



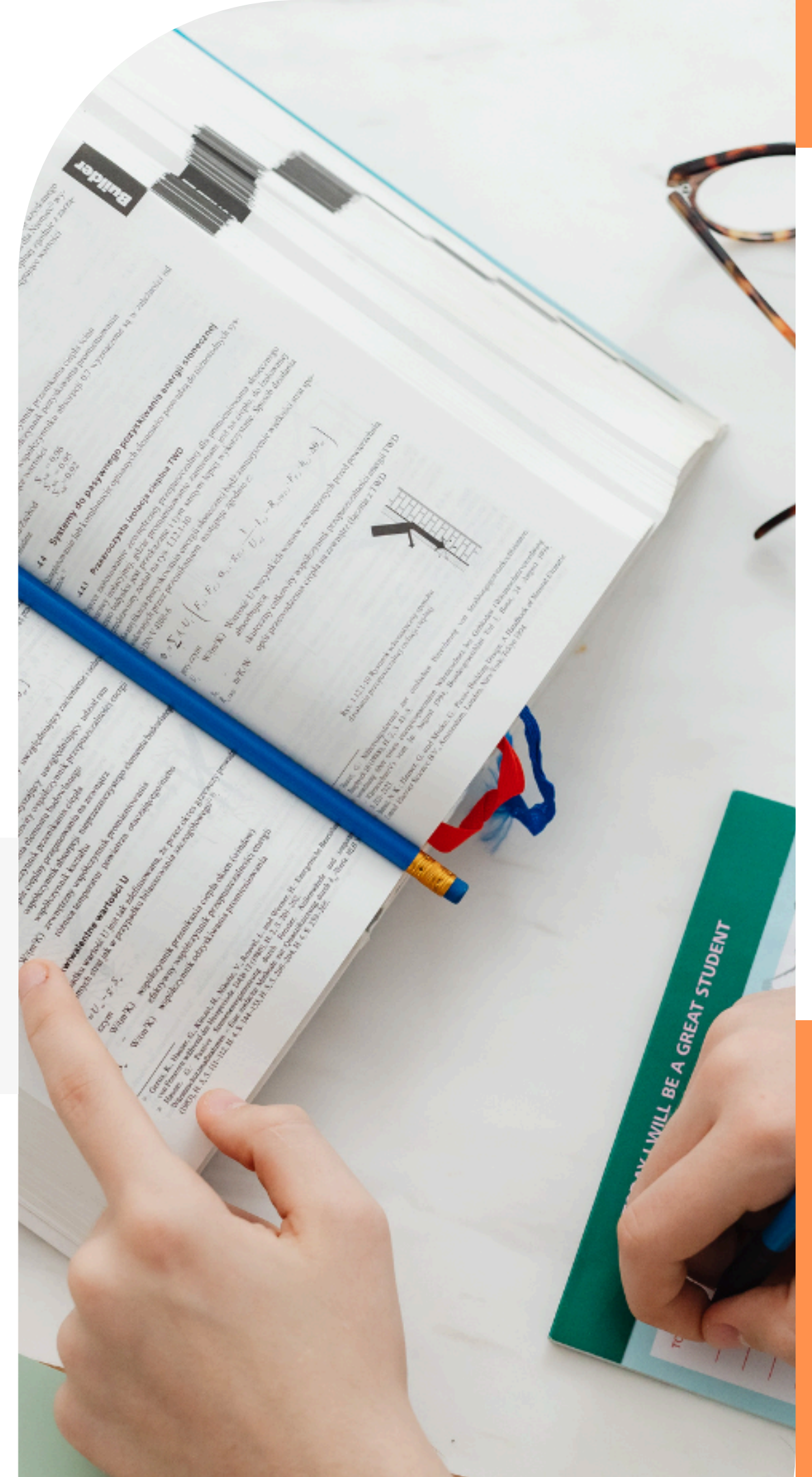
The 4th International Conference on Education,
Economics, Business, Entrepreneurship, and Finance

Implementation of the Contextual Teaching and Learning (CTL) Model in Increasing Learning Motivation with Self-Regulated Learning as a Moderating Variable

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The
Education
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BACKGROUND



01

The importance of effective education and learning

- The changing times require individuals to have knowledge and skills (Usman et al., 2024).
- Teachers need to create interesting and varied learning experiences (Alpian et al., 2019).

02

The importance of learning motivation in the educational process

- Learning motivation affects student engagement and learning outcomes (Bakar, 2014; Cook & Artino, 2016).

