

The Influence of Contextual Teaching and Learning Methods and Emotional Intelligence Toward Vocational High School Students' Entrepreneurship Learning Outcomes

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ARTICLE INFO

Keywords:

CTL;
Emotional Intelligence;
Learning Outcomes

Article history:

Received 2023-07-04

Revised 2024-04-28

Accepted 2024-11-01

ABSTRACT

This study examines the effects of the Contextual Teaching and Learning (CTL) method and emotional intelligence on entrepreneurship learning outcomes in vocational high school students. Given the growing importance of entrepreneurial skills in education, understanding how teaching methods and emotional factors contribute to student success is crucial. The research employs a causative approach, focusing on Class XI students at a public vocational high school in Padang Panjang. Primary data were collected through questionnaires distributed to students, capturing their learning experiences with the CTL method and self-reported levels of emotional intelligence. Data analysis was conducted using SPSS to evaluate relationships and interaction effects between variables. The analysis reveals that the CTL method significantly improves learning outcomes for students in entrepreneurship. Emotional intelligence also has a positive effect on these outcomes, with students demonstrating higher emotional intelligence achieving better results. Notably, an interaction effect was found between the CTL method and emotional intelligence, suggesting that students benefit most when both are present. These findings highlight the value of combining contextual teaching methods with emotional intelligence to maximize learning outcomes. The interaction effect emphasizes that integrating these elements can create a more conducive learning environment for developing entrepreneurial skills. The study concludes that both the CTL method and emotional intelligence play critical roles in enhancing entrepreneurship education among vocational students. Schools are encouraged to adopt CTL methods while fostering emotional intelligence to improve student success in entrepreneurial competencies.

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1. INTRODUCTION

Learning in schools must be meaningful learning, which involves students in cultivating and increasing their mastery of learning materials. For this reason, student activity is needed in the learning process. Engage in activities that make students gain experience in learning, so that learning becomes

memorable and sticks in the memories of students. Vocational High School (SMK) is one of the institutions providing advanced formal education that will realize the achievement of national education goals in order to provide provisions to students, in the form of knowledge, abilities and skills so that students are able to continue their education to a higher level and are ready to directly involved in the world of business and industry (Laily 2022). In this regard, in Vocational Schools the subject of entrepreneurship is one of the most important lessons in preparing students to go directly into the world of work. The main goal is for students to be able to open their own jobs by entrepreneurship, not just preparing students as job seekers. The primary catalyst for our economy is undoubtedly entrepreneurship. It is through the establishment of small businesses, initiated by individuals with innovative thinking, that wealth is generated and the majority of job opportunities are created. Furthermore, many of these individuals go on to build and expand their ventures into large-scale enterprises (Celuch, Bourdeau, and Winkel 2017);(Wahab 2012). The importance of entrepreneurship lessons in vocational schools should be a subject that motivates students to take lessons. However, in reality, students do not really like entrepreneurship lessons so that student learning outcomes are very low (Celuch et al. 2017).

Rosail & Rohayati (2022) reveal learning outcomes as the transformation of student behavior covering the cognitive, affective, and psychomotor fields after facing a learning event. Based on observations that researchers have made on entrepreneurship subjects in class Of the 8 classes, only 3 classes achieved the classical completion criteria, namely class XI AKL 1, XI TTB and class XI UPW Class. Furthermore, in class and class XI UPW, with a total of 33 students, 25 students reached the KKM with a completion percentage of 75.76%, and 8 students did not reach the KKM with an incomplete percentage of 24.24%. The other five classes, namely classes XI AKL 2, XI BDP 1, XI BDP 2, XI OTKP 1.

Based on the identified issue, effective teaching methods are essential to enhance students' emotional intelligence (EQ) during the learning process. One such method is Contextual Teaching and Learning (CTL), which aims to cultivate EQ by connecting academic content with real-life situations. This approach encourages students to relate their knowledge to practical applications in their daily lives, thereby fostering deeper understanding and motivation. By engaging students in meaningful contexts, CTL helps them develop not only academic skills but also emotional awareness and interpersonal abilities. (Asmara 2019).

