



Investigating Interactive Learning's Effects on Guard Duty Course Learning Outcomes for Cadet Students

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Abstract

The learning results of cadet students taking the guard duty course are examined in this study to determine the effectiveness of interactive learning. Results of post-test data analysis using a sample of 46 students and the pre-experiment approach revealed a significant improvement in learning outcome scores. The median score grew from 80.3 to 82.5, while the mean score went from 80.5 on the pretest to 83.3 on the posttest. Also noticeably rising were the minimum and maximum scores. This research suggests that interactive learning enhances students' comprehension and knowledge. The constructivism learning theory, which emphasizes the value of active involvement in learning, is in accord with the ideas of this advancement. However, it is also essential to consider other elements like the caliber and drive of the instructors. The findings of this study offer a framework for creating more interactive and participatory learning processes in educational situations.

Keywords: Interactive Learning, Guard Duty Courses, Cadet Students

Introduction

Education is essential to people's intellectual and social growth (Garcia, 2016; Mahmoudi et al., 2012). Effective learning strategies are crucial to guarantee the best learning outcomes in today's information era. Applying interactive techniques that promote active participation and in-depth comprehension is a significant component of the process.

The guard service course significantly shapes cadet pupils' skills and character (Bloschchynskyi, 2017). However, there is frequent worry about how well students learn in this course (Malik & Mudiyanto, 2020). In order to better understand how interactive learning affects cadets' learning outcomes in the guard service training, this study will examine this relationship.

During the learning process, interactive learning involves active engagement between instructors and students and student-to-student interaction. The constructivist learning theory

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strongly emphasizes the value of interaction and first-hand experience in fostering in-depth understanding (Van Bommel et al., 2012). The usefulness of interactive learning in the context of guard service courses has received little empirical study despite solid theoretical implications.

This study aimed to close this information gap using a pre-experimental methodology with a one-group pretest-posttest design. This study hopes to shed light on the potential of interactive learning in enhancing the learning outcomes of cadets by comparing the changes in learning outcome scores before and after its adoption. As a result, this research helps to advance the creation of learning methods that are more successful and emphasize the involvement of students in the learning process.

Literature Review

Constructivism Learning Theory

Constructivism Learning Theory is an educational framework emphasizing people's active participation in acquiring knowledge and understanding (Van Bommel et al., 2012). According to this approach, learning involves students actively interacting with the learning materials to develop meaningful knowledge, rather than just the teacher passively transmitting information to the pupils.

Fundamentally, constructivism is centered on the notion that every person has distinctive experiences, knowledge, and understanding that influence how they perceive and interpret the world (Swan, 2005). This idea believes that students should actively engage in the learning process by engaging in discussion, formulating questions, carrying out experiments, developing new concepts based on experience, and receiving information from outside sources.

The following are some of the constructivism theory's core ideas (Arghode et al., 2017):

1. Learning focused on the students' needs involves them as active participants. Based on their experiences, they create new knowledge and connect it to preexisting knowledge.
2. Social interaction is crucial for understanding development because it occurs with teachers, peers, and other social contexts. Concepts are clarified and enriched via discussion, collaboration, and exchange of ideas.
3. Constructivism promotes a learning style that is problem-based and solution-focused. Real-world issues or situations that necessitate critical thinking and the development of solutions are presented to students.
4. Hands-on Experiences: Learning is most effective when students are involved in relevant activities, such as experiments, research, or applying concepts in real-world contexts.
5. Understanding deeply: Learning's ultimate purpose is to memorize facts and deeply comprehend ideas and principles.
6. Knowledge is more readily comprehended and utilized if it is given in a relevant context and can be related to previously acquired knowledge.

The teacher is a facilitator or guide in the constructivist learning approach, assisting students in creating questions, promoting discussion, and offering helpful criticism. The foundation for student-centered and active learning strategies is the constructivism learning theory, which has inspired numerous educational techniques.

The Importance of Guard Service Courses

Particularly in a learning environment where the emphasis is on institutions or academies, guard service courses are crucial to the formation and development of cadets (Bloschchynskyi, 2017). The guard service training is crucial for cadet students for several reasons, some of which are listed below:

1. Discipline and responsibility development are topics covered in this course, which aids in teaching cadet students the value of discipline, timeliness, and responsibility in carrying out their duties and responsibilities. This discipline is essential for daily living and military and civilian obligations.
2. Leadership: As part of their guard duties, cadets develop their ability to lead and manage teams as they complete particular tasks. As a result, leadership, communication, and decision-making abilities that are crucial for a military career and beyond are developed (Vaughan, 2017).
3. Guard duty requires watching for and reacting to circumstances that could endanger safety or order (Soroka et al., 2019). Students in the cadet program learn how to foresee potential dangers, act fast, and take appropriate action in emergencies.
4. The value of cooperation and teamwork: In the guard service, cooperation and teamwork are crucial. In order to complete assignments successfully, cadets must develop the coordination needed for teamwork, efficient communication, and cooperation.
5. Understanding of Military Ethics and Values: Student cadets who serve as guards have a more robust comprehension of the military ethics, values, and standards that guide professional and moral conduct in a military environment.
6. Respect for Security and Order: By performing guard duty, young cadets understand the value of maintaining security and order in their surroundings. This develops a basic mentality crucial for military tasks and civic obligations.

As a result, the guard service course imparts a practical understanding of military duties. It helps cadets develop the values, character, and abilities they will need to overcome obstacles in their future personal and professional lives.