03

The role of learning models in increasing motivation

- Variations in learning models can increase student interest and engagement.
- One relevant model is Contextual Teaching and Learning (CTL), which relates material to real life (Sung et al., 2022)

04

Problems in the field

- Variations in learning models can increase student interest and engagement.
- One relevant model is Contextual Teaching and Learning (CTL), which relates material to real life (Sung et al., 2022)

05

Inconsistencies in previous research

- Several studies show that CTL increases learning motivation (Alpian et al., 2019; Wati, 2015; Rafzan et al., 2024).
- However, there are also insignificant results (Rahmawati et al., 2019), so further research is needed.

METHOD



icebef



UPI

FPeB

Method

Quantitative
Research

Type of Research

Quasi-
Experimental

Research Design

Factorial Design
2x3 with
Posttest-Only
Control Design

Variable

X : CTL Learning Model
Y : Learning Motivation
Z : Self Regulated
Learning

Variable

Questionnaire : Close
Ended
Learning Motivation : MSLQ
by Pintrich (1991)
Self Regulated Learning :
ASLQ by Nambiar (2022)

Location

Edu Global School
Bandung

Sample

10 D dan 10 E Classes
at EGS

Data Analysis Technique

Two Way ANOVA

RESULT



The descriptive analysis found that the experimental class with CTL showed higher learning motivation, especially at the high SRL level, although the variation in learning motivation was greater in groups with more students. The following is a summary of the descriptive analysis according to the 2x3 factorial design.

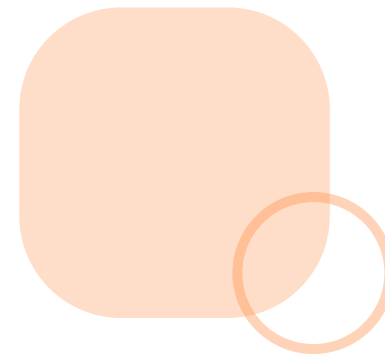


Table 1. Summary of Descriptive Analysis Results

Group	Mean	Standard Deviation	Number of Students
A ₁ B ₁	130	-	1
A ₁ B ₂	178,333	9,585	6
A ₁ B ₃	199,667	5,859	3
A ₂ B ₁	113,667	12,662	3
A ₂ B ₂	151,125	18,689	8
A ₂ B ₃	191	-	1

Source: Research results, 2024 (Data processed)

Overall, the experimental class with CTL showed higher learning motivation, especially at the high SRL level, although the variation in learning motivation was greater in groups with more students.

RESULT



Two-Way ANOVA test was conducted. Two-Way ANOVA is a statistical method used to test the effect of two factors (independent variables) on one dependent variable (response variable) simultaneously

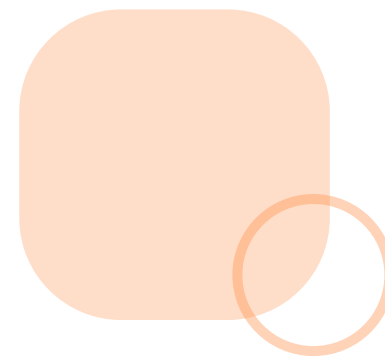


Table 2. Two Way Anova Test

Dependent Variable: Learning Motivation					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	27662.455 ^a	19	1455.919	647.075	.002
Intercept	597005.861	1	597005.861	265335.938	.000
Model	5776.000	1	5776.000	2567.111	.000
SRL	4421.417	17	260.083	115.593	.009
Model*SRL	841.000	1	841.000	373.778	.003
Error	4.500	2	2.250		
Total	641559.000	22			
Corrected Total	27666.955	21			

a. R Squared = 1.000 (Adjusted R Squared = .998)

Source: Research results, 2024 (Data processed)

Based on the table, the Corrected Model has a Sig. value of 0.002 (< 0.05), which means that the variation in learning motivation can be explained by a combination of these factors. In other words, this model is effective overall in increasing learning motivation. The Sig. value for the Intercept is 0.000, indicating that student learning motivation has a significant basis even without the influence of the CTL or SRL learning models. Thus, the Intercept results show that students have significant basic learning motivation, which can then be further enhanced by applying the CTL model and SRL skills. The Sig. value in the Model has a Sig. value of 0.000, which is smaller than alpha (0.05). This significance value indicates that the application of the Contextual Teaching Learning (CTL) model significantly affects student learning motivation. It can be concluded that the use of the CTL method is effective in increasing learning motivation. The Sig. value of 0.009 in SRL shows that students' Self-Regulated Learning abilities significantly affect learning motivation. With a significance value of 0.009 (Sig < 0.05), this means that the better students are at regulating their own learning process, the higher their learning motivation. Furthermore, the interaction between the Model (CTL) and SRL shows that there is a significant interaction between the CTL model and SRL in influencing student learning motivation. The significance value of 0.003 (Sig. < 0.05) indicates that the effectiveness of the CTL model is influenced by the level of students' SRL. Students with high SRL benefit more from the application of the CTL model than students with low SRL.

