

## LECTURER LEARNING STRATEGIES THAT FOCUS ON DEVELOPING STUDENTS' CRITICAL THINKING: A LITERATURE REVIEW

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### Abstract

This research aims to examine various learning strategies implemented by lecturers that focus on developing students' critical thinking. Critical thinking is an indispensable ability in the academic and professional world, as it enables individuals to analyse, assess and solve problems effectively. In this literature review, various learning methods and techniques such as group discussions, case studies, simulations, and problem-based learning are discussed as means to stimulate critical thinking. The findings of this literature review indicate that strategies that involve active student participation, constructive feedback, and an environment that supports open discussion and reflection are highly effective in developing critical thinking skills. This study also highlights the importance of the role of lecturers in creating a conducive learning atmosphere and being responsive to students' learning needs, as well as the need for training and professional development for lecturers to implement these strategies effectively. The results of this study are expected to be a reference for lecturers in designing and implementing learning strategies that can improve students' critical thinking skills.

**Keywords:** Learning strategies, Critical thinking, Students, Teaching methods.

### Introduction

In the era of globalisation and rapid development of information technology, the ability to think critically is one of the most important competencies. Critical thinking is not just the ability to respond and solve problems, but also involves the ability to evaluate information objectively, ask relevant questions, and make decisions based on strong evidence and logic. (Sitopu et al., 2024); (Guna et al., 2024); (Fawait et al., 2024); (Syakhrani & Aslan, 2024).

Critical thinking is a mental process that aims to analyse and evaluate information in an objective, logical and insightful way. It involves the ability to respond to a problem or situation by considering multiple perspectives, producing valid and coherent arguments, identifying underlying assumptions and evaluating available evidence. Critical thinking also includes the ability to make decisions based on rigorous analysis rather than intuition or emotion alone, so that individuals are able to develop effective and innovative solutions to problems encountered. (Liu, 2024).

In the context of higher education, the development of critical thinking is the main goal that must be achieved because university graduates are expected to be able to face various complex challenges in the world of work and society. Critical thinking has a very crucial role in higher education. In an academic context, students are expected not only to receive information passively, but also to be able to analyse, interpret, and evaluate the information critically. (Safitri & Syahfitri, 2023).. This is important because the academic world is a place where ideas are tested and developed, and the ability to think critically allows students to contribute significantly to knowledge in their field of study. In addition, critical thinking helps students to develop important skills such as problem-solving, decision-making, and the ability to communicate effectively. These abilities are not only relevant in an academic context, but are also highly valued in the world of work, where graduates are expected to face and solve a variety of complex challenges. (Wardana et al., 2024)..

In addition, higher education is a time when individuals shape their worldview and life principles. Critical thinking helps students to build an open mentality to various perspectives and understand the complexity of the world more deeply. (Wulandari, 2021). By practising critical thinking, students learn not to take information or ideas for granted without asking questions or considering supporting evidence. They will be better able to identify bias, spot potential logical fallacies, and develop stronger and more well-founded arguments. The development of these skills enables students to become more active citizens who are aware of their social responsibilities and are better equipped to contribute positively to society. (Tshewang & Wangdi, 2021).

However, facts in the field show that many students still do not have adequate critical thinking skills. This can be seen from the low ability of students to analyse problems in depth, formulate strong arguments, and integrate various points of view in solving problems. This condition indicates that the learning strategies applied by lecturers in higher education may not be fully effective in developing students' critical thinking skills. (Widiastuti et al., 2022)..

The role of lecturers in the development of critical thinking is very important. Lecturers are responsible for designing and implementing learning strategies that can stimulate students' critical thinking. Various learning strategies such as Problem-Based Learning, Project-Based Learning, in-class discussions and debates, as well as the use of case studies, are believed to help develop students' critical thinking skills. However, challenges such as time constraints, lack of resources, and resistance to change in learning methods are often barriers to the implementation of these strategies. (Ashimova & Turekhanova, 2022)..

Therefore, it is necessary to conduct an in-depth literature review to identify learning strategies that are effective in developing students' critical thinking. This review is expected to provide practical guidance for lecturers in choosing and implementing learning strategies that can improve students' critical thinking skills. Thus, university graduates can become individuals who are able to think critically, creatively, and are ready to face challenges in the world of work and society.