Effective teaching methods are essential for enhancing students' emotional intelligence (EQ) within the educational process. Contextual Teaching and Learning (CTL) is one such approach that promotes EQ by actively engaging students in learning activities. CTL is designed to make learning more enjoyable and meaningful, fostering a shift toward student-centered learning. By aligning with students' natural ways of understanding, CTL integrates academic concepts with real-life contexts, making education more relevant and applicable to students' lives (Hasibuan, 2014; Sulfemi, 2019). This method bridges the gap between academic knowledge and practical experience, deepening students' comprehension and retention of material as they connect classroom learning to real-world situations (Hyun et al., 2020; Gatra, 2018). Furthermore, research by Lotulung et al. (2018) indicates that students exposed to CTL can more readily grasp complex concepts and events when introduced through relatable contexts. This approach not only enhances students' understanding but also equips them with the skills to address real-life challenges, improving problem-solving abilities and practical application of knowledge.

On March 14, 2022, researchers observed that students at Padang Panjang Vocational School primarily view entrepreneurship as synonymous with trading, emphasizing product creation and sales. The instruction was predominantly teacher-centered and lacked diversity in teaching methods, which limited the connection of the material to students' real-world experiences in both formal and non-formal settings. This suggests a need for more effective, contextual learning approaches that promote a deeper understanding of entrepreneurship, as the subject requires more than mere memorization; it necessitates a comprehensive grasp of concepts and their application in real-life

situations. Integrating varied teaching methods could significantly improve students' engagement and comprehension in entrepreneurship.

In addition to teaching methods, other factors contribute to successful entrepreneurship learning outcomes, notably emotional intelligence (EQ), a concept that emerged as an important component of human intelligence (Setyawan and Simbolon, 2018). EQ serves as a complement to IQ, a distinction highlighted by Harvard psychologist Howard Gardner in 1983 (Setyawan and Simbolon, 2018). According to Ghufron (2016), emotional intelligence encompasses self-awareness, behavior regulation, and a willingness to confront reality. These qualities are essential cognitive traits that support human activities, including self-awareness, self-control, motivation, empathy, and social skills (Fauziah, 2015). Daniel Goleman, who popularized EQ, identified its key components: understanding one's emotions, managing emotions, self-motivation, recognizing others' emotions, and relationship management (Rosail and Rohayati, 2022). Emotional functions are multifaceted, serving as energizers, messengers, and facilitators of intrapersonal and interpersonal communication. Emotions also support survival, reinforce information, and maintain life balance (Rosail and Rohayati, 2022; Risman, 2020).

A study at SMAN 5 Makassar found that students with higher emotional intelligence (EI) achieved better academic outcomes, indicating that EI plays a key role in students' performance (M. Makbul et al., 2021). Research further supports that EI positively impacts students' abilities to handle academic and social challenges in higher education, suggesting that those with higher EI perform better overall (Zhoc et al., 2020). Hermawan and Rochmawati (2019) also observed that emotional intelligence, learning interest, and introductory accounting knowledge significantly improve students' understanding of accounting concepts, emphasizing the benefits of combining emotional and intellectual engagement in learning.

According to Rahma (2021), students with higher emotional intelligence achieved better results when taught using the Contextual Teaching and Learning (CTL) method. This indicates an interaction effect between CTL and EI, suggesting that CTL is more effective for students with high EI. This insight highlights the importance of incorporating EI development into teaching strategies for enhanced learning outcomes (Setyawan and Simbolon, 2018).

In mathematics, a study on students at Kansai Pekanbaru Vocational High School concluded that EI significantly influences students' success, indicating that fostering EI could improve their engagement and understanding of mathematical concepts (Rosail and Rohayati, 2022). However, Rosail and Rohayati (2022) found that EI did not directly affect outcomes in computer accounting. Meanwhile, Wiranto (2020) found that the CTL approach improves social studies outcomes for students studying economics, demonstrating CTL's potential across diverse subjects.