Learning Models on Learning Motivation

The application of the Contextual Teaching and Learning (CTL) model has been proven to significantly increase student learning motivation (Aziz & Munif Shaleh, 2019). Research shows that students who learn with the CTL model have higher learning motivation than students who are taught with conventional methods—as many as 40% of students in the experimental class showed high motivation, while in the control class, none did. The CTL model helps students understand material contextually by relating lessons to real-life situations, making learning more relevant, interesting, and meaningful. This approach also fosters intrinsic motivation, as students feel challenged, satisfied, and actively involved in learning activities such as discussions and exploration. Statistical test results (Two-Way ANOVA, Sig. < 0.05) confirm that CTL has a significant effect on learning motivation compared to conventional methods. Overall, CTL creates an active, contextual, and meaningful learning process, which encourages students to be more enthusiastic and responsible for their learning.

Self-Regulated Learning on Learning Motivation

Self-Regulated Learning (SRL) is a crucial skill that enables students to plan, organize, and evaluate their own learning, significantly influencing learning motivation (Widiatmoko & Herlina, 2021). Research shows that students with high SRL levels demonstrate stronger learning motivation, as they can manage their time, set clear goals, and select effective learning strategies. When students feel in control of their learning process, they develop greater confidence and satisfaction, which strengthens their motivation (Widiatmoko & Herlina, 2021). Students with strong SRL skills can identify difficult material, seek additional resources, and remain motivated despite challenges. Intrinsic motivation—learning driven by personal satisfaction—is more dominant among high-SRL students because they clearly define goals and monitor their progress. Self-efficacy also mediates the relationship between SRL and motivation; students who believe in their abilities are more motivated to succeed (Bandura in Puspitaningsih, 2014). Moreover, SRL helps students regulate emotions such as anxiety and fear of failure, enabling them to stay focused and persistent (Widiatmoko & Herlina, 2021). Through self-evaluation, students reflect on their progress, address weaknesses, and adjust strategies, enhancing intrinsic motivation (Azmi et al., 2024). Overall, SRL plays a significant role in improving learning motivation and academic achievement by fostering independence, self-confidence, and effective learning management (Azmi et al., 2024; Puspitaningsih, 2014; Widiatmoko & Herlina, 2021).

Learning Models on Learning Motivation with Self-Regulated Learning

Learning models have a significant influence on student motivation. The Contextual Teaching and Learning (CTL) model has been proven to increase motivation by linking lesson material to real life, making learning more relevant and meaningful (Sung et al., 2022). The success of CTL is also influenced by Self-Regulated Learning (SRL) skills, which are students' abilities to plan, monitor, and evaluate their own learning processes (Panadero, 2017). Students with high SRL tend to be more motivated, confident, and able to overcome learning challenges (Ilishkina et al., 2022). They can make optimal use of CTL because they are able to set goals, strategies, and reflect on their learning well. Conversely, students with low SRL find it more difficult to take advantage of contextual learning and tend to be passive and less confident. Thus, SRL acts as a moderating factor that determines the extent to which the CTL model can increase learning motivation. Research shows that strengthening SRL skills is important to maximize the positive impact of CTL (Lago & Cruz, 2021). Teachers need to integrate SRL training through reflection, planning, and self-evaluation activities so that students can learn more independently and be more motivated. Overall, the combination of the CTL model and SRL development creates more effective and relevant learning that can continuously improve students' intrinsic motivation and learning outcomes.

CONCLUSION



Based on the presentation of results and discussion, it can be concluded that the Contextual Teaching Learning (CTL) model is better at increasing student motivation than the conventional learning model. The positive effect of CTL on learning motivation is even stronger with the support of Self-Regulated Learning (SRL) skills. With good SRL, students can manage their learning process independently, set goals, and organize learning strategies, making learning more effective and significantly increasing learning motivation. This study can help teachers and important figures in the world of education to produce more effective learning by applying the Contextual Teaching Learning (CTL) model and encouraging the development of Self-Regulated Learning (SRL) skills in students. With the integration of these two aspects, students are expected to be able to learn independently, be more confident, and have high motivation to face learning challenges. For further research, it is recommended that a more in-depth exploration be conducted regarding the variations in the application of Contextual Teaching Learning (CTL) in various subjects and levels of education to see the consistency of its influence on student learning motivation. In addition, research can broaden its focus by examining the role of external factors such as parental support, learning environment, and educational technology in strengthening Self-Regulated Learning (SRL) skills.



THANK YOU

FOR YOUR ATTENTION

ANY QUESTIONS?

