

The Effect of the Contextual Teaching and Learning Model on the Learning Motivation of Grade 10 Students in PAK Learning at SMK Karsa Mulya Palangka Raya

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Abstract

This study aimed to determine the effect of the Contextual Teaching and Learning (CTL) instructional model on students' learning motivation in Christian Religious Education for Grade X students at SMK Karsa Mulya Palangka Raya and to determine whether the effect of the CTL model was greater than that of conventional learning. This study employed a quantitative approach using a Quasi-Experimental Design with a Pretest-Posttest Control Group Design. The sample consisted of Grade X TKR as the experimental class, comprising 27 students, and Grade X DKV as the control class, comprising 22 students. Data were collected using a learning motivation questionnaire that had been tested for validity and reliability. Data analysis was conducted using IBM SPSS Statistics 25 through normality, homogeneity, Paired Sample t-Test, and Independent Samples t-Test tests. The results of the Paired Sample t-Test in the experimental class showed a significance value of 0.000 (< 0.05), with a t-value of -11.673 and a mean difference of -17.889, indicating an increase in students' learning motivation after the implementation of CTL. The results of the Independent Samples t-Test on the post-test showed a significance value of 0.000 (< 0.05), with $|t\text{-value}| = 6.040 > t\text{-table} = 2.011$, indicating a significant difference in learning motivation between the experimental and control classes. The N-Gain results showed an average increase of 0.6641 (66.41%) in the experimental class, higher than 0.3741 (37.41%) in the control class. Thus, CTL had a significant effect and resulted in a greater increase in students' learning motivation than conventional learning.

Keywords

Contextual Teaching and Learning, Learning Motivation, Christian Education, Quasi-Experimental Design



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INTRODUCTION

Education is a fundamental means of developing students' potential and preparing them to participate actively and responsibly in society. One of the important factors determining the success of the educational process is students' learning motivation. Learning motivation refers to the internal and external forces that encourage students to engage in learning activities,

persist in completing tasks, and achieve predetermined educational goals. Alifah Putri (2025) defines learning motivation as a driving force that encourages students to participate in learning activities to achieve particular goals. Similarly, Raharjo (2022) explains that learning motivation generates enthusiasm and encourages students to participate actively and persistently in the learning process. Students with high motivation tend to demonstrate discipline, responsibility, persistence, and a strong desire to achieve academic success, whereas low motivation may negatively affect learning outcomes and hinder the achievement of learning objectives (Dimiyati & Mudjiono, 2021).

An effective learning process therefore requires students to possess adequate motivation to participate with enthusiasm, attention, and responsibility. Motivated students are more likely to ask questions, express opinions, participate in discussions, and make efforts to understand learning materials. However, low learning motivation remains a common problem in schools. Students with low motivation may show limited enthusiasm, classroom participation, concentration, and willingness to complete learning tasks (Hutagalung et al., 2024). One factor contributing to this condition is the use of monotonous and teacher-centered learning models that do not correspond to students' characteristics and needs. Kirana et al. (2025) argue that monotonous instruction can cause boredom and reduce student involvement, while Elfrida et al. (2024) emphasize that learning activities disconnected from students' real-life experiences may reduce interest and motivation.

This issue is particularly relevant to Christian Religious Education (PAK), which aims not only to provide religious knowledge but also to develop students' attitudes, values, character, and ability to apply Christian teachings in everyday life. PAK learning should therefore enable students to recognize the relevance of Christian values to their personal experiences, social relationships, and environmental challenges. When learning is dominated by lectures and assignments without meaningful contextual connections, students may have difficulty recognizing the practical significance of the material. Consequently, an instructional model that connects learning content with students' real-life experiences is needed.

One alternative is the Contextual Teaching and Learning (CTL) model, which emphasizes connecting learning materials with students' real-life situations (Heristyo et al., 2025). CTL enables students to understand learning materials more meaningfully by relating academic concepts to their everyday experiences and encouraging them to seek, process, and apply knowledge actively (Nurlinda et al., 2024). Through discussion, critical thinking, problem solving, and knowledge application, CTL can create a more active and engaging learning environment (Sinaga et al., 2023). Previous studies have demonstrated its potential to increase learning motivation. Alpian et al. (2019) found a positive influence of CTL on learning motivation, while Sinaga et al. (2023) reported increased motivation through active student involvement. In PAK, Napitupulu et al. (2024) also found evidence of a positive contribution of CTL to students' learning motivation.