This study aims to explore the effects of the Contextual Teaching and Learning (CTL) method and emotional intelligence on entrepreneurship learning outcomes among students. By comparing outcomes for students with varying levels of emotional intelligence and evaluating CTL against conventional teaching approaches, this research seeks to provide valuable insights into effective educational strategies. The findings are expected to benefit policymakers, educational institutions, and educators by offering guidance for designing and implementing learning activities that better support entrepreneurial skill development and overall academic success. With this understanding, stakeholders can foster more engaging and supportive educational environments.

2. METHODS

This research aims to empirically examine differences in entrepreneurship learning outcomes between students taught using the Contextual Teaching and Learning (CTL) method, influenced by emotional intelligence, and those taught using traditional, conventional methods. Given these objectives, this study adopts a quasi-experimental design with a quantitative approach to assess the effectiveness of CTL compared to conventional teaching.

Experimental research, in general, is designed to test the impact of a specific intervention by manipulating independent variables and observing changes in dependent variables, thereby establishing causal relationships (Sugiyono, 2019). In this study, the CTL method serves as the intervention for the experimental group, while the conventional teaching approach is applied to the control group. This quasi-experimental approach allows researchers to approximate results similar to a true experimental design, despite limitations in controlling all influencing variables.

The study was conducted at SMKN 1 Padang Panjang from August 2022 through the end of the odd semester of the 2022/2023 academic year. The focus was on class XI students studying the core competency of "Analyzing Business Opportunities for Products/Services." The research population consisted of all 270 class XI students across eight classes at SMKN 1 Padang Panjang. This population was selected due to the researcher's familiarity with the school environment, as they are part of the teaching faculty. Detailed demographic information and class-specific breakdowns are available for further context.

Table 1. Number of Class XI Students at Karya Padang Panjang Vocational School for the 2022/2023 Academic Year

No.	Class	The number of students
1	XI AKL 1	34
2	XI AKL 2	33
3	XI BDP 1	35
4	XI BDP 2	34
5	XI TTB	32
6	XI UPW	33
7	XI OTKP 1	35
8	XI OTKP 2	34
Total		270

This research involved two classes as samples, totaling 70 students, with one class designated as the experimental group and the other as the control group. Random sampling was employed to select these samples, ensuring that each student had an equal chance of selection, thereby minimizing bias and enhancing the fairness of the comparison between groups. According to Sugiyono (2020), random sampling provides every member of the population with an equal opportunity to be included in the sample, which strengthens the study's validity and reliability.

As described by Swarjana and SKM (2022), random sampling treats all individuals in the population as equal choices, regardless of their characteristics, aiming to create a sample that accurately represents the larger population. This approach helps ensure that the results are generalizable, as the sample reflects the diversity within the entire group. By eliminating selection bias, random sampling contributes to a more reliable and unbiased outcome, making the findings more applicable to the overall population.

The researcher selected the experimental and control classes based on specific criteria: students from the same grade level, the largest class sizes, and an equal number of students in both classes. Among the available options, Class XI BDP 1 and another class, designated as the control group, met these requirements with equal and the largest student counts. The table below presents the first-semester examination results in the Entrepreneurship subject for Grade 11 students at SMKN 1 Padang Panjang in the 2022/2023 academic year.

Table 2. Average Scores of Daily Test I in Entrepreneurship for Class XI Students at SMKN 1 Padang Panjang, Academic Year 2022/2023

Class	The number of students		Total Student	Completeness %	
	Complete	Not Completed		Complete	Not Completed
XI AKL 1	25	9	34	73.53	26.47
XI AKL 2	14	19	33	42.42	57.58
XI BDP 1	11	24	35	31.43	68.57
XI BDP 2	16	18	34	47.06	52.94
XI TTB	17	15	32	53.13	46.87
XI UPW	25	8	33	75.76	24.24
XI OTKP 1	12	23	35	34.29	65.71
XI OTKP 2	8	26	34	23.53	76.47

3. FINDINGS AND DISCUSSION

3.1 Description of Research Data

Table 3. Frequency Distribution of Learning Outcomes Data Using the Contextual Teaching and Learning (CTL) Method

