

**EXPLORING LECTURER'S PERCEPTION AND
APPROACHES OF CRITICAL THINKING SKILL IN
ISLAMIC HIGHER EDUCATION: A CASE STUDY**

Thesis

Submitted to meet the Graduation Requirements of
Master's Degree MA in Education



**Universitas
Islam Internasional
Indonesia**

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ABSTRACT

Integrating critical thinking into religious beliefs can give rise to a paradox between contexts that promote it and conventional methods that rely more heavily on doctrinal approaches. Critical thinking, being an important skill for navigating globalization, necessitates further research in Indonesian Islamic higher education. The primary emphasis of this study should be on exploring the importance of lecturers' perspectives and their approaches in aiding students' advancement of critical thinking skills, along with the challenges they come across. This research employs qualitative research methods, with a case study design. The data collection process are semi-structured interviews, classroom observations, post-observation interviews, and analysis of relevant documents, including the curriculum, lesson plans, and student assignments. Thematic analysis is then applied to the collected data. The research findings reveal that lecturers hold three distinct perceptions regarding critical thinking: (1) critical thinking as a skill; (2) critical thinking as a disposition; and (3) critical thinking as a combination of both skills and dispositions. Throughout their teachings, the lecturers consistently emphasize the integration of critical thinking with Islamic religious education, drawing from their respective specializations. This study identifies the concept of "respectful" as a disposition, which can be further categorized as intellectual humility. Consequently, the findings indicate that the lecturers perceive and recognize the significance of respect within the context of critical thinking. The infusion approach is used when integrating critical thinking. The infusion approach to critical thinking encompasses four primary themes. 1), pedagogical approaches 2), assessment methods 3), student engagement, and participation. 4), Instructional methods. This study presents a comprehensive of the challenges encountered by lecturers in teaching critical thinking skills with categorizing into three distinct categories—student-related, lecturer-related, and methodology-related—this research provides a comprehensive framework for comprehending the complexities involved in this educational process. This study provides valuable insights into the perceptions and approaches of lecturers regarding critical thinking in the realm of Islamic higher education. The results contribute to the current body of knowledge about teaching methods in Islamic education, underscoring the significance of fostering critical thinking abilities to cultivate inquisitive and self-reliant individuals within the context of Islamic teachings. Subsequent investigations should center on comprehending instructors' viewpoints and methods concerning critical thinking in religious teaching, investigating how cultural and religious elements influence critical thinking within religious establishments, and evaluating the lasting consequences of incorporating critical thinking into the religious institution's curriculum on student achievements.

Keywords: *Critical thinking, lecturers, perception, approaches, Indonesia, Islamic higher education*

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LIST OF ABBREVIATIONS

CT	Critical Thinking
PTKIN	Perguruan Tinggi Keagamaan Islam Negeri (Islamic State University)
FITK	Fakultas Ilmu Tarbiyah dan Keguruan (Tarbiyah and Lecturer Training Faculty)

LIST OF GLOSSARIES

Aqidah Course		An Aqidah course, also known as a "Theology" or "Creed" course, is an educational program or curriculum that focuses on the study of Islamic beliefs and doctrines. The term "Aqidah" is an Arabic word that translates to "creed" or "faith," and it refers to the set of fundamental beliefs and tenets that form the basis of Islamic theology.
Critical Thinking		Reasonable reflective thinking' refers to a way of thinking that is centered on deciding what one should believe or do' (Ennis, 2011). The concept of critical thinking involves higher-order thinking skills (cognitive and meta-cognitive) and a tendency to utilize these skills.
Curriculum Religious Education	in	The official documents supporting and providing guidance on the teaching and learning of Islamic religious education
Fiqh Course		A Fiqh course, also known as Islamic Jurisprudence, is an educational program or curriculum that focuses on the study of Islamic law and its practical application in various aspects of a Muslim's life. Fiqh is derived from the Arabic word "فقه" which means "understanding" or "comprehension." In the context of Islam, it refers to the understanding and interpretation of Islamic legal principles based on the Quran and Hadith.
History Course	of Islam	A History of Islam course is an educational program or curriculum that focuses on the historical development and evolution of the Islamic civilization.
Islamic Education	Higher	Islamic higher education refers to institutions of higher education that focus on the study and development of Islam. This institution is devoted to spreading Islamic understanding and teachings. In the Indonesian context, Islamic higher

education has been incorporated into a modern system where Islamic studies are integrated with a modern perspective as well as the Indonesian culture

Islamic Education	Religious	The term Islamic religious education refers to a study program in Islamic higher education focusing on Islamic studies such as Fiqh, Quran and hadith, Islamic history, Aqidah, or other aspects of Islamic thought.
Kitab Kuning or Yellow Book		Kitab Kuning, also known as "Yellow Books," refers to a vast collection of classical Islamic texts written in Arabic and other languages with a traditional Islamic scholarly style. These books are typically characterized by their yellowish-brown color due to the type of paper they are traditionally printed on.
Lecturer		A lecturer is defined as a teacher who teaches at a higher education institution.
Pesantren		Islamic boarding schools in Indonesia
Quran and Hadith Course		Quran and Hadith is a course educational program or curriculum designed to study and explore the two primary sources of Islamic teachings: the Quran and Hadith.

CHAPTER I

INTRODUCTION

1.1 Research Background

Critical thinking is one of the required skills to survive in globalization. It is considered one of the most essential learning components in the 21st century. Bezanilla et al. (2021) emphasized the importance of educating students on thinking critically and effectively in a digital age, where a lot of information is available at the click of a button when you connect to the internet. According to Haber (2020), the term "critical thinking" has its roots in various subjects, such as philosophy, psychology (Lewis & Smith, 1993), and education (Sternberg, 1987). Ennis (1985) defines critical thinking as reflective thinking applied by people to make sense of things to determine what to believe and what not to believe. Critical thinking based on a psychological viewpoint can also be described as mental processes, problem-solving methods, and approaches to learning new ideas (Halpern, 2002; Sternberg, 1986).

In the context of higher education, critical thinking is a fundamental feature (Abasaid & Ferreira, 2022). It is a primary component of higher education due to its multiple impacts on graduates' academic, professional, and personal development. Thus, most higher education institutions may implicitly or explicitly include objectives for improving students' critical thinking skills in their strategic plans. Arum and Roska (2011) argue that the ongoing discussion about the development of critical thinking skills in higher education stems from the belief that this competence can only be acquired through experiential learning and maturation over time. Researchers like Norris (1985, 1988) and Dwyer et al. (2011) noted that despite limited research on the effectiveness of critical thinking in higher education teaching, critical thinking is still a critical element of education and must be practiced mainly for students to master it. In light of this,

experience and maturity processes are unnecessary to help develop critical thinking skills since they can be learned, developed, and improved through intentional effort and practice.

Recent studies demonstrate that students' critical thinking in higher education is still relatively low (Altinyelken, 2021; Nickname & Royafar, 2019; Rear, 2017). Altinyelken (2021) stressed in his study that students in the Netherlands indicated that the primary factors contributing to the critical thinking crisis were the use of old teaching methods, the discouraging attitudes of peers and instructors, a lack of language competence, and the belief that critical thinking is not necessary. In Iran, Nickname and Royafar (2019) pointed out that attitudes and personality determine factors affecting students' critical thinking ability. They found that the students raised in a system that rewards obedience, silence, and acceptance are nearly incapable of questioning and criticizing, so they are reluctant to ask critical questions. Finally, Rear's (2017) research on Asian students studying at Western universities found that cultural beliefs and educational background contribute to low student critical thinking. For example, instilling the obedience culture in Asian societies and educational backgrounds emphasizes test-oriented and teacher-centered learning systems. Together, they argue that these factors may impact the development of critical thinking skills.

In response to students' need for critical thinking skills, it is imperative to consider lecturers' perspectives. The perception of the lecturer plays a crucial role in developing critical thinking skills in students since it affects the prevailing educational environment and teaching methods in the classroom. Ozkan-Akan (2003) stressed that teachers' perceptions could influence students' critical thinking abilities in both positive and negative ways. For instance, teachers who value critical thinking and believe it is crucial for their students are likelier to incorporate activities and assignments that promote and

develop critical thinking skills. Additionally, teachers who do not value critical thinking are less likely to prioritize this skill in their lessons and may not provide students with opportunities to practice and develop it. However, the importance of critical thinking for each individual means that critical thinking concepts should be a primary concern for lecturers (Abasaid & Ferreira, 2022).

Several research studies have indicated that lecturers play an essential role in fostering students' critical thinking skills, and their methods can be varied (Bezanilla et al., 2021; Choy & Cheah, 2009; Clark et al., 2015). Bezanilla et al. (2021) believe that students can improve critical thinking skills with active methodologies, overcome university interests, and bring a minimum level of critical thinking from previous education. Choy and Cheah (2009) added that lecturers could give criteria for assessing information and teaching critical thinking according to the terms and strategies. Specifically, Clark et al. (2015) noted that lecturers could utilize the flipped instruction model. Through this model, students receive instruction outside the classroom and use class time for hands-on activities, discussions, and projects for improved student engagement and performance. Together, the findings of these studies highlight the importance of lecturers' role in teaching critical thinking skills and suggest ways in which critical thinking teaching can be approached.

However, despite the possibility of teaching and developing critical thinking in students, Anggraeny and Khongput (2022) stated that there needs to be more debate about what should be taught and how it should be taught. Some argue that critical thinking should be taught as a skill that can be learned and practiced (Facione, 2000; Freeley & Steinberg, 2008; Simpson & Courtney, 2002). In contrast, others believe it should be taught as a mindset or disposition developed over time through repeated engagement with intellectual challenges (Davies & Barnett, 2015; Ennis, 2011). Alternatively, critical

thinking is viewed as an interplay between cognitive abilities and habits of mind, which can be enhanced by developing a critical thinking disposition and vice versa (Chafee, 1992, as cited in Faccione, 2000). As a result, these debates can prevent lecturers from determining the most effective method for cultivating critical thinking, resulting in confusion and ambiguity in instruction. Consequently, critical thinking requires consideration of different perspectives and approaches.

Ennis (2013) identified four most common teaching methods among the frequently implied approaches and argued that critical thinking could be taught in multiple ways, standards, and goals. Those four strategies are generic, immersion, infusion, and mixed approaches. A generic approach develops critical thinking skills, and dispositions separate from a particular subject. The immersion approach of critical thinking is taught by subject learning both in the infusion and immersion approaches. The infusion approach offers explicit instructions, while immersion provides implicit practice. Finally, the mixed method combines generic approaches and immersion or infusion in developing critical thinking. Thus, it is crucial that lecturers need to be critical enough to identify and adopt the most effective approaches among these many approaches.

As mentioned above, Ennis' (2013) framework provides a comprehensive framework for promoting critical thinking skills and is widely used in educational and professional settings. In recent studies, it has been demonstrated that these approaches are practical. Such as Zhang and Yuan (2022) showed that teachers utilize an infusion approach to critical thinking through reflective and collaborative writing and incorporating real-world examples into their lessons. Albergaria et al. (2011) concluded through a generic approach that question-and-answer sessions and group discussions could efficiently demonstrate students' critical thinking skills. It can effectively

encourage students to become more involved in the classroom since it will include various interactions between lecturers and students. In this way, lecturers can assist students in developing critical thinking skills and motivate them to think beyond their current understanding. With the immersion approach, Orhan and Çeviker Ay (2022) stimulated students' learning of critical thinking skills by immersing them in environmental education rather than teaching them explicitly. During the courses, various activities were used to prepare the subject related to environmental education. These activities included group work, discussions, pair work, and problem-solving. Finally, Thorndahl and Stentoft (2020) demonstrated a mixed-method approach using problem-based learning with critical thinking skills instruction. In this approach, students are presented with real-world problems and asked to solve them through critical thinking and collaboration.

In other approaches, many researchers have investigated the relationship between holding different religious beliefs and critical thinking (Kim, 2020; Malik & Ahmad, 2017; Tan, 2017; R. Zhang, 2018). In his study, Kim (2020) found that some Christian college environments and experiences promote positive changes in critical thinking and the importance of developing a worldview. Further, the study confirmed the arguments in higher education literature that link religious or spiritual engagement with positive outcomes for college students. Zhang (2018) discusses a Buddhist perspective, and they argue that a true Buddhist mind always employs critical thinking. Buddhist teachings emphasize compassion and selflessness. The process of achieving compassion requires the use of critical thinking. Tan (2017) proposes a Confucian conception of critical thinking based on judgment. Critical thinking is needed and promoted in at least two ways to attain the Confucian ideal of *li* (normative behavior). First, applying generalized knowledge, norms, and procedures in the *dao* (Way) to unique action scenarios with

insight and flexibility. It was second, motivated by the ethical quality of *ren* (humanity) that testifies to one's moral character. Finally, Malik and Ahmad, (2017) found that the Islamic approach to critical thinking is rooted in Islam's knowledge and belief sources. It is also rooted in its scholarly attitude toward the significant subjects of inquiry that constitute Islamic studies. These subjects fall under the humanities, social sciences, and pure sciences.

In promoting critical thinking in a religious higher education setting, particularly in Islam, lecturers play a critical role in interpreting and delivering appropriate instructional approaches and ensuring compliance with educational objectives. Lecturers in Islamic higher education should also consider the importance of applying critical thinking. Some Islamic lecturers might incorporate various teaching methods with technology, such as online forums and social media, to encourage students to engage in critical thinking and discussion beyond the classroom (Tathahira, 2020). Others might focus on developing critical thinking skills through studying classical Islamic texts, such as the Quran and Hadith, which can provide a rich source of information and ideas for students to analyze and evaluate (Malik, 2019). Additionally, some Islamic lecturers might use examples from current events and contemporary issues to illustrate the importance and relevance of critical thinking in real-world situations (Altinyelken, 2021). In short, lecturer approaches to improve critical thinking in Islamic higher education can vary widely. Still, it is an essential component of a well-rounded education that helps students develop the skills necessary to navigate the complexities of modern society and engage with the world meaningfully.

To address the statement above, there is an urgent need for Islamic religious institutions to develop critical thinking (Moore, 2004; Altinyelken, 2021). Moore (2004) claimed that critical thinking could enhance students' understanding of Islamic teachings

and practices and enable them to evaluate their relevance and applicability in modern society. Altinyelken (2021) suggested conducting more in-depth research on developing critical thinking in Islamic Institutions. Further research is needed to determine how critical thinking is interpreted in Islamic higher education institutions, particularly in Indonesia.

Some studies have been conducted in Indonesia on critical thinking in general higher education settings, such as developing critical thinking strategies for language instruction with oral interpretation in the context of Universitas Brawijaya (Junining, 2016), a study focused on the approach to help students at Ekasakti University develop their critical thinking abilities through problem-based instruction (PBI) (Riyadi et al., 2022), or the study highlights a significant correlation between lecturers' intellectual skills and students' critical thinking abilities in the context of private universities in Indonesia (Amhar et al., 2022). In Islamic higher education settings, such as the study on the development of the DBUS (Discovery-Based Unity of Sciences) model for students to enhance their critical thinking skills and religious convictions in the context of state Islamic universities in Semarang and Yogyakarta (Husna, 2019), a study that examines the challenges lecturers often face when assessing the critical thinking skills of their students in Islamic religious education (Hakim & Zulkifli, 2021), or a study to examine the frequency of critical thinking in reading among students at Ar-rainy State Islamic University using the strategies of interpretation, analysis, evaluation, inference, explanation, and self-regulation (Muslem et al., 2019). Together studies agree that critical thinking skills should be emphasized in Indonesia because studies indicate that critical thinking continues to be one of the most challenging competencies for Indonesian students.

Based on the aforementioned studies, it is evident that there is a need for further research on critical thinking in Indonesian Islamic higher education, specifically focusing on the importance of lecturers' perceptions and teaching approaches in facilitating the development of students' critical thinking skills. In response to this gap, this study aims to investigate the perspectives of lecturers in Islamic higher education in Indonesia regarding critical thinking and their approaches to teaching it. The study will be titled "Exploring Lecturers' Perception and Approaches to Critical Thinking Skills in Islamic Higher Education: A Case Study."

1.2 Research Question

The following questions were considered for lecturers who teach in Islamic Religious Education study program at Islamic higher education institutions: These lecturers belong to specialized Tarbiyah and Lecturer Training Faculty (FITK), which may belong to various faculties, and their areas of expertise differ significantly from science, engineering, or social sciences.

1. How do lecturers in Islamic higher education institutions perceive critical thinking?
2. How do lecturers in Islamic higher education approach critical thinking skills in the teaching process?
3. What challenges do lecturers face when fostering students' critical thinking in Islamic higher education institutions?

1.3 Objective of Study

The objectives of this study are:

1. To explore the lecturers' perceptions of critical thinking in Islamic religious higher education teaching.

2. To analyze the critical thinking approaches demonstrated by lecturers during the teaching process in Islamic religious higher education.
3. To explore the challenges lecturers, face in developing critical thinking skills in religious higher education.

1.4 Significant of the Study

Critical thinking stands as an essential ability that enables individuals to assess, judge, and arrive at informed conclusions by relying on evidence and logical thinking. In Islamic higher education, this skill is essential in developing lecturers who can facilitate students' learning and promote critical thinking within the classroom. The main topics of this study are the definition of critical thinking and its relationship to the nature of the Islamic religion, specifically in Islamic religious education, including the Quran and Hadith, Aqidah, Fiqh, and the History of Islam. There is a fundamental reason for discussing critical thinking and its relationship to religion. Some liberal viewpoints advocate excluding religious principles from the development of critical thinking. If it remains that way, religiously affiliated schools will cease to exist. In addition, there are clear statements regarding how religious claims and arguments conflict with logic. This necessitates further research into the development of critical thinking skills within religious institutions.

Empirical research explores lecturers' perceptions and approaches to cultivating critical thinking during teaching and learning to understand the development of critical thinking in Islamic religious-based institutions. Thus, this case study of Islamic higher education institutions aims to explore how lecturers perceive critical thinking and their teaching approaches. Moreover, it is essential to determine which teaching materials to use for the teaching process to cultivate students' critical thinking. Thus, in the future, this study will provide an overview of how fundamental thinking approaches develop in

the teaching and learning process. In addition, it will highlight how these approaches appear, specifically in Islamic higher institutions. This research is not only helpful for lecturers in developing and defining critical thinking within a pedagogical practice approach, Still, it will also be valuable for institutions to design curricula that address students' critical thinking and learning outcomes.

1.5 Thesis Outline

This research is organized into five chapters:

Chapter 1: The background of the study is discussed in this chapter to explore how lecturers view critical thinking and how the method is applied. Additionally, to learn more about this, it is necessary to study previous approaches, particularly previous studies on the concept of critical thinking in various contexts and the context of religion.

Chapter 2 outlines the theoretical underpinnings of critical thinking and earlier research on various critical thinking viewpoints. It discusses the concept of critical thinking in general and the approach to teaching how to think critically. The final point reviewed an empirical study on lecturers' perspectives, and critical thinking approaches in Islamic religious institutions.

Chapter 3: The research methods for this study are described in this chapter. The research approach adopted in this study helps answer the questions by articulating the research questions. Additionally, the stages and methods of the research—data collection, data analysis, validity, and reliability are —covered in this chapter.

Chapter 4: This chapter reported the results of the analysis of the Islamic higher education case in terms of the perceptions, approaches, and challenges by lecturers in improving critical thinking.

Chapter 5: This study offers theoretical and empirical contributions to scholars of many disciplines, which this chapter summarizes. This chapter describes the conclusion and

recommendation in analyzing the extent to which critical thinking is understood, conceptualized, and implemented by the religious-based higher education institution. This can also consider the practical implications for policymakers in tertiary institutions, especially in designing programs or curricula.

CHAPTER II

THEORETICAL FOUNDATION

This study integrates the relevant literature by establishing a theoretical framework. The literature review is structured in two parts. The first part provides the conceptual framework that will strengthen the foundation for this study. The second part is an overview of the reviewed literature, consisting of empirical Studies on Critical Thinking in Higher Education and focusing on four key areas. These areas include lecturers' perspectives on critical thinking in higher education, approaches employed by teachers to cultivate critical thinking in students, the role of critical thinking in religious institutions, and the challenges lecturers encounter in fostering critical thinking in higher education.

2.1 Theoretical Framework

The theoretical framework encompasses the fundamental concepts developed to address research problems. In this particular case, the theoretical framework relies on philosophical and educational perspectives, specifically drawing from Ennis's (1985) foundational philosophical theory that asserts critical thinking involves reflective and rational thinking, depending on beliefs.

Ennis, a prominent figure in the field of critical thinking, has been actively conducting research on the subject since 1985 and continues to do so today. His definition of critical thinking surpasses mere assessments of beliefs and extends to actions as well. Ennis emphasizes that critical thinking involves decision-making and has practical, real-world applications. He identifies "deciding on an action" as one of the key abilities of a critical thinker and outlines the essential skills or stages that characterize this process: defining the problem, selecting criteria to evaluate potential solutions, formulating

alternative solutions, tentatively deciding what course of action to take, reviewing the decision while considering the overall situation, and monitoring the implementation.

Ennis's definition of critical thinking appears to reconcile the viewpoints of educational philosophy and psychology, presenting a well-rounded approach that integrates both theoretical and practical elements. This makes Ennis's theory highly relevant to the focus of the current study, which focuses on teaching and learning within Islamic higher education institutions. As a result, a comprehensive exploration follows, delving deeper into the concept and various approaches with meticulous scrutiny.

2.1.1 The Concept of Critical Thinking

Critical thinking theory is an approach that emphasizes the importance of questioning assumptions, evaluating evidence, and analyzing arguments to arrive at well-reasoned conclusions. This approach is based on the belief that knowledge is not simply memorizing facts but requires active engagement with ideas and a willingness to consider alternative perspectives. Critical thinking theory in education is founded on John Dewey's concept of reflective thinking (Dewey, 1933), wherein Dewey differentiated between the process and product of thinking.

Reflective thinking, as defined by John Dewey, is a central component of critical thinking theory (Dewey, 1933). Reflective thinking involves a deliberate and conscious effort to examine one's beliefs and assumptions and consider the evidence and reasoning that supports them (Rodgers, 2002). This process requires a willingness to question one's ideas and to consider alternative perspectives to arrive at a more informed and nuanced understanding of a particular issue. Critical thinking theory has become an essential component of many curricula, with an increasing emphasis on teaching students to think critically and evaluate evidence. This approach is necessary to prepare students to be active and engaged citizens in a complex world.

Dewey believed that reflective thinking and judgment are recursive and mutually influential processes (Dewey, 1933). He argued that thinking is not a linear process in which one follows a set of steps or procedures but rather an iterative process in which one revisits and revises one's thinking based on new information and feedback. To make sound judgments, Dewey emphasized the importance of selecting and weighing the bearing of facts and suggestions as they present themselves. This involves carefully examining the evidence and arguments presented in a particular context and deciding whether they are credible and relevant to the issue at hand. Also, Dewey argued that judgment involves discerning the veracity of purported facts and the soundness of ideas (Rodgers, 2002). To achieve this, one must cultivate a critical and evaluative mindset that is open to questioning assumptions and actively seeking evidence to either substantiate or challenge beliefs.

As previously discussed, this paper will focus on Ennis's Theory, which draws inspiration from John Dewey's philosophy. Following this, a similar number of critical thinking theorists and experts will examine the application and adherence of Ennis's theory in their empirical research, examining critical thinking in depth.

2.1.2 Ennis's Theory of Critical Thinking

Inspired by John Dewey's idea, Ennis (1985) defined critical thinking as reflective thinking that makes sense and is focused on deciding what to believe or do. Dewey and Ennis emphasize the importance of reflective thinking in critical thinking theory. Both Dewey and Ennis believe that critical thinking involves a deliberate and conscious effort to examine one's beliefs and assumptions and consider the evidence and reasoning that supports them.

The distinction between the definition and the concept of critical thinking played a pivotal role in Ennis' explanation. He defined critical thinking as a set of competencies

and the tendency towards cultivating them (Ennis, 2011). Additionally, this skill is invaluable when addressing problems or making decisions, since it encompasses the entire process from identifying a problem to reviewing assumptions for validity and reliability.

This paper will explore Ennis's concept of critical thinking disposition and abilities, which presents a framework emphasizing the necessary attitudes, dispositions, and abilities for engaging in critical thinking. Ennis (1998) established a widely recognized classification system that forms the basis for instructing critical thinking. He characterizes critical thinking as "thoughtful, introspective thinking centered on determining beliefs or actions" (Ennis, 1989, p. 4). As per this categorization, critical thinking encompasses 15 abilities paired with their respective sub-abilities, in addition to three fundamental attitudes accompanied by sub-divisions. Ennis asserts that his taxonomy is straightforward, coherent, and adaptable to various applications (Ennis, 1996). Moseley et al. (2004) reviewed this taxonomy and found that the number and relevance of the broad categories and subcategories made it challenging to apply this taxonomy to a more comprehensive set of activities.