Nevertheless, the implementation of CTL may face limitations related to instructional time, facilities, and teachers' understanding of the model (Kirana et al., 2025). Moreover,

research specifically examining the effect of CTL on learning motivation in PAK among Grade X students at SMK Karsa Mulya Palangka Raya remains limited. Preliminary observations during the researcher's PPL in October–November 2025 indicated that some Grade X students showed low enthusiasm during PAK lessons, limited participation in discussions, passivity in completing assignments, lack of concentration, and the use of mobile phones for non-learning activities. These conditions indicate the need for a learning model that promotes active participation and connects PAK materials with students' everyday experiences. Therefore, this study aims to determine the effect of the CTL model on the learning motivation of Grade X students in PAK at SMK Karsa Mulya Palangka Raya and to examine whether CTL has a greater effect on learning motivation than conventional learning. The findings are expected to provide empirical and practical contributions to the development of more meaningful, active, and student-centered PAK learning.

METHODS

This study employed a quantitative approach to examine the effect of the Contextual Teaching and Learning (CTL) model on the learning motivation of Grade X students in Christian Religious Education (PAK) at SMK Karsa Mulya Palangka Raya. A quantitative approach was considered appropriate because the study collected numerical data through structured instruments and analyzed them statistically to test the formulated hypotheses (Sugiyono, 2019). The study used a quasi-experimental method with a nonequivalent control group design. Two groups were involved: an experimental group that received PAK instruction using the CTL model and a control group that received conventional instruction through lectures and assignments. Both groups completed pre-tests and post-tests to measure changes in learning motivation.

The research was conducted at SMK Karsa Mulya Palangka Raya, Central Kalimantan, from January to July 2026. The population consisted of 71 Christian Grade X students participating in PAK, comprising 22 students from Visual Communication Design (DKV), 17 from Motorcycle Engineering (TSM), 27 from Light Vehicle Engineering (TKR), and 5 from Digital Business (BD). Samples were selected through non-probability purposive sampling (Sugiyono, 2019). Class X TKR (27 students) was assigned as the experimental group, while Class X DKV (22 students) served as the control group.

The primary instrument was a 25-item learning motivation questionnaire based on five indicators proposed by Herwati et al. (2023): persistence in completing tasks, resilience in facing difficulties, interest in new problems or questions, independent learning ability, and boredom with monotonous activities. The questionnaire used a five-point Likert scale, with negative items reverse-scored. Validity was tested using Pearson Product-Moment correlation, while reliability was assessed using Cronbach's Alpha with IBM SPSS. The pre-test obtained an alpha of 0.937, while the post-test obtained 0.950. However, post-test item 24 had an r-count of 0.400, below the stated critical value of 0.482, and therefore requires further consideration in the final analysis. Data were analyzed using Shapiro–Wilk normality testing, Levene's

homogeneity testing, paired-samples and independent-samples t-tests, and N-Gain analysis. Hypothesis testing used a significance level of 0.05, while N-Gain values of ≥ 0.70 , $0.30 < 0.70$, and < 0.30 were categorized as high, moderate, and low, respectively.

FINDINGS AND DISCUSSION

Findings

Hypothesis Testing

Hypothesis testing in this study was conducted using the Paired Sample t-Test and Independent Samples t-Test with the help of the IBM SPSS Statistics 25 program. The Paired Sample t-Test was used to determine whether there was a difference in student learning motivation before (pre-test) and after (post-test) treatment was given in the experimental class. Furthermore, the Independent Samples t-Test was used to determine whether there was a difference in the average learning motivation between students in the experimental class who received learning using the Contextual Teaching and Learning (CTL) model and students in the control class who received conventional learning. The basis for decision making in both tests is if the significance value (Sig. (2-tailed)) ≥ 0.05 then H_0 is accepted and H_a is rejected, whereas if the significance value (Sig. (2-tailed)) < 0.05 then H_0 is rejected and H_a is accepted. Thus, the results of hypothesis testing in this study are explained in stages as follows.

Paired Sample t-Test Results

A Paired Sample t-Test was conducted to test the first hypothesis of the problem formulation, namely whether the CTL model influences student learning motivation by observing whether or not there is a difference in student learning motivation in the experimental class before and after being given learning using the Contextual Teaching and Learning (CTL) model. This test compares students' learning motivation scores during the pre-test with the post-test scores in the experimental group.

