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## Exploring Student Motivation in Learning Creative Products and Entrepreneurship at a Vocational High School in Indonesia

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### Abstract

Learning motivation refers to the internal drive that initiates and sustains students' engagement in the learning process. This study aims to explore the level of learning motivation among 11th-grade students in the Creative Products and Entrepreneurship course (locally known as PKK) at SMK Muhammadiyah 1 Semarang, Indonesia. A descriptive quantitative approach was employed, using a questionnaire based on Keller's ARCS motivation model (Attention, Relevance, Confidence, Satisfaction). The sample consisted of 49 students selected through random sampling. Descriptive analysis revealed that students' overall learning motivation was in the high category, with an average score of 80.1 out of 100. Among the four ARCS components, Satisfaction received the highest mean score, while Attention was the lowest. These findings suggest that while students generally feel positive and satisfied with the learning experience, strategies to better capture and maintain their attention should be strengthened. The study highlights the importance of motivational design in vocational education to enhance student engagement and learning outcomes.

**Keywords:** Student motivation, ARCS model, Creative Products and Entrepreneurship, Vocational High School.

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### INTRODUCTION

Student motivation plays a central role in the learning process. It serves as the internal drive that initiates learning activities, sustains engagement, and supports the achievement of learning goals. Highly motivated students tend to exhibit active participation, perseverance, and resilience in the face of academic challenges (Elvira Z. et al., 2024). In practice-based subjects such as Creative Products and Entrepreneurship is particularly important, as the subject requires creativity, autonomy, and consistent student involvement in both cognitive and hands-on learning activities.

Despite the importance of motivation, there is growing concern regarding students' lack of engagement in Creative Products and Entrepreneurship courses. The subject is often perceived as supplementary or less critical than other academic subjects (N. Wulandari, 2020). This perception may lead to reduced student interest, lower attendance, and underperformance, especially when learning activities are not aligned with students' preferences or real-world applications. Understanding students' motivational tendencies in this context is therefore essential for improving pedagogical strategies and overall learning outcomes.

To better understand student motivation, this study adopts the ARCS motivational model developed by Keller (1987), which consists of four components: Attention, Relevance, Confidence, and Satisfaction. The model emphasizes intrinsic motivation and provides a framework for designing engaging learning experiences. Keller (2020) highlights that motivation must be continuously fostered by drawing students' attention, connecting content with their needs, building their confidence, and ensuring a sense of satisfaction.

Several studies have examined student motivation in the context of Creative Products and Entrepreneurship. N. Wulandari (2020) found that students at SMK Negeri 9 Muaro Jambi showed low motivation in Creative Products and Entrepreneurship, as reflected in their frequent tardiness, lack of interest, and poor participation. Limited facilities and low attendance were key contributing factors. Similarly, Pratiwi et al. (2020), in a study at SMK PGRI 4 Kediri, reported that students'

motivation and discipline were both low, resulting in poor assignment completion and lack of responsiveness during instruction. Their study concluded that motivation significantly influenced Creative Products and Entrepreneurship learning outcomes, with a coefficient of determination of 65%. In another study, Ramadhany & Rosy (2021) found that self-regulated learning and interest only explained 28% of the variance in Creative Products and Entrepreneurship learning outcomes, indicating the potential presence of other unexplored internal motivational factors.

Theoretically, motivation is a critical component of learning success. Banerjee & Halder (2021) emphasize that motivation provides energy, direction, and persistence in learning behavior. Autonomy-supportive teaching—such as providing choices, listening to students' voices, and offering constructive feedback—can enhance academic motivation. Teachers who create inclusive and supportive classroom environments are more likely to foster students' psychological engagement and sense of value.

Keller's ARCS model (Ikhlasani et al., 2023) provides a practical approach to understanding and improving student motivation. The Attention component focuses on capturing and sustaining learners' interest through varied media and interactive methods (Bahri & Supriyadi, 2021). Relevance involves connecting learning content to students' experiences, goals, and future roles (Erlina & Hamid, 2025). Confidence emphasizes building students' belief in their ability to succeed, supported through manageable challenges and positive reinforcement. Satisfaction refers to the emotional response and fulfillment students experience from learning, which can be strengthened through meaningful feedback and recognition (Erlina & Hamid, 2025).