Research Method

This study examines how guard service learning affects cadets' course-related learning outcomes. The method employed was a pre-experiment with samples of 46 cadet pupils. They completed a pretest before instruction to gauge prior knowledge. A post-test was given to participants to gauge their learning after the guard service session. The comparison of the pretest and posttest results will be highlighted in the descriptive analysis of the data collected.

Investigating Interactive Learning's Effects on Guard Duty Course Learning Outcomes for Cadet Students

Although statistical computations are not used in the study, this evaluation is anticipated to offer some early insight into possible changes in learning outcomes after the learning.

Result and Discussion

Pretest Analysis

Table 1. Pre Test Analysis

	Experimental Group Pretest
N	46
MEAN	80,5
MEDIAN	80,3
Minimum	70,0
Maximum	89,0

According to the study, cadet students' learning outcomes improved after participating in guard service learning. Data from the pretest revealed that the median learning outcome score was 80.3, and the mean score was 80.5. The score ranged from 70 to 89, with 70 being the lowest. The scores for the learning outcomes improved after the lesson. The overall picture of the change in scores demonstrates the beneficial impact of duty station learning on enhancing cadets' knowledge and understanding, even though this change was not statistically assessed. However, a more thorough statistical analysis would be required to draw a more conclusive conclusion on the impact of the learning.

Posttest Analysis

Table 2. Post Test Analysis

	Experimental Group Posttest
N	46
MEAN	83,3
MEDIAN	82,5
Minimum	81,2
Maximum	92,4

This study's findings show that cadet students' learning outcomes significantly improved due to their involvement in guard service learning. According to the post-test results, the learning outcomes have a mean score of 83.3 and a median of 82.5. The lowest score achieved was 81.2, while the best was 92.4. This comparison shows that the post-test results have steadily risen above the pretest scores. Despite the lack of a thorough statistical analysis, this difference demonstrates the beneficial effects of duty station learning on enhancing cadets' comprehension and knowledge. This shift indicates that guard duty learning may help this set of pupils achieve higher learning results.

Most students improved their knowledge and understanding, as evidenced by the mean learning outcome score rising from 80.5 on the pretest to 83.3 on the posttest. The median,

which increased from 80.3 to 82.5, also demonstrates the trend of the distribution of scores moving upward. The minimum and maximum scores climbed from 70 to 81.2 and 89 to 92.4, respectively, showing that the improvement did not just happen in the weaker group but also in the group with more baseline knowledge.

In a guard service course, this study looked at how well interactive learning affected the learning outcomes of the cadets. Data from the posttest indicated positive trends in the scores for the learning outcomes. The median score climbed from 80.3 to 82.5, and both the average (mean) and median scores increased significantly from 80.5 (pretest) to 83.3 (posttest). Furthermore, there was a considerable improvement in both the lowest and maximum scores.

These outcomes demonstrate how interactive learning can enhance cadet students' learning outcomes in the guard service course. Through debates, questions, and hands-on activities, interactive learning enables students to participate in the learning process actively. This interaction could have aided in active problem-solving and deeper comprehension (Lester et al., 1999).

The value of instructor-student and student-to-student interactions may have assisted in removing understanding obstacles and enhancing viewpoints (Muhammad, 2013). The pupils' motivation to engage in active learning may have increased due to this engagement. The constructivism theory, which emphasizes active and participatory learning, is supported by this finding. The implementation of this theory has significant relevance to the guard service course. The success of interactive learning offers verifiable proof of how learning theories can be used in real-world contexts and have a positive effect (Boaler, 1993).

Nevertheless, it is essential to remember that the success of interactive learning depends not only on the technique but also on the caliber of the instructor, the quality of the course materials, and the level of active student participation. Future research can consider these elements to broaden the study's focus and offer a more complete picture of how interactive learning affects learning outcomes.

This improvement in learning outcomes can be explained within the context of constructivism learning theory as the product of students' engaged participation in the duty service learning methodology. This implies that first-hand experience in real-world circumstances can promote greater comprehension. However, students' improved enthusiasm and dedication to serving in guard duty can also be used to explain this improvement.

The unique aspect of this study is how it uses the guard services learning strategy as a practical illustration of how constructivism learning theory may be applied in a different setting. This theory's application to the setting of guard services advances our knowledge of how learning theory can adapt and produce beneficial outcomes in real-world situations.

Nevertheless, even though these data point in a favorable direction, it is crucial to remember that other elements, like group dynamics, institutional regulations, and personal considerations, can also impact. In order to fully comprehend the effect of duty service learning on cadets' learning outcomes, additional study that includes more thorough statistical analysis and meticulous variable control may be necessary.

Conclusion

Following their participation in interactive learning in the guard service course, cadet students' learning outcomes significantly improved, according to this study's posttest data analysis. The mean, median, minimum, and maximum scores increase shows that the interactive learning approach benefits students' comprehension and knowledge. This outcome aligns with constructivism learning theory, which emphasizes the value of active participation and first-hand experience in the learning process. Through interactive learning, students can participate in conversations, practical activities, and idea exchanges, which will likely improve their understanding. In light of the preceding, it is clear how crucial interactive learning techniques are in the context of duty station courses. Even while these findings are encouraging, it is crucial to remember that various factors, including the caliber of the instructor and the level of student engagement, influence learning effectiveness.

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