A recent revision of Ennis' taxonomy included 16 critical thinking skills, three main dispositions, and subcategories (Ennis, 2011). The previous taxonomy has mostly stayed the same, with only one skill and subcategory added. The table below lists all of Ennis' taxonomy categories.

Table 2.1

Ennis's taxonomy of critical thinking dispositions and skills

Skills	Dispositions
Direct attention towards a specific question.	1. Value the accuracy of their beliefs and the justification of their decisions, striving to ensure correctness to the best of their ability, including:

<p>Direct attention towards a specific question.</p>	<p>a. Explore alternative hypotheses, explanations, conclusions, plans, sources, and so forth.</p>
<p>Analyze arguments: Examine and evaluate the reasoning behind arguments.</p>	<p>b. Seriously consider perspectives other than their own.</p> <p>c. Endeavor to be well informed.</p> <p>d. Support a position based on the available justified information.</p> <p>e. Employ their critical thinking abilities.</p>
<p>Pose and respond to questions that seek clarification or challenge ideas.</p>	<p>2. The ability to comprehend and present their own and others' positions with honesty by:</p>
<p>Assess the reliability and trustworthiness of a source.</p>	<p>a. Explore and attentively listen to the perspectives and reasons of others.</p> <p>b. Aim for clear and precise communication.</p> <p>c. Establish and sustain focus on the conclusion or question at hand.</p>
<p>Engage in the act of observing and judiciously assess observation reports.</p>	<p>d. Seek and provide reasons to support arguments.</p> <p>e. Consider the overall context and circumstances.</p>
<p>Utilize their previously established conclusions.</p>	<p>f. Cultivate reflective awareness regarding their own fundamental beliefs.</p>
<p>Deduce and judge deductions</p>	
<p>Make well-founded material inferences, commonly referred to as "induction."</p>	
<p>Formulate and assess value judgments: Construct and appraise judgments grounded in values.</p>	
<p>Define terms and judge definitions: Provide clear definitions for terms and assess the adequacy of definitions.</p>	

Attribute unstated assumptions: Identify assumptions that are not explicitly stated.

Analyze and reason about propositions or positions they disagree with or are uncertain about while maintaining unbiased thinking.

Incorporate dispositions and other abilities when making and justifying a decision.

Progress systematically in a manner suitable for the given situation.

Consider the emotions, knowledge level, and level of sophistication of others.

Discuss and present using appropriate rhetorical strategies, such as fallacy labels

3. Care about every person, including:
 - a. Showcase critical thinking skills while taking into account others' feelings and understanding.
 - b. Show genuine concern for the welfare of others.

According to Ennis (1991, 1996, 2011), three broad fundamental dispositions are essential for critical thinking:

1. Intellectual humility: This disposition entails acknowledging the boundaries of one's knowledge and maintaining a willingness to accept the potential for error. Intellectual humility involves being open to alternative perspectives and being prepared to adjust one's beliefs based on new evidence.
2. Intellectual perseverance: This disposition involves the willingness to engage in sustained and focused thinking to solve problems or understand complex issues.

Intellectual perseverance involves a willingness to persist in facing challenges and setbacks.

3. Intellectual integrity: This disposition involves being honest and fair in thinking and decision-making. Intellectual integrity involves a willingness to acknowledge and address one's biases and consider evidence and arguments that challenge one's beliefs.

In addition to these broad dispositions, Ennis identified specific critical thinking abilities necessary for practicing critical thinking. These abilities include identifying and evaluating arguments, recognizing and avoiding fallacies, and synthesizing information from multiple sources. Ennis's critical thinking model emphasizes developing specific skills and broader dispositions that support practical thinking and decision-making. Individuals can become more effective critical thinkers in various contexts by cultivating these abilities and dispositions (Eslami, 2016; Davies & Barnett, 2015; Facione, 2000; Freeley & Steinberg, 2008; Simpson & Courtney, 2002).

2.1.3 Approaches to Teaching Critical Thinking Skills

This theory will be used to examine the lecturer's approach to teaching and learning. It will address the debate regarding whether critical thinking should be treated as a subject or as a general skill that can be taught. That there are four different approaches to teaching critical thinking skills:

1. General approach
2. Infusion approach
3. Immersion approach
4. Mixed approach

General approaches are ways of approaching critical thinking that need to be taught separately from the subject as general skills and dispositions. to stress teaching

critical thinking in separate courses, such as informal logic or critical thinking classes, outside of any subject of study (Ennis, 1998; Lipman, 1991; Paul, 2007). According to this approach, students can focus more on their cognitive capabilities than on specific subjects. Additionally, the "skill-oriented" approach, as the paradigm for developing critical thinking skills, is known as Kanik's (2010) and has received much criticism for its limitations. Uncertainty regarding students' capacity to apply these general critical-thinking skills to disciplines is one such obstacle (Kong, 2005).

The second and third approaches teach critical thinking abilities using subject-mapping approaches. According to scholars who share this perspective, particularly content-oriented views (Kanik, 2010), critical thinking abilities should be included in the curriculum because they are inextricably linked to the research subject matter. They argue that different subjects require different subject-specific skills and dispositions regarding critical thinking (Brown, 1997; McPeck, 1990). Critical thinking is viewed this way as "merely loose categories employing different approaches to thinking" Moore 2014. The same idea underpins Mejia's (2005) refusal to discuss a person's general level of critical thinking and emphasize his critical thinking development concerning specific subjects. Ennis is one of the opponents of this strategy since he thinks this method will discourage people from using their critical thinking abilities in daily life (Ennis, 1998).

Through the explicit instruction of these skills in some courses, the infusion approach encourages students to think critically by explicitly integrating critical thinking skills into the course material (Paul et al., 1993). The third approach, immersion, implicitly develops critical thinking abilities in the subject matter and is like this approach. According to some scholars, the explicit consideration of critical thinking abilities tends to detract from the subject's reality, which is why they are skeptical of the infusion approach. However, for some intellectuals, the infusion method offers more

benefits than immersion because it can immediately promote applying critical thinking skills to other academic disciplines (Ennis, 2011).

The last and most common approach combines a general approach with a subject-specific strategic approach through infusion or immersion. This approach is referred to as the "mixed model" by Sternberg (1987). According to this perspective, just a few general critical thinking skills apply to different topic areas and are more pertinent to a subject (Facione, 2000; Tsui, 1999). The discourse differentiates critical thinking courses. Ennis believes combining the two is effective in content courses and refers to it as "cross-curriculum critical thinking" (Ennis, 2011). Like Ennis, Halpern argues that "the most effective approach for teaching critical thinking is a broad-based, cross-disciplinary approach" (Halpern, 2002, p. 30). Kennedy et al. (1991), after analyzing several research studies on various methodologies, advise a mixed approach due to the need for more data indicating that anyone should be prioritized.

As a result, some of the critical thinking approaches described above will help this study address questions concerning what lecturers use during religious institutions' teaching process.

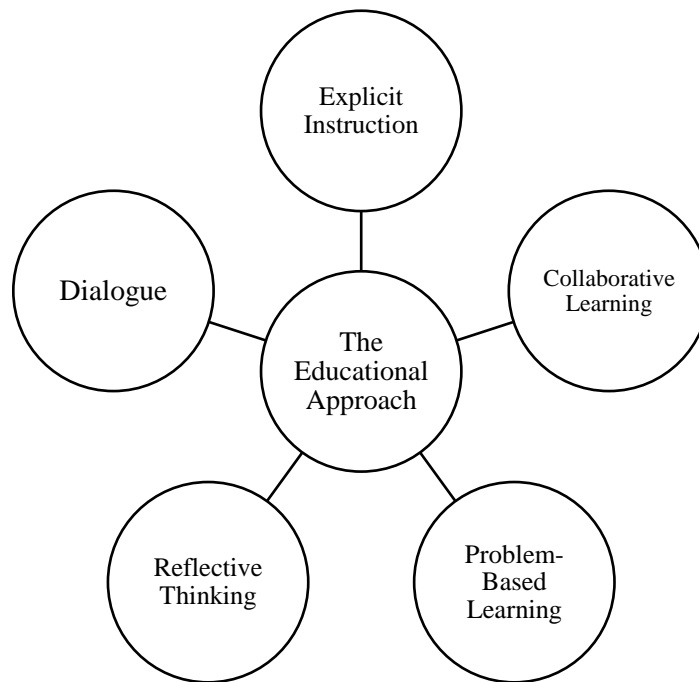
2.1.4 The Educational Approach

In contrast to philosophical or psychological approaches, the educational approach to teaching critical thinking draws upon extensive classroom experience and observation of student learning (Sternberg, 1986). However, the educational approach has been criticized for its lack of specificity, which hampers its ability to provide clear guidance for effective instruction and assessment (Ennis, 1985; Sternberg, 1986). Furthermore, educational frameworks have not undergone rigorous testing comparable to those developed in the fields of philosophy or psychology (Sternberg, 1986), adding another limitation to this approach.

Critical thinking is essential in addressing various tasks, questions, problematic situations, or challenges, encompassing problem-solving, theory evaluation, investigations, work interpretation, and creative endeavors (Bailin, 1990). It is important to note that these challenges always emerge within specific contexts. Successfully navigating these challenges demands a comprehensive range of understandings, and the nature of the circumstances determines the specific resources needed for each unique challenge.

Numerous research studies advocate for the adoption of specific teaching techniques to nurture the advancement of critical thinking capacities. These methods encompass explicit guidance, cooperative or collaborative learning, exemplification, and constructivist approaches. Various scholars have underscored the indispensable nature of explicit instruction in honing critical thinking abilities (Abrami et al., 2008; Facione, 1990; Halpern, 1998; Paul, 1992). Facione (1990) further accentuates the significance of encompassing both the dispositional and affective dimensions of critical thinking within this direct instruction. Figure 2.1 provides a comprehensive representation of the intricate relationships among educational methodologies, incorporating diverse techniques for teaching critical thinking sourced from multiple researchers

Figure 2.1
The Educational Approaches



The following paragraph will provide a detailed description and explanation of the content depicted in Figure 2.1.

1. **Explicit Instruction:** This approach explicitly teaches students to think critically through structured activities and discussions. Lecturers can use instructional strategies such as Socratic questioning, concept mapping, and argument analysis to help students develop critical thinking skills (Facione, 1990).
2. **Collaborative Learning:** Collaborative learning is an approach that involves students working together to solve problems and make decisions. Lecturers can facilitate this approach by creating group activities that require students to work together to solve problems or complete tasks. (Abrami et al., 2008)
3. **Problem-Based Learning:** Problem-based learning is an approach that involves students solving real-world problems or scenarios. Lecturers can guide this approach by providing students with complex problems requiring critical thinking and problem-solving skills.

4. **Reflective Thinking:** Reflective thinking is an approach that involves students reflecting on their learning and experiences to develop critical thinking skills. Lecturers can guide this approach by providing opportunities for students to reflect on their learning and develop their critical thinking skills through self-assessment and feedback (Dewey, 1936; Ennis, 1984)
5. **Dialogue:** In education, critical dialogue can take many forms, including classroom discussions, debates, and writing assignments. Critical dialogue can promote the development of critical thinking skills, as it encourages students to question assumptions, consider different viewpoints, and evaluate evidence (Dewey, 1936; Ennis, 1984).

2.2 Empirical Studies on Critical Thinking in Higher Education

2.2.1 The Urgency for Developing Critical Thinking in Higher Education

Numerous scholars have emphasized the significance of nurturing critical thinking skills in higher education (Flores, 2016; Franco & Almeida, 2015; Hervás & Miralles, 2006). They have underscored how these skills contribute to fostering higher-order cognitive abilities like reflection and self-awareness. Scholars argue that these proficiencies are invaluable for students' future professional endeavors. They empower them to effectively analyze intricate social issues and resolve them with precision.

However, other researchers have highlighted the importance of critical thinking in everyday life. They argue that key competencies, including critical thinking, are essential to navigating the constant changes and complexities of the world. These competencies are seen as necessary to effectively address the challenges that arise in various aspects of daily existence (Franco & Almeida, 2015). Tenas (2013) asserts that the world now demands the ability to know comprehensively, express opinions appropriately, own and defend one's ideas and perspectives, and comprehend, analyze,

and assess the viewpoints of others. Flores (2016) emphasizes that critical thinking abilities are crucial for students' professional development in social knowledge since they help them meet the demands of a globalized society. Thus, Hervás and Miralles (2006) emphasize that critical skills are needed in the modern era, such as organizing, processing, analyzing, and transmitting increasingly detailed data, problem-solving and decision-making skills, understanding scientific papers, and understanding world developments that are taking place. As a result, an environment like higher education should help students develop their critical thinking skills.

Additionally, the development of critical thinking is frequently linked to other essential abilities for living a satisfying life in the twenty-first century. In modern teaching and learning, Hervás and Miralles (2006) indicate that current skills include learning, developing new knowledge, engaging in metacognition, making decisions, thinking creatively, solving issues, and engaging in critical thinking. While some authors have emphasized the significance of developing these skills across all subject areas in higher education, the arts and humanities are particularly effective in fostering critical thinking and the expression of meaning (Dimitru, 2019).

Other researchers have also stressed the importance of critical thinking for students' holistic development as well as for the social transformation of their environments. Higher education institutions should go beyond being mere certifying bodies and instead focus on providing individuals with the skills needed to make ethical and responsible decisions. These institutions can help shape individuals who possess knowledge but also can act ethically and responsibly in their communities by emphasizing critical thinking. It is also possible to resolve complex issues through the use of critical thinking by analyzing, contemplating, and making decisions. Due to this, it is capable of transforming, enhancing, and contributing to the creation of societies in

the future (Abdellatif & ElKhodary, 2020; Agredo Tobar & Burbano Mulcue, 2012; González, 2008; Roohr et al., 2019). Therefore, it is essential to see critical thinking in higher education from the student's point of view.

In their study, Roohr et al. (2019) explored the importance of nurturing critical thinking in higher education institutions to address the evolving demands of skills and learning in the twenty-first century and to prepare college graduates for the workforce. The researchers aimed to examine how institutional and student factors contribute to the disparity in critical thinking scores between first-year and third- or fourth-year college students. Specifically, the study investigated any factors within higher education institutions that may influence the relationship between student differences and their scores on critical thinking tests.

Saulius and Romualdas (2021) assert that critical thinking education must be integrated into higher education studies. They explore how students' understanding of the essential thinking concept, one of the most significant descriptive and normative ideas in modern education, is impacted. They also emphasize determining and contrasting undergraduate students' critical thinking comprehension before and after completing their philosophy coursework. It frequently states in their papers that being a critical thinker entails having robust argument analysis and presentation skills.

Based on the previous statement, it is evident that critical thinking has become an integral aspect of higher education. In this context, lecturers play a significant role in fostering critical thinking among students. Consequently, this study emphasizes the importance of investigating how lecturers convey their perspectives to cultivate essential thinking skills, particularly in higher education. As a result, there is a pressing need to develop critical thinking in students within higher education institutions.

2.2.2 Lecturers' Perception of Critical Thinking in Higher Education

Expanding on the prior research regarding critical thinking in higher education, there is a growing importance placed on comprehending how lecturers communicate their viewpoints to cultivate vital thinking abilities. González (2008) highlights the crucial role of lecturers in implementing critical thinking strategies and enhancing students' capabilities. It would be problematic if a lecturer attempted to instill the value of critical thinking in students without sufficiently engaging in a reflexive-critical process (Badia & Becerril, 2016; Balyer & Öz, 2018).

Bezanilla et al. (2021) examined critical thinking from the perspective of a university lecturer. They revealed that lecturers who used an active technique might get beyond the university's lack of interest in fostering critical thinking. Students' ability to think critically, at least to a primary degree, from earlier educational levels suggests that developing critical thinking abilities in college is crucial.

Although understanding the importance of teaching critical thinking is significant, perceiving how lecturers approach and grapple with it presents its own set of challenges. The results of the study revealed that lecturers who employed active teaching techniques could overcome the lack of emphasis on critical thinking within the university setting. Considering that students already possess some level of critical thinking ability from earlier educational levels, critical thinking skills development in college becomes even more crucial. The researchers successfully captured lecturers' perspectives regarding the importance of critical thinking in higher education and how fostering this skill is essential for designing meaningful curricula and engaging learning activities. Future exploration could delve deeper into the effectiveness of instructional approaches in terms of facilitating the growth of critical thinking and their impact on higher education.

Bezanilla's (2021) study on critical thinking shed light on a range of lecturer perceptions, highlighting persisting challenges in terms of learning competencies associated with critical thinking. According to Ketabi et al. (2013), most lecturers have a primary and general understanding and need more specificity about critical thinking. As described by Choy and Cheah (2009), some lecturers mistakenly believe that they are equipping their students with critical thinking skills when, in fact, they are simply facilitating subject comprehension. Therefore, lecturers should examine their perspectives before imparting critical thinking to their students, compare them with educational standards set by universities, engage in self-reflection, and adjust their time allocation and instructional approaches accordingly before imparting critical thinking to their students. The implementation of critical thinking in lesson plans requires lecturer preparation to equip them with the necessary tools (Ketabi et al., 2013).

In line with the aforementioned studies, Abasaid and Ferreira (2022) conducted research on the professor's perception of critical thinking in higher education. The study highlighted the observation that, although professors may possess confidence in the importance of critical thinking, they may still encounter challenges when attempting to implement it in their teaching practices. This indicates a potential gap between professors' professional beliefs and their actual instructional practices. Recognizing the significant influence of professors' fundamental perspectives is crucial, as it directly affects how they approach and instruct students in higher education. By acknowledging the impact of these perspectives, educators can gain a deeper understanding of teaching practices and create an environment that fosters critical thinking and holistic student development.

Furthermore, scholars provide educational implications that can bridge the gap between academic research and practical application. These implications seek to introduce enlightening ideas and enhance critical thinking instruction in higher education

institutions. After examining lecturers' and professors' perspectives on critical thinking, it is crucial to consider how these insights can be applied to students. Developing critical thinking skills and enriching the learning experience of students can be achieved through the implementation of effective strategies and approaches. In this regard, Bezanilla et al. (2019) conducted a comprehensive analysis of lecturer perceptions and explored the methods used for teaching and learning critical thinking in higher education. According to their findings, the paper emphasizes the interrelationship between lecturers' concepts and strategies for promoting critical thinking. The study identifies reading, analysis, synthesis of resources, and the utilization of case studies as effective methodologies for assessing critical thinking skills. It highlighted the importance of aligning lecturers' perspectives and instructional methods to effectively cultivate essential thinking skills in the next generation of learners.

2.2.3 Lecturers' Strategies for Inculcating Critical Thinking

The importance of aligning lecturers' perspectives and instructional methods to foster essential thinking skills in students is further supported by the findings of Alexander et al. (2010). Utilizing a qualitative approach, they conducted online discussions and interviewed 24 students enrolled in a psychology course in the southern United States. Using the four-question methodology of analyzing, reflecting, applying, and questioning, students were asked questions designed to facilitate critical thinking. Through instructional strategies that promote active learning, the four-question technique effectively enhanced critical thinking. In conclusion, the researchers concluded that the strategy is appropriate for use in all learning environments.

Active learning techniques are instrumental in online learning environments with limited interaction opportunities. While online courses provide communication tools such as email and chat rooms, the lack of face-to-face interaction and immediate feedback

makes it more difficult for learners to engage in critical thinking and collaborative learning. In online learning environments where the possibility of interaction is limited, active learning techniques are essential.

Alexander et al. (2010) suggested a useful technique called the four-question approach for in-person lectures or discussions, aiming to stimulate students' critical thinking about the course content. This method encourages active involvement with the subject matter and improves students' grasp of essential ideas. In a distinct qualitative investigation conducted by Zhang and Yuan (2022), the focus was on two English as a Foreign Language (EFL) instructors in China and their endeavors to integrate Critical Thinking (CT) into their reading-focused classrooms. The study employed comprehensive, semi-structured interviews, classroom observations, artifact analysis, and the scrutiny of eight collaborative discussion sessions involving the instructors and the primary author. The outcomes revealed that the instructors introduced innovative CT techniques into reading instruction via an infusion approach. This strategy explicitly highlighted critical thinking at the beginning of the course and also boosted students' critical thinking abilities and language proficiency through reflective and cooperative writing exercises utilizing reading journals.

The research findings also revealed a range of elements that impacted their endeavors to introduce CT innovation. These factors encompassed the instructors' level of CT expertise, their convictions and attitudes regarding critical thinking, institutional considerations like assessment criteria and backing from peers and administrators, as well as contextual elements like student backgrounds and classroom organization. The study provides insights into how lecturers can be supported to innovate conventional CT instruction in the reading classroom. By highlighting the importance of CT in reading

instruction and promoting reflective and collaborative writing activities, and incorporating real-world examples into their lessons, lecturers can help to develop students' CT abilities and language competence. Additionally, by considering the factors that influence CT innovation, lecturers can better understand how to implement CT instruction effectively and overcome potential barriers.

In Zhao's (2016) study, the focus is on instructional strategies for cultivating critical thinking in English as a Foreign Language (EFL) classrooms within China's higher education context. The paper highlights three research-supported teaching strategies that are effective in promoting critical thinking among students. These strategies include explicit instruction, which involves providing clear guidance and instruction on critical thinking skills and processes. Another strategy is lecturer questioning, where instructors pose thought-provoking questions to stimulate critical thinking among students. Lastly, active and cooperative learning strategies such as group discussions, debates, and reciprocal peer questioning are utilized to encourage students' active engagement and collaboration, fostering the development of critical thinking abilities. The research also explores the typical attributes of successful teaching of critical thinking, to shed light on overarching instructional approaches for fostering critical thinking skills. The study highlights the importance of effective teaching strategies to promote critical thinking skills in EFL classrooms. Through explicit instruction, questioning, and active and cooperative learning strategies, lecturers can create an environment that fosters critical thinking skills in language learners. The study offers valuable insights for EFL lecturers looking to improve their instructional strategies for fostering critical thinking skills in their classrooms.

Albergaria et al. (2011) found, using a comprehensive approach, that employing question-and-answer sessions and group discussions is an effective way to showcase students' critical thinking abilities. This approach enhances classroom participation by fostering diverse interactions between instructors and students. Consequently, educators can play a pivotal role in nurturing students' critical thinking skills and inspiring them to expand their cognitive horizons. Additionally, the study underscores the significance of utilizing question-and-answer sessions and group discussions as practical tools for both illustrating and honing critical thinking skills within the classroom. By promoting interactions between educators and students and enhancing critical thinking abilities, teachers can encourage active student engagement, motivation, and involvement.

In their quantitative study, Orhan and Çeviker Ay (2022) aimed to investigate the impact of Critical Thinking (CT) instruction using three different approaches (general, immersion, and mixed) on students' CT skills and dispositions. The study employed a strategy that involved preparing a subject related to environmental education and incorporating activities such as group work, discussions, pair work, and problem-solving. The findings revealed that all three approaches—general, immersion, and mixed—resulted in improvements in both CT skills and dispositions. Notably, there was a large effect size for enhancing CT skills. The general approach was identified as the most effective for improving CT skills, while the mixed approach proved to be the most effective for enhancing CT dispositions. The study concluded that a combination of different CT teaching approaches could be beneficial in promoting the development of CT skills and dispositions in students. They stimulated students' learning of CT skills by immersing them in environmental education rather than teaching them explicitly.

In conclusion, as discussed above, there are global strategies for cultivating critical thinking in higher education. However, Wijayati (2022) examines the Indonesian context and uses observation tools and interview instruments to collect data from German students and lecturers at Universitas Negeri Malang. The study aimed to explore feedback strategies that can improve the critical thinking skills of German as a Foreign Language (GFL) learners in Indonesia. The study found that asking questions, providing comments, encouraging output, and giving praise are effective feedback strategies for improving critical thinking skills. The lecturers provided students with questions encouraging them to think and answer, making them more active in the classroom. These feedback strategies helped students memorize, understand, apply, analyze, reformulate, and evaluate the learned materials, leading to better critical thinking skills. The study recommends that lecturers use various types of feedback to provide more opportunities for students to improve their language skills.

The importance of aligning lecturers' perspectives and instructional methods to foster essential thinking skills in students is further supported by the findings of Alexander et al. (2010). Utilizing a qualitative approach, they conducted online discussions and interviewed 24 students enrolled in a psychology course in the southern United States. Using the four-question methodology of analyzing, reflecting, applying, and questioning, students were asked questions designed to facilitate critical thinking. Through instructional strategies that promote active learning, the four-question technique effectively enhanced critical thinking. In conclusion, the researchers concluded that the strategy is appropriate for use in all learning environments.

