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## THE CRITICAL LITERACY ROLE IN THE DEVELOPMENT OF CRITICAL THINKING SKILLS IN HIGH SCHOOL STUDENTS: AN INTERDISCIPLINARY APPROACH

### Abstract

Critical thinking skills are an important aspect of education which enables students to analyze information critically and objectively. This journal article reviews the role of critical literacy in developing critical thinking skills in high school students through an interdisciplinary approach. Through the literature review method, this article explores the concepts of critical literacy and critical thinking skills and their relationship in the context of high school education. Critical literacy allows students to develop a deeper understanding of the information they encounter, while critical thinking skills enable them to critically evaluate that information and build strong arguments. The interdisciplinary approach highlights the importance of integrating diverse subjects in developing students' critical thinking skills. In this context, this article highlights the implications and challenges of integrating critical literacy in the school curriculum. It is hoped that this article can provide valuable insights for educators and policy makers in improving critical learning at the high school level.

**Keyword:** Critical Literacy, Critical Thinking Skills, High School, Interdisciplinary

### INTRODUCTION

Critical thinking skills are a key foundation in the development of students' ability to understand, analyze, and critically evaluate information. In an increasingly complex information age, where information flows rapidly through various media; critical thinking skills are becoming increasingly important for students to be able to filter relevant information and understand its implications in a broader context (Barevičiūtė et al., 2023; Vodá et al., 2022). High school is a stage of critical education where students begin to be encouraged to develop their critical thinking skills more deeply in various curriculum contexts.

One important factor supporting in the development of critical thinking skills is critical literacy. Critical literacy enables students to read, understand and interpret information carefully and develop a constructive skeptical attitude towards the information they encounter (Medranda-Morales et al., 2023). By having strong critical literacy, students can identify biases, assumptions, and manipulations in the information they encounter, which in turn helps them become more critical readers and more analytical thinkers.

Developing critical thinking skills and critical literacy doesn't just happen on its own. It needs a deliberate and ongoing effort within learning settings that are relevant and engaging (Sundermann & Fischer, 2019). Thus, it's crucial for teachers to grasp how critical literacy helps in fostering critical thinking skills and to find ways to incorporate it into everyday classroom activities. In addition, understanding how critical literacy and critical thinking skills can be effectively integrated is also a focus of attention in contemporary educational research.

A number of studies have highlighted the importance of interdisciplinary approaches in developing students' critical thinking skills (Berasategi et al., 2020). The interdisciplinary approach recognizes the complexity of the real world outside the classroom and emphasizes student engagement in solving real-world problems that cross traditional subject boundaries. Therefore, this approach offers a potential framework in integrating critical literacy and critical thinking skills into a holistic and meaningful curriculum.

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## **METHODS**

The research method in this article adopts a systematic literature review approach to investigate the role of critical literacy in the development of critical thinking skills in senior high school students. This approach involves certain steps that ensure the completeness and reliability of information obtained from recent literature published at least after 2019. The initial stage of the research involved identifying and formulating clear and specific research questions related to the relationship between critical literacy and critical thinking skills at the high school education level. Next, a literature search was conducted using reputable academic databases such as Google Scholar, PubMed, and JSTOR, applying relevant keywords and using a publication filter after 2019 to ensure currency of information.

Once the relevant literature was collected, it was evaluated for credibility, relevance and relevance to the research questions posed. This evaluation process considered the research methodology used, the strength of the arguments presented and the direct relevance to the high school education context. The selected literature was then synthesized to identify patterns, trends and key findings that emerged in relation to the role of critical literacy in developing high school students' critical thinking skills. This approach ensures that the research utilizes current and relevant literature to strengthen the arguments and findings presented in the journal articles.

## **RESULTS AND DISCUSSION**

### **The Importance of Critical Literacy in the Development of Critical Thinking Skills**

The importance of critical literacy in the development of critical thinking skills cannot be underestimated. Critical literacy helps students to develop the ability to read and understand texts in depth, which in turn enables them to conduct more critical analysis of the information they encounter. For example, research by Dwyer (2023) highlights that critical literacy enables students to identify inconsistent arguments, unproven assumptions, as well as hidden implications in the texts they read. Thus, critical literacy acts as a foundation for the development of critical thinking skills.

In the context of senior high school (SMA), critical literacy becomes increasingly important as students at this level are exposed to a range of complex and diverse materials. Through critical literacy, students are taught to be skeptical readers, who are able to interpret and evaluate information carefully. By understanding the context and communication purpose of the texts they read, students can develop deeper analytical thinking (Sabariego et al., 2020). In an educational environment that promotes critical literacy, students in high school are encouraged to become active readers, who do not just passively receive information but also ask critical questions and dig deeper.