Table 1 Test Results Paired Sample t-Test

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval				
					of the Difference				
					Lower	Upper			
Pair 1	PRETEST - POSTTEST	-17,889	7,963	1,532	-21,039	-14,739	-11,673	26	,000

Based on the results in Table 4.3, the Paired Sample t-Test shows that the significance value (Sig. (2-tailed)) is 0.000, which is smaller than the significance level of 0.05 ($0.000 < 0.05$). In addition, the calculated t value is -11.673 with a degree of freedom (df) of 26. Because the significance value is smaller than 0.05, H_{01} is rejected and H_{a1} is accepted. The Mean Difference value of -17.889 indicates that the average score of students' learning motivation in the post-test was 17.889 points higher than the average score in the pre-test. Thus, there is a

significant difference between students' learning motivation before and after being given treatment using the Contextual Teaching and Learning (CTL) model. These results prove that the Contextual Teaching and Learning (CTL) model has an influence on the learning motivation of class X students in Christian Religious Education learning at SMK Karsa Mulya Palangka Raya.

Independent Sample t-Test Results

An Independent Sample t-Test was conducted to test the second hypothesis, namely to determine whether the CTL model has a greater influence than conventional learning on student learning motivation in Christian Religious Education (PAK). This can be seen from the condition of student learning motivation in the experimental and control classes. The following table shows the results of the Independent Sample T-Test:

Table 2 Test Results Independent Sample T-Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Standard Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PRETEST	Equal variances assumed	1,432	,237	-1,797	47	,079	-2,823	1,571	-5,983	,337
	Equal variances not assumed			-1,821	46,666	,075	-2,823	1,551	-5,943	,297
POSTEST	Equal variances assumed	,024	,878	-6,040	47	,000	-9,212	1,525	-12,281	-6,144
	Equal variances not assumed			-6,089	46,204	,000	-9,212	1,513	-12,257	-6,167

Independent Sample t-Test Results on Pre-Test Data

The Independent Sample t-Test was then conducted to determine the initial conditions of learning motivation between the experimental class and the control class before being given treatment. Based on the results in Table 4.4, the Independent Sample t-Test for pre-test data showed a significance value (Sig. (2-tailed)) of 0.079, which is greater than 0.05 ($0.079 > 0.05$). In addition, the calculated t value was -1.797, while the t-table value at a significance level of 5% with degrees of freedom (df) = 47 was 2.011. Because the value of $|t_{\text{count}}| = 1.797 < t_{\text{table}} = 2.011$, then H_{02} is accepted and H_{a2} is rejected. These results indicate that there was no significant difference between the learning motivation of students in the experimental and control classes before the treatment. Therefore, both groups had relatively similar initial levels of learning motivation, making them suitable for comparison in this study. This similarity in initial conditions provides the basis for analyzing differences in learning motivation found after the treatment by comparing the post-test results of both groups.

Independent Sample t-Test Results on Post-Test Data

After the learning process was completed, an Independent Sample t-Test was conducted on the post-test data to determine whether there was a difference in learning motivation between the experimental class that received learning using the CTL model and the control class that received conventional learning. The results of the Independent Sample t-Test on the post-test data showed a significance value (Sig. (2-tailed)) of 0.000, which is smaller than 0.05 ($0.000 < 0.05$). The calculated t value obtained was -6.040, while the t table value at a significance level of 5% with degrees of freedom ($df = 47$) was 2.011. Because the value of $|t_{\text{count}}| = 6.040 > t_{\text{table}} = 2.011$, then H_0 is rejected and H_a is accepted. then H_{02} is rejected and H_{a2} is accepted.

These results indicate a significant difference between students' learning motivation in the experimental and control classes after treatment. Therefore, it can be concluded that the application of the Contextual Teaching and Learning (CTL) model significantly impacts the learning motivation of tenth-grade students in Christian Religious Education (PAK) learning at SMK Karsa Mulya Palangka Raya. The learning motivation of students who participated in learning using the Contextual Teaching and Learning (CTL) model was proven to be higher than that of students who participated in conventional learning.

N-Gain Test Results as Strengthening the Second Hypothesis

Ttable 3 Test ResultsN-Gain

Descriptives					
	GROUP			Statistics	Std. Error
Ngain_Score	EXPERIMENT AL CLASS (X TKR)	Mean		,6641	,04496
		95% Confidence Interval for Mean	Lower Bound	,5717	
			Upper Bound	,7565	
		5% Trimmed Mean		,6643	
		Median		,6818	
		Variance		,055	
		Standard Deviation		,23363	
		Minimum		,06	
		Maximum		1.24	
		Range		1.18	
		Interquartile Range		,20	
		Skewness		-,061	,448
		Kurtosis		1,790	,872
	CONTROL CLASS (X DKV)	Mean		,3741	,04281
		95% Confidence Interval for Mean	Lower Bound	,2851	
			Upper Bound	,4632	
		5% Trimmed Mean		,3658	
		Median		,3333	
		Variance		,040	
		Standard Deviation		,20079	