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The research findings also uncovered various factors that played a role in shaping their endeavors to introduce innovative approaches to Critical Thinking (CT). These factors included the instructors' understanding of CT, their personal beliefs and perspectives, as well as aspects related to the institution, like assessment demands and backing from colleagues and administrators. Additionally, contextual factors such as the diverse backgrounds of students and effective classroom management practices had an

impact on their efforts. The study provides insights into how lecturers can be supported to innovate conventional CT instruction in the reading classroom. By highlighting the importance of CT in reading instruction and promoting reflective and collaborative writing activities, and incorporating real-world examples into their lessons, lecturers can help to develop students' CT abilities and language competence. Additionally, by considering the factors that influence CT innovation, lecturers can better understand how to implement CT instruction effectively and overcome potential barriers.

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Albergaria et al. (2011) concluded through a generic approach that question-and-answer sessions and group discussions could efficiently demonstrate students' critical thinking skills. It can effectively encourage students to become more involved in the classroom since it will include various interactions between lecturers and students. In this way, lecturers can assist students in developing critical thinking skills and motivate them to think beyond their current understanding. Moreover, the study highlights the importance of using question-and-answer sessions and group discussions as practical tools for demonstrating and developing critical thinking skills in the classroom. Teachers can promote student involvement, motivation, and engagement by encouraging interactions between lecturers and students and improving critical thinking skills.

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2.2.4 Lecturers' Challenges in Teaching Critical Thinking

Expanding upon the understanding of worldwide approaches to promoting critical thinking in higher education, several researchers have recognized the challenges that lecturers might encounter when teaching this skill (Miu & Chi's, 2010; Rear, 2017; Nickname and Royafar, 2019; Cosgrove, 2010; Kowino et al., 2012; Anggraeny, 2022)

Miu and Chi's (2010) research focused on a particular facet within this field, delving into the influence of culture on the instruction and acquisition of critical thinking skills among postgraduate students, specifically comparing Chinese International and New Zealand European students. The researchers conducted interviews with these students to gain insights into their perspectives regarding critical thinking and its instruction. The study uncovered significant cultural variations in the approach to teaching and learning critical thinking. Chinese International students tended to perceive

critical thinking as the process of memorizing information and adhering to rules. On the other hand, New Zealand European students viewed it as a process involving questioning and reasoning. The researchers attributed this disparity to the cultural emphasis on rote learning and obedience in China, while in New Zealand, there is a greater emphasis on individualism and the practice of questioning authority.

The study also found that language proficiency also played a role in teaching and learning critical thinking. The Chinese International students struggled with understanding the nuances of the English language, which hindered their ability to grasp the abstract concepts related to critical thinking. On the other hand, the New Zealand European students had a greater understanding of the language and were more comfortable expressing their thoughts and ideas. Overall, the study highlights the challenges teachers face when teaching critical thinking to students from different cultural backgrounds. It emphasizes the importance of understanding students' cultural and linguistic backgrounds to teach critical thinking effectively.

Rear (2017) also found in his study that cultural beliefs and educational background were significant challenges that contributed to the low level of critical thinking skills among Asian students. The study aimed to explore the factors contributing to the low level of critical thinking skills among Asian students studying at Western universities. The qualitative research involved interviewing 20 Asian students from diverse academic fields who were enrolled in postgraduate programs at a UK university. One of the cultural factors identified was the emphasis on respect for authority figures in Asian societies, which can discourage students from questioning their teachers or challenging their ideas. This attitude can be transferred to the classroom and affect students' ability to engage in critical thinking. Additionally, the study found that the educational backgrounds of Asian students were also a factor, as the education systems

in their home countries often emphasize memorization and rote learning over critical thinking.

The study concluded that cultural beliefs and educational background play a crucial role in developing critical thinking skills among Asian students. Therefore, universities need to consider these factors when designing teaching methods and interventions to improve critical thinking skills among international students.

Nickname and Royafar (2019) conducted a study in universities in Iran to investigate the factors that affect critical thinking abilities and to identify the challenges with critical thinking abilities among university students. The researchers collected data from 243 students studying different fields at two Iranian universities. It was discovered that student's personality traits, particularly openness to experience and conscientiousness, were positively related to their critical thinking abilities. It can be a challenge to master it. Moreover, a study found that students raised in a system that rewards obedience, silence, and acceptance are less likely to develop critical thinking skills. The students in this study were found to be less likely to ask critical questions and challenge authority, which may hinder their ability to develop critical thinking skills.

In 2010, Cosgrove carried out a qualitative investigation entitled "Addressing Critical Thinking Challenges in Authentic Educational Settings: Implications for Higher Education" within the setting of the University of Cambridge. This study aimed to uncover the obstacles educators encounter while teaching critical thinking in educational environments. The research encompassed interviews with 38 individuals, comprising leaders, professors, staff, and students, in addition to 38 observations conducted at the University of Cambridge. Utilizing a grounded theory methodology, Cosgrove (2010) analyzed the gathered data to discern prevalent themes and patterns.

The study found several challenges to teaching critical thinking, including a lack of understanding of what critical thinking means, a lack of training for teachers on how to teach critical thinking, and a lack of support from the administration for critical thinking instruction. Additionally, the study found that critical thinking instruction is often de-prioritized in favor of other subjects or skills. Students may not see the immediate value of critical thinking in their academic or professional lives. The study highlights the importance of addressing these challenges and providing more support and resources for lecturers to teach critical thinking skills in higher education effectively.

In 2012, Kowino et al. (2012) undertook a study to investigate the obstacles that teachers confront while imparting critical thinking abilities within Kenyan classrooms. The research encompassed the participation of 16 teachers and 343 students from 16 schools across Kenya. Data was collected through a combination of visual observations, rating scales, in-depth interviews, and document analysis. The results unveiled a variety of significant challenges encountered by teachers when teaching critical thinking skills. These challenges encompassed inadequate training and resources, limited support from the school administration, an educational emphasis on memorization and test readiness, and time constraints caused by overloaded curricula. Additionally, the study highlighted that learners often lacked the motivation to engage in critical thinking and were accustomed to passive learning methodologies.

Meanwhile, the study highlights the need for interventions to address the challenges teachers face in teaching critical thinking skills in schools in Kenya. The study recommends that teacher training programs equip teachers with the skills and knowledge necessary to teach critical thinking effectively and that the curriculum shift towards more learner-centered and critical thinking-oriented approaches to teaching and learning.

In the context of Indonesia, Anggraeny (2022) pointed out that shaping students' habits posed the greatest hurdle when it came to promoting critical thinking. Additionally, the prior learning experiences of students were also identified as a challenge in fostering critical thinking. Alongside this, students highlighted a lack of learning motivation, language proficiency, and resources, mirroring challenges echoed by the teachers.

In conclusion, global strategies for fostering critical thinking in higher education have brought to light the challenges lecturers face in teaching this skill. Researchers have identified obstacles related to cultural differences, language proficiency, personality traits, a lack of training and support, student motivation, and resource limitations. To effectively promote critical thinking, educators must consider these challenges and adopt learner-centered approaches tailored to diverse cultural backgrounds and student needs.

2.2.5 Critical Thinking in Religious Institutions

After recognizing the significance of critical thinking approaches and delving into lecturers' perspectives and the challenges they encounter, this study specifically investigates the case of religious institutions. In this context, religious institutions refer to organizations that are affiliated with a specific religion, which in this study's case is Islam, a belief system, or a religious group, including certain universities and colleges.

In religious belief, S. Anderson (2017) focused on how critical thinking is designed in a religious institution. The author's findings frequently emphasize that popular scripture terms like questioning, pondering, reasoning and asking to denote active, skillful, and disciplined thinking. Unquestionably, the idea outlines how critical thinking concerning intellectual discipline fits in well with the goals of the church's educational program. Shannon (2020) even gave an example and discussed the concept, including the characteristics of exaggerated critical thinking and why religion is always

associated with doctrine. This argument was validated by Hepner (2015), who agreed that there is an erosion of critical thinking development in students.

Furthermore, Hepner (2015) shows pessimism toward critical thinking in religion. Constantly, he highlighted in his research that general education programs including religion education programs at colleges and institutions across the country are not producing critical thinking abilities. He emphasizes that students who are exposed to liberal education will naturally develop their critical thinking abilities when teachers and students engage in specific discussions in a designated setting.

Along with the discussion on the relationship between religion and critical thinking, Altinyelken (2021) described how Islamic institutions believe in the existence of critical thinking. Even though the study looked from the perspective of Muslims in the Netherlands, the findings stated that students were experiencing inadequate possibilities for dialogues, questions, debates, or challenges to the authority of religious instructors or Islamic scriptures and that emphasis on fostering critical thinking. It is clear from the study that the traditional pedagogical method, discouraging attitudes of instructors/peers, barriers of language, young students, and perceived lack of awareness for critical examination are the fundamental problems. Where they discuss the development of the critical thinking idea in Islamic education. On the other hand, Wills (2019) emphasizes that critical thinking can inspire children's spiritual development. However, based on real-world examples, the author explains that it is argued that children's spiritual growth can incorporate skepticism to shape changes in the lives of those who learn logically and foster their capacity for critical thought.

Moreover, Alkharusi et al. (2014) assert that critical thinking finds practical application within Islamic institutions at Sultan Qaboos University in Oman. The authors delve into diverse conceptions of critical thinking and explore predictive models

concerning critical thinking at the university level, taking into account cognitive, motivational, background, and demographic factors. Nonetheless, the construction of these models is contingent upon the utilization of quantitative research methods, which researchers and educators can readily employ.

In the context of Islamic higher education in Indonesia, various studies have been conducted. For instance, there is research on the development of the Discovery-Based Unity of Sciences (DBUS) model aimed at enhancing students' critical thinking skills and religious convictions in state Islamic universities in Semarang and Yogyakarta (Husna, 2019). Another study explores the difficulties teachers often encounter when evaluating their students' critical thinking abilities in Islamic religious education (Hakim & Zulkifli, 2021). Similarly, a study examines the frequency of critical thinking in reading among students at Ar-Raniry State Islamic University, using techniques like interpretation, analysis, evaluation, inference, explanation, and self-regulation (Muslem et al., 2019). These studies collectively underscore the importance of prioritizing critical thinking skills in Indonesia. This emphasis is crucial since the research consistently indicates that critical thinking remains one of the most formidable competencies for Indonesian students.

In sum, this study focused on critical thinking approaches and challenges in religious institutions, particularly within Islamic religious education. Researchers (Anderson, 2017; Shannon, 2020; Hepner, 2015; Altinyelken, 2021; Wills, 2019; Alkharusi et al., 2014; Husna, 2019; Hakim & Zulkifli, 2021; Muslem et al., 2019) emphasized the importance of fostering critical thinking skills despite barriers like discouraging attitudes, language limitations, and a lack of awareness. Promoting critical thinking in Islamic higher education settings is essential, as it enhances intellectual growth and empowers students' capacity for reasoned thought.

2.3 Research Gap

Based on the preliminary studies, there is still a need for further investigation to bridge the gap and examine how lecturers perceive critical thinking, their instructional approaches, and the challenges they encounter when teaching students with a focus on critical thinking skills. There is also a lack of research that discusses perceptions, teaching approaches, and challenges associated with Islamic higher education in Indonesia. This research is significant because Indonesia has the largest Muslim population in Indonesia. This is especially relevant in Islamic religious higher education in Indonesia or *Perguruan Tinggi Keagamaan Islam Negeri (PTKIN)*.

Emphasizing the lecturers' perception is crucial to achieving the intended learning outcomes in cultivating critical thinking, aligning with the goals of Islamic education. Furthermore, multiple case studies conducted in Indonesia suggest that there is still room for improvement in students' understanding, interpretation, and development of critical thinking skills. Given the pressing nature of this issue, this study focuses on exploring how lecturers in Islamic religious institutions perceive and employ critical thinking approaches, as well as the challenges they encounter.

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents an overview of research methodology, encompassing various aspects such as research approach, design, research location, subjects, and timeframe. It delves into data collection and analysis techniques as well as the research's credibility. The chapter also discusses the researcher's position and ethical considerations. All of these elements are thoroughly justified by referring to a variety of references on research methodology. The purpose of this discussion is to provide insight into the technical aspects of the research process.

3.1 Research Methodology

This research utilizes qualitative research methods. In addition, Patton (2015) emphasizes that the objective of qualitative methods is to explore problems extensively. Therefore, qualitative researchers are less likely to be limited by predefined analytical categories, leading to deeper discussions and more comprehensive explorations. The use of this method is accessible to comprehend the issue under study from a variety of perspectives. This study utilizes qualitative research methods since it incorporates various knowledge contributions, including "illumination of meaning" (Patton, 2014). Hence, this study attempts to comprehend the meaning of critical thinking in how it is used in Islamic higher education institutions. In other words, qualitative research can also help us understand the importance individuals or groups ascribe to social or human issues (Creswell, 2018).

With this understanding, it becomes clear that the topic of this study necessitates a different strategy for examining an actual case. For this reason, the study will focus on actual Islamic religious institutions in Indonesia as a specific case. The study argues that interpretivism is the best approach since it aims to comprehend and interpret lecturers'

perceptions of critical thinking. This conception supports the construction of a complete picture of the phenomenon as a whole (Hudson & Ozanne, 1988). This study utilized a case study to gain a deeper understanding of how critical thinking is applied, drawing on the tradition of qualitative inquiry. A case study is defined as providing more in-depth details and unique perspectives on a topic (Thomas, 2011).

Furthermore, the component supporting this case study is what provides significance to this study's use of a qualitative approach. According to Graebner et al. (2012), this strategy is more adaptable, exploratory, and able to elicit participant interpretation and experience. The process can also lead to the emergence of new data, giving the gathered data a deeper perspective and opening new possibilities for performance. In the meantime, Strauss and Corbin (1998) describe some of the methodology's historical popularity among researchers. As a result, this study used a qualitative technique to apply to both academic and non-academic audiences that implement change and bring visions to reality. Simons (2009) praised this methodology for its ability to investigate singular, specific events. This case study was designed to better comprehend one example in a constrained situation (Baxter & Jack, 2008).

This research delves into a case study of teaching and learning within an Islamic religious education classroom. The primary objective is to investigate how lecturers in Islamic higher education institutions perceive critical thinking and their strategies for fostering critical thinking skills among students. The study also aims to identify and analyze the challenges they encounter in this process. Consequently, the focus of this investigation lies in examining lecturers' perceptions and approaches to nurturing critical thinking in the context of Indonesian Islamic religious higher education institutions, where certain limitations may be present.

3.2 Research the Place, Subjects, and the Time of the Research

3.2.1 Selection of the Place

This research focuses on one case of state Islamic Higher Education in Indonesia. The institution recognized the importance of a curriculum designed to promote the renewal of Islamic thought in Indonesia. Besides that, this university aims to grow students in rational thinking, analytical-critical thinking, ethical behavior, problem-solving orientation, and farsightedness.

This study focuses explicitly on lecturers affiliated with the Islamic Religious Education study program within the Tarbiyah and Lecturer Training Faculty (FITK). The selection of this faculty is driven by its specialized focus on the Islamic Education study program, which aims to produce competent professionals in Islamic education and teaching while emphasizing Islamic values. FITK is highly regarded for its well-designed curriculum, effective teaching strategies, and experienced lecturers. Consequently, the lecturers of the Islamic Religious Education program are particularly interested in exploring the extent to which they can develop approaches and competencies that foster critical thinking in students while simultaneously upholding Islamic values.

3.2.2 Selection of Participants

Six permanent lecturers from the Islamic Religious Education study program within the Tarbiyah and Lecturer Training Faculty (FITK) were carefully chosen as participants to provide valuable insights and enhance the research findings. The selection criteria focused on their extensive teaching experience, with a minimum of two years of teaching, and their specialization in teaching students across six semesters in four concentration courses: Quran and Hadith, Aqidah, Fiqh, and the History of Islam. These lecturers are also considered permanent faculty members.

Cohen et al.'s (2007) concept of purposeful participation was employed to ensure a comprehensive and diverse range of perspectives, emphasizing the involvement of knowledgeable individuals. Thus, lecturers from various fields were selected to provide thorough, representative, and varied information. The selection process took into account participants with diverse years of teaching experience, an equal representation of both male and female individuals, and a broad range of regional and educational backgrounds. Demographic data of the lecturer participant was obtained.

The study includes data from six participants, comprising three males and three females, who are educators in the fourth semester of the Islamic religious education studies program. These respondents are permanent lecturers at the institution and hold a minimum of five years of teaching experience. To ensure confidentiality, pseudonyms have been employed to protect their identities. The participants' varied teaching specializations have resulted in a wide spectrum of findings, which will be expounded upon in Chapter 4.

3.3 Data Collection

In this study, I used four different data collection methods to analyze the perceptions and approaches utilized by lecturers in teaching critical thinking skills in Islamic higher education in Indonesia, as well as their challenges. These methods include Semi-structured interviews, classroom observations, post-observation interviews, and documentation such as the curriculum, the lecturer's lesson plan, and student assignments.

Table 3.1
Types of Data Collection

Research Question	Data Collection
How do lecturers in religious higher education institutions perceive critical thinking?	Lecturers' interviews

How do lecturers in religious higher education approach critical thinking skills in the teaching process?	Lecturers' interviews Observation Documentation
What challenges do lecturers face when fostering students' critical thinking in religious higher education institutions?	Lecturers' interviews Observation

3.3.1 *Semi-structured Interviews*

In this study, semi-structured interviews were employed as a research method, involving dialogues between researchers and participants that revolved around topics relevant to the research matter (DeMarrais, 2004). As noted by Cohen et al. (2007), this approach allows flexibility to adjust research questions, alter their sequence, and modify phrasing according to the interviewee's context. These semi-structured interviews were conducted before classroom observations to delve into lecturers' viewpoints regarding critical thinking. The semi-structured interview procedure used in this study is in-person rather than via phone or email. The direct interaction between the interviewer and the participant will lead to richer data. Hence this interview approach was chosen.

Open-ended questions were used to collect data for this study. Although compared to closed questions, open-ended questions are more challenging and analyzed, especially for me as a researcher. However, this open-minded inquiry is more adaptable and enables researchers to delve deeper into data. Additionally, open-ended questions may result in unexpected or unanticipated responses among researchers (Robson, 2002). So that it can be more adaptable, I have prepared a list of questions for this case, along with the option to vary the order or the wording.

As an example of the type of questions used to identify the most critical topic about lecturers' perspectives, consider the following: How can you comprehend critical thinking? Moreover, could you elaborate on those concepts with examples of what

happens during the classroom teaching and learning process? What else shapes your perception of critical thinking? Further, the following are some examples of the structure of questions to address research questions related to the lecturer's critical thinking approach: How do you conduct in-class instruction? Moreover, how much have you tried to encourage critical thinking in your students while teaching? An explanation of the interview instrument can be found in Appendix 2. The lecturer interview instrument was modified from a dissertation by Eslami, (2016) and Parlindungan (2016) to meet this study's objectives.

3.3.2 Observation

In this observation process, I acted as a passive observer. I only observed the teaching and learning process in class without getting involved, so the course could generally proceed without my intervention. The observations started at the beginning of May 2023, a full month or four weeks, and were carried out in class for 120 minutes, equivalent to 3 credits, once a week for each class. As I observed four different courses, including the Quran and Hadith, Aqidah, Fiqih, and History of Islam concentration classes, I observed these classes three times in other weeks, so my total number of observations was 12. Aside from that, as long as there are compulsory group work activities, I sit at the back of the class during class interactions, put myself in small groups when they have group tasks, and walk about observing other group processes.

In addition, I carried out this observation activity after I had a semi-structured interview with the lecturer. In this instance, the class observation I explored is observing how the lecturer uses their approach in applying principles, structure, group composition, group interaction, and assignments carried out for four weeks, in each case, observed four times throughout the study. Every observation is captured on video. Videos offer information on the practice of and examples of critical thinking strategies.

I began the observation process by being more open so that I may identify recurring patterns in interaction and behavior. During the observation process, I paid close attention to the environment that occurs in the classroom, including student-lecturer interactions, how students engage, and their interactions with the assignments given by the lecturer. I have broadened my observations to become more focused and sensitive to the context that occurs after specific patterns have been found and explained through reflection. I started by considering how a lecturer might help students develop critical thinking skills by providing assignments and instructions. According to Appendix 3, the observation instrument is an adaptation of that used in the dissertation (Mkomele, 2015), which has been adapted following the purpose of this study.

3.3.3 Documentation

This study used several documents, including curriculum, teaching and learning resources provided by the lecturer or lecturer syllabus, and samples of assignments given from lecturer to student. Analysis of documents has significant potential for revealing participant values and opinions (Marshall & Rossman, 2016). The methods and instruments lecturers utilize during the teaching and learning process can display information on how they can help students build their critical thinking ability. Additionally, the tasks assigned by the lecturer gave me a better picture of how well the lecturer challenges students' critical thinking.

The data collection process in this study also included the curriculum in the Islamic Religious Education program study, the lecturer's syllabus, and student assignments, which were also used in the documentation data collection process. The following is a description of the curriculum's learning outcomes:

Knowledge: Understand the theoretical concepts of education in general, Islamic Religious Education in particular, concepts and theories of pedagogy, teacher professionalism, personality, social, and Islamic education; Knowledge of educational research concepts and theories; Knowledge of integrating education, chemistry, and religion;

Skills: Knowledge of Islamic education and teaching in educational institutions, especially at the senior secondary level (Madrasah Aliyah and or Senior High School) and elementary and junior secondary levels (Madrasah Tsanawiyah and Ibtidaiyah and or Junior and Elementary Schools);

Application: An ability to take responsibility for a career related to Islamic Religious Education and further study in this field;

Analysis: Ability to write, present, analyze data, and take various alternative solutions independently and in groups using information technology:

Community Service: The ability to adapt to different and rapidly changing socio-economic environments while building awareness of Islamic Religious Education.

3.4 Data Analysis

Qualitative data for the study were gathered through interviews, observations, and document analysis and subsequently examined using thematic analysis methods. As explained by Boyatzis (1998), thematic analysis is a technique employed to discover, examine, and present recurring patterns or themes inherent in the data. This method also entails interpreting different facets of the research subject, contributing to a holistic grasp of the topic.

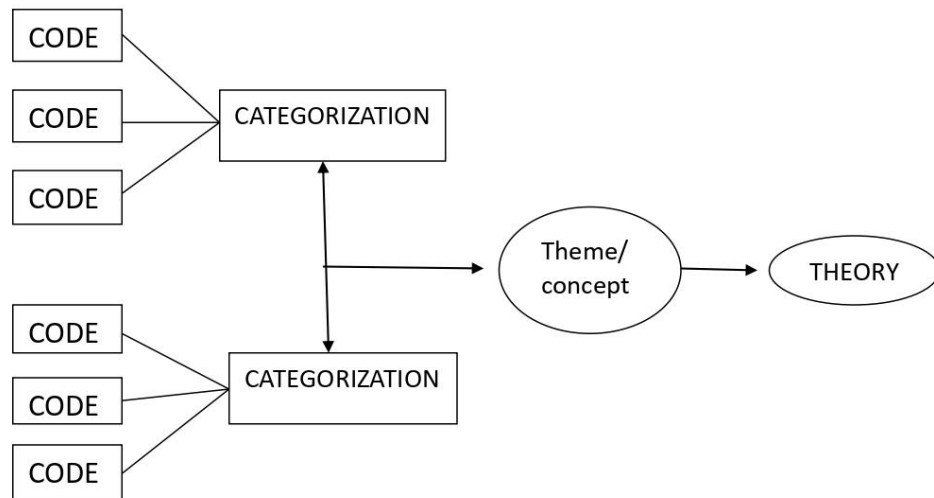
Thematic analysis, as described by Daly, Kellehear, and Gliksman (Fereday & Cochane, 2006), involves identifying and developing significant themes that emerge to create a depiction of the phenomenon under investigation. In this research, the researchers adopted a deductive or theoretical thematic analysis approach (Boyatzis, 1998), meaning they predetermined the theory or analysis to be applied in the field before conducting the study. This format of thematic analysis provides an overview of the overall data while offering a more detailed and in-depth analysis (Boyatzis, 1998).

The thematic analysis method applied in this study is based on the coding manual for qualitative researchers, as presented by Saldana (2009). The study employed deduction, induction, and verification techniques in analyzing qualitative data. When interpreting the qualitative data, I utilized the theories mentioned in Chapter 2 as a reference, demonstrating a deductive thinking approach. Conversely, when categorizing the data to identify specific categories, an inductive thinking approach was applied. Throughout the research process, the researcher utilized both inductive and deductive thinking approaches interchangeably.

As a result, the thematic analysis carried out in this study concentrates on investigating research inquiries centered around lecturers' viewpoints regarding critical thinking. Furthermore, it delves into the methods they employ and the obstacles they face while fostering students' critical thinking abilities.

