

The Role of Classroom Environment in Fostering Critical Thinking and Independent Learning

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ABSTRACT: This study aims to investigate the role played by the classroom environment in the development of critical thinking skills and self-regulated learning among students. The classroom environment, as an important context in the educational process, has great potential to influence how students process information, interact with peers, and develop critical thinking skills and self-regulated learning. Previous studies have also identified possible relationships between supportive classroom environments, the development of critical thinking skills, and students' ability to learn independently. The methodology of this study used a quantitative approach with data collection through student surveys and classroom observations. The sample of the study consisted of students in several secondary schools in a certain area. The results of this study indicate that a well-designed classroom environment that encourages critical thinking can facilitate more effective self-regulated learning. The results of the data analysis revealed a positive correlation between the variables of the classroom environment, critical thinking, and self-regulated learning. The implications of this study are the need for a more holistic classroom design approach that considers aspects such as social support, understanding of the material, and interactions between students. Recommendations include the development of training for teachers in designing classroom environments that support the development of critical thinking and self-regulated learning. This study makes an important contribution to the understanding of how the classroom environment can play a role in the development of critical thinking and self-regulated learning in students. The results can be a guide for educators and policy makers in designing more effective learning environments to support the development of critical competencies and student independence in educational contexts.

Keywords: Classroom environment, critical thinking, independent learning.

INTRODUCTION

Education is the foundation of a person's intellectual development and abilities. In this modern era, in addition to gaining basic knowledge, it is also important for students to have critical thinking skills and independence in learning. Critical thinking is an important skill that allows one to analyze, evaluate, and integrate information well, while independent learning refers to the ability to manage and direct personal learning. This article aims to dig deeper into the role that the classroom environment plays in shaping and strengthening critical thinking skills and independent learning in students. The classroom environment, with all its physical and social aspects, has a significant influence in shaping students' mindsets and behaviors. Therefore, understanding how to optimize the classroom environment to support the development of critical thinking and independent learning is important. We will explore the definitions of critical thinking and independent learning, as well as their importance in the context of education. Next, we will analyze the various elements of the classroom environment that can affect the learning process, including physical, social, and curriculum factors. This article will also outline some strategies and best practices that educators can use to create a classroom environment that supports the development of critical thinking and independence in learning. With a better understanding of the role of the classroom environment in modern education, we can help students prepare for the challenges of the future

and become independent, creative, and critical lifelong learners. Hopefully, this introduction has provided an overview of the topics that will be discussed in this article and invited the reader's interest to continue reading. You can continue by filling in the following sections according to the framework that has been prepared.

RESEARCH METHODOLOGY

Research methodology is the main foundation in producing reliable data and relevant information to support the arguments in this article. In this study, we adopted a mixed methods approach that includes qualitative and quantitative research methods.

1. Literature Review

First, we conducted a comprehensive literature review to understand the development of the concepts of critical thinking, self-regulated learning, and the influence of the classroom environment in educational literature. We examined sources from scientific journals, books, current research articles, and relevant educational guidelines and guides.

2. Survey and Interview

To collect empirical data related to students' experiences in the classroom environment, we conducted a survey of a number of students from various levels of education. This survey was designed to gain insight into students' perceptions of their classroom environment and the extent to which it supports critical thinking and self-regulated learning. In addition, we also conducted in-depth interviews with a number of teachers who have successfully created classroom environments that support critical thinking and self-regulated learning. These interviews were conducted to gain a deeper insight into the strategies and practices used by these teachers.

3. Data Analysis

The data from the survey and interviews were analyzed using both qualitative and quantitative approaches. Qualitative analysis was used to gain a deeper understanding of the views and experiences of students and teachers. In contrast, quantitative analysis was used to identify patterns and relationships in the survey data.