Interval class	KKM	Frequency (fo)	Frequency (%)	Description
75-78	70	4	11,43	Completed
79-82	70	10	28,57	
83-86	70	8	22,86	
87-90	70	9	25,71	
91-94	70	2	5,71	
95-98	70	2	5,71	
N		35	100	
Amount		296		
Average		85		
Median		84		
Modus		80		
Std Deviation		5.304		
Variance		28.129		
Min		75		
max		95		

Table 4. Frequency distribution of learning outcomes data using conventional methods

Interval Class	KKM	Frequency (fo)	Frequency (%)	Description
55-59	70	1	2.86	Not Completed
60-64	70	4	11.43	
65-69	70	8	22.86	
70-74	70	11	31.43	Completed
75-79	70	8	22.85	
80-84	70	3	8.57	
N		35	100	

Amount	2469
Average	71
Median	70
Modus	75
Std Deviation	6.118
Variance	37.432
Min	55
max	82

Table 5. Distribution of the frequency of emotional intelligence of students in the experimental class of entrepreneurship subjects

No	Indicator	Experiment Class			Control Class		
		Average	TCR	Criteria	Average	TCR	Criteria
1	Recognizing your own emotions	4.1	82	Good	3.91	78.30	Pretty Good
2	Managing your own emotions	4.23	84.6	Good	3.91	78.26	
3	Motivating yourself	4.16	83.1	Good	4.01	80,35	Good
4	Recognizing other people's emotions	4.34	86.8	Good	3.91	78.34	
5	Building relationships with other people	4.2	83.9	Good	3.94	78.81	Pretty Good
Average		4.21	84.08	Good	3.936	78.81	

The data shows that the average emotional intelligence score of students in the experimental class was 4.21, indicating a high level of emotional intelligence. Additionally, the respondents' answers had an average of 84.08, categorizing their emotional intelligence as "good." This suggests that these students are likely capable of effectively managing their emotions and interacting positively with others, which may enhance their overall learning outcomes.

Table 6. The High Emotional Intelligence Group in the Two-Sample Classes

No	Students Name	Student Score		No	Students Name	Student Score	
		Emotional Intelligence	Learning Outcomes			Emotional Intelligence	Learning Outcome
1	Sample 20	134	95	1	Sample 6	125	75
2	Sample 32	134	92	2	Sample 13	124	80
3	Sample 23	132	90	3	Sample 4	123	75
4	Sample 28	131	95	4	Sample 22	123	65
5	Sample 30	131	89	5	Sample 16	123	74
6	Sample 33	131	87	6	Sample 25	121	64

7	Sample 35	131	86	7	Sample 35	121	78
8	Sample 5	130	95	8	Sample 19	120	82
9	Sample 12	130	88	9	Sample 34	119	67
10	Sample 1	129	90	10	Sample 20	119	70
11	Sample 17	128	88	11	Sample 8	118	70
N		11	11	N		11	11
Amount		1441	995	Amount		1336	800
Average		131.00	90.45	Average		121.45	72.73
Median		131	90	Median		121	74
Modus		131	95	Modus		123	75
Std Deviation		1.844	3.328	Std Deviation		2.296	6.018
Variance		3.400	11.073	Variance		5.273	36.218
Min		128	86	Min		118	64
Max		134	95	Max		125	82

Based on the data presented, students with high emotional intelligence in the experimental class achieved higher learning outcomes compared to those in the control class. The mean score for high emotional intelligence in the experimental class is 90.45, while the mean score for the control class is not specified. This indicates that the Contextual Teaching and Learning (CTL) method may be more effective in enhancing learning outcomes for students with high emotional intelligence.