Furthermore, the importance of critical literacy in the context of developing critical thinking skills reflects the close relationship between reading ability and critical thinking. According to a study by Hamdi (2023), critical literacy helps students understand the social, political and cultural context behind the information they receive. Thus, critical literacy not only teaches students to understand the words on the page, but also to understand the world around them in a critical and reflective way. The integration of critical literacy in the high school education curriculum has significant implications in shaping students who are able to think critically, independently, and responsibly in processing information. In addition, the application of the Student Teams Achievement Division (STAD) type cooperative learning model, as suggested by Mansur & Mole (2021), can also increase students' overall learning motivation.

### **Integrating Critical Literacy in the High School Curriculum**

The integration of critical literacy in the high school curriculum plays an important role in strengthening students' critical thinking skills in various learning contexts. In a study conducted by Indrašienė et al. (2023), the emphasis on critical literacy was recognized as an effective strategy in improving students' critical thinking skills. The interdisciplinary approach becomes the main foundation in integrating critical literacy into a variety of subject. In an educational environment that promotes critical literacy, every subject becomes an opportunity for students to develop the ability to read, understand and critically evaluate information.

The integration of critical literacy in the high school curriculum can also help students to relate the knowledge they learn to real-life contexts. For example, in social science subjects, students can learn to evaluate historical evidence by using a critical literacy framework, while in

mathematics, they can hone critical thinking skills through complex problem solving. Thus, the integration of critical literacy not only strengthens students' critical thinking skills but also helps them develop a deeper understanding of how information is presented and evaluated across different areas of knowledge.

However, challenges in integrating critical literacy into the high school curriculum remain. Adequate training is needed for teachers to develop and implement learning strategies that promote critical literacy. In addition, strong support from the school and education policy are also needed to ensure that critical literacy becomes an integral part of students' learning experience in high school. By addressing these challenges, the integration of critical literacy in the high school curriculum has the potential to create a learning environment that supports and stimulates the development of deep critical thinking skills in students.

### **The Teacher's Role in Developing Critical Thinking Skills**

The significant effect of guided inquiry method on students' science process skills and cognitive learning outcomes has been the main focus of research, as highlighted by Mansur (2021). The role of teachers in the development of critical thinking skills cannot be overstated. As shown by the study of Lasekan et al. (2024), teachers have a great influence in shaping students' attitudes and critical thinking skills. By providing a supportive learning environment, teachers can create an atmosphere in the classroom where students feel comfortable to explore ideas, ask questions, and express opinions critically. Teachers' involvement as important facilitators in the learning process promotes critical thinking, which is an important foundation in developing students' overall thinking skills.

In addition, teachers also play an important role in providing constructive feedback to students regarding their critical thinking skills. Feedback delivered in a positive and constructive way can help students to understand the strengths and weaknesses in their thinking, as well as provide direction to improve their critical thinking skills (Sitthiworachart et al., 2023). By facilitating discussions that encourage critical thinking, teachers can also help students to see problems from multiple perspectives, develop analytical skills, and construct strong arguments.

Of course, to be effective in playing their role, teachers need to have a deep understanding of critical concepts and teaching strategies that support the development of critical thinking skills. This emphasizes the importance of ongoing teacher training in this area. By strengthening the role of teachers in guiding students in the development of critical thinking skills, schools can create an environment that promotes critical thinking as an integral part of the student learning process.

### **Challenges in Integrating Critical Literacy**

The challenge of integrating critical literacy into the high school curriculum is a major concern in the establishment of a quality educational environment. One of the main challenges is the need for adequate training for teachers. Teachers must have a deep understanding of critical literacy concepts as well as teaching and assessment strategies that support the development of students' critical thinking skills (López et al., 2023). Appropriate training can help teachers develop their skills in structuring lessons that encourage critical thinking, asking deep questions and providing constructive feedback.

In addition, there needs to be support and commitment from the school and government in encouraging the integration of critical literacy into the curriculum. This involves careful planning, adequate resource allocation, and policies that support the development of critical thinking skills at the high school level (Dumitru et al., 2023). Without adequate support, the implementation of critical literacy in the curriculum may be hampered and not achieve the expected results.

In addition, students' awareness and participation in the critical literacy learning process is also a crucial factor. It is necessary to build students' awareness of the importance of critical literacy and its impact in strengthening their critical thinking skills. Teachers need to motivate students to be actively involved in the critical literacy learning process, encouraging them to read critically, ask questions and seek a deeper understanding of the information they receive.