Gain_Percent		Minimum		,00	
		Maximum		,90	
		Range		,90	
		Interquartile Range		,27	
		Skewness		,813	,491
		Kurtosis		1,104	,953
	EXPERIMENTAL CLASS (X TKR)	Mean		66,4075	4,49620
		95% Confidence Interval for Mean	Lower Bound	57,1655	
			Upper Bound	75,6496	
		5% Trimmed Mean		66,4348	
		Median		68,1818	
		Variance		545,826	
		Standard Deviation		23.36293	
		Minimum		5.56	
		Maximum		123.53	
		Range		117.97	
		Interquartile Range		20.45	
		Skewness		-,061	,448
		Kurtosis		1,790	,872
	CONTROL CLASS (X DKV)	Mean		37,4146	4,28092
		95% Confidence Interval for Mean	Lower Bound	28,5119	
			Upper Bound	46,3173	
		5% Trimmed Mean		36,5850	
		Median		33,3333	
		Variance		403,178	
		Standard Deviation		20.07929	
		Minimum		,00	
		Maximum		90.48	
		Range		90.48	
		Interquartile Range		27.45	
		Skewness		,813	,491
		Kurtosis		1,104	,953

Based on the results in Table 4.5, the average (mean) N-Gain Score of learning motivation in the experimental class (X TKR) was 0.6641, while in the control class (X DKV) it was 0.3741. Based on Hake's criteria, both values are included in the medium category, but the average N-Gain Score in the experimental class is higher than the control class. When viewed from the N-Gain Percent, the experimental class obtained an average increase in learning motivation of 66.4075%, while the control class obtained an average of 37.4146%. This shows that the increase in student learning motivation in the experimental class was around 29% higher than the control class.

In addition, the standard deviation of the N-Gain Score in the experimental class was 0.23363, while in the control class it was 0.20079, which indicates that the distribution of data on the increase in learning motivation in both groups was relatively not much different. The minimum and maximum values of the N-Gain Score in the experimental class were 0.06 and 1.24, respectively, while in the control class they were 0.00 and 0.90. Descriptively, the results of the N-Gain analysis showed that the increase in student learning motivation in the experimental class was higher than in the control class. The average N-Gain Score of 0.6641 indicates that the increase in student learning motivation in the experimental class was in the medium category and approaching the high category, while the average N-Gain Score in the control class was 0.3741 in the medium category, but lower than the experimental class.

The results of the N-Gain analysis support the results of the second hypothesis test that H_{a2} is accepted and H_{02} is rejected. The N-Gain results strengthen the results of the Independent Samples t-Test which show that the Contextual Teaching and Learning (CTL) model has a better influence on increasing student learning motivation compared to conventional learning. Thus, the Contextual Teaching and Learning (CTL) model is proven to be able to increase the learning motivation of class X students in Christian Religious Education learning at SMK Karsa Mulya Palangka Raya.

Discussion

Implementation of the Contextual Teaching and Learning (CTL) Learning Model in Christian Religious Education Subjects

The research began with a pre-test administered to students in the experimental and control classes to determine their initial learning motivation before treatment. The learning motivation questionnaire used in the pre-test had previously undergone validity and reliability testing. The results of the Independent Samples t-Test showed a significance value of 0.079, which was greater than 0.05. The calculated t-value was 1.797, lower than the t-table value of 2.011. Therefore, H_0 was accepted and H_a was rejected, indicating that there was no significant difference in students' initial learning motivation between the experimental and control classes. Thus, the two groups had relatively similar initial conditions and were considered suitable for comparison.

After the pre-test, learning activities were conducted in three meetings in both classes using the same PAK materials. The main difference was the instructional model: the experimental class used the Contextual Teaching and Learning (CTL) model, whereas the control class used conventional learning. In the experimental class, learning followed several CTL stages, including orientation, contextual problem presentation, inquiry, learning community, modeling, and reflection. These stages encouraged students to construct knowledge through meaningful experiences and connections with real-life situations. In the first meeting, the teacher explained the learning objectives and introduced questions related to students' everyday experiences. Contextual problems were then presented to stimulate students to think, ask questions, and express their opinions. Rather than directly providing answers, the teacher guided students through an inquiry process to discover relevant concepts.