By integrating these components, the ARCS model offers a comprehensive framework for evaluating and enhancing motivation in vocational education settings such as the Creative Products and Entrepreneurship course. Teachers who apply this model can better support students' engagement and improve learning outcomes.

The purpose of this study is to describe the level of student motivation in the Creative Products and Entrepreneurship course at SMK Muhammadiyah 1 Semarang based on the ARCS model. The findings are expected to inform instructional design strategies that foster higher engagement and satisfaction in vocational learning environments.

## METHOD

This study employed a quantitative descriptive design to investigate students' motivation in the Creative Products and Entrepreneurship course. Quantitative research is a systematic approach that utilizes numerical data and statistical analysis to objectively examine patterns, behaviors, or relationships within a population (Barella et al., 2024). Specifically, this study used descriptive statistics to analyze and interpret students' responses regarding their motivation without attempting to generalize findings beyond the sample.

The population consisted of all eleventh-grade students enrolled at SMK Muhammadiyah 1 Semarang during the academic year. A total of 96 students were distributed across four vocational programs: Accounting (28 students), Digital Business (31 students), Animation 1 (17 students), and Animation 2 (20 students). Using proportional simple random sampling and applying Slovin's formula with a 10% margin of error, a final sample of 49 students was selected to represent the population.

Data on student motivation were collected through a structured questionnaire based on Keller's ARCS model, which includes four motivational components: Attention, Relevance, Confidence, and Satisfaction. The instrument consisted of 20 items distributed evenly across the four components, each rated using a Likert scale. The questionnaire aimed to capture students' motivational perceptions during their participation in the Creative Products and Entrepreneurship course.

Content validity was assessed through expert judgment using Aiken's V method. This technique calculates the content validity coefficient based on ratings from expert panels on the representativeness of each item. The results indicated that most items scored between 0.83 and 0.92, surpassing the minimum validity threshold of 0.677. A few items (3, 4, 5, and 10) initially fell below the threshold and were revised accordingly before data collection. Thus, all items were confirmed to have strong content validity and were deemed appropriate for use.

Reliability testing was conducted using Cronbach's Alpha to determine the internal consistency of the instrument. The analysis yielded a Cronbach's Alpha value of 0.951 for the 20-item questionnaire, indicating a very high level of reliability. This result confirms that the instrument is stable and dependable for assessing students' motivational levels in the vocational learning context.

Data analysis was carried out using descriptive statistics in SPSS software. Students' responses were processed to obtain frequencies, percentages, and mean scores for each motivational component. Prior to analysis, a normality test was conducted to assess the distribution of the data. Motivational

scores were then categorized into three levels—low (0–59%), moderate (60–79%), and high (80–100%)—based on the framework by Indirah (2021). This categorization provided a meaningful interpretation of students’ motivational tendencies across the sample.

## RESULTS AND DISCUSSION

The descriptive analysis of student motivation was conducted using SPSS based on the responses of 49 students from SMK Muhammadiyah 1 Semarang. As shown in Table 1, all responses were valid and complete, indicating a 100% response rate and ensuring that the dataset was reliable for further statistical analysis.

Table 1. Descriptive Statistics – Response Validity

Cases	Valid	Missing	Total
N	49	0	49
Percent	100.0%	0.0%	100%

Table 2 presents the summary statistics of students’ learning motivation scores. The mean score was 80.61, which suggests a generally high level of motivation. The scores ranged from 37 to 100, with a median of 80.00, indicating a fairly symmetrical distribution around the central tendency. The standard deviation of 12.61 and variance of 158.95 demonstrate moderate variability in responses. The skewness value of -0.708 shows a slight negative skew, suggesting that more students scored above the average. The kurtosis value of 1.535 indicates a leptokurtic distribution—sharper than the normal curve—suggesting a concentration of scores around the mean.