The steps in analyzing research results, as outlined by Saldana (2009, p. 12), are presented in the figure below:

Figure 3.2
Code to Theory for Qualitative Inquiry



In this thesis, the coding process was conducted based on Saldana's (2009) manual coding theory. For an example of the coding process, please see the sample coding provided in Appendix 6. Following is the coding process.

1. *Preparing and conducting coding.* The initial stage of data analysis involves coding. As defined by Charmaz (2006, p. 43), coding refers to the process of assigning labels to data segments, which simultaneously categorize, summarize, and provide explanations for each piece of data.
2. *Categorization.* The code obtained was organized into categories to facilitate the comparison of findings within each category. These comparative findings are then utilized to develop theoretical concepts. As mentioned by Richards and Morse (Saldana, 2009, p. 11), categorization is a method of organizing diverse data, arranging them, and sorting elements that represent the data.
3. *From coding and categorizing to identifying themes and developing theories.* By employing this categorization, researchers can demonstrate the systematic connections between themes and concepts about the development of theory (Corbin & Strauss, Saldana, 2009, p. 11).

Building upon this groundwork, thematic analysis is a vital method for identifying underlying themes within a document and focusing on a specific topic. However, it's important to note that there is no consensus on the exact definition or methodology of thematic analysis. In this approach, emergent themes form the foundation for analyzing qualitative data (Fereday & Muir-Cochrane, 2006). A theme in thematic analysis refers to something significant within a dataset that relates to the research question and reflects a patterned response or meaning (Braun & Clarke, 2006). By organizing the initial codes and applying thematic analysis, I can gain valuable insights into the data's thematic patterns and uncover meaningful connections. This process allows for a comprehensive exploration of the document's content and contributes to a deeper understanding of the research topic.

3.5 Trustworthiness

Validity and reliability are essential in qualitative research because this methodology needs to generate persuasive arguments and follow reasonable logic. Bloor and Kayu (2006) defined reliability as the degree to which study findings can be replicated in various ways while coming to the same conclusion. Additionally, internal validity describes the degree to which the researcher's conclusions accurately characterize the data collected. As a result, validity and reliability can be described as beliefs among qualitative researchers who address the credibility, transferability, dependability, and confirmation of their studies and conclusions (Gay et al., 2012, p. 392); they can establish confidence in their studies. In this instance, I employed a combination of techniques, including member-checking, peer debriefing, negative case analysis, data triangulation, and journal entries, to enhance the credibility and reliability of the data during the interpretation phase (Lincoln & Guba, 1985). Since my study was conducted under the interpretive paradigm and embraced a social construction perspective of reality, I have

utilized various methods to bolster the credibility and dependability of my findings. The following steps can reinforce the trustworthiness of my research:

1. The lecturer participant was invited to confirm the findings during member checks. In this regard, they may correct any misconceptions regarding significant findings irrelevant to their practice or beliefs. Each lecturer participant was presented with parts of the transcripts at different times and asked if there were anything they would like clarified or deleted
2. An effective triangulation strategy was employed to collect data through interviews, observation, and class documentation (Bryman, 2015). This provided a rigorous basis for validating the conceptual framework developed to analyze critical thinking. Using a conceptual framework to analyze multiple data sources, documents, observations, and interviews with lecturers enhanced the study's credibility.
3. To enhance credibility further, I sought input from my supervisors, esteemed experts in the field, who reviewed the entirety of my research process and posed a series of inquiries. I incorporated these questions into our discussions and integrated them as annotations in my writing. This step clarified various aspects of the research, rendering it more accessible to individuals beyond the research team.
4. To ensure the credibility of this research, I took steps to ensure that the lecturers were comfortable sharing pertinent information during the interviews. In each interview session, I made sure to clearly outline the interview's purpose and how the gathered data would be utilized. I supplied a confidentiality letter and obtained their consent to record their voices. Moreover, I endeavored to create an amicable rapport, aiming to foster effective communication and shared comprehension. By

employing these strategies, I bolstered the dependability of the collected data for this study, guaranteeing that the interviewees could offer a comprehensive insight into their perspectives on critical thinking.

3.6 Ethical Consideration

This study has obtained approval from the Faculty of Education at the International Islamic University of Indonesia. This is indicated in the official letter with the reference number 60/Dek.FIP/UIII/UM.02/03/2023. To obtain data, I had discussions with the head of the Islamic religious education study program, informing them of my research plan and requesting permission to collect data from lecturers who teach undergraduate students in semester 6. It took approximately one week for the administrative process to be completed. Upon receiving permission, I collected the names and data of respondents who agreed to be interviewed. I also obtained the names and data of the classes that consented to be observed.

In the following weeks, I sent a letter to all the lecturers participating in the research, describing the purpose and nature of the study and requesting their voluntary participation. As lecturers were not required to participate in the research, their participation was voluntary and would not negatively affect their performance.

This study maintains confidentiality by not disclosing identifiable information about the respondents, and the findings would not affect how they teach and learn in the classroom. Data collection audio and video recordings are securely stored in locked facilities, with limited access restricted to researchers. The recordings will be used only for analysis and will not be disseminated without the respondents' consent. In the event of data publication in academic journals or conference presentations, participant and school identification details will be kept strictly confidential, with the respondent's name being used as a pseudonym.

CHAPTER IV
RESULT AND DISCUSSION

4.1 Research Result

This study's main objective is to explore how lecturers at Islamic higher education perceive critical thinking. This allows them to determine what approaches lecturers employ when fostering critical thinking within their students and the challenges they face. The following three research questions are relevant to achieving this objective: 1. How do lecturers in religious higher education institutions perceive critical thinking? 2. How do lecturers in religious higher education approach critical thinking skills in teaching? 3. What challenges do lecturers face when fostering students' critical thinking in religious higher education institutions? These questions are addressed sequentially as follows.

Table 4.1
Demographic Data of Research Respondents

Respondent	Sex	Teaching duration	Teaching specializations
Fatimah	Female	20 years	Hadist Ahkam
Asep	Male	15 years	<i>Tasawuf</i>
Anisa	Female	6 years	Islamic History
Budi	Male	10 years	Fiqh
Bunga	Female	8 years	Islamic Thinking
Ahmad	Male	7 years	Aqidah and Reading <i>Tasawuf</i> Nash

Before discussing the findings of the study, Table 4.1 presents the profiles of six respondents, comprising three males and three females, who participated in the sixth semester of the Islamic religious studies program. All respondents hold permanent lecturer positions at the institute and boast a minimum of five years of teaching

experience. The data collection methodology involved semi-structured interviews, classroom observations, post-observation interviews, and the examination of pertinent documentation, such as the curriculum, lecturer's lesson plans, and student assignments. The diverse nature of their teaching specializations has led to a wide array of findings in this research, which will be comprehensively discussed in the ensuing sections.

4.1.1 Research Question #1 How do lecturers in religious higher education institutions perceive critical thinking?

In this section, the lecturer's perspective is reported by exploring how critical thinking is defined and their opinions regarding how significant it is to apply critical thinking in students. Second, ask the lecturer's perspective concerning students' ability to think critically during learning in the classroom. To gather information, interviews were conducted with six lecturers. Further, students responded to the question about data trustworthiness and captured their viewpoints on critical thinking in Islamic higher education.

a. Critical Thinking as a Skill

Critical thinking is a skill that can be used while addressing problems or making decisions because it starts with problem identification and ends with a validity and reliability analysis of assumptions. Critical thinking involves asking questions and evaluating ideas, arguments, or situations. This implies a mindset beyond taking things at face value and encourages deeper analysis. There is also an indication about critical thinking that accepting something without question may only sometimes take; the respondent argues that critical thinking involves identifying and pointing out deficiencies or problems. In an interview, Fatimah said,

“The concept of thinking critically means being able to be critical. You can say that accepting something is not as easy as you would like; you can see something wrong, so you dare to express your concerns. Hence, constructive criticism is

required—not criticism based solely on emotion but rather criticism that is constructive and aimed at promoting the welfare of all”.

(Fatimah Interview, 25/05/23)

Fatimah emphasized the importance of providing critical thinking also, including the skill of constructive criticism. Criticism should not be based solely on emotion but should aim to improve the welfare of all parties involved. A constructive criticism approach identifies areas that can be enhanced while remaining respectful and helpful. These statements support the idea that critical thinking involves expressing concern and providing constructive criticism. All parties involved are encouraged to take a balanced approach considering their well-being and advancement.

Aside from that, Asep provided another perspective on the importance of critical thinking for students, stating that,

“There is no doubt that critical thinking is important. Students need to think critically in the university, such as by combining lectures with seminars to write papers and give presentations so that activities are centered on the students. They can be more active and critical in their learning”.

(Asep Interview, 02/05/23)

The above statement highlights the importance of critical thinking. The report acknowledges the significance of critical thinking. It suggests critical thinking is crucial for students, particularly in a university setting. Asep implies that critical thinking includes a skill that enables students to engage in higher-level thinking, problem-solving, and analysis. This skill can be reached through the Integration of lectures and seminars to foster critical thinking. Critical thinking helps students go beyond the passive absorption of information and encourages them to evaluate concepts, form opinions, and engage in deeper learning. This approach enables a more interactive and participatory learning experience for students. By combining lectures with seminars, students can engage in discussions, exchange ideas, and apply their knowledge through activities like writing papers and giving presentations. as well as student-centered activities.

Asep also highlighted how student-centered learning could promote critical thinking. Structuring activities around students suggests they are more likely to take an active role in their education. This active engagement allows students to develop their analytical and critical thinking skills as they are encouraged to question, evaluate, and express their thoughts. On the other hand, enhanced learning through critical thinking will also imply that when students are actively involved in their education and are encouraged to think critically, their learning experience is improved. Likewise, Budi pointed out that critical thinking involves the same skills as evaluating and being critical. Budi stated that,

"Critical thinking is important and in demand for students. By thinking critically and evaluating the context, students can follow lectures properly. For example, if the subjects taken are fiqh, worship, and *muamalah*, students must understand the concepts taught before well."

(Budi Interview, 17/05/23)

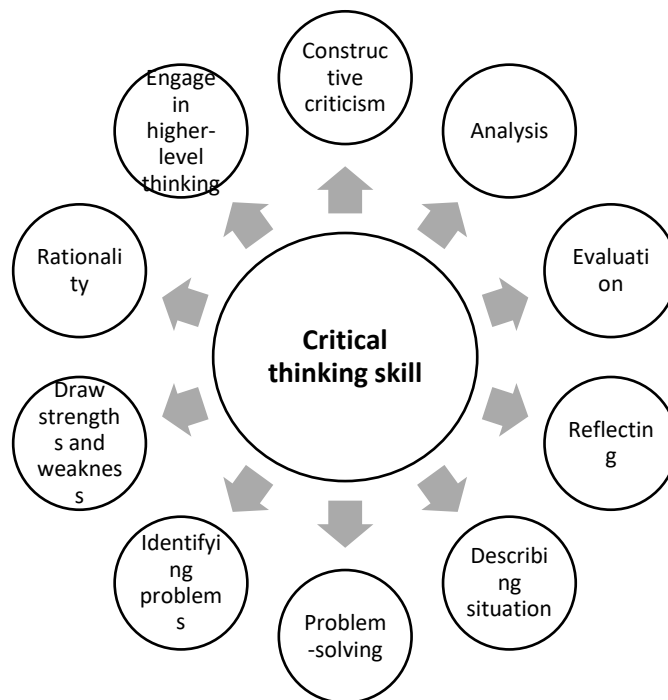
Budi's statement above highlights the significance of critical thinking for students and the increasing demand for it. Thinking critically and evaluating the context is essential for students to comprehend lectures effectively. Additionally, it underscores the importance of critical thinking in understanding specific subjects and building upon prior knowledge. Overall, critical thinking plays a pivotal role in enriching students' learning experiences and promoting academic achievement.

Together, Fatimah, Asep, and Budi highlighted that critical thinking is a set of skills that students can use to analyze, evaluate, describe, engage in higher-level thinking, and solve problems.

As shown in Figure 4.1, the key elements of critical thinking mentioned by the lecturer are summarized. This figure illustrates the extent to which lecturers in Islamic higher education use different forms of critical thinking.

Figure 4.1

The Element of Critical Thinking Skill Evident from The Lecturer's Perceptive



In Figure 4.1, it is evident that lecturers perceive a few elements of critical thinking skills and agree that elements enable students to approach learning and problem-solving more thoughtfully and comprehensively. Students can enhance their ability to have constructive criticism, analyze information, evaluate and reflect arguments, describe concepts clearly, able to draw strengths and weaknesses, can be rationality, engage in higher-level thinking, and solve problems effectively by developing these skills.

b. Critical Thinking as a Disposition

In addition to being a skill, critical thinking can also be defined as a disposition. Critical thinking disposition encompasses a person's inherent or learned inclinations, attitudes, and attributes that determine their readiness and capacity for critical thinking. Confident respondents view critical thinking as involving students' conduct and tendency to be receptive to various contexts, which includes embracing skepticism and curiosity. Budi explained that,

“A fundamental characteristic of critical thinking is a habit of thinking and a desire to relate everything to current events, thus giving them a more open and curious mind.”

(Budi Interview, 15/05/23)

Accordingly, the statement emphasizes critical thinking, focusing on the habit of thinking, connecting information to current events, and cultivating an open and curious mind. Having these characteristics contributes to developing and enhancing critical thinking skills, allowing individuals to approach the world thoughtfully and analytically. This respondent suggests that critical thinking is a process for students to become more knowledgeable and satisfy their curiosity.

Similarly, Anisa highlighted the following real-world connections:

“Students also make analogies with current events. For example, students explained that during the heyday of the Abassiyah, even though the caliph's children could not study and live in luxury, they could still survive. Sometimes, their analogy was based on the current viral incident”.

(Anisa Interview, 10/05/23)

Anisa's statement above illustrates how students can draw parallels between historical events and contemporary issues. Analogies enable students to relate past circumstances to current events, potentially gaining a deeper understanding or establishing connections between different periods. The example of the caliph's children surviving without educational opportunities or luxurious lifestyles during the Abassiyah era suggests that students perceive resilience and adaptability as valuable traits that are relevant today. Essentially, Anisa's perspective emphasizes students' critical thinking and ability to apply historical knowledge to current events. In addition, it highlights their ability to analyze and make connections between different contexts. Anisa also added the statement below,

“Critical thinking is critical in our lives. Critical thinking helps us objectively analyze information, question existing beliefs, and understand the world more deeply. By thinking critically, we can recognize valid arguments, identify bias or manipulation of information, and make better and more rational decisions.”

(Anisa Interview, 10/05/23)

On the other hand, Fatimah pointed out that critical thinking should remain dynamic, energized, and notary. She further explained that this involves being willing to express doubts and question assumptions. As she said,

"It is important to ensure that critical thinking is not stale or hampered. In a condition called "critical thinking," one is not only silent and restrained and expresses doubts, problems, or ideas that arise. Especially in youth or as a student, fresh ideas often overflow. Therefore, this individual needs active critical thinking to direct and channel these ideas, rather than just drowning them in silence."

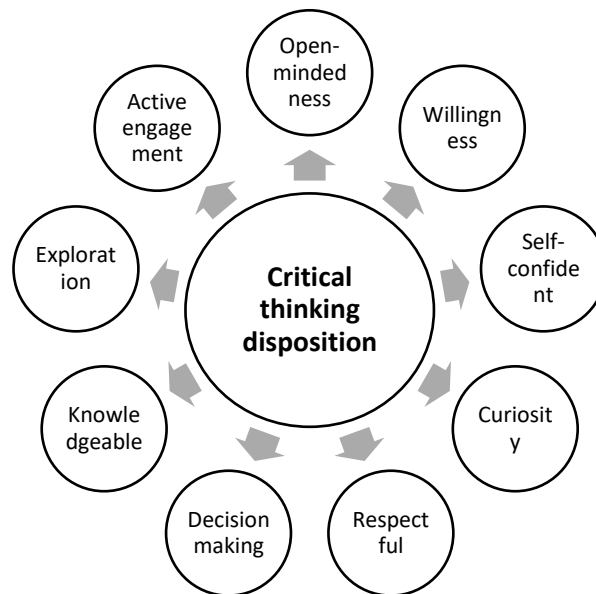
(Fatimah Interview, 24/05/23)

From the above statement, Fatimah emphasizes the importance of active expression, avoiding stagnation, channeling fresh ideas, encouraging active engagement, and embracing a questioning mindset. She believes continuous growth, exploration, and intellectual curiosity are essential components of critical thinking.

Based on the aforementioned findings regarding how lecturers perceive critical thinking as a disposition, it is evident from Figure 4.2 below that the specific elements comprising the lecturer's perception of critical thinking as a disposition are depicted.

Figure 4.2

The Element of Critical Thinking Disposition Evident from The Lecturer's Perceptive



Together, these elements constitute the lecturer's perception of critical thinking disposition. They represent the qualities and attitudes that contribute to critical thinking's effectiveness. In cultivating these elements, individuals can develop a strong essential disposition of thinking, which enables them to approach problems, situations, and information critically.

c. Critical Thinking as a Set of Dispositions and Skills

The two perceptions described above indicate that lecturers have differing perceptions and a similar concept to Ennis. On the other hand, Ennis (2011) gives more definitions of critical thinking as a disposition and skill concept. This framework highlights the dispositions, attitudes, and abilities necessary for practicing critical thinking. Budi also describes that critical thinking is a set of skills and dispositions.

“Students need to think critically. Otherwise, students will not be able to connect during lectures. The ability to think critically is not only a matter of being able to analyze but also of wanting to understand something. As an example, since I teach fiqh and *muamalah*, it is essential that my students first understand the material; only then can they be critical; the basics must be understood first”.

(Budi Interview, 16/05/2023)

Budi underscores the significance of critical thinking for students in a broader sense. Through the practice of critical thinking, students can establish connections with their lecturers, grasp the material, and delve into meaningful analysis. A solid grasp of the fundamentals is crucial in fostering practical critical thinking. Hence, the statement highlights the importance of understanding the basics. Lecturers play a vital role in enabling students to think critically and actively engage in their learning journey by cultivating critical thinking skills and ensuring a solid comprehension of fundamental concepts. Ahmad also mentioned critical thinking as a skill set derived from student awareness. During the interview, he stated that,

“Awareness of critical thinking is the key to progress. We can learn how to think critically by reading the text carefully. Therefore, critical thinking is a skill that students develop through their awareness of being active and asking questions.”

(Ahmad Interview, 07/05/2023)

Ahmad emphasizes awareness as a key to progress. He also emphasizes learning critical thinking through careful reading, active engagement and questioning, and developing critical thinking skills. He focuses on the importance of thinking critically, actively applying it to texts, and continuously improving one's critical thinking ability through active inquiry and analysis.

d. Critical Thinking Intertwined with Islamic Religious Education

In addition to the lecturer's perceptions of critical thinking as a skill and disposition, this study also discovered various insights and examples of how lecturers perceive critical thinking about their respective subjects. Therefore, this section will explore how lecturers connect critical thinking with their specific subjects, categorized into four perspectives: critical thinking in the History of Islam, Fiqh, Hadith Ahkam, and Aqidah.

Critical Thinking in History of Islam Perspective. The respondent acknowledges that Islamic culture and Islamic Education do not impede critical thinking but encourage Muslims to view the world from a broad perspective. In an interview, Anisa stated that,

“Despite Islamic culture, it is not hampered by a lack of thinking. Even Muslims are expected to have broad perspectives. During the Islamic period, many scientists were born because of intensive thinking activities. I place a high priority on the discussion in my class when studying Islamic history. Students are assigned to write papers on topics such as Islam during the Abbasiyah period. Afterward, they discussed, and I allowed them to express their views.”

(Anisa Interview, 10/05/23)

A significant feature of the statement is its emphasis on the critical contributions made by scientists during the Islamic period. The report emphasizes the importance of class discussions when teaching Islamic history. Anisa affirms that Islamic culture does not hinder thinking but instead promotes it. In the Islamic context, Muslims are expected to have broad perspectives, indicating the importance of critical thinking. It also acknowledges the positive relationship between Islamic education and critical thinking. While still discussing the history of Islam view, Anisa stated,

“In Islam, rationalization is essential. The Abassiyah era witnessed a significant translation movement and the development of Islamic science. Islam spread through preaching, including translating and incorporating Greek philosophy while prioritizing Islamic teachings.”

(Anisa Interview, 10/05/23)

Anisa gives more perspective on the concept of critical thinking in Islam, highlighting the importance of rationalizing in Islam, suggesting that blind adherence without critical thinking is not encouraged. It implies that Islam encourages believers to engage in thoughtful analysis and reasoning when it comes to understanding and following its teachings. as well as the respondent's explanation of thought and concrete examples, which suggests that within Islam, there is room for diverse opinions and the need to think in terms of concrete examples. This implies that Islam encompasses a range

of perspectives and encourages believers to apply critical thinking to real-life situations and contexts.

For instance, Anisa provides examples of the translation movement and Islamic science during the Abassiyah era. The translation movement, which played a significant role in the development of Islamic science, facilitated the exchange of knowledge between diverse cultures and contributed to intellectual growth within the Islamic world. Looking back at history, this also highlights the prioritization of Islamic teachings. It emphasizes that Islam incorporates elements from various sources, including philosophy, but only embraces those that align with its core principles and values. This suggests Islam encourages critical discernment and selective adoption, harmonizing ideas and concepts with its fundamental principles.

Overall, the statement depicts Islam as a religion that fosters rationalization and critical thinking. It indicates that Islam encompasses diverse perspectives and encourages believers to engage in critical thought, supported by concrete examples. Referencing the translation movement underscores the historical significance of intellectual exchange and the incorporation of external knowledge into Islamic thought. Moreover, it highlights the value of aligning Islamic teachings with acquired knowledge while prioritizing principles that resonate within the faith.

Critical Thinking in Fiqh Perspective. Aside from the historical perspective on Islam discussed above, Budi also explained how the study of fiqh is closely related to critical thinking.

“A key aspect of critical thinking in fiqh is evaluating scholars’ opinions and arguments and considering relevant historical and social contexts. The ability to identify weak arguments, logical flaws, and cognitive biases is required for this task.”

(Budi Interview, 15/03/23)

As Budi points out, critical thinking in fiqh is a comprehensive assessment of scholarly opinions, consideration of historical and social contexts, and employing logical analysis to identify flaws and biases. Developing critical thinking skills will enable individuals to explore fiqh more rigorously and informally, thus contributing to advancing Islamic jurisprudence. Then, Budi describes how the Qur'an portrays Moses' story and encourages us to think about it critically. He said,

“The teachings of Islam encourage us to think critically. This is described in Surah Al-Kahf, which describes the story of Prophet Musa and Prophet Khidir. Based on the example of Prophet Musa, it is evident that Islam teaches us critical thinking”.

(Budi Interview, 15/03/23)

Budi perceives Islam promotes critical thinking, specifically Surah Al-Kahf of the Quran. This chapter narrates the story of Prophet Musa (Moses) and Prophet Khidir. As Ahmad points out, Prophet Musa's example illustrates how Islam encourages believers to participate in critical thinking actively. Budi argues Islam promotes critical thinking and supports this claim by referring to Surah Al-Kahf and Musa's example. Budi may also cite another verse in the Qur'an to support his claim. As well as highlighting the compatibility of critical thinking with Islamic education, it encourages believers to engage in intellectual reflection and questioning within the framework of their faith.

Critical Thinking in Hadith Ahkam Perspective. As a lecturer of Hadith Ahkam, Fatimah emphasized the importance of critical thinking when interpreting and studying hadith. Based on what Fatima said,

“Developing critical thinking skills is essential, especially when understanding hadith laws, such as marriage and more. Many people use weak hadiths to provide false support, even though they are inaccurate. To ensure that the hadith text is accurate and valid, it is important to objectively critique, analyze, and evaluate it.”

(Fatimah Interview, 25/05/23)

The statement emphasizes that despite the inaccuracy of weak Hadith, many people still use them to provide false support. Therefore, critical thinking plays a crucial role in determining the authenticity and reliability of Hadith used in various arguments or claims. To assess the credibility of a Hadith, critical thinkers should carefully examine the chain of narrators, the content, and the overall context. Fatimah further stresses the importance of objectively analyzing, evaluating and critiquing Hadith. Critical thinking in the context of Hadith laws involves employing systematic and rational methods to assess the validity and applicability of the narrations. Individuals could identify inconsistencies, contradictions, or biases in the hadith by engaging in critical analysis.

Critical Thinking in Aqidah Perspective. In the interview, Ahmad explained that a scholar named Marunir teaches us to think critically in one of Sufism's books. As he said,

“Yes, if it is not critical, students cannot progress. This is a lesson in understanding the text of Marurir, as it illustrates the importance of thinking critically, as people believe they are good, but in reality. Still, I have been deceived. Critically analyzing texts like this is also essential. Islam encourages us to think critically.”