Table 7. Low Emotional Intelligence Group in the Two Sample Classes

No	Students Name	Student Score		No	Students Name	Student Score	
		Emotional Intelligence	Learning outcomes			Emotional Intelligence	Learning outcomes
1	sample 21	123	76	30	sample 23	115	75
2	sample 10	123	84	31	sample 28	114	70
3	sample 15	122	78	32	sample 1	114	68
4	sample 26	122	80	33	sample 14	114	70
5	sample 19	122	87	34	sample 24	113	72
6	sample 2	122	80	35	sample 2	113	72
7	sample 11	121	80	36	sample 17	112	75
8	sample 13	121	84	37	sample 15	111	74
9	sample 29	120	77	38	sample 26	110	68
10	sample 7	118	80	39	sample 32	110	60
11	sample 31	118	75	40	sample 5	110	64
N		11	11	N		11	11
Amount		1332	881	Amount		1236	768
Average		121.09	80.09	Average		112.36	69.82
Median		122	80	Median		113	70
Modus		122	80	Modus		114	75
Std Deviation		1.758	3.673	Std Deviation		1.859	4.665
Variance		3.091	13.491	Variance		3.455	21.764

Min	118	75	Min	110	60
Max	123	87	Max	115	75

Based on the data presented, students with low emotional intelligence in the experimental class achieved higher learning outcomes compared to their counterparts in the control class. Specifically, the average score for low emotional intelligence in the experimental class is 80.09, while the average score for the control class is 69.82. This indicates that the teaching methods applied in the experimental class, likely influenced by the CTL approach, contributed to better learning outcomes for students with lower emotional intelligence.

3.2 Normality Test

Table 8. Summary of Research Variable Data Normality Test Results

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for hasil	.087	44	.200*	.987	44	.894

The results show that the significance (Sig) values for all research variables exceed 0.05. As a result, it can be inferred that the data distribution across all sample groups follows a normal distribution. This observation of normality indicates that the prerequisites for various statistical analyses have been met, allowing for the derivation of more robust and reliable conclusions from the data.

3.3 Homogeneity Test

Table 9. Summary of Variance Homogeneity Test Results

		Levene			
		Statistic	df1	df2	Sig.
Learning Outcome	Based on Mean	2.082	3	40	.118
	Based on Median	1.703	3	40	.182
	Based on Median and with adjusted df	1.703	3	34.543	.184
	Based on trimmed mean	2.074	3	40	.119

From the table above, the homogeneity of the variance test column can be seen the significance value of Sig. > Sig. α (.118 > 0.05) entrepreneurship learning outcomes, it can be concluded that the data variance of population groups is homogeneous.

3.4. Hypothesis test

After conducting normality and homogeneity tests, it was determined that both the learning outcomes and emotional intelligence of students in the sample class are normally distributed and have homogeneous variances. This fulfillment of assumptions allows for the application of analysis of variance (ANOVA) in hypothesis testing. The results of the hypothesis testing using ANOVA can be referenced in the table below, which will provide insights into the significance of the differences observed among the groups:

Table 10. Calculation of Two Way ANOVA

Tests of Between-Subjects Effects							
Dependent Variable: learning outcomes							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Squared	Eta Squared
Corrected Model	2793.273 ^a	3	931.091	45.119	.000	.772	
Intercept	269571.273	1	269571.273	13062.925	.000	.997	
method	2156.000	1	2156.000	104.476	.000	.723	
intelligence	484.455	1	484.455	23.476	.000	.370	
Method of intelligence	152.818	1	152.818	7.405	.010	.156	
Error	825.455	40	20.636				
Total	273190.000	44					
Corrected Total	3618.727	43					

Table 11. Independent Samples Test

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	(2-Mean Difference)	Std. Error Difference	
Learning Outcome	Equal variances assumed	5.511	.477	10.271	68	.000	14.057	1.369	
	high emotional intelligence and high control	5.065	.036	8.550	20	.000	17.727	2.073	
	low emotional intelligence and low control		.470	1.738	40	.000	10.273	1.790	

Testing the hypothesis in this study was carried out with a two-way analysis. The hypothesis that has been formulated into a hypothesis is tested first.