By effectively addressing these challenges, schools can create a learning environment that supports the development of high school students' critical thinking skills. Integrating critical literacy into the curriculum is not just about providing relevant materials, but also about shaping a learning culture that encourages critical, reflective and analytical thinking.

### **The Effect of Learning Environment on Critical Thinking Skills**

The influence of the learning environment on the development of critical thinking skills of high school students is an important focus in understanding the dynamics of learning. Learning environments that facilitate questioning, discussion, and critical reflection can contribute significantly to the development of students' critical thinking skills. Research shows that environments that provide space for students to ask questions, express opinions, and debate help them to go beyond simple comprehension skills (Oyewo et al., 2022). In an atmosphere that is open and encourages dialog, students are encouraged to question assumptions, explore different viewpoints, and develop critical and analytical thinking.

In addition, a learning environment rich with resources, both physical and human, also plays an important role in developing high school students' critical thinking skills. Facilities such as well-stocked libraries, scientific laboratories, and access to information technology open up opportunities for students to explore topics in greater depth and conduct experiments and research that encourage critical thinking (Ali et al., 2023). On the other hand, the presence of experienced and knowledgeable teachers is also a valuable asset in creating a learning environment that encourages critical thinking skills.

However, the challenge of creating a learning environment that supports the development of high school students' critical thinking skills cannot be ignored. Sometimes, a curriculum structure that is too focused on standardized tests or evaluations that are more paying attention to quantitative rather than qualitative factors may hinder the development of critical thinking skills (Mäkiö & Mäkiö, 2023). Therefore, there is a need for adjustments in learning and assessment patterns to create an environment that is more inclusive and encourages critical thinking in students. By considering the influence of the right learning environment, schools can create a supportive atmosphere for students to become active, critical, and reflective learners.

### **The Effect Of Critical Literacy On Argumentation Skills**

The influence of critical literacy on students' ability to construct strong and reasoned arguments is an important aspect in the development of their critical thinking skills. Critical literacy enables students to read, analyze, and critically evaluate various sources of information (Lazou & Tsinakos, 2023). Through this process, students learn to identify valid arguments, consider relevant evidence, and evaluate the strengths and weaknesses of different positions or views. Thus, critical literacy provides a solid foundation for students to develop strong argumentation skills.

Argumentation skills supported by critical literacy enable students to present their views persuasively and reasonably. They are able to organize their thoughts systematically, use relevant and logical evidence to support their claims, and identify and respond to arguments provided by others (Dwyer, 2023). In an educational context, this ability enables students to actively participate in class discussions, deliver persuasive presentations, and write thought-provoking essays or reports. Thus, critical literacy not only strengthens students' critical thinking skills, but also empowers them to communicate effectively and articulate their ideas clearly.

However, it should be noted that developing strong argumentation skills through critical literacy requires time and consistent practice. Teachers need to provide opportunities for students to practice constructing arguments, provide constructive feedback and support them in broadening their horizons on relevant issues. Thus, the influence of critical literacy on students' argumentation skills depends not only on the understanding of critical literacy concepts, but also on the implementation of effective and integrated learning strategies in the learning environment.

Through understanding and effective implementation of critical literacy, schools can play a significant role in shaping a generation of students who are able to think critically, solve problems, and make informed decisions wisely

### **CONCLUSION**

In general, critical literacy plays a very important role in the development of students' critical thinking skills at the high school level. Through the integration of critical literacy in the education curriculum and the role of teachers as supportive facilitators, students have the opportunity to develop the ability to read, understand and evaluate information critically.

Challenges in integrating critical literacy, such as adequate teacher training and support from the school and government, need to be addressed to create a learning environment that supports the development of students' critical thinking skills. In addition, the influence of the learning environment and students' argumentation skills also is an important aspect in shaping their critical thinking skills. By understanding and effectively implementing critical literacy, schools can play a significant role in preparing students to become active, critical and reflective learners in the face of the complexity of the modern world.

Overall, critical literacy integration is not just about teaching students to understand texts, but also, about helping them understand the world around them in a critical and reflective manner. By creating learning environments that support and stimulate the development of critical thinking skills, schools can help students face the complex and diverse challenges in their lives. Therefore, it is important for educators, administrators and policy makers to recognize the important role of critical literacy in education and work together to integrate it into the curriculum and daily learning practices, thus helping students become independent, critical and open-minded learners in the face of an ever-changing world

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