(Ahmad interview, 07/05/23)

Ahmad, the lecturer reading *Tasawuf's* text, emphasized the significance of critical thinking for progress and its vital role in students' advancement. This indicates that without the capacity for critical thinking, students may encounter intellectual and academic growth difficulties because critical thinking empowers individuals to effectively analyze and evaluate information, resulting in personal growth and development. Ahmad also describes critical thinking as seeking more profound knowledge about the underlying content or hidden narrative.

For instance, Ahmad explains deriving lessons from the text of Marurir. The mention of Marurir's text serves as an example to underscore the importance of critical thinking. It implies that this text illustrates how individuals can be deceived despite

believing in their goodness. By engaging in critical analysis of texts like Marurir, individuals can gain a profound comprehension of the intricacies and potential deceptions present in the world.

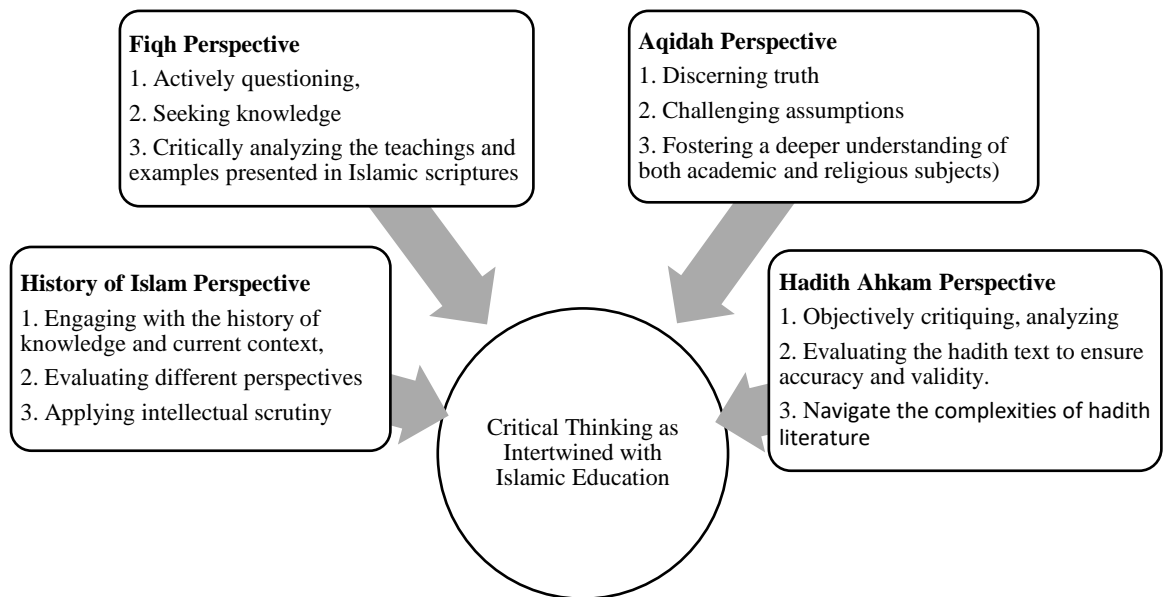
Therefore, reading this text needs the importance of critical analysis. The statement emphasizes the importance of critically analyzing texts like Marurir. It suggests that approaching texts with a critical mindset allows individuals to evaluate the content, question assumptions, and uncover hidden meanings or manipulations. Students can better understand the text's message and implications through critical analysis.

On the other hand, Islam encourages critical thinking: It asserts that Islam encourages believers to think critically. It implies that within the Islamic tradition, critical thinking is valued and promoted to understand and interpret religious texts and navigate the world's complexities. This aligns with the broader notion that Islam encourages believers to use reason and intellect to engage with the teachings and principles of the faith.

The statement underscores the importance of critical thinking for progress and emphasizes its relevance in analyzing texts like Marurir. Critical thinking allows individuals to uncover deceptions and gain a deeper understanding of complex issues, which aligns with the encouragement of critical thinking within the Islamic tradition. Figure 4.3 illustrates the context in which critical thinking nature intertwined with Islamic religious education.

Figure 4.3

The Intertwined Nature of Critical Thinking and Islamic Religious Education



Intertwined implies that these two concepts are interconnected and interdependent. As shown in Figure 4.3, Islamic religious education lecturers stressed the importance of critical thinking in the classroom. Islamic religious education involves studying and teaching Islamic principles, beliefs, practices, and values. It aims to nurture individuals who deeply understand Islam and can apply its teachings. Critical thinking is a foundational element of this educational process. The lecturer also recognizes that the intertwined nature of critical thinking and Islamic religious education implies mutual reinforcement and support. Cultivating critical thinking enhances the quality of Islamic education by developing intellectual curiosity, analytical skills, and a deeper understanding of Islamic teachings. Furthermore, Islamic religious education encourages and guides critical thinking by providing a moral and ethical framework to conduct critical analysis and inquiry.

Summary

As part of this section, I have presented the results of research question #1: 1. How do lecturers in religious higher education institutions perceive critical thinking?

According to the findings, lecturers have three different perceptions of how critical thinking is perceived, namely (1) critical thinking as a skill, (2) critical thinking as a disposition (3) critical thinking as a set of skills and dispositions.

First, like Ennis' concept of critical thinking, critical thinking includes skills and dispositions. The findings of this study indicate that lecturers perceive critical thinking as a skill because critical thinking involves abilities and mental processes that can be learned. Lecturers believe critical thinking is not inherent but a skill that can be developed and improved through learning and practice. I managed to summarize several elements of critical thinking as a skill, including analysis, evaluation, reflection, describing situations, problem-solving, identifying problems, constructive criticism, rationality, and drawing strengths and weaknesses.

Second, some lecturers perceive critical thinking as a disposition since they believe it encompasses skills that can be learned, attitudes, tendencies, and one's mental orientation toward rational, open, and reflective thinking. A critical thinking disposition consists of attitudes and mental characteristics that support the practice of critical thinking. A disposition of critical thinking consists of the following elements: open-mindedness, willingness, self-confidence, curiosity, decision-making, knowledge, exploration, and active engagement.

Third, lecturers perceive critical thinking as both a disposition and a skill, as these aspects complement one another and play an essential role in developing practical critical thinking. Lecturers can foster a learning environment that encourages openness, curiosity, and a love of learning when they view critical thinking as both a disposition and a skill.

Moreover, the lecturer consistently emphasizes integrating critical thinking with Islamic religious education through various perspectives based on their specialization. As

part of this integration, different viewpoints from Islamic history, Fiqh (Islamic jurisprudence), Aqidah (creed), and Hadith Ahkam (rulings) are considered.

4.1.2 Research Question #2: How do lecturers in religious higher education approach critical thinking skills in the teaching process?

The second question concerns how lecturers cultivate students' critical thinking skills in Islamic higher education. Researchers conducted interviews, observations, and documentation to determine the second objective, including the program study's curriculum, the lecturer's syllabus, and student assignments. The researcher visited four classes in semester 6 for undergraduate students with differing concentrations, including the Hadith Ahkam, Aqidah, Fiqh, and History of Islam. This study identified and summarized several approaches to teaching critical thinking in Table 4.2 below.

Table 4.2
The Approach to Critical Thinking

The infusion approach to critical thinking	Lecturers				
	Anisa	Fatimah	Asep	Budi	Bunga Ahmad
Pedagogical Approaches					
Critical reading approach					✓
Non-book-oriented approach	✓				
Real-world context	✓				
Assessment Methods					
Oral exam		✓		✓	✓
Thought-provoking assignments	✓				✓
Resume paper	✓	✓	✓	✓	✓
Writing paper	✓	✓	✓	✓	✓

Student Engagement and Participation						
Student contribution	✓		✓		✓	✓
Student-centered learning	✓	✓		✓		
Collaborative learning	✓				✓	
Role-play approach	✓					
Instructional Methods						
Presentation method	✓	✓	✓	✓	✓	
Question-and-answer session	✓	✓	✓	✓	✓	✓
Addressing weak points	✓		✓			
Feedback Approach	✓	✓	✓			
Incorporation of multimedia sources	✓					
Seminar approach			✓			
Lecture approach	✓	✓	✓	✓	✓	✓

Table 4.2 provides an overview of the critical thinking development approaches employed by lecturers. It reveals four main categories of approaches: Pedagogical Approaches, Assessment Methods, Student Engagement and Participation, and Instructional Methods. The table further elaborates on specific approaches within each category. Notably, the data suggests that only a limited number of lecturers utilize pedagogical approaches. Among the four approaches to assessment methods, the majority of lecturers favor using resumes and writing papers. Regarding student engagement and participation, lecturers tend to encourage greater student collaboration. In terms of

instructional methods, lecturers predominantly rely on presentation and lecture techniques.

Infusion approach to critical thinking. The infusion approach to critical thinking integrates critical thinking skills into the curriculum and instructional practices. It emphasizes embedding critical thinking throughout various subject areas and lessons. In this approach, critical thinking is not taught as a separate skill or subject but is integrated seamlessly into the content and activities. Lecturers purposefully design learning experiences that require students to think critically within the subject's context.

As mentioned above, the researchers observed that the approach that lecturers use to develop critical thinking in their students during their time mainly uses the infusion approach. This study identified four broad categories of infusion approaches according to Table 4.2, including pedagogical approaches, assessment methods, student engagement and participation, and instructional methods outlined below.

Pedagogical approaches. A pedagogical approach is a framework, a theory, or a philosophy for teaching and learning. A comprehensive set of principles, strategies, and methods guides the educational process. This study identifies three pedagogical approaches: a critical reading approach, a non-book-oriented approach, and a real-world approach.

The primary method of instruction and learning in reading *Tasawuf* Nash's class is the critical reading approach. Lecturers often provide explanations but analyze the text.

The lecturer, Ahmad, stated that,

"The teaching approach in this class is to read and understand the text; it is difficult to ask them to analyze it if it is still tough to understand, so I just ask my student to read it."

(Ahmad Interview, 20/05/23)

Also, Ahmad believed that the reading method could sharpen their thinking skills as well. as said below:

“In the case of reading texts, the approach used is simply reading. The script was read one by one and then translated in the manner of reciting the Quran. Students were also asked to read and translate the *Nash*. However, the students are not asked to explain it since reading and translating it is already challenging. This course is designed to provide students with the opportunity to become familiar with Arabic references through the reading of this text.”

(Ahmad Interview, 20/05/23)

As described above, reading can also be used to sharpen thinking skills. Ahmad stated that the reading method helped to sharpen their thinking skills. Reading texts in a specific manner positively impacted the student’s ability to think critically and analytically. As well as the critical reading approach, the translation approach involves reading and translating texts. Overall, Ahmad describes three aspects of this approach 1) Vocabulary, 2) Translating 3) Comprehension. The process is compared to reciting the Quran, emphasizing the importance of carefully reading with vocabulary, translating, and understanding the text.

The observation indicates that by requiring students to analyze and interpret the text, the difficulty of this task contributes to the development of critical thinking skills. This approach was designed to ensure that students are familiar with Arabic references and to allow them to become familiar with them by reading the text. The reading method exposes students to authentic Arabic sources. This helps them better understand language, culture, and references within their field. In addition to the critical reading approaches, Anisa takes a non-textbook-oriented approach to learning. Anisa, a history of Islam lecturer, invites students to attend seminars with a theme corresponding to the subject matter. Anisa stated:

“I prefer a non-book approach in teaching Islamic history. In my instructional approach, I also prefer to explore by inviting students to attend seminars, so it’s okay if they sit down. At least they know how to present in public, respond to moderators, and respond to questions during discussions. This helps them sharpen their critical thinking skills.”

(Anisa Interview, 10/05/23)

As described above, the instructional approach combines experiential learning, public speaking, and critical thinking elements. Students are exposed to seminar dynamics in those courses and provided opportunities to observe, learn from, and engage with others. Active participation is often encouraged in educational settings; however, the statement suggests that passive participation can still contribute to developing critical thinking skills, particularly in observing the dynamics of public presentations and discussions and understanding their dynamics. Moreover, Anisa noted that her teaching approach is always varied. As Anisa explained, she also enjoys asking her students to relate historical events to the current context. She stated that.

“Students also make analogies with current events. For example, students explained that during the heyday of the Abassiyah, even though the caliph's children could not study and live in luxury, they could still survive. Sometimes, their analogy was based on the current viral incident”.

(Anisa Interview, 17/05/23)

In addition to the statement above, this can be observed when students give examples of current events as part of the teaching process. As evidenced by the following observations made by students in class regarding Islam's history:

Lecturer: Can anyone provide some insights into the events during the Abbasid period?

Student: During the Abbasid era, Islam experienced tremendous growth and achievements. The focus of scholarly activities during that time revolved around religion. An intriguing aspect is that despite the abundance of luxury, the children of the caliphs did not engage in excessive spending. In contrast, in contemporary times, we often hear news about the children of tax officials showcasing their opulent lifestyles on social media. These differences between the past and present can be attributed to the decline and transformation of that era.

(Observation Day #1, 17/05/23)

From the observation above, it can be concluded that by emphasizing these differences between the past and present, the students imply that the decline and transformation of the Abbasid era have contributed to a change in societal values and behaviors. The observation provides insights into the Abbasid period, shedding light on

the historical context and its implications for contemporary society. According to the classroom experience and the interview with Anisa, a lecturer in Islamic history, she uses an approach that considers real-world contexts in her teaching. The real-world connection approach is also demonstrated by a statement in Curriculum No. 14, where learning objectives are written to promote understanding and application of key concepts and techniques.

“The application of Islamic religious knowledge material to the learning process in the institution”

(Curriculum Islamic Religious Education No. 14 on learning outcome)

By applying Islamic religious knowledge to the educational process, students can develop analytical skills, foster reflection, and gain a broader understanding of various subjects.

Assessment Approaches. Another approach relates to the assignments provided by the lecturer. These assignments are intended to help students develop their critical thinking skills. Bunga, a lecturer in Islamic religious thought courses, said she always assigned resume assignments to her students. As she stated below:

“In most cases, the assignments I give are in the form of a resume, so I ask students to prepare a resume or summarize, after which they are still required to express their opinion.”

(Bunga Interview, 29/05/23)

Bunga highlighted the combination of resume or summary writing with the requirement to express an opinion. These assignments encourage students to engage with the content and form their reasoned views by providing information and asking students to share their thoughts. This approach allows students to engage with the content in a structured manner and develop their ability to present information effectively. Almost identical to the assignment of making a resume, Budi requires his students to produce writing paper assignments. As he described that,

“For example, I use writing a paper for the questions of exams to develop critical thinking skills. Writing papers will also help you become a more critical thinker.”

(Budi Interview, 15/05/23)

In response to an exam question, Budi noted that the process of writing a paper is to develop students' critical thinking skills. Budi also believes that writing papers will contribute to developing critical thinking skills. It was Budi's opinion that, by writing an essay as a response to a question on an exam, the individual is likely to be required to engage in critical thinking processes. Conducting research, analyzing data, and constructing logical arguments or explanations are all part of writing a paper. This process encourages individuals to think critically about the topic, evaluate different perspectives, and organize their thoughts coherently and structured. Developing critical thinking skills during the paper-writing process can assist individuals in developing their ability to analyze complex issues, evaluate evidence, and formulate well-reasoned arguments.

Budi also suggested that writing papers can help develop critical thinking skills in general as well as critical thinking skills. Typically, when writing an essay, students must research a topic, gather relevant information, and analyze and interpret the information critically. It requires them to think critically, evaluate different sources, weigh evidence, and draw conclusions based on logical reasoning. It is also essential for you to be able to communicate your thoughts and arguments when writing a paper effectively. Writing essays promotes critical thinking by fostering analytical, evaluation, and communication skills. Another similar approach was mentioned by Ahmad, who stated that:

“Sometimes, the exams I give students are oral, so I call one of them and ask them a question. This method is effective because I can determine how much they can explain what they have learned in class.”

(Ahmad Interview, 07/05/23)

Ahmad also adds some statements:

“Yes, I give a variety of exams. I gave them an oral or written test in class, or, for example, I asked them to write a term paper, which they revised and then turned into a book or journal. It was designed to assist them in writing theses. I also encouraged them to participate in seminars or workshops outside of class on relevant topics. Following the seminar, I asked them to summarize the results of their observations. In this way, the learning approach does not need to be fixed in the classroom. Attending seminars is also a great way for them to practice speaking in front of large groups.”

(Ahmad Interview, 07/05/23)

The response illustrates the lecturer’s various methods to assess students’ understanding and ability to explain their learning. The lecturer also discusses how other activities, such as writing papers, attending seminars, and summarizing observations, can enhance the students’ learning experiences. Figure 4.4 illustrates an example of an essay for writing a paper:

Figure 4.4

Student Essay Question

**SOAL UAS ISLAM DAN ILMU PENGETAHUAN
KELAS PAI 2 B**

Buatlah essay tentang Sains dan Islam, yakni: fungsi sains dan teknologi untuk mempermudah aktifitas umat manusia serta meningkatkan produktifitas mereka. Kemudian tentang peran umat Islam dalam pengembangan sains dan peradaban di masa klasik, dan mengapa kini sangat kuat upaya integrasi Sains dan Agama, mengapa dan untuk apa upaya-upaya integrasi tersebut dilakukan ?

Figure 4.4 shows a question format that requires students to prepare a written paper (for the English translation, see appendix 7). This indicates that the question prompts students to delve into more profound levels of thinking and analysis, going beyond mere recollection or brief answers. Moreover, the question is described as thought-provoking, indicating its capacity to stimulate critical thinking and prompt students to consider diverse perspectives, arguments, or ideas concerning the given topic.

It implies that the question aims to elicit a well-crafted and comprehensive written response. This question emphasizes that Figure 4.4 represents a format that challenges students to employ higher-order thinking skills and articulate their thoughts through writing. The question fosters critical thinking and encourages students to explore the topic extensively in their written work. Another type of thought-provoking question also described in reading the *Tasawuf* text course, which is stated by Ahmad below,

“On the midterm exam that I sometimes give in this text reading class, I give only one paragraph of a text or *nash* that has been studied; then I ask the students to give a vowel, translate the text and explain its meaning.”

(Ahmad Interview, 07/05/23)

Criticizing this text is not only important for lecturers in text-reading courses. In addition, it is also practiced by lecturers who teach courses on the history of Islamic civilization. Lecturers have given quite critical assessments of the history of Islamic culture. Here are some examples of exam questions related to the history of Islamic culture, which Anisa mentioned in her interview session:

“As part of the submission, you must write an essay on the relationship between Islam and science. Science entered the Islamic world by conquering territories, including three centers of classical civilization: Egypt, Iraq, and Persia. Alexander, the Great in Macedonia, built the three centers of civilization, conquered the Persian empire, and even reached Afghanistan. What is the importance of science in Islam, in your opinion? The essay should be supported by Al-Quran arguments that provide examples of scientific phenomena in the Quran that scientists have verified.”

(Anisa Interview, 10/05/23)

According to the type of assignment above, the lecturer provided the essay's topic in a historical context and instructed the students to analyze the importance of science in Islam using Quranic evidence. This type of question is also a type of thought-provoking question. As a lecturer of Islamic history, Anisa also provided students with example questions that differed from asking them to answer questions. Anisa asked students to create their questions accompanied by a narrative. Figure 4.5 shows examples of questions and answers:

Figure 4.5
Sample questions and answers to student assignment


INDIKATOR SOAL: Disajikan gambar dan/atau narasi tentang peristiwa sejarah Indonesia pada zaman Hindu/Buddha. Peserta diminta untuk memilih hasil analisis yang tepat.	No. Soal	SOAL: 	Kerajaan Hindu Budha di Indonesia bermula dari perdagangan dan penyebaran agama. Agama Hindu dan Budha merupakan agama yang pertama kali masuk ke Indonesia dimana sebelumnya masyarakat Indonesia masih mengenal <i>animisme</i> . Sebutkan beberapa teori masuknya Kerajaan Hindu ke Indonesia! a. Teori Brahmana, teori Waisya, teori Ksatria, dan teori Arus Balik b. Teori Waisya, teori Sudra c. Teori Brahmana, teori Mahabarata d. Teori China dan teori India e. Teori Gajahmada
	1.		
	Jawaban a.		
PEMBAHASAN: Beberapa teori masuknya Kerajaan Hindu ke Indonesia yaitu: 1. Teori Brahmana: Teori ini mengatakan bahwa ajaran agama yang disebarkan di Indonesia berasal dari kasta Brahmana. Dimana pada saat itu para Brahmana merupakan tamu yang diundang oleh raja-raja penganut agama tradisional Indonesia. Seiring berjalannya waktu para Brahmana ikut menyebarkan ajaran agama Hindu di Indonesia. Teori ini berdasarkan pernyataan ilmuwan yaitu Van Leur. 2. Teori Waisya: teori ini mengatakan bahwa ajaran Hindu di Indonesia disebarkan oleh kasta Waisya, terutama para pedagang. Para pedagang memiliki hubungan dan kerjasama yang kuat dengan raja-raja di Indonesia. Di sela-sela kegiatan berdagang itu kemudian para Waisya menyebarkan agama Hindu pada masyarakat Indonesia. Ilmuwan yang sependapat dengan teori ini yaitu N.J. Krom. 3. Teori Ksatria: teori ini mengatakan bahwa ajaran Hindu di Indonesia adalah berasal dari kasta Ksatria. Dimana golongan ksatria ini berasal dari prajurit perang dan bangsawan. Menurut teori ini, masalah politik di India menyebabkan pertumpahan darah dan menyebabkan prajurit dan bangsawan yang kalah mencari tempat pelarian. Salah satunya yaitu di Indonesia. Asumsi ini berdasarkan seorang ilmuwan bernama C.C. Berg dan Mookerji. 4. Teori Arus Balik: Teori ini berasal dari asumsi seorang ilmuwan bernama F.D.K. Bosch. Menurut teori ini penyebaran agama Hindu di Indonesia adalah berasal dari orang Indonesia itu sendiri. Ajaran agama Hindu dibawa oleh orang Indonesia yang berkunjung ke India kemudian mendirikan suatu organisasi (Saangha). Setelah kembali, lalu mereka mulai menyebarkan ajaran agama Hindu			
a.	Teori Brahmana, teori Waisya, teori Ksatria, dan teori Arus Balik*		

Figure 4.5 depicts a question requiring students to formulate questions (see the appendix 7 for the English translation). The question is based on pictures provided by the lecturer. This format encourages active student engagement and critical thinking as they create questions. The question further states that each question should be narrated and transformed into a multiple-choice format, including possible answers and discussion. This indicates that the questions are meant to be answered and facilitate further exploration and analysis through discussion. As mentioned, this type of question prompts students to think and analyze based solely on the images presented by the lecturer. By limiting the information to visual cues, students are encouraged to develop their analytical skills and apply existing theories or knowledge to answer the questions effectively.

The question highlights using a specific format that promotes student engagement, critical thinking, and analytical skills. It emphasizes the value of visual stimuli in prompting student analysis and encourages active participation in discussions related to the questions.

Student Engagement and Participation. The focus of this approach is on student-centered class activities. This study found that student contribution, student-centered learning, and collaborative learning can enhance students' ability to think critically and become more active. The role of student contribution and collaborative learning will be explained in more detail in instructional approaches since collaboration also includes discussion, presentation, and debate approaches. Bunga explained that;

“In my class, students are encouraged to be active in class. Promoting discussions and collaborative learning between students and teachers is essential so students can express their opinions more freely.”

(Bunga Interview, 29/05/23)

According to Bunga's statement above, student engagement, discussion, and collaboration are essential to creating a stimulating and inclusive classroom environment. Students should be allowed to freely express their opinions, a culture of active participation should be fostered, and meaningful interactions between students and teachers should be promoted. Additionally, Anisa stated that the role-play approach also involves student engagement in the learning process. As Anisa said in the interview:

“I can also use the role-playing method in the History of Islam course. For example, I ask one student to play the role of Prophet Muhammad when placing the Black Stone in position, while the other students play the role of the Quraysh using cloth. By doing so, everyone can experience the role-playing experience.”

(Anisa Interview, 10/05/23)

In the History of Islam course, Anisa suggests using the role-playing method. Anisa's statement is also described in one of the course sessions. In the lecturer's class, a student is assigned the role of Prophet Muhammad while positioning the Black Stone. Other students are given the Quraysh role and instructed to portray them using cloth. This approach is intended to provide all participants with an immersive and experiential learning experience. Students can gain a deeper understanding of historical events and empathize with characters by participating in role-playing activities. Below is a description of the class activities of role-playing:

In one of the sessions shown on observation day #2, 11/05/23, the lecturer invites a select group of students to participate in a reenactment of the laying of the Hajar Aswad (Black Stone). This activity aims to provide students with a hands-on experience and an opportunity to visually and physically interact with the historical event. Students can gain a deeper understanding of the significance and context of the Hajar Aswad through participation in the reenactment and develop a sense of connection to the historical event through their participation. It allows for a more interactive and experiential approach to learning, which enhances student engagement and the learning experience.