This approach reflects Johnson's view (in Jihan, 2025) that contextual learning enables students to connect academic knowledge with real experiences, making learning more meaningful.

The second meeting emphasized group activities through a learning community. Students discussed and analyzed issues related to PAK and connected them with situations encountered in daily life. The teacher acted as a facilitator by providing guidance when necessary. Through discussion, collaboration, and problem solving, students had greater opportunities to participate actively. This is consistent with Berns and Erickson (in David, 2024), who explain that contextual learning connects subject matter with real-world situations and creates meaningful learning experiences. It also corresponds with Uno's (2023) view that learning motivation encourages students to participate actively and persist in learning activities.

In the third meeting, groups presented their discussion results, while other students responded and asked questions. The teacher reinforced the material, followed by a reflection activity in which students summarized the lesson and related it to their daily lives. During the three meetings, students in the experimental class showed increased participation, including greater willingness to ask questions, express opinions, engage in group discussions, and complete assignments diligently. These behavioral changes reflect the learning motivation indicators proposed by Herwati et al. (2023), particularly persistence, resilience, interest in new problems, independence, and active involvement in learning.

The Influence of the Contextual Teaching and Learning (CTL) Learning Model on Student Learning Motivation

After the entire learning process was completed in three meetings, a post-test was administered to students in both the experimental and control classes using the learning motivation questionnaire. The post-test aimed to identify changes in students' learning motivation following the treatment and to compare the outcomes between the two groups. The data were analyzed using normality and homogeneity tests, Paired Samples t-Test, Independent Samples t-Test, and N-Gain analysis with IBM SPSS Statistics 25. The normality test indicated that the data were normally distributed, while the homogeneity test showed that the variances of the experimental and control groups were homogeneous. Therefore, the data met the assumptions required for parametric statistical analysis. The Independent Samples t-Test showed a significance value of 0.000, which was lower than 0.05, with a calculated t-value of 6.040 compared with a t-table value of 2.011. These results indicate a significant difference in learning motivation between the experimental and control groups after the treatment. Thus, the null hypothesis was rejected and the alternative hypothesis was accepted, indicating that the CTL model had a significant influence on students' learning motivation in PAK.

The significant difference can be explained by the characteristics of CTL, which actively involve students in connecting learning materials with real-life experiences. During the learning process, students in the experimental class participated in discussions, problem solving, expressing opinions, inquiry activities, presentations, and reflection. Such activities encouraged students to become more responsible and actively involved in constructing their

understanding. This finding is consistent with Johnson's view (in Jihan, 2025) that CTL helps students discover the meaning of learning by connecting subject matter with real-life situations. When students recognize the usefulness of learning materials in their daily lives, their intrinsic motivation to learn can increase.

The findings are also consistent with constructivist theory, which views knowledge as something constructed by students through meaningful learning experiences (Mashudi & Azzahro, 2020). CTL provides opportunities for students to actively construct knowledge through inquiry, discussion, presentation, and reflection. Consequently, students become more engaged in learning and develop stronger motivation. The findings are also supported by previous research showing that CTL positively influences learning motivation (Alpian et al., 2019; Sinaga et al., 2023). In the context of PAK, Napitupulu et al. (2024) likewise found that CTL contributes positively to students' learning motivation.

The Paired Samples t-Test further showed a significance value of 0.000, indicating a significant increase in learning motivation within the experimental class. The mean difference of -17.889 indicates that the post-test motivation score was higher than the pre-test score. This improvement was supported by the N-Gain analysis. The experimental class obtained an average N-Gain score of 0.6641 (66.41%), while the control class obtained 0.3741 (37.41%). Although both were categorized as moderate according to Hake's criteria, the experimental class demonstrated a substantially greater improvement than the control class.

The improvement was also reflected in students' learning behaviors. Students became more diligent in completing assignments, more resilient when facing difficulties, more active in asking questions and expressing opinions, and more independent in seeking information. These changes correspond to the learning motivation indicators proposed by Herwati et al. (2023), including persistence, resilience, interest in new problems, independent learning, and reduced boredom with learning activities. Although motivation also increased in the control class through lectures, question-and-answer sessions, examples, and exercises, the increase was lower than that of the experimental class. Overall, the findings demonstrate that CTL provides a more meaningful, active, and contextual learning experience and is more effective than conventional learning in enhancing students' learning motivation in PAK.