Table 2. Descriptive Statistics – Motivation Scores

Statistic	Value
Mean	80.61
Median	80.00
Standard Deviation	12.61
Variance	158.95
Minimum	37.00
Maximum	100.00
Range	63.00
Skewness	-0.708
Kurtosis	1.535

Further analysis of the four ARCS components—Attention, Relevance, Confidence, and Satisfaction—was conducted using Excel, with a total score of 3950 out of a possible 4906. This equates to an average score of 4.04 on a 5-point scale, or 81%, placing overall learning motivation in the high category based on Indirah’s classification (2021). This result reflects that students are generally motivated, particularly in terms of seeing value in the subject and deriving satisfaction from their learning experiences.

The Satisfaction and Relevance dimensions recorded the highest average scores. This finding supports W. Wulandari et al. (2022), who argued that students are more likely to be motivated when learning content is perceived as meaningful and closely related to their real-life experiences. The high satisfaction also aligns with Alfitriani (2024) assertion that positive student perceptions of the curriculum significantly contribute to motivation, especially in hands-on, practice-oriented courses like Creative Products and Entrepreneurship.

However, it is noteworthy that the Attention and Confidence aspects were comparatively lower and fell into the moderate category, indicating the need for targeted improvement. According to Vera H Nainggolan & Listiani (2024), a lack of engaging teaching methods and insufficient individualized feedback may contribute to students’ reduced focus and confidence, particularly when encountering learning challenges. This aligns with the present findings, suggesting that although students are generally motivated, not all motivational dimensions are being equally addressed in the current instructional environment.

From a pedagogical perspective, the discrepancy between high satisfaction and moderate confidence indicates a possible gap between students’ enjoyment of the course and their belief in their ability to perform well. Keller’s ARCS model emphasizes that confidence is critical in fostering intrinsic

motivation (Keller, 1987). When students feel underprepared or unsupported, their long-term engagement and self-efficacy may decline despite their initial interest in the subject. Therefore, enhancing instructional strategies to foster early success, providing structured scaffolding, and delivering consistent formative feedback are essential steps toward improving confidence.

Similarly, the lower attention score highlights the need for more engaging learning environments. According to Bahri & Supriyadi (2021), attention can be effectively cultivated through interactive media, real-world problem-solving tasks, and varied teaching approaches. In the Creative Products and Entrepreneurship context, incorporating entrepreneurial simulations, student-led projects, or collaborative product design activities could enhance focus and sustained attention.

In summary, the results suggest that while the overall motivation of students in the Creative Products and Entrepreneurship subject is high, there are specific areas—particularly attention and confidence—that require focused instructional development. Addressing these aspects holistically will likely yield improvements in student engagement, performance, and long-term interest in entrepreneurship education. These findings reinforce the importance of designing motivationally responsive instructional environments, especially in vocational education contexts where applied learning and student agency are critical to success.

## CONCLUSION

This study concludes that students' learning motivation in the *Creative Products and Entrepreneurship* course at SMK Muhammadiyah 1 Semarang is generally high, with the *Satisfaction* dimension emerging as the most dominant component. This indicates that students find personal fulfillment and value in their learning experiences. However, the relatively lower scores in the *Attention* and *Confidence* dimensions point to specific areas that require pedagogical enhancement. Addressing these gaps is essential to sustaining and deepening student engagement in vocational learning environments.

To further optimize student motivation, it is recommended that instructors adopt more interactive, student-centered teaching strategies that actively capture learners' attention and support the development of self-efficacy. Structured feedback, varied instructional media, and opportunities for student-led activities may enhance focus and build confidence over time.

Future research is encouraged to investigate additional factors influencing student motivation, such as classroom climate, peer collaboration, and teaching style, potentially through mixed-methods or qualitative approaches. Such investigations would provide richer insights into the complex dynamics of motivation in vocational education.

Ultimately, this study reinforces the vital role of motivation in shaping students' learning outcomes and highlights the importance of thoughtful instructional design in empowering students to participate confidently and enthusiastically in practice-based courses like Creative Products and Entrepreneurship.

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