Instructional Methods. An instructional approach refers to a method or technique used to deliver instruction to students that is more specific and practical. Teachers employ various strategies and activities to facilitate student learning within a particular pedagogical approach. For example:

An approach based on seminars and presentation methods can lead to other activities, such as question-and-answer sessions, addressing weak points. Feedback, multimedia sources, and lectures are also examples of instructional approaches.

Researchers have observed that the presentation method and lecture method are employed in almost all classes; the class is overcrowded; the Islamic course is automatically divided between girls and boys; since the number of students makes it difficult for the lecturer to use a participatory approach, the lecture approach is used instead. As Ahmad points out:

“I teach Nash or Arabic text reading and typically rely on a lecturer approach. But this course specifically requires the lecturer method as it focuses solely on developing the essential reading skills and understanding the text.”

(Ahmad Interview, 07/05/23)

Based on the activity in the class of reading *Tasawuf* Text, it was found that most lecturers still rely on lecture-based teaching strategies. This lecture preference can be attributed to large class sizes, heavy teaching loads, and various school responsibilities

that lecturers must manage. In the text reading class, one-way information delivery dominates teaching and learning. Students were asked to read the yellow book in Arabic without using vowels. Similarly, Asep also stated:

“I also use the lecture approach because, in my opinion, the lecture method cannot be avoided since not all information can be accessed online, especially the knowledge of the *Tarekat*. There is no use in questioning and arguing over the meaning of dhikr, so the tarekat often practices in class instead of being questioned and discussed”.

(Asep Interview, 02/05/23)

Asep also claims that the lecture method is particularly effective in teaching knowledge related to *tarekat*, which the respondent teaches about. It recognizes that not all information can be accessed online, and the lecture method provides a means to transmit specific knowledge that may require direct instruction. It suggests that particular topics, such as the meaning of dhikr, may be better taught through practical demonstration or direct practice rather than extensive questioning and discussion.

Anisa also pointed out that the lecture method is usually used after discussions and presentations:

“I usually use also lecture approach to avoid my student getting tense and giving them a deep understanding of the course. After the presentation is finished and I will then make any necessary corrections. When something goes wrong, I will redirect it to the right corridor again.”

(Anisa Interview, 10/05/23)

One of the class activities shows that the lecturer typically explains things in the last session to give any necessary corrections after completing the presentation. As described below:

Lecturer: After seeing how the prophet provided a solution for this cloth so that the tribes would not argue and everybody would receive the same amount, we can conclude that he had made a wise decision. With his wise attitude, the prophet serves as a role model. Can anyone tell me what lessons can be drawn from this story?

Students: (one student raises his hand to give his view). We can see wisdom, tolerance, and fairness in the prophet's attitude.

(Observation Day #2, 19/05/23)

In the class session above, Anisa provided feedback after students had completed the role play, and the lecturer continued to involve students by asking questions after she had provided feedback. In this regard, the lecturer is essential in offering feedback and guidance to students to improve their work. Likewise, it indicates that the lecturer will redirect discussions back on track if they deviate or encounter difficulties. The lecturer may initially withhold their explanations, allowing students to participate in discussions and express their views and opinions. From observation, the class also implies that allowing students to talk and discuss creates an environment where different students' perspectives may be shared. Students are encouraged to participate actively and to think critically in this manner. It emphasizes the importance of bravery when expressing one's opinions, acknowledging that students' views can be right or wrong.

Additionally, Anisa discussed how the lecturer should encourage students to appreciate the process of critical evaluation. It recognizes the value of students being critical of each other's work, as it promotes a deeper analysis and understanding of the subject matter. This appreciation signifies the lecturer's support for open and constructive dialogue among students.

Besides the lecturer method, some lecturers use the presentation approach Anisa state below:

“I usually use the presentation method, followed by a question-and-answer session, followed by a discussion between students, to which I typically add or clarify any weak points in their arguments.”

(Anisa Interview, 11/05/23)

Anisa's statement describes a teaching method incorporating presentations, question-and-answer sessions, and discussion sessions with students. This approach promotes student engagement, critical thinking, and active learning. Including these elements allows lecturers to facilitate knowledge transfer, foster meaningful interactions,

and assist students in developing analytical and argumentative skills. Fatimah also stated a similar statement:

“My teaching method is usually a combination of presentations and discussions. In this method, the participants discuss the matter and then discuss it together. So, later, when they have a discussion, it gets stuck, and the lecturer provides this explanation, this and that, and so on.”

(Fatimah Interview, 25/05/23)

Like Anisa’s statement, it was clearly stated that approaches usually combine between presentations and discussions. Through observation data, the presentation approach suggests that the lecturer employs both instructional delivery and interactive dialogue to facilitate learning. Expressions are likely used to provide initial information or context, while discussions enable participants to participate and exchange ideas actively.

The syllabus’s lecturer also specifically mentions teaching approaches such as group discussions and presentations, which are stated in the syllabus perfectly to encourage active engagement and foster critical thinking among students. Incorporating these participatory methods alongside lecture-based instruction can encourage students to express their thoughts, share perspectives, and engage in critical thinking. Allowing participants to discuss the topic initially promotes active engagement and the exploration of diverse viewpoints. This method also implies that the lecturer and students can actively participate in the discussion, providing explanations, insights, and additional information.

From observation in the classroom, there is a significant role for the lecturer can also help with stuck discussions because when discussions reach an impasse or get stuck, the lecturer provides explanations and additional insights. This suggests that the lecturers intervene to help overcome obstacles or clarify misunderstandings, promoting continued engagement and learning. By offering answers, the lecturer assists in moving the discussion forward and deepening participants' understanding.

The approach describes a teaching method that combines presentations and discussions. It highlights the importance of first allowing participants to engage in discussions, fostering critical thinking and active participation. The involvement of the lecturer in the subsequent debate provides guidance and additional insights, enhancing the learning experience. By addressing stuck discussions, the lecturers ensure students receive the necessary support. It is also supported by Asep's statement below:

“Typically, I use the seminar method as a learning approach, as I believe this model allows students to criticize and be criticized. It is important to have references and data to support student claims. We should not criticize something based on our own opinions alone. The point is that when students are critical, they should also be able to reference parameters and references.”

(Asep Interview, 02/05/23)

As mentioned above, the seminar method as a learning approach can allow students to engage in critical thinking and constructive criticism. Through seminars, students can actively participate in discussions, share their perspectives, and challenge each other's ideas. This implies that critical thinking should be grounded in well-established principles, theories, or scholarly work. Encouraging students to reference reliable sources promotes a deeper understanding of the subject matter and strengthens the credibility of their arguments.

On the other hand, Anisa, a history of Islam lecturer, often use multimedia source to integrate into her approach. He said,

“I assign students to watch historical films for visualization and encourage them to provide comments and critique. Assignments involve thought-provoking questions and listening to relevant YouTube content. I relate past stories to the present, emphasizing the cyclical nature of history and encouraging students to contribute with relevant examples.”

(Anisa Interview, enables11/05/23)

Anisa prefers alternative methods of teaching Islamic history. These methods include assigning historical films, incorporating multimedia sources like YouTube content, and encouraging students to comment, critique, and contribute relevant examples

to the lesson. The lecturer also emphasizes history's cyclical nature and connection to the present. This also reflects an approach to teaching that goes beyond traditional textbook-centered methods. As a result of incorporating visual media, multimedia sources, thought-provoking assignments, and student participation, the lecturer intends to facilitate an engaging and interactive learning environment for studying Islamic history.

Summary

In this section, I have reported the results of research question #2: 2. How do lecturers in religious higher education approach critical thinking skills in the teaching process? The four approaches to critical thinking that Ennis mentioned include the generic approach, the infusion approach, the immersion approach, and the mixed method approach. Still, from this finding, I found that lecturers who teach Islamic education in religious higher education approach critical thinking using the infusion approach.

The infusion approach to critical thinking was found to be composed of four major themes. These themes are pedagogical approaches, including non-book-oriented approaches and real-world contexts. Second, Assessment methods include oral examinations, thought-provoking assignments, resume papers, and writing papers. Third, student engagement and participation consist of the following: student contributions, student-centered learning, collaborative learning, and the role-playing approach. Fourth, instructional methods include presentation methods, question-and-answer sessions, addressing weak points, feedback processes, and incorporating multimedia sources.

On the other hand, this study also highlighted the alignment between the Islamic religious education curriculum, research findings, and the lecturer's syllabus. Research findings support teaching methods that promote effective communication and engagement, such as incorporating presentation skills and fostering deep discussions with students. Based on research findings, the curriculum is designed to provide students with

the skills and abilities required to independently analyze, evaluate, and develop solutions both individually and collaboratively.

4.1.3 Research Question #3: What challenges do lecturers face when fostering students' critical thinking in religious higher education institutions?

In this section, I reported the results of research question #3: What challenges do lecturers face when fostering students' critical thinking in religious higher education institutions? Data from interviews and observations in the classroom are used in this study to address this question. Based on the finding, Table 4.3 categorizes the challenges lecturers encounter when developing critical thinking.

Table 4.3

The Challenges in Teaching Critical Thinking

The Category of Challenges	Specific Challenges in Teaching Critical Thinking
Student-related challenges	Diversity of educational backgrounds
	Family background
	Students' lack of grounding or interest
	Language barriers and passiveness
	Lack of seriousness
	Grade Orientation
	Lack of reading habits
	Lack of confidence
	Digitalization
	Insufficient student participation
Lecturer-related challenges	Lecturers' lack of competence or experience
	Insufficient time and ratio
	Dogmatism
Methodology-related challenges	Preference for textbook-based approaches
	Repetitive metho

Table 4.3 above shows the challenges lecturers face in teaching critical thinking skills to students divided into three major categories, which will be explained in more detail in the next paragraph;

Student-related challenges. These challenges are related to the student factor. Several respondents emphasized that the background and experience of students are significant challenges. They Mainly focus on the challenges faced by students from different educational backgrounds, specifically those who have graduated from public education and those who need to be proficient in Arabic. These factors may contribute to more passive participation in class among students in the PAI (Islamic Religious Education Program).

“Students from different backgrounds have unique experience backgrounds, and usually children who have graduated from the general public education tend to have different challenges in class as many of the children in PAI do not understand Arabic and are therefore more passive when in class.”

(Ahmad Interview, 07/05/23)

Ahmad highlights the importance of acknowledging students' diverse backgrounds and the potential challenges they may encounter in the classroom. There is a particular emphasis on the impact of language differences on the participation and engagement of students. Educators need to recognize these factors to create inclusive learning environments and implement strategies that address the specific needs of students from diverse educational and linguistic backgrounds.

Responding to the challenges described by the lecturer, students also believe that,

“As far as I am concerned, passive students are also a result of our culture. Their classmates will avoid critical students as they are considered burdensome to the speaker. As a result, students feel pressured to ask questions when they are critical.”

(Interview student in Anisa's class, 11/05/23)

From the student statement above, they believe that the culture among students plays a significant role in shaping their participation and questioning behavior. The fear of being perceived as burdensome or facing social exclusion may discourage students from actively expressing their critical thoughts and engaging in meaningful discussions.

A similar respondent (Anisa) also stated:

“One of the challenges I see is their educational background. Among the students are graduates from high schools, Islamic boarding schools, madrasah Aliyah, and students from favorite schools or mediocre schools. Thus, the educational background of their students has a significant influence on their behavior. Students from a favorite school, a good school, are usually trained to think critically; in those classes, they are more active and stand out”.

(Anisa Interview, 10/05/23)

On a similar note, Budi stated that,

“Students' backgrounds are extremely influential, particularly those from Salafi boarding schools. Most students are quiet, not even active, and those who are active are students from modern schools. However, even students who are in high school ask a lot, yes, because they start at PAI from scratch, which is why I ask so often. Salafi science students are familiar with the text, so they can easily understand it and remain passive.”

(Budi Interview, 15/05/23)

Budi emphasizes the importance of students' educational backgrounds in influencing their behavior and critical thinking abilities. Regarding critical thinking skills and classroom participation, students from highly regarded schools may be at an advantage. Understanding these diverse backgrounds can help inform teaching strategies and create an inclusive learning environment that supports the development of critical thinking skills in every student, regardless of their educational background.

Fatimah similarly expressed the following comment:

“I also believe that family background can influence a student's thinking and behavior. It is important to consider whether the family has a democratic background in which individuals are free to express their opinions or whether there is an authoritarian background in which children are not allowed to communicate freely; since there are also students whose parents are strict, so it is natural for them to obey their parents.”

(Fatimah Interview, 24/05/23)

An additional respondent mentioned that a student's family background could be challenging since it can impact their thought processes and behavior. To understand students' communication patterns and obedience, it is essential to consider the nature of their family environment, whether democratic or authoritarian.

Fatimah highlighted that a democratic family environment promotes open communication and freedom of expression, which contribute to developing independent thinking and the ability to express oneself confidently. In contrast, an authoritarian family background may foster a sense of obedience and conformity in students. Lecturers need to recognize these influences to customize their teaching approaches and create a supportive learning environment that respects students' diverse family backgrounds and encourages critical thinking and independent thinking in their students. Bunga shared the same and said,

“Passive students are smart people, not because they are stupid. They may take notes and listen carefully when the information is explained. A quiet child is smart not because he is stupid but rather because he is intelligent. People who frequently speak tend to score low on standardized tests.”

(Bunga Interview, 29/05/23)

“To motivate today's students to be active in class, you must trigger them first and then give them grades based on their participation.”

(Budi Interview, 15/05/23)

“As far as I can tell, most students are not serious about their studies. Occasionally, they ask questions but repeat what is in the book. Students ask this question solely to obtain grades and not to gain knowledge. If the goal is to earn grades, then the student will ask the question randomly; they believe that the most important thing is to participate in the activity. Since it is based on grades, I can tell the person asking the question does not understand it.”

(Asep Interview, 02/05/23)

There was also a respondent who highlighted the challenges more clearly, emphasizing the lack of seriousness and superficial nature of the questions. A lecturer observes that many students must be more serious about their studies. Students occasionally ask questions but often repeat what is already stated in the text. Some students ask questions solely to earn grades rather than better understand the subject matter. This highlights the need for a more meaningful approach to learning and raises concerns about the students' genuine understanding.

The respondent emphasizes the importance of motivation and participation and the importance of students' seriousness regarding their studies. Rather than arguing that frequent speaking indicates intelligence, they advocate for a more inclusive approach to defining intelligence. To determine why students are passive and lack seriousness, students in Asep class spoke in the interview session, stating that:

“Occasionally, several explanations by the lecturer led me to ask questions. Why is this so? Is that so? However, I kept quiet concerning the lecturer. As I think he is the expert and understands the subject matter the most, I do not dare ask questions or express an opinion.”

Student further state that,

“Besides that, it is hard to disagree with the lecturer's explanations since they are based on famous books, so we cannot differ from what he says.”
(Interview student in Asep’s class, 02/05/23)

As stated above, the statement reflects a student's perspective and answers the lecturer's description of the student. The student mentioned that the lecturer's explanations prompted them to ask questions. However, it emphasizes the student's reluctance to question or challenge the lecturer's expertise and the authority of the cited sources.

In addition to the lack of seriousness of the student, the lack of motivation was evident in reading *Tasawuf*'s text classes, where students had to wait to be called by their names before asking questions.

Lecturer: Is there anyone interested in reading the text?

(Among students, no one responds)

Lecturer: All right, I will call the name, and the person I call must be prepared, ready to read and explain...

(Observation Day #3, 17/05/23)

In addition to discussing the challenges associated with student behavior, Asep provided the following statement:

“The challenge I face is that students must now be forced or lured by grades to ask questions, rather than because of their desire and minimal reading habits.”
(Asep Interview, 02/05/23)

The respondent above highlights A challenge that lecturers face in their teaching experience. The concern is expressed regarding the need to motivate students to ask questions through external motivations, such as grades. Asep's challenges are also evident in the way the lecturer assigns grades to students who ask:

Lecturers: Do you have anything to ask?
(In response, several students raised their hands to ask questions and express opinions. Immediately following their questions, the lecturer recorded their scores and encouraged others to do so.)
Student: I would also like to ask (raising his hand):
(Observation Day #4, 23/05/23)

The class session above showed that the lecturer is concerned about the students' low inclination to ask questions independently and their minimal reading habits. Students are challenged to question if external motivations, such as grades, are relied upon to motivate them. For students to cultivate a more meaningful and self-driven learning experience, fostering intrinsic motivation, promoting a culture of curiosity, and encouraging independent reading habits may be necessary.

In connection with the reading habit, Bunga stated:

“Many students tend to be passive because they do not read enough and do not prepare material before entering class. In this case, students tend to read the material before attending lectures, which is a special challenge.”
(Bunga Interview, 29/05/23)

“A challenge is that students prefer tasks that do not require deep thought, such as resumes, which are already within their comfort zone. When given questions that require them to consider multiple options, they often lack the confidence to think critically. Consequently, they prefer a more textbook-based approach.”
(Anisa Interview, 11/05/23)

While the lack of reading habits might pose a challenge, another respondent also pointed out that students prefer tasks that do not require deep thinking, need more confidence in critical thinking, and prefer a textbook-based approach. The statement

highlights the difficulties associated with students' preference for tasks that do not require deep thought, their need for more confidence in critical thinking, and their preference for textbook-based approaches. This challenge may be overcome by creating conditions that encourage students to step outside their comfort zones, fostering self-confidence in their critical thinking skills, and promoting alternative learning methods that develop higher-order thinking abilities.

On the other hand, another lecturer discussed the challenges posed by digitalization and technology in the context of students' learning and academic integrity. It highlights the tendency for students to become lazier due to the convenience provided by digital tools and raises concerns about their approach to paper assignments. Ahmad stated:

“Digitalization has led to a dependence on technology that presents challenges for today's students. They tend to become lazier because of this digitalization. Most students do not take paper assignments seriously and are dishonest when completing them. The information is often copied and pasted from the internet without further filtering. As a means of avoiding plagiarism, I mandated that students use plagiarism checkers as a means of ensuring that they are honest”.

(Ahmad Interview, 08/05/23)

Ahmad highlighted that digitalization has resulted in a reliance on technology among today's students. This dependence on technology may contribute to laziness or a decreased willingness to put in effort when completing assignments. This also may impact many students who need to take paper assignments seriously and exhibit integrity in their completion. It claims that students frequently copy and paste information from the internet without proper filtering or citation, potentially leading to plagiarism. By identifying and addressing these challenges, lecturers can strive to promote academic integrity and encourage students to take their assignments more seriously, fostering a deeper understanding of the subject matter and critical thinking skills.

Another respondent (Budi) confirmed this statement:

“Compared to previous generations of students, today's students are much different. Many facilities are available today that make life easier and more instantaneous, so it tends to make students lazy. Today, finding a student who carries a book with them is rare. My former habit was to spend time in the library, but now the library is more often quiet because students spend more time in the café”.

(Budi Interview, 15/05/23)

Besides the digitalization era, Anisa mentions insufficient student participation in classroom activities and organizational involvement.

“Students do not participate sufficiently in class and organizational activities, another visible challenge. Participating in organizations is an important way to become more active and develop critical thinking skills. Compared to students solely focused on studying, attending school, and returning home, students involved in organizations make a significant difference”.

(Anisa Interview, 11/05/23)

Engaging students in organizations can enhance their activity levels and foster critical thinking skills by encouraging them to become involved. It emphasizes the importance of organizational involvement in developing critical thinking skills and promoting active learning. Students can be encouraged to participate in organizations to address the challenge and create a more engaging and enriching educational experience.

Lecturer-related challenges. Several factors contribute to this challenge, including the lecturer's inexperience, insufficient time, and dogmatism. Some respondents say lecturers need more training in specific teaching methods for developing critical thinking skills.

Ahmed said,

“I believe that the curriculum guidelines are not very clear about what is required to sharpen critical thinking, and it is also lacking in training for that purpose.”

(Budi Interview, 08d/05/23)

Budi believes the curriculum guidelines need to be revised in two aspects: providing clear direction on enhancing critical thinking and offering sufficient training to

lecturers. These limitations can hinder the effective development of critical thinking skills among students and impede the implementation of instructional practices that support critical thinking in the classroom.

Regarding the effective development of critical thinking skills, students said there is still a gap between students and lecturers, which hinders them from having an informed opinion. Here is what students in Anisa's class said:

“I feel that the lecturers here are exclusive and cannot be questioned at any time. Due to the gap between lecturers and students, it is difficult for students to ask questions freely. Students do not always have the opportunity to ask the lecturer questions, especially outside of the classroom, because questions sometimes arise outside of the classroom as well.”

(Interview student in Anisa’s class, 11/05/23)

The student also portrays a perception of lecturers as exclusive and insufficient time, leading to a challenging environment for students to ask questions freely. A perceived gap between lecturers and students further exacerbates this issue. The limited opportunities to ask questions inside and outside the classroom may hinder students' ability to actively engage in dialogue, seek clarification, and deepen their understanding of the subject matter.

There is also a challenge in the lecturer's thinking, which is dogmatic. Ahmad expressed this thought in the following manner:

"You must be on the same level as the person you are disputing if you wish to engage in an argument."

(Budi Interview, 07/05/23)

Additionally, the student in Budi’s class noted that the dogmatism of the lecturer also limits some things;

“A student once asked a fundamental question, to which the lecturer responded, why are you asking this simple question? To my mind, this is a one-sided viewpoint that ignores the importance of considering a variety of perspectives. The lecturer holds his dogma.”

(Interview student in Bunga’s class, 30/05/23)

The student's account highlights the limitations imposed by the dogmatism of the lecturer. The lecturer's rigid beliefs hinder open-mindedness, stifle the consideration of diverse perspectives, and potentially limit the development of critical thinking skills among students. The incident involving the response to a fundamental question exemplifies how the lecturer's dogmatism can manifest and impact the learning environment.

Methodology-related challenges. These challenges are related to the methodology that the lecturer used, such as the challenges due to the Preference for textbook-based approaches and the repetitive method.

Some lecturers say students prefer a more textbook-oriented approach, such as summarizing lessons. For students, this task is relatively easy. Likewise, lecturers consider this a challenge as they strive to develop their critical thinking abilities. As Anisa said,

“Students prefer tasks that do not require deep thought, such as resumes, which are already within their comfort zone, and prefer a more textbook-based approach.”

(Anisa Interview, 11/05/23)

As Anisa pointed out, students tend to do tasks that do not require deep thought and correspond to their comfort level. They favor a more textbook-based approach to learning. Lecturers should be mindful of these preferences while providing opportunities for students to develop their critical thinking skills. They should engage with challenging

tasks and explore a variety of learning approaches beyond traditional textbook-based methods.

Another challenge also indicated by Budi, who states that,

“Another challenge is the repetition of the same teaching method. The presentation method is designed to allow students to take an active part in the learning process; it is hoped that students will be actively engaged, but it appears that students are already bored. Almost all lecturers have the same teaching approach, and the seating positions are monotonous.”

(Budi Interview, 15/05/23)

Regarding the effectiveness of the repetitive method, a student in Budi's class argued and said in the interview that,

“Although there is a presentation, it is only perfunctory and ineffective because it is too boring; if the class situation isn't alive, it's useless.”

(Interview student in Bunga's class, 15/05/23)

The lecturers emphasize the challenges associated with the repetitive use of one teaching method, which results in student boredom and a lack of active engagement. It also points out uniformity in teaching approaches and monotonous seating positions as additional factors contributing to the classroom's perceived lack of excitement and variety. It may be necessary to implement various teaching methods, foster interactive learning experiences, and create a more dynamic and stimulating environment to meet these challenges.

Summary

The section discusses the challenges lecturers face when teaching critical thinking skills to students. These challenges are categorized into three main categories.

The first category focuses on student-related challenges. Student challenges can include a lack of motivation, limited prior knowledge or skills, or resistance to engaging in critical thinking. This category explores the difficulties lecturers may encounter when working with students who exhibit these characteristics.

The second category addresses lecturer-related challenges. These challenges are specific to lecturers. They might include insufficient competence or experience in teaching critical thinking, a lack of time and resources, or dogmatism among lecturers. The lecturer-related challenges involve obstacles that lecturers must overcome to teach their students critical thinking skills.

The third category focuses on methodology-related challenges. These challenges arise from the teaching methods and approaches used in the classroom. Specifically, the section discusses the limitations and drawbacks associated with textbook-based approaches to teaching critical thinking and the repetitive nature of specific teaching methods. Methodology-related challenges highlight the need to explore alternative instructional strategies and innovative approaches to promote effective critical thinking instruction.

Using these three categories to divide the challenges, the section provides a comprehensive discussion of the challenges lecturers encounter when teaching critical thinking. This framework allows for a deeper understanding of the specific challenges within each category. It provides insights into potential strategies and solutions to overcome these hurdles.