## **Research Methods**

The study in this research uses the literature method. The literature research method, or literature review, is a research approach that involves collecting, reviewing, and analysing relevant, existing written sources related to a specific research topic. The main objective is to understand and evaluate existing theories, concepts, or research results, which can then be used to build a theoretical foundation for new studies, identify research gaps, or formulate more specific research questions. (Firman, 2018); (Suyitno, 2021); (Jelahut, 2022). This process usually involves systematic steps such as determining keywords, searching and selecting relevant literature from databases or academic repositories, and analysing and synthesising the information found. Thus, the literature research method not only provides an overview of the topic under study, but also helps researchers build stronger, evidence-based arguments within the broader research context.

## **Results and Discussion**

### **Critical Thinking Concept**

Critical thinking is the ability to think clearly and rationally about what to do or what to believe. It involves the ability to analyse facts objectively, evaluate arguments logically, and make decisions based on sound, evidence-based judgements. Critical thinking also includes the skills to question the assumptions underlying ideas, recognise biases and logical fallacies, and consider multiple perspectives before coming to a conclusion. In other words, critical thinking is an active and disciplined process that requires individuals to engage in deep reflection and precise evaluation of the information received (Beshlei & Batry, 2012). (Beshlei & Batrynychuk, 2022)..

The characteristics of critical thinking include a number of aspects such as analytical, sceptical, objective, and reflective. Critical thinkers tend to have strong analytical abilities, which allow them to dissect complex problems into simpler parts for understanding and evaluation. They are also sceptical, not taking information for granted without checking its validity and reliability. (Carter et al., 2022). Objectivity is another important trait, as critical thinkers strive to make unbiased judgements based on the evidence and logic at hand. Finally, reflectivity refers to the readiness to revise opinions or beliefs if new, stronger evidence emerges (Hasyim et al., 2022). (Hasyim et al., 2024).. Thus, critical thinkers not only engage in deep and methodical thought processes, but are also open to alternatives and changes based on rigorous analysis.

Critical thinking in higher education plays an important role in shaping a generation of thinkers who are able to face the complexities and challenges of the modern world. At the tertiary level, students are expected not only to passively absorb information, but also to be able to critically analyse, evaluate, and apply knowledge. (Xhomara, 2020). With critical thinking, students can develop the ability to assess the strengths and weaknesses of arguments, see causal relationships, identify bias, and make decisions based on careful consideration and valid evidence. These skills are essential in a range of disciplines, from the sciences to the humanities, where

knowledge is not always black and white and often requires deep interpretation and understanding. (Onen, 2021).

In addition, critical thinking helps students become independent lifelong learners. They are encouraged to not only accept information provided by lecturers or other resources, but also seek, evaluate, and synthesise information from various sources. This fosters strong research skills and encourages a healthy scepticism towards unproven claims or manipulative information. (Kirschner, 2021). In the world of work, these critical skills are highly valued as they enable individuals to solve complex problems, make thoughtful decisions, and contribute innovatively within a team or organisation. Thus, higher education that emphasises critical thinking not only prepares students for academic success, but also to become critically thinking citizens and skilled professionals in this information age. (Andhani et al., 2023)..

Thus, critical thinking is essential in higher education as it helps students develop the analytical, evaluation, and knowledge application skills needed to face academic and professional challenges. By instilling these skills, higher education not only improves the quality of the workforce but also forms reflective and thoughtful individuals, ready to contribute positively and innovatively in society.

### **Critical Thinking Learning Strategies**

Critical thinking learning strategies can start with problem-based learning. In this method, students are presented with real, complex problems and asked to find solutions independently or in groups. The process involves problem identification, collection of relevant information, data analysis, and evaluation and selection of the best solution. This method not only promotes a deep understanding of the material, but also develops critical thinking skills such as analysis, synthesis, and evaluation. (Melawati et al., 2023)..

Another approach is collaborative discussion, where students are invited to discuss and debate various controversial topics or issues. In this discussion, students are taught to express opinions with strong evidence, criticise other people's arguments constructively, and be open to different perspectives. (Judijanto et al., 2024); (Iksal et al., 2024); (Irwan et al., 2024).. Such discussions not only enrich students' understanding of the topic, but also train them to think critically and reflectively. In addition, this activity encourages effective communication skills and teamwork, which are essential in the professional world. (Melawati et al., 2023)..

