periodic training, to deepen teachers' understanding of innovative, context-based learning strategies. Finally, future researchers in related fields should expand this research by testing the CTL model against other competency variables, such as cognitive learning outcomes or critical thinking skills, and by applying it to more heterogeneous student populations.

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