Discussion

CTL Method Yields Higher Entrepreneurship Learning Outcomes than Conventional Methods

The analysis results reveal a significance value (sig) of 0.000, which is below the alpha threshold of 0.05. This indicates that students who participate in the Contextual Teaching and Learning (CTL) method achieve significantly better learning outcomes in entrepreneurship compared to their peers taught through conventional methods. Therefore, it can be concluded that class XI students at SMKN 1 Padang Panjang show markedly enhanced learning results in entrepreneurship when the CTL method is implemented, in contrast to traditional teaching strategies.

According to Lotulung et al., (2018) After being exposed to CTL learning, students will acquire a heightened comprehension of events and activities through the guidance of their teachers. Moreover, they will develop the ability to effectively address the challenges they encounter in their daily lives. According to Elaine B. Johnson's book *Contextual Teaching and Learning; What and It Is Here to Stay*, CTL serves as an educational approach that strives to assist students in grasping the significance of their academic material by connecting it to the context of their everyday existence, while taking into

consideration their personal, social, and cultural environment (Saputra, A., 2014). It is relevant with the opinion of (Lotulung et al. 2018)

It is also supported by Fikriyatus et al., (2019) The CTL method is designed to enhance learning outcomes by actively engaging students in the learning process. This approach fosters student participation, leading to a paradigm shift where learning becomes enjoyable and meaningful. By connecting academic content to real-life situations, CTL promotes a deeper understanding of the material. Additionally, digital contextual teaching and learning methods further facilitate a serene and pleasant learning environment, allowing for interactive and dynamic educational experiences that cater to students' needs and preferences.

High-EQ Students Using CTL Achieve Better Entrepreneurship Outcomes than Those Using Conventional Methods

The analysis indicates that with a significance value of 0.000, which is less than the alpha level of 0.05, students with high emotional intelligence (EQ) who were taught using the Contextual Teaching and Learning (CTL) method achieved significantly better entrepreneurship learning outcomes than those taught through traditional methods at SMKN 1 Padang Panjang.

As Daud (2012) explains, emotional intelligence includes key aspects of emotional management such as self-awareness, self-control, self-motivation, empathy, and social skills, all of which are essential for academic success. When students apply these emotional skills effectively, they are more likely to experience optimal learning outcomes. Daniel Goleman's work on emotional intelligence underscores the importance of self-motivation, noting that students who possess this skill tend to approach challenges with resilience and adaptability, which further enhances their academic success (Muyasaroh, 2022; Prananda and Hadiyanto, 2019).

Research at SMAN 5 Makassar supports this link, finding that students with strong learning outcomes generally exhibit higher levels of emotional intelligence. This connection suggests that emotional intelligence directly influences academic performance, particularly in dynamic learning environments. Other studies reinforce the positive impact of emotional intelligence on students' academic and social functioning, especially in higher education, highlighting its importance for overall student well-being and success (Zhoc et al., 2020). Setyawan and Simbolon (2018) further describe emotional intelligence as the capacity to recognize, understand, and effectively use emotions as a source of energy and influence. Students with high emotional intelligence are better equipped to recognize and respect their own emotions and those of others, enabling them to respond appropriately and manage energy effectively in daily life and school. This skill is crucial, as individuals who lack emotional regulation may struggle in life, regardless of their intellectual ability, due to difficulties in managing personal challenges.

CTL Improves Entrepreneurship Outcomes for Low-EQ Students Compared to Conventional Methods

Contextual teaching methods, particularly the CTL approach, are crucial elements in educational activities. Selecting the appropriate method significantly impacts the achievement of learning objectives. By connecting academic content to real-life situations and encouraging active student participation, CTL fosters deeper understanding and engagement. This alignment between teaching methods and learning goals can enhance students' motivation and overall academic performance, making it essential for educators to carefully consider their instructional strategies. According to (Hartatik 2019) In education, a method refers to the approach or strategy used to facilitate learning and provide insight. Contextual learning emphasizes the adaptation of teaching materials to local specifics, making the content more relevant and engaging for students. When learning is connected to students' prior knowledge and related to real-life events or experiences in their environment, it enhances their understanding and retention. This approach encourages students to see the relevance of their studies, fostering deeper engagement and motivation in the learning process. According Hartatik, (2019) Situational learning is a learning philosophy that focuses on the connection between educational content and students' real-life experiences. This approach enables students to relate and apply their