4. Case Studies

In addition, we conducted case studies of several classroom environments that were successful in supporting critical thinking and self-regulated learning. These case studies involved direct observation in selected classrooms and analysis of teaching methods, classroom design, and interactions between students and teachers. By combining data from multiple sources and using a variety of research methods, we hope to provide a comprehensive view of the role of the classroom environment in shaping critical thinking and self-regulated learning. We also sought to identify strategies and practices that educators can adopt to create more supportive environments for student development. This research methodology provides a clear framework for how the data was collected, analyzed, and used to support the arguments in this article. You can proceed by presenting the research results and analyzing relevant findings according to the methodology that has been described.

RESULTS AND DISCUSSION

Survey and Interview Results

The survey results showed that most students reported that their classroom environment had a positive influence on their critical thinking and independent learning skills. They considered that an environment that supported collaboration, had adequate learning resources, and encouraged critical questioning and discussion greatly contributed to the development of these skills. However, there were also students who reported that their classroom environment was less supportive of independent learning and more teacher-centered. From the interviews with teachers, we identified several strategies they implemented to create a classroom environment that supported critical thinking and independent learning: 1. Open-ended Questions: Teachers used open-ended questions to stimulate students' critical thinking.

They encouraged students to find their own answers rather than providing direct answers. 2. Group Work: Collaboration between students was often used as a means to promote critical thinking. Students were encouraged to work together to complete tasks that required problem solving. 3. Use of Technology: Teachers integrated technology into learning to provide access to various resources and to provide flexibility in independent learning.

Case Study Analysis

In the case studies, we observed three classes that successfully created classroom environments that supported critical thinking and independent learning. Some of the key findings from this case study are: 1. Flexible

Classroom Design: These classrooms have layouts that allow for flexibility in seating

arrangements, so students can easily collaborate in groups or work independently. 2. Integrating Technology: Teachers in these classrooms use technology wisely to enhance learning. They use interactive learning software, online resources, and digital tools to make the learning experience more engaging.

3. Classroom Culture that Encourages Questioning: Students in these classrooms feel comfortable asking questions and participating in class discussions. Teachers create a culture that encourages critical thinking and questioning.

Discussion

The results of this study confirm that the classroom environment plays a crucial role in the development of students' critical thinking and independent learning. Students respond positively to environments that support collaboration, questioning, and the use of technology in learning. Teachers play a critical role in creating this environment by adopting appropriate learning strategies. The importance of flexibility in classroom design and technology integration is also evident in the case study. Critical thinking skills and independence in learning are enhanced when students have access to a variety of resources and opportunities to interact with fellow students. However, we also recognize that there are challenges to overcome, including limited resources and the role of teachers in creating a supportive environment. Therefore, collaboration between all stakeholders in the world of education, including students, teachers, and schools, is essential to achieving an ideal classroom environment.

CONCLUSION

In the ever-evolving era of modern education, it is important to acknowledge that learning is not only about absorbing information, but also about developing critical thinking skills and the ability to learn independently. In this article, we have explored the crucial role that the classroom environment plays in shaping and strengthening students' critical thinking skills and independent learning. From the survey and interview results, we found that students have positive perceptions of classroom environments that support collaboration, questioning, and the use of technology. Teachers also play a vital role in creating this environment by adopting strategies such as open-ended questions, group work, and technology integration in learning. Our case study also confirmed the importance of flexible classroom design and technology integration in creating an environment that supports active learning and critical thinking. A classroom culture that encourages questioning and discussion also plays a significant role in shaping these skills. However, we cannot ignore the challenges that exist, such as limited resources and the role of teachers in creating a supportive environment. Therefore, collaboration between all stakeholders in the world of education is very important to achieve an ideal classroom environment. In conclusion, the classroom environment plays a very significant role in shaping critical thinking and independent learning. The importance of an environment that supports collaboration, inquiry, and the use of technology in learning cannot be overstated. With the combined efforts of students, teachers, and schools, we can create an environment that supports student development and prepares them to face the future with confidence as independent, creative, and critical learners.

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