Case studies are also an effective strategy in teaching critical thinking. Students are given real-life scenarios that must be analysed and evaluated to identify root causes and develop solutions. In this process, they must utilise multiple sources of information, consider multiple perspectives, and make decisions based on available data. Case studies provide a real context that makes learning more relevant and engaging, while exercising critical analysis and decision-making skills. (Priska et al., 2021).

Finally, self-reflection methods can be used to develop critical thinking. Students are asked to write reflection journals or essays in which they evaluate their own

understanding of the course material, reflect on their learning process, and identify areas for improvement. (Rizka et al., 2024). Self-reflection helps students to realise their strengths and weaknesses, increase self-awareness, and develop strategies for more effective learning. It also encourages them to be proactive and self-directed learners who always strive to improve themselves.

Critical thinking learning strategies such as problem-based teaching, collaborative discussions, case studies, and self-reflection are very effective in helping students develop critical thinking skills. Through these methods, students not only acquire in-depth and relevant knowledge, but are also trained to become independent thinkers who are able to analyse, evaluate and solve complex problems thoughtfully. Therefore, the integration of these strategies in the higher education curriculum is essential to produce individuals who are competent and ready to face the challenges of the modern world.

### **The Role of Lecturers in Developing Critical Thinking**

The role of lecturers in developing students' critical thinking is crucial and can be started by designing curriculum and teaching methods that promote critical thinking. Lecturers should be able to structure teaching materials and learning activities that challenge students to think more deeply and critically. This could involve analytical assignments, complex case studies, or research-based projects. Lecturers should also ensure that the material taught is relevant to real-life situations and requires critical thinking to solve the problems posed. (Ashimova & Turekhanova, 2022)..

Furthermore, lecturers need to be facilitators who encourage discussion and debate in the classroom. By creating an open and inclusive learning environment, lecturers can motivate students to share their opinions freely and critically. Class discussions should be designed in such a way that students are challenged to put forward well-grounded arguments, listen to and respond to others' arguments, and dig deeper into various perspectives. The role of the lecturer here is to moderate the discussion, direct students to think more broadly, and help them construct logical and structured arguments. (Astika et al., 2021).

Lecturers should also provide constructive and constructive feedback. One effective way to develop critical thinking is through in-depth assessment and specific feedback on the strengths and weaknesses of the tasks students complete. The feedback provided should encourage students to critically analyse their work and look for ways to improve it in the future. In addition, lecturers need to provide encouragement for students to learn from mistakes and consider various views before making conclusions. (Aziza & Baroroh, 2024).

Finally, lecturers should be living examples of critical thinking in all aspects of their teaching. Lecturers should demonstrate their ability to analyse information, construct logical arguments, make decisions based on evidence, and be skeptical but constructive of new information. (Indah, 2020). By being good role models, lecturers can inspire students to adopt the same approach in their learning. In addition, lecturers

can invite students to engage in joint research or challenging collaborative projects, so that students can learn critical thinking in a practical and real context. (Djamas et al., 2021).

By actively taking on these roles, lecturers can significantly contribute to developing students' critical thinking, which in turn will prepare them to become resilient individuals who are able to deal wisely with the complexities of the professional and personal world.

## Conclusion

Lecturer learning strategies that focus on developing students' critical thinking suggest that the role of lecturers is crucial in creating a learning environment that encourages critical thinking. Various strategies have been identified, including curriculum development and teaching methods that emphasise critical analysis, the use of in-class discussions and debates to deepen understanding, and the provision of constructive feedback. Each of these strategies aims to actively engage students in the learning process, encouraging them to question information, relate concepts to real-life situations, and develop their ability to construct logical arguments.

Overall, the literature confirms that a holistic approach involving various learning strategies is the key to success in developing students' critical thinking. In addition to their direct role in the classroom, lecturers also need to be role models in critical thinking, as well as equip students with skills that can be applied in real-life contextualisation. The literature review also highlighted the importance of educational institutions' support in providing resources and training for lecturers to implement these strategies effectively. With a comprehensive and sustainable approach, it is hoped that students can develop critical thinking that will be useful both in their professional careers and everyday life.

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