learned competencies to everyday situations, enhancing the relevance and significance of their education. By encouraging students to actively seek out learning materials and relate them to real-world contexts, situational learning fosters a deeper understanding and appreciation of the subject matter. As students recognize the importance of what they are learning, they find personal meaning in it, which motivates them to engage fully without feeling pressured by teachers, parents, or external factors. This intrinsic motivation promotes a more effective and enjoyable learning experience, allowing students to develop skills that are applicable to their social lives and personal needs.

The Contextual Teaching and Learning (CTL) method motivates students to grasp the significance of subject matter within the context of their daily lives, encompassing their personal, social, and cultural experiences. This approach enables students to acquire knowledge and skills that can be flexibly applied across various situations. In contrast to conventional learning methods, which primarily involve direct instruction from the teacher, the CTL method emphasizes collaboration among students during the learning process. This collaborative learning environment fosters deeper engagement and understanding, allowing students to relate academic concepts to real-world scenarios.

So even though the student has low emotional intelligence he is still able to get high learning outcomes because he gets the motivation to learn from CTL method. With CTL method, students also feel the importance of learning so they will study well.

Interaction Between CTL Method and Emotional Intelligence on Entrepreneurship Outcomes

The analysis shows a significant interaction between the Contextual Teaching and Learning (CTL) method and emotional intelligence on the entrepreneurship learning outcomes of students at SMKN 1 Padang Panjang, with a significance value of 0.010, below the alpha level of 0.05. This suggests that the CTL method and students' emotional intelligence combine to positively influence learning outcomes.

CTL emphasizes active student engagement in exploring and connecting with content, enabling students to retain information better and apply it to real-life contexts. By fostering a dynamic and enjoyable learning environment, CTL nurtures intrinsic motivation, allowing students to engage deeply with material without external pressures, leading to a richer, more positive educational experience.

In this setting, students come to appreciate the value of learning, understanding its relevance to their present and future lives. They develop a proactive approach, seeing themselves as equipped with essential tools for future endeavors. High emotional intelligence further supports their learning by enabling them to manage challenges, handle external pressures, and strive for academic success (Azizah and Martaningsih, 2021; Wimbo, 2015). Emotional intelligence empowers students to self-regulate, persevere, and empathize, enhancing their collaborative abilities and resilience. As noted by Wahyudi and Ratna Sari (cited by Khodijah), emotional intelligence directly impacts both the quality and quantity of learning; positive emotions accelerate learning and improve outcomes, while negative emotions can impede or halt the learning process altogether.

4. CONCLUSION

In conclusion, this study supports all proposed hypotheses, demonstrating that the Contextual Teaching and Learning (CTL) method significantly improves entrepreneurship learning outcomes for class XI students at SMKN 1 Padang Panjang, outperforming conventional methods. For students with high emotional intelligence, the CTL method yields notably better results, as shown by a significance value of 0.000, while the same effect is evident for students with low emotional intelligence, reinforcing CTL's broad applicability. Additionally, a significant interaction exists between the CTL method and emotional intelligence, with a Sig value of 0.010, indicating that CTL's effectiveness is enhanced when paired with higher emotional intelligence levels. These findings underline the importance of incorporating active, contextually relevant teaching methods like CTL in entrepreneurship education, especially when considering students' emotional intelligence.

However, this study is limited by its focus on a single school and grade level, which may affect the generalizability of results across different educational settings. Future research could expand on these

findings by including a broader range of schools, grade levels, and diverse educational contexts to examine the consistency of CTL's effectiveness. Additionally, exploring other influential factors, such as students' motivation and self-efficacy, may provide a more comprehensive view of learning outcomes. Teachers are encouraged to adopt diverse, engaging methods like CTL to promote active learning and keep students motivated, while students are advised to participate enthusiastically and complete assignments, fostering a more vibrant, productive learning environment.

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