Comparison of Research Results with Previous Research

The results of this study align with the theory proposed by Johnson (in Jihan 2025), which states that Contextual Teaching and Learning is a learning concept that connects subject matter to real-life situations, enabling students to more easily understand the material and find meaning in what they learn. When students are able to see the connection between subject matter and everyday life, they become more interested in learning, more actively participate in learning, and have a stronger drive to achieve learning success.

The results of this study also support the opinions of Berns and Erickson.(inDavid 2024)which states that contextual learning provides students with opportunities to construct knowledge through real-world experiences, collaboration, and problem-solving. During the study, students in the experimental class appeared more active in discussions, asking

questions, expressing opinions, and collaborating on group assignments. These activities demonstrate that the Contextual Teaching and Learning model is capable of creating more interactive learning than conventional learning.

When linked to the theory of learning motivation, the results of this study are also in line with Sardiman's opinion. (in Iskandar et al. 2022), which states that learning motivation is the overall driving force within students that initiates, directs, and sustains learning activities. After implementing the Contextual Teaching and Learning model, students showed behavioral changes in the form of increased persistence in completing assignments, courage to express opinions, active questioning, and enthusiasm in participating in learning activities. These changes indicate that the right learning model can increase student learning motivation.

Furthermore, the results of this study support Uno's (2023) theory, which states that learning motivation is influenced by both internal and external factors. One of these factors is a conducive learning environment. The Contextual Teaching and Learning model creates an active, collaborative, and student-centered learning environment, thus optimally stimulating learning motivation compared to conventional learning.

Based on Herwati's (2023) learning motivation indicators, the increase in learning motivation in the experimental class was evident across all indicators, including persistence in completing assignments, resilience in facing difficulties, interest in new problems, independent learning abilities, and increased student interest in participating in learning. Conversely, the control class also experienced an increase in learning motivation, but the increase was lower. This was evident from the average N-Gain Score of the control class of 0.3741 (37.41%), while the experimental class achieved 0.6641 (66.41%). This difference indicates that conventional learning is still capable of increasing learning motivation, but its effectiveness is not as great as the Contextual Teaching and Learning model.

The results of this study are consistent with Sumiati's (2023) research, which states that the application of the Contextual Teaching and Learning model can increase student learning motivation because learning is linked to students' real experiences. Similarly, Raharjo's (2022) research shows that the use of the Contextual Teaching and Learning model significantly increases student learning motivation compared to conventional learning. The results of Juliardi Sinaga et al.'s (2023) research also show that contextual learning can increase learning motivation through more interactive learning activities, while Binti Yusup's (2022) research concludes that the Contextual Teaching and Learning model in Christian Religious Education learning makes students more interested in participating in learning because the material studied is closer to their lives.

Although the results are in line with previous research, this study differs in its context. This study was conducted on the Christian Religious Education subject at SMK Karsa Mulya Palangka Raya using a Pretest-Posttest Control Group Design and measured the increase in learning motivation through Paired Sample t-Test, Independent Samples t-Test, and N-Gain analysis. Therefore, this study not only shows the influence of the Contextual Teaching and Learning model on student learning motivation but also provides an overview of the

magnitude of the increase in learning motivation that occurred in the experimental class compared to the control class.

Based on the overall research findings, the theories used, and previous research, it can be concluded that the Contextual Teaching and Learning (CTL) model is an effective learning model for increasing student learning motivation. Learning that connects material to real-life situations, provides opportunities for students to actively discuss, solve problems, collaborate, and reflect, can create a more meaningful learning experience, thereby significantly increasing student learning motivation.

CONCLUSION

Based on the results of the research, data analysis, and discussion concerning the influence of the Contextual Teaching and Learning (CTL) model on students' learning motivation in Christian Religious Education (PAK) among Grade X students at SMK Karsa Mulya Palangka Raya, it can be concluded that the implementation of the CTL learning model has a positive and significant influence on students' learning motivation. The application of CTL encourages students to become more actively involved in the learning process by connecting learning materials with real-life situations and experiences. This meaningful learning approach enables students to better understand the relevance of the material while increasing their interest, participation, and willingness to engage in learning activities. Furthermore, the findings indicate that the CTL learning model has a greater influence on students' learning motivation than conventional learning. Compared with conventional learning, which tends to rely more heavily on teacher explanations and assignments, CTL provides opportunities for students to actively participate, discuss, explore, and relate the subject matter to situations in their daily lives. Therefore, CTL can be considered a more effective learning model for enhancing students' learning motivation in Christian Religious Education at SMK Karsa Mulya Palangka Raya. Its implementation is expected to contribute to more meaningful, active, and student-centered learning experiences.

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