4.2 Discussion

This study aims to explore lecturers' perceptions of critical thinking, analyze the critical thinking approaches demonstrated during the teaching process, and explore the challenges lecturers face in developing critical thinking skills in Islamic religious higher education. This study addressed three research questions: 1. How do lecturers in religious higher education institutions perceive critical thinking? 2. How do lecturers in religious higher education approach critical thinking skills in teaching? 3. What challenges do lecturers face when fostering students' critical thinking in religious higher education institutions? An observation of the classroom was conducted during the month of May 2023. The lectures of four concentration courses were audio-recorded and transcribed verbatim for data analysis, interviews, observation, and documentation.

4.2.1 *Lecturer's Perception of Critical Thinking in Islamic Higher Education*

a. The importance of critical thinking and its role in improving student performance

Based on the results of interviews with all lecturers, it is evident that all agree that cultivating critical thinking in students is very important. These findings support the importance of critical thinking in the learning process in the classroom based on the following themes.

Enhancing the Learning Experience. The analysis highlights that most lecturers perceive critical thinking as necessary because it enhances learning and contributes to a more enjoyable educational experience. This theme emphasizes that critical thinking is a valuable method that positively impacts students' engagement and enjoyment of the learning journey. This argument is also supported by Duron et al. (2006), Black (2005), Choy (2003), and Nickerson (1994) regarding the importance of teaching critical thinking to students. They highlight the consensus among these scholars that incorporating critical

thinking instruction enhances students' thinking abilities and facilitates improved learning outcomes.

Based on the results obtained, the majority of lecturers hold the viewpoint that critical thinking plays a vital role in the learning journey. However, none explicitly articulated that critical thinking encompasses the realm of higher-order thinking, characterized by introspection, analysis, and assessment. Flores (2016), Franco & Almeida (2015), and Hervás & Miralles (2006) have highlighted its significance in nurturing advanced cognitive abilities like introspection and self-awareness, among others. They believe that this capacity will empower future professionals to dissect and solve societal challenges. Lecturers, though, appear to mainly view critical thinking as a tool to facilitate improved learning, enabling students to employ their acquired knowledge in their forthcoming careers. The respondents did not explicitly reference the inclusion of higher-order cognitive skills like introspection and judgment in critical thinking. However, following their instructional syllabi, all respondents acknowledged the pivotal role of critical thinking as a fundamental learning process.

In brief, this study contends that critical thinking underscores the viewpoint that it serves as a crucial competence, empowering students, enriching their educational journey, and fostering a genuine enthusiasm for learning. It accentuates students' proactive engagement in knowledge formation, questioning preconceptions, and deriving pleasure from the process of critical thinking. However, it refrains from explicitly categorizing critical thinking as a higher-order cognitive skill.

Significance of Critical Thinking in Daily Life. Some lecturers also consider critical thinking essential for everyday life applications. Likewise, Franco and Almeida (2015) explored the significance of critical thinking in our daily lives. In a world where change and complexity are ubiquitous, essential skills like critical thinking are indispensable.

The instructors also underscore the vital role of thinking beyond the confines of academia, as it finds myriad practical applications. This study believes that critical thinking plays a crucial role in our daily lives by enabling us to objectively analyze information and gain a deeper understanding of the world in which we live.

Nurturing Active and Dynamic Critical Thinking. Some lecturers also consider the importance of critical thinking in the teaching and learning process because critical thinking involves fostering an environment and providing opportunities that encourage individuals to engage in critical thinking actively and continuously adapt their thinking processes. This becomes the basis for urgency in the application of critical thinking itself. Several scholars support this argument, including Abdellatif & ElKhodary (2020; Agredo Tobar & Burbano Mulcue (2012); González (2008); Roohr et al. (2019), who emphasizes that critical thinking can assist individuals in resolving complex issues through analyzing, contemplating, and making decisions, thus transforming, enhancing, and creating future societies.

A lecturer also believes active critical thinking goes beyond passive observation or acceptance of information. The process involves actively questioning, analyzing, and evaluating ideas, concepts, and evidence. In support of this argument, Bezanilla et al. (2019) argue that active critical thinking can be used to plan activities and assignments where students are required to actively engage with the material, participate in discussions, and provide thoughtful insights and perspectives. Additionally, lecturers believe that nurturing dynamic critical thinking requires fostering adaptability and an openness to new ideas and perspectives and improving student development.

This study presents the perspective that to cultivate dynamic essential thinking abilities, individuals should be encouraged to explore alternative viewpoints, question

their assumptions, and adapt their thinking based on new information. This viewpoint aligns with Flores's (2016) argument, which emphasizes the importance of critical thinking skills for students' professional growth in social knowledge, enabling them to meet the challenges of an increasingly globalized society.

This study further supports the notion that fostering active and dynamic critical thinking entails establishing an environment that nurtures curiosity, encourages active participation, cultivates analytical skills, promotes adaptability, and integrates critical thinking across various disciplines. By prioritizing these elements, individuals can enhance their critical thinking abilities, enabling them to navigate intricate challenges, make well-informed decisions, and continually learn and develop.

b. The multifaceted nature of critical thinking perception

This study found that several lecturers had varying perceptions about critical thinking and how it is taught. Based on the lecturer interviews, this study discovered that lecturers view critical thinking as a skill, a disposition, or a combination of the two. Their attributes are like those outlined and explained by Ennis (1998), who asserts that this framework focuses on the dispositions, attitudes, and abilities necessary for effective critical thinking. Yet only seven of the 16 critical thinking skills listed by Ennis in his taxonomy are mentioned by the lecturer in describing them. As shown in Table 4, this is clearly illustrated. Despite the alignment with Ennis' framework, the lecturers' descriptions of critical thinking skills were limited to only seven out of the 16 skills identified by Ennis. This suggests there might be a gap in the lecturers' knowledge or awareness of the comprehensive skills associated with critical thinking. The data revealed that the lecturers' limited mention of essential skills of thinking indicates a need for more information and knowledge about the skills that should be known and taught. This implies

a potential market for further professional development or training to enhance the lecturers' understanding and ability to incorporate critical thinking skills in their teaching.

Furthermore, the lecturer's perspective does not explicitly mention that critical thinking encompasses reflective thinking. As stated in the research by Badia and Becerril (2016) and Balyer and Öz (2018), the significance of this reflexive-critical process is emphasized. These studies highlight the potential challenge that arises when a lecturer attempts to foster the value of critical thinking in students without actively engaging in a reflective-critical process themselves.

In summary, the sentence emphasizes the variation in lecturers' perceptions of critical thinking, the alignment with Ennis' framework, the limited mention of critical thinking skills, and the implications of this finding for the lecturers' knowledge and instructional practices.

Figure 4.2 in the finding section shows that the lecturers describe disposition as a willingness to focus thinking to solve problems or understand complex issues and also for construction criticism, where this perception is also represented by Ennis (1991, 1996, 2011) as intellectual perseverance, this intellectual willingness to persist in the face of challenges and setbacks. This suggests that the lecturers' viewpoints align with Ennis' interpretation of disposition as a vital component of critical thinking. The characteristics of critical thinking disposition mentioned by the lecturers during the interview, like curiosity, open-mindedness, eagerness, and self-assurance, closely mirror the disposition Ennis referred to as "intellectual humility" (1991, 1996, 2011). Ennis further elaborated that this disposition encompasses acknowledging the confines of one's knowledge and being receptive to the prospect of being incorrect. As well as disposition in decision-making, as Ennis mentioned, it includes intellectual integrity, which involves a willingness to acknowledge and address one's biases and consider evidence and

arguments that challenge one's beliefs. Table 4.4 below illustrates Ennis' disposition to critical thinking based on the perceptions of the respondent lecturers.

Table 4.4

Ennis's critical thinking disposition from the lecturer's perspective

Ennis's critical thinking disposition	Disposition from the lecturer's perspective
Intellectual Perseverance	willingness to focus thinking to solve problems or understand complex issues construction criticism
Intellectual Humility	curiosity, open-mindedness, willingness, and self-confidence respectful
Intellectual Integrity	disposition in decision-making consider Judgment and argument

This study analyzed the alignment between the lecturers' perceptions of disposition and Ennis' conceptual framework. It highlights how the elements mentioned by the lecturers correspond with Ennis' descriptions of intellectual perseverance, intellectual humility, and intellectual integrity, reinforcing the credibility and validity of the lecturers' perspectives about established theoretical perspectives.

The concept of "respectful" can be classified as a disposition or attitude and can be classified as intellectual humility, which is "respectful" not present in Ennis' theory. However, based on the findings obtained from interviews with lecturers and students, as well as an analysis of curriculum documents, it is evident that they perceive and value the importance of respect. Some students may be reluctant to question the teachings of respected scholars and lecturers. This study also found that the term "Respectful" is

associated with cultural norms and religious beliefs, which tend to influence individuals' behaviors, attitudes, and values.

Based on the findings obtained from interviews conducted with both lecturers and students, as well as an examination of curriculum documents, and further supported by the results of observations, it becomes evident that both lecturers and students perceive and highly value the significance of respect within the educational context.

One interesting finding is that some students might exhibit a reluctance to question the teachings of respected scholars and lecturers. This indicates that respect, as a concept, might have an impact on students' behavior and willingness to engage in critical thinking or challenge authority figures. This finding could have implications for fostering a more open and intellectually stimulating learning environment.

Moreover, it reveals that the term "Respectful" is linked to cultural norms and religious beliefs. This observation highlights how cultural and religious influences can shape individuals' attitudes, behaviors, and values, including their approach to education and interactions within the academic setting. It implies that the concept of respect may vary across different cultural and religious contexts.

Overall, the analysis brings to light the complex nature of respect within the educational context and its interplay with intellectual humility, cultural norms, and religious beliefs. Understanding these dynamics can help educators and institutions create inclusive and respectful learning environments while also encouraging critical thinking and intellectual growth among students. It also underscores the importance of acknowledging and addressing cultural diversity in educational settings to promote effective teaching and learning experiences.

On the other hand, Ennis (2011) strongly argues that critical thinking is both a skill and a disposition, he also believes that critical thinking should be used in addressing

problems or making decisions because it begins with identifying problems and ends with analyzing assumptions for validity and reliability. Accordingly, the concept of critical thinking comprises a set of skills, such as identifying and evaluating. Then dispositions emerge, such as wanting to know more about issues and find solutions. Likewise, lecturers characterize critical thinking as a blend of both dispositions and skills. This also underscores their resonance with this viewpoint, implying that they view critical thinking as an amalgamation of both attributes and abilities. This examination underscores the all-encompassing essence of critical thinking and its importance in grappling with intricate matters and reaching well-founded conclusions.

In the interviews with lecturers, the presence of skills and dispositions becomes evident, highlighting the significance of constructing knowledge in teaching students how to think critically. Lecturers anticipate that students will hone their critical thinking abilities by generating fresh insights based on the information they've gathered during their learning journey. Beyond acknowledging critical thinking as both a skill and a disposition, lecturers recognize the pivotal role of knowledge in the thinking process. This perspective aligns with Ennis's (2011), Halpern's (2014), and Thomas and Lok's (2015) viewpoints, asserting that knowledge serves as a foundational element for critical thinking. In light of accurate information, students are tasked with formulating novel knowledge through their cognitive processes.

This study argues that knowledge, critical thinking skills, and active student engagement are interconnected in the process of constructing understanding. However, for this interconnection to occur, lecturers must adequately prepare for their classes. Supporting this idea, Ketabi et al. (2013) emphasize the importance of ensuring that lesson plans enable critical thinking.

4.2.2 Approaches to Critical Thinking in religious higher education

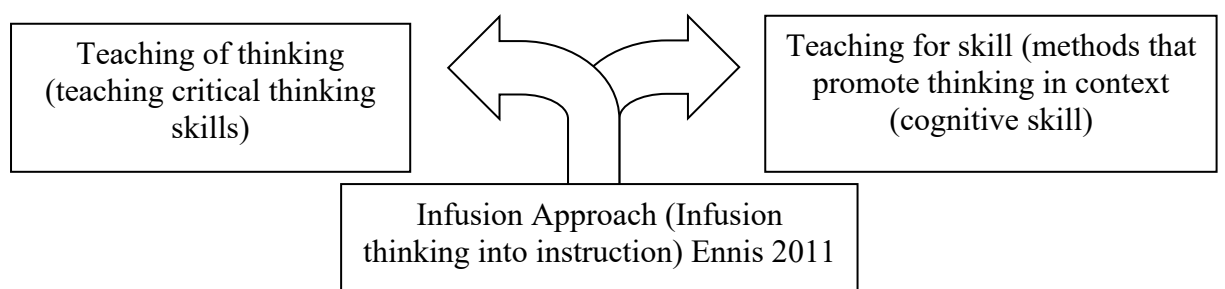
Ennis (2011) presents four distinct strategies for teaching critical thinking abilities. The initial method is the general approach, emphasizing skill development, followed by the infusion and immersion approaches. The infusion approach involves incorporating critical thinking skills directly into the curriculum, encouraging students to think critically in explicit ways (Paul et al., 1993). On the contrary, the immersion approach fosters critical thinking skills in a manner that aligns with the subject matter without explicit instruction. Lastly, the mixed approach combines the general approach with subject-specific skills, either through infusion or immersion strategies.

Using Ennis' theoretical approaches, observational data, and documents obtained, it is concluded that lecturers who teach Islamic religious education at Islamic higher education focus primarily on applying the infusion approach to critical thinking in their subjects. Islamic education lecturers need to instill critical thinking skills into their students, which is supported by this result. However, they must be given specific critical thinking or oriented skills in the curriculum or syllabus. Lecturers have traditionally regarded critical thinking skills as merely a learning outcome.

Thus, Islamic religious education lecturers are more applicable in teaching for thinking than teaching for thinking (Costa, 2001). Figure 4.6 shows that the infusion approach can incorporate the concepts of the teaching of thinking and teaching for skills in two distinct ways.

Figure 4.6

The Concept of Teaching Critical Thinking



Based on Figure 4.6, it can be inferred that the teaching of thinking primarily emphasizes skill-oriented instruction, as described by Ennis as a broad approach. The infusion approach leads to teaching for skills that specifically target methods for promoting critical thinking within the context of a particular subject. This is evident from Figure 4.3 in the findings, where respondents successfully established connections between critical thinking and Islamic religious education through the application of the infusion approach.

Alexander et al. (2010) and Zhang and Yuan (2022) have also recognized the infusion approach. These studies show that the infusion approach benefits students regarding knowledge, attitudes, and values in cross-curricular education and that lecturers demonstrate a positive impact in teaching subjects and gain satisfaction in terms of professional development. Infusion can be applied to many methodologies, such as discussions, debates, presentations, and questions.

Table 4.2 in the finding section illustrates some approaches lecturers employ when teaching subjects in the class. Five lecturers use an instructional approach, whereas most rely on the presentation method. The presentation method provides students with an opportunity to ask and answer questions, provide effective and efficient information, make rational decisions, and draw consistent conclusions when solving problems (Bustami et al., 2018; Fakhriyah, 2014; Cahyarini et al., 2016). This presentation method is also more focused on student engagement and student-centered learning.

Instructional methods used by some lecturers include group discussions, role plays, presentations, experiments, and debates. Students can increase their critical thinking skills by utilizing this approach, which is also known as a participatory approach.

In support of this argument, Cheong (2008) states that online discussions are commonly used in Singaporean universities and that many schools have begun to use online forums to facilitate discussions outside the classroom. In addition, Zhao's (2016) research supports the development of critical thinking in English as a Foreign Language classrooms in Chinese tertiary institutions, emphasizing explicit instructions, lecturer questions, and active and cooperative learning strategies such as group discussions, debates, and questions—feedback between classmates.

Suleiman (2012) supports this argument by stating that open-ended questions effectively reveal cognitive domains and enhance student learning. The ability to think critically can also be improved through presentations and experiments. The data triangulation analysis also revealed that students perceived debate as an effective means of promoting critical thinking, despite the language barrier. As Scott (2009) points out, the debate is beneficial in understanding topics, acquiring new knowledge, and understanding the debate process. It is also supported by Kimaro (2001) and Alexander et al. (2010).

For this method to be used effectively, the lecturer has a significant role, such as employing a feedback approach. According to Wijayati (2022), asking students questions, providing comments, encouraging their output, and providing praise are feedback strategies that enhance students' critical thinking abilities. A lecturer provides students with several questions to think about and answer. Through these feedback strategies, learners are also triggered to memorize, understand, apply, analyze, reformulate, and evaluate the material they have learned.

However, the prevailing problems in the teaching and learning process in the Islamic education study program are that the lecturers need to prepare before delivering their lectures and that all lecturers need to implement the feedback strategy. Student-

centered learning activities are more prevalent in classes where lecturers are not adequately escorted.

Additionally, some lecturers teach the topic of reading Sufi scripts using the lecturer method or *ceramah* method, focusing primarily on the lecturer with limited student participation. Lecturers still use the lecture strategy because of the large class size, the large teaching load, and the numerous responsibilities associated with the school, such as the administration. Paul (1992) also emphasizes in his study that students can fail to develop critical thinking because of the instruction they receive in college that does not foster critical thinking, despite such a method not being appropriate for conveying the process of growing critical thinking. Students are instructed to memorize material without understanding the logic of the material they are studying, which is equivalent to remembering content designed to be memorized. Although Alexander et al. (2010) still recommend the lecture method, he emphasizes that this method can be enhanced by using four-question techniques to improve quiz performance in conjunction with a face-to-face learning environment that promotes critical thinking.

According to Alexander et al. (2010), the recommendation is needed to utilize the lecture method during the teaching process. However, it is crucial to consider various provisions. This research aligns with the perspective that, although the lecture method typically aligns with a lecturer-centered teaching approach, there are multiple studies and circumstances wherein this method can aid students in comprehending the material. Hence, it is essential to incorporate a feedback strategy and tailor the implementation of the lecture method to suit the subject's context.

On the other hand, this study highlights that lecturers employ instructional strategies such as presentations, discussions, and questions and answers to address weaknesses and strengths in teaching. This approach is considered adequate and suitable

for other academic disciplines, as stated by Ennis (2011). Some intellectuals favor the infusion method, which immediately encourages applying critical thinking skills across various academic fields. However, this study also acknowledges that this approach may only sometimes successfully cultivate critical thinking among students due to challenges that will be discussed later. It further mentions that the student participation method can make students passive if not accompanied by proper preparation from the lecturer, such as the lack of critical questions and feedback approach. Consequently, the lecture method becomes the primary teaching method utilized in such situations.

The study concluded that the infusion approach employed by lecturers is educational. This aligns with the perspective of Sternberg (1986), who emphasized that the educational approach to teaching critical thinking is based on extensive classroom experience and observation of student learning.

It is important to note that the educational approach has faced criticism for its lack of specificity, which makes it challenging to provide clear guidance for effective instruction and assessment. Scholars like Ennis (1985) and Sternberg (1986) have raised concerns about this limitation. However, the study suggests that by integrating the infusion approach into the educational approach, lecturers aim to enhance the effectiveness of fostering critical thinking skills. Incorporating the infusion approach will enable lecturers to provide a more structured and practical framework for instruction and assessment, thus responding to criticisms related to the lack of specificity in education.

Based on the observational findings, also highlights a potential gap between lecturers' perceptions of fostering critical thinking and learning outcomes. While lecturers may believe they promote critical thinking, their efforts might focus more on subject comprehension than developing students' critical thinking skills. This is supported by the argument that Choy and Cheah's (2009) research supports and reinforces this perspective.

Therefore, it emphasizes the need for lecturers to reflect on their instructional methods and ensure that they genuinely foster students' critical thinking skills rather than solely focusing on subject understanding. It underscores the importance of aligning lecturers' intentions with the desired outcomes of promoting critical thinking among students.

4.2.3 Lecturers' Challenges in Teaching Critical Thinking

Based on the analysis of the challenges lecturers face in teaching critical thinking skills to students in this study, three major categories emerge as student-related challenges, namely challenges that originate with students. A second type of challenge is lecturer-related, namely challenges relating to lecturers themselves, such as insufficient competence or experience, insufficient time and ratio, and dogmatism; a third type is methodology-related, which are the challenges arising from textbook-based approaches and repetitive methods.

a. Student-related challenges

Table 4.3 in the finding section illustrates that lecturers face most student challenges. In addition, the results of this study suggest that the family environment, lifestyle, and educational background significantly affect how they think and participate in class. For example, students from Salafiyah *pesantren* schools tend to have a more passive mentality than graduates from modern *pesantren*. In contrast, students who graduate from modern *pesantren* schools remain less active than those who graduate from public high schools. Miu and Chi (2009) and Rear (2017) make the same argument that different cultural and educational backgrounds are significant challenges that contribute to a low level of critical thinking.

Furthermore, there are language barriers and passiveness in this Islamic education study program, where there are several Arabic courses, such as reading Sufism texts or several other reference books in Arabic. Due to this language challenge, students with an

Arabic background, such as graduates of public secondary schools, are more challenging to learn in class. They are also more passive than those who already have an Arabic background. Miu and Chi's (2010) and Rear's (2017) research also explain and confirm this language challenge.

As explained by the respondent lecturer, Anisa, significant differences in the education system and family greatly influence critical thinking. The respondent lecturer explained that students from Democratic families would have more freedom to express their opinions and may be more inclined to open communication and independent thinking. Compared to students with a family background from an authoritarian family background, who are more obedient and are not encouraged to express their opinions, students from a democratic family background may be able to develop critical thinking skills. Researchers Nickname and Royafar (2019) have also confirmed that students raised in a system that rewards obedience, silence, and acceptance are less likely to develop critical thinking skills.

Additionally, one of the challenges from other related students is their inability to take advantage of today's digital world, where everything is instantaneous, which allows them to obtain information effortlessly from the internet. Consequently, a lack of seriousness, reading habits, confidence, inadequate student participation, and even grade orientation follows. According to the observations, the student's level of activity and involvement in the class were highly dependent on two factors: the lecturer's behavior and the importance placed on grades. These factors played a significant role in determining the students' enthusiasm to ask questions and actively participate in the teaching and learning process.

Teacher Influence. The first factor, the lecturer's behavior, and teaching style, seem to have a considerable impact on how actively the students engage in the class. If

the lecturer is enthusiastic, engaging, and encouraging, the students are more likely to be motivated and participate actively. On the other hand, if the lecturer appears disinterested or less encouraging, it may affect the students' willingness to participate and ask questions.

Grades as an Incentive. The second factor mentioned is the importance of grades. The students seem to view their grades as an indicator of their performance and involvement in the class. Consequently, students may be more inclined to participate and ask questions if they believe it will positively affect their grades.

The combination of these factors creates a challenge for the teaching and learning process in the class. It suggests that there might be a need to create more intrinsic motivation for students to engage with the subject matter rather than solely relying on external factors like teacher behavior and grades.

To address this challenge, lecturers could explore strategies to foster a genuine interest in the subject matter and encourage students to engage based on their passion for learning and understanding rather than just seeking rewards or approval. This may involve creating interactive and thought-provoking learning experiences, providing opportunities for open discussions, and emphasizing the value of critical thinking and self-discovery in the study of "*Tasawuf Nash*." By nurturing a deeper connection to the subject matter, students are more likely to engage actively and develop a meaningful understanding of the teachings.

The argument is also supported by research results from Anggraeny (2022), which demonstrate that habits are the most challenging aspect of encouraging students to think critically. In addition, students prior learning experiences: students reported a lack of motivation for learning.

b. Lecturer-related challenges

In addition to the challenges lecturers face, they are also subjected to challenges from the lecturers themselves, such as their lack of competence or experience and insufficient time, ratio, or training. These challenges are acknowledged by Cosgrove (2010) as obstacles to implementing critical thinking with students, such as a need for more understanding of what critical thinking is and inadequate lecturer training. Additionally, Kowino et al. (2012) noted that lecturers who concentrate on rote learning and exam preparation due to a lack of time due to overcrowded curricula often need more motivation to apply critical thinking skills and will become accustomed to passive learning methods.

Despite the challenges mentioned above, this study found that lecturers who need to be more flexible about the importance of critical thinking face new challenges. With dogmatism, they will tend to maintain a particular approach without considering the students' context or individual needs. The dogmatic attitude of such a lecturer can impede critical thinking in the classroom and prevent lecturers from broadening their understanding of the concept. This attitude will also affect lecturers' challenges related to methodology-related challenges, as explained in the following paragraphs:

c. Methodology-related challenges

Due to the challenges previously described, this challenge arises to ensure that the lecturer maintains the same approach and does not innovate or adopt a repetitive approach. As with the presentation method, all lecturers perform it continuously without modification or improvisation in a class environment so that the lecturer has a greater preference for textbook-based approaches.

Lecturers may require additional resources, which can contribute to challenges related to teaching methods. This aligns with Cosgrove's (2010) argument about the

impact of insufficient administrative support for critical thinking instruction. Kowino et al. (2012) also highlighted that lecturers require assistance in teaching essential thinking skills due to inadequate training, limited resources, and a lack of administrative support. Angraeny's research (2022) further reinforces this conclusion.

In a nutshell, this study presents a comprehensive analysis of the challenges lecturers face when teaching critical thinking skills to students. This study provides a clear framework for understanding the complexities involved in this process by categorizing the challenges into three distinct types. Analyzing lecturers' challenges when teaching critical thinking skills provides valuable insight into this multifaceted educational endeavor. To overcome these challenges effectively, it is necessary to consider the student, the lecturer, and the methodological aspects. The lecturers can create engaging learning experiences by understanding and addressing these challenges, thereby fostering the development of robust critical thinking skills in their students.

4.2.4 The Influence of Cultural and Religious Factors on Teaching Critical Thinking in Islamic Higher Education

This study also found new findings that learning and teaching cultural and Islamic religious factors significantly impact the teaching of critical thinking skills in Islamic higher education, and lecturers must navigate these factors to promote critical thinking while respecting Islamic culture and religious beliefs. Traditional knowledge is highly valued in Islamic societies, and rote learning and memorization are common. Critical thinking requires students to challenge existing knowledge and beliefs, which can be challenging in a culture that values tradition and authority. Some students may be reluctant to question the teachings of respected scholars and lecturers.

Approach to Religion and Belief. Anderson (2017) researched the impact of religious knowledge and beliefs on critical thinking, highlighting potential hindrances. Shannon

(2020) adds that an excessive emphasis on critical thinking can be linked to doctrine, while Hepner (2015) observed that critical thinking within a doctrinal culture could lead to erosion. Moreover, this study reveals that students hesitate to ask questions or engage in class discussions due to a hostile environment and adherence to traditional learning methods. The research participants also expressed reluctance to express their opinions or seek clarification during the learning process due to a culture that emphasizes respect for lecturers. Similarly, Rear (2017) highlights how a culture of obedience leads to test-oriented and teacher-centered learning.

Based on the findings of this study, it is evident that a distinct religious approach is termed "Respectful". According to the analysis, this approach differs from theoretical perspectives. Cultural norms and religious beliefs often influence the behaviors, attitudes, and values of individuals. In many religions, respect for others, oneself, and the divine is strongly emphasized. The cultural traditions and norms of a society also play a significant role in guiding interpersonal interactions and promoting respectful behavior.

This study suggests that the "respectful" religious approach incorporates teachings and practices that emphasize respect as a core value. This approach may stand out from other theoretical perspectives, which prioritize different aspects or values, leading to distinctions between them. Which is also stated in the curriculum document.

"Upholding Islamic values, which include piety to God Almighty, respect for human values, and internalization of values and norms,"

In those statements, it is highlighted that the religious approach provides students with specific cultural and moral values. As part of the development of character, these values are essential; they can affect critical thinking if students are prevented from questioning specific ethical issues or societal norms as a result of religious teachings.

Similarly, Eslami, (2016) discusses the importance of respect among different religions, specifically within the context of Catholicism. He highlights that all religions

should respect one another. As an example, Catholic schools, are known to prioritize the respectful treatment of other world religions. In these schools, teachers are expected to acknowledge and appreciate the positive regard the Church holds for other religious traditions.

The significance of this study is further demonstrated by Hepner (2015), who shows a pessimistic view of critical thinking in religion and even suggests that students should learn critical thinking in general education rather than in religious institutions. However, Altinyelken (2021) describes how Islamic institutions believe in the existence of critical thinking. Traditionally, Islam is viewed as a holistic code of conduct encompassing all aspects of human existence, including ethics, morals, and spirituality. Some lecturers may be concerned that promoting critical thinking could undermine Islamic beliefs and values. Likewise, Wills (2019) emphasizes that critical thinking can inspire children's spiritual development through real-life examples.

The participants' demographics in the significant study, which was influenced by culture and religion, included the experience, background, and gender of the respondent, which played a significant role in how he provided approaches in his teaching. Alkharusi et al. (2014) also found that the various conceptualizations of critical thinking and the predictive models at the university level are influenced by cognitive, motivational, background, and demographic factors within Islamic institutions at Sultan Qaboos University in Oman.

Despite these challenges, many lecturers in Islamic higher education are finding ways to promote critical thinking skills while respecting cultural and religious factors. One approach emphasizes the importance of critical thinking within the Islamic tradition. Islamic scholars and philosophers have a long history of engaging in critical thinking and

inquiry, and lecturers can draw on this tradition to show students that critical thinking does not conflict with Islamic beliefs.

Another approach is to frame critical thinking skills to enhance religious understanding and practice rather than as a challenge to them. By demonstrating how critical thinking can help students better understand and appreciate the tenets of their faith, instructors can encourage students to approach critical thinking to deepen their religious knowledge and commitment. Meanwhile, lecturers can use Islamic cultural and religious values to promote critical thinking skills. For example, Islam strongly emphasizes social justice and critical thinking can be framed as a means of addressing social and political issues. Lecturers can use case studies and examples to show students how critical thinking skills can be used to solve real-world problems and promote social justice.

In other words, cultural and Islamic religious factors significantly impact the teaching of critical thinking skills in Islamic higher education, especially in Indonesia. Lecturers must navigate these factors to promote critical thinking while respecting cultural and religious beliefs. By emphasizing the importance of critical thinking within the Islamic tradition, framing critical thinking as a means of enhancing religious understanding and practice, and using Islamic values to promote critical thinking skills, lecturers can help students develop the skills they need to succeed in a rapidly changing world while remaining true to their cultural and religious traditions. Critical thinking skills stay among the most challenging competencies for Indonesian students at Islamic institutions. Similarly, this finding is supported by research on critical thinking in Indonesia (Husna, 2019; Hakim & Zulkifli, 2021; Muslem et al., 2019).

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

In this section, both conclusions and suggestions are presented. Research results and discussions are summarized in the conclusions, which reflect the researcher's perspective and relevant statements. The recommendations are intended to assist other parties interested in exploring or expanding upon the research findings.

5.1 Conclusions

This thesis highlights the need for lecturers in Islamic religious education study programs at Indonesian Islamic higher education institutions to further develop their understanding of critical thinking. While lecturers acknowledge the significance of critical thinking in higher education, there still needs to be more consensus on its effective instructional methods. Some lecturers adhere to traditional, lecture-based approaches, while others employ interactive and student-centered methods. Although there is general agreement among lecturers that critical thinking encompasses both skills and dispositions, there needs to be more mention of specific elements of critical thinking. This suggests that some lecturers may need more perception of the factors involved. Additionally, it is essential to recognize that skills and dispositions are integral and complementary components of critical thinking. While some lecturers perceive critical thinking as a combination of skills and dispositions, the majority still categorize it solely as a skill or a disposition.

This study found that the concept of "respectful" can be classified as a disposition or attitude and can be classified as intellectual humility, which is "respectful" not present in Ennis' theory of critical thinking disposition. However, based on the findings obtained from interviews with lecturers and students, as well as an analysis of curriculum documents, it is evident that they perceive and value the importance of respect.

This study reveals that critical thinking is intricately connected with Islamic religious education, encompassing the integration of critical thinking skills and principles within the context of Islamic teachings and values. It emphasizes the significance of analytical, logical, and reflective thinking in comprehending and interpreting Islamic knowledge and texts. Within the realm of Islamic religious education, critical thinking entails the act of questioning, analyzing, and evaluating information, arguments, and beliefs through both rationality and the guidance of Islamic teachings. It encourages students to explore diverse perspectives, seek substantiating evidence, and make informed judgments while remaining aligned with the principles and teachings of Islam. By fostering critical thinking within the framework of Islamic religious education, students not only develop a deeper understanding of Islamic concepts but also nurture independent thinking abilities, actively engage in meaningful discussions, and embark on reflective journeys that contribute to their personal and spiritual growth.

Furthermore, lecturers' perceptions regarding their understanding of critical thinking significantly impact their instructional approach. In the context of this Islamic religious education study program, the infusion approach to critical thinking, as described in Ennis' theory (2011), is predominantly employed.

Meanwhile, the study concluded that the infusion approach employed by lecturers is educational. This aligns with the perspective of Sternberg (1986), who emphasized that the educational approach to teaching critical thinking is based on extensive classroom experience and observation of student learning. Incorporating the infusion approach into the educational approach will enable lecturers to provide a more structured and practical framework for instruction and assessment, thus responding to criticisms related to the lack of specificity in education.

The infusion approach to critical thinking was found to be composed of four major themes. These themes are pedagogical approaches, including non-book-oriented approaches and real-world contexts. Second, Assessment methods include oral examinations, thought-provoking assignments, resume papers, and writing papers. Third, student engagement and participation consist of the following: student contributions, student-centered learning, collaborative learning, and the role-playing approach. Fourth, instructional methods include presentation methods, question-and-answer sessions, addressing weak points, feedback processes, and incorporating multimedia sources.

In the infusion approach, lecturers utilize instructional methods such as presentations, discussions, and question-and-answer sessions to address both the strengths and weaknesses in their teaching. This approach is deemed practical and applicable to various academic disciplines, as supported by Ennis (2011). However, it is essential to acknowledge that this approach may only sometimes effectively foster critical thinking among students. Insufficient student participation methods can result in passivity among students, especially when accompanied by inadequate lecturer preparation, such as the absence of critical questions and a feedback approach. Consequently, the lecture method becomes the primary teaching approach in such situations.

There is also a need for more training and resources to support lecturers in teaching critical thinking effectively. The lecturers' learning approach also requires an appropriate system and curriculum design.

This study presents a comprehensive and in-depth analysis of the challenges lecturers face in teaching their students critical thinking skills. By categorizing these challenges into three distinct categories—student-related, lecturer-related, and

methodology-related—, this research provides a comprehensive framework for understanding the complexities involved in this educational process.

The student-related challenges identified in this study encompass a range of factors such as unique experiences and backgrounds, students' lack of grounding or interest, language barriers and passiveness, diverse backgrounds, family background, lack of seriousness, and grade orientation. Additionally, factors such as lack of reading habits, lack of confidence, academic knowledge, insufficient student participation, and the influence of digitalization contribute to the challenges faced by students. Lecturer-related challenges include teachers' lack of competence or experience, limited time and ratio, and dogmatism in their approach to teaching. These challenges stem from the lecturers and can impact their effectiveness in teaching critical thinking skills. Methodology-related challenges refer to challenges arising from the choice of instructional approaches. These challenges include a preference for textbook-based approaches and repetitive methods.

Lecturers need to recognize and understand these challenges to develop effective strategies to enhance the critical thinking skills of their students. Studying the challenges, lecturers face in teaching critical thinking skills provides valuable insights into this complex endeavor. To overcome these challenges effectively, it is crucial to consider the student, the lecturer, and the methodological aspects. Understanding and addressing these challenges will enable lecturers to create engaging learning experiences that promote the development of robust critical thinking abilities in their students.

On the other hand, cultural and Islamic religious factors significantly impact the teaching of critical thinking skills in Islamic higher education. Lecturers must navigate these factors to promote critical thinking while respecting cultural and religious beliefs. Lecturers can emphasize the importance of critical thinking within the Islamic tradition,

frame critical thinking to enhance religious understanding and practice, and use Islamic values to promote critical thinking skills. Critical thinking requires students to challenge existing knowledge and beliefs, which can be challenging in a culture that values tradition and authority. Some students may be reluctant to question the teachings of respected scholars and lecturers. This study also found that the term "Respectful" is associated with cultural norms and religious beliefs, which tend to influence individuals' behaviors, attitudes, and values.

This paper also highlighted that critical thinking should not be antithetical to cultural values or religious beliefs. Many religious and cultural traditions emphasize the importance of reason, reflection, and inquiry. Moreover, critical thinking can help individuals better understand and appreciate their cultural heritage and question and challenge aspects of their culture that may be harmful or unjust.

The approaches lecturers employ in Islamic higher education when teaching critical thinking skills can vary. Some may focus on instructing students on identifying and evaluating arguments within the framework of Islamic scholarship. In contrast, others may emphasize the practical applications of critical thinking within an Islamic context. However, lecturers must also be mindful of the potential challenges of teaching critical thinking skills in a cultural and religious setting. In general, the instruction of critical thinking skills in Islamic higher education necessitates a delicate balance between promoting critical thinking, providing adequate resources, and respecting cultural and religious values. By effectively navigating these factors, lecturers can assist students in developing the necessary skills to thrive in an ever-changing world while remaining faithful to their cultural and religious heritage.

5.2 Suggestions

This study offers three significant recommendations for institutions, government, and future research.

5.2.1 Suggestions for the Institution

- 1) *Develop comprehensive faculty development programs.* Institutions should place a high priority on designing and implementing faculty development programs that emphasize critical thinking skills among lecturers. Lecturers can participate in workshops, seminars, and training sessions to acquire the knowledge, strategies, and resources needed to effectively teach and promote critical thinking.
- 2) *Encourage a supportive and inclusive learning environment.* Institutions should foster an environment that fosters open discussion, critical inquiry, and intellectual curiosity. Promoting interdisciplinary collaboration, establishing debate clubs and forums, and integrating critical thinking activities into the curriculum can all help to achieve this goal.
- 3) *Incorporate technology and innovative teaching methods.* Institutions should explore innovative teaching methods and technology integration to enhance critical thinking skills. Through the use of online platforms, interactive learning tools, and simulations, students can be encouraged to analyze, solve problems, and make decisions within an Islamic framework.
- 4) *Integrate critical thinking across the curriculum.* In Islamic higher education, critical thinking should be integrated throughout the curriculum. Critical thinking skills must be explicitly addressed in course objectives, learning outcomes, and assessments. The curriculum should include activities, assignments, and assessments that encourage students to analyze, evaluate, and synthesize information within an Islamic framework, fostering their critical thinking abilities across disciplines.

5.2.2 Suggestions for the Government

- 1) *Invest in research and development in critical thinking.* Governments should allocate resources and funding to initiatives that explore and enhance the development of critical thinking skills in Islamic higher education.
- 2) *Collaborate with educational institutions.* Governments should work with educational institutions to develop policies and guidelines that prioritize critical thinking as a core component of Islamic higher education.
- 3) *Promoting professional development opportunities for educators.* Governments should invest in professional development opportunities for educators, including workshops, conferences, and training programs that enhance critical thinking skills.

5.2.3 Further Research Suggestions

This study had several limitations, including limited sample size and a small number of secondary school respondents due to time constraints. Additionally, this study concludes with several recommendations for future research that can be addressed below:

- 1) To gain a deeper understanding of lecturers' perceptions and approaches to critical thinking within religious education, conduct a broader and more comprehensive study involving multiple religious' institutions. The study can provide a more comprehensive and nuanced analysis by including a larger sample size and diverse institutions.
- 2) Examine the impact of cultural and religious factors on the teaching and learning of critical thinking skills in religious institutions. Analyze the impact of cultural and religious beliefs, values, and practices on pedagogical approaches and the effectiveness of critical thinking instruction. There is a need for further research

to shed light on the unique challenges and opportunities that arise in religious, and educational settings.

- 3) Examine the integration of respectful and intellectual humility into the curriculum: this research will consider discussions and activities explicitly addressing respect and intellectual humility in the curriculum. To foster a culture of openness, critical thinking, and mutual respect, these themes can be incorporated into a variety of subjects and courses.
- 4) Examine the long-term effects of integrating critical thinking skills into the curriculum of religious institutions on the academic and professional performance of students. Evaluate the impact of integrating essential thinking instruction on students' intellectual growth, problem-solving abilities, and ability to navigate complex religious and social issues. Identify how these skills will contribute to students' academic and professional success in the future.

Through the implementation of these research recommendations, a deeper understanding of critical thinking can be achieved, resulting in more effective instructional strategies and policies in religious institutions. The results of this study can contribute to the development of students' critical thinking skills and their overall educational experience.

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APPENDIX 1: BASELINE SURVEY OF LECTURERS

I. Data Responden dalam Bahasa

1. Siapa nama Anda?
2. Sudah berapa lama Anda mengajar di kampus ini?
3. Apa bidang spesialisasi mengajar Anda?
4. Apa latar belakang pendidikan Anda?
6. Dari daerah mana anda berasal?
7. Apakah Anda memiliki pengalaman mengajar dari berbagai jenis perguruan tinggi lainnya? Jika ya, Boleh disebutkan

II. Respondent Data in English Translation:

1. What is your name?
2. How long have you been teaching at this campus?
3. What is your area of specialization in teaching?
4. What is your educational background?
6. Where are you from?
7. Do you have teaching experience at other types of universities? If yes, may I mention

APPENDIX 2: INTERVIEW INSTRUMENTS

I. INTERVIEW INSTRUMENT IN ENGLISH

Lecturers' Interview:

How do lecturers in religious higher education institutions perceive critical thinking?

1. How do you perceive critical thinking skills?
2. Do you believe critical thinking skills are important? If so, why?
3. Could you provide more details, along with examples, of how critical thinking is applied in this Islamic institution?
4. What contributes to your comprehension of critical thinking?
5. How well do your students demonstrate their critical thinking abilities in the classroom?

How do lecturers in religious higher education approach critical thinking skills in the teaching process?

1. How do you approach teaching your subject in the classroom?
2. To what extent have you actively fostered the development of critical thinking skills in your students?
3. Could you provide a more detailed explanation of the teaching methodology you employ?
4. Do you believe your instructional approach can effectively encourage students to cultivate and enhance their critical thinking abilities? Please share your perspective.
5. In your view, what teaching approach has the greatest impact on improving students' critical thinking skills? Can you provide an example?
6. What kinds of assignments do you typically create for all students?
7. What specific media tools do you believe are necessary for this Islamic institution to nurture the growth of students' critical thinking abilities?

What challenges do lecturers face when fostering critical-thinking students in religious higher education institutions?

1. What are some factors that might hinder lecturers in fostering students' critical thinking skills?
2. What challenges do lecturers encounter when attempting to cultivate students' critical thinking in the classroom or through assignments?
3. How do lecturers address and overcome these challenges and obstacles in their efforts to develop student's critical thinking abilities?

II. INTERVIEW INSTRUMENT IN BAHASA INDONESIA

Wawancara Dosen:

Apa pandangan dosen di perguruan tinggi keagamaan mengenai pentingnya berpikir kritis?

1. Bagaimana pendapat Anda tentang keterampilan berpikir kritis?
2. Menurut Anda, apakah keterampilan berpikir kritis itu penting? Mengapa?
3. Bisakah Anda menjabarkan lebih lanjut dengan beberapa contoh yang diterapkan di lembaga Islam ini?
4. Apa yang membentuk pemahaman Anda tentang berpikir kritis?
5. Bagaimana kemampuan siswa Anda untuk berpikir kritis di kelas?

Bagaimana pendekatan dosen di perguruan tinggi agama terhadap kemampuan berpikir kritis dalam proses pengajaran?

1. Bagaimana Anda mengajar mata pelajaran Anda di kelas?
2. Sejauh mana upaya Anda untuk mengembangkan keterampilan berpikir kritis pada siswa di kelas Anda?
3. Metode pengajaran seperti apa yang anda gunakan? Bisakah Anda meng gambarkannya dengan lebih detail?
4. Apakah pendekatan instruksional Anda dapat mempengaruhi siswa untuk mengembangkan dan mempertajam pemikiran kritis mereka? Jelaskan pendapat Anda
5. Menurut anda, pendekatan mengajar seperti apa yang memiliki dampak yang paling membantu meningkatkan keterampilan berpikir kritis mereka? Bagaimana? beri contoh.
6. Jenis tugas apa yang Anda rancang untuk semua siswa?
7. Alat media apa yang dibutuhkan di lembaga Islam ini untuk mengembangkan pemikiran kritis siswa?

Tantangan apa yang dihadapi dosen dalam mengembangkan kemampuan berpikir kritis mahasiswa di perguruan tinggi keagamaan?

1. Adakah faktor penghambat bagi dosen dalam menumbuhkan keterampilan berpikir kritis siswa?
2. Apa saja tantangan yang mungkin dihadapi dosen dalam menumbuhkan pemikiran kritis siswa di dalam kelas, ataupun dalam mengerjakan tugas?
3. Upaya apa yang dosen lakukan dalam menangani tantangan dan kendala dalam menumbuhkan pemikiran kritis siswa?

APPENDIX 3: SAMPLE OF INTERVIEW

1. How do you perceive critical thinking skills?

“The concept of thinking critically means being able to be critical. You can say that accepting something is not as easy as you would like; you can see something wrong, so you dare to express your concerns. Hence, constructive criticism is required—not criticism based solely on emotion but rather criticism that is constructive and aimed at promoting the welfare of all”.

2. Do you believe critical thinking skills are important? If so, why?

“There is no doubt that critical thinking is important. Students need to think critically in the university, such as by combining lectures with seminars to write papers and give presentations so that activities are centered on the students. They can be more active and critical in their learning”.

3. Could you provide more details, along with examples, of how critical thinking is applied in this Islamic institution?

“In my class, Interpreting Religious Texts is the key point; therefore, Encouraging students to critically analyze and interpret religious texts, such as the Quran and Hadith, helps them develop a deeper understanding of their faith. They may explore different interpretations, historical contexts, and cultural influences to arrive at well-reasoned conclusions.”

4. What contributes to your comprehension of critical thinking?

“In my view, the impact on learning and teaching is significantly shaped by various factors, such as educational resources like materials, academic papers, books, articles, and a wide range of online sources.”

5. How well do your students demonstrate their critical thinking abilities in the classroom?

“Many students tend to be passive because they do not read enough and do not prepare material before entering class. In this case, students tend to read the material before attending lectures, which is a special challenge.”

How do lecturers in religious higher education approach critical thinking skills in the teaching process?

1. How do you approach teaching your subject in the classroom?

"The teaching approach in this class is to read and understand the text; it is difficult to ask them to analyze it if it is still tough to understand, so I just ask my student to read it."

2. To what extent have you actively fostered the development of critical thinking skills in your students?

"In the case of reading texts, the approach used is simply reading. The script was read one by one and then translated in the manner of reciting the Quran. Students were also asked to read and translate the Nash. However, the students are not asked to explain it since reading and translating it is already challenging. This course is designed to provide students with the opportunity to become familiar with Arabic references through the reading of this text."

3. Could you provide a more detailed explanation of the teaching methodology you employ?

"Usually I use the presentation method with a brief introduction, and those who wish to discuss may come prepared. Sometimes, students also have their materials ready in advance. During the introduction, I often like to recap what was covered in the previous session and review the presentation guidelines. Interestingly, in some cases, even during the afternoon, there's an allowance for participants to have a drink, despite it being against campus rules."

4. Do you believe your instructional approach can effectively encourage students to cultivate and enhance their critical thinking abilities? Please share your perspective.

"Indeed, students have become disinterested in the methods and approaches employed by lecturers, particularly the presentation method. Although this approach is intended to create student-centered learning and promote high participation, students appear quite bored as most lecturers follow the same monotonous model. Moreover, the fixed sitting positions of students contribute to the monotony, and it would be beneficial to introduce changes, such as arranging seating in a circle or exploring other seating arrangements. This variety could help rejuvenate the learning environment and enhance student engagement."

5. In your view, what teaching approach has the greatest impact on improving students' critical thinking skills? Can you provide an example?

“In my opinion, methods that engage students in activities like discussions, questions and answers, and various other approaches can significantly aid in developing their critical thinking skills.”

6. What kinds of assignments do you typically create for all students?
“I use writing a paper for the questions of exams to develop critical thinking skills. Writing papers will also help you become a more critical thinker.”

7. What specific media tools do you believe are necessary for this Islamic institution to nurture the growth of students' critical thinking abilities?

“I use different teaching methods, and YouTube is one of them. The reason is that I have a great passion for history, and I studied in the history department. Back then, most of my lecturers relied on the lecture model.”

What challenges do lecturers face when fostering critical-thinking students in religious higher education institutions?

1. What are some factors that might hinder lecturers in fostering students' critical thinking skills?

“Students from different backgrounds have unique experience backgrounds, and usually children who have graduated from the general public education tend to have different challenges in class as many of the children in PAI do not understand Arabic and are therefore more passive when in class.”

2. What challenges do lecturers encounter when attempting to cultivate students' critical thinking in the classroom or through assignments?

“A challenge is that students prefer tasks that do not require deep thought, such as resumes, which are already within their comfort zone. When given questions that require them to consider multiple options, they often lack the confidence to think critically. Consequently, they prefer a more textbook-based approach.”

3. How do lecturers address and overcome these challenges and obstacles in their efforts to develop student's critical thinking abilities?

“I often advise my students by sharing stories of successful individuals, using them as examples to motivate them to avoid laziness. Additionally, I encourage them to participate in organizations, as I believe that active involvement can lead to greater engagement in class and can be more critical. So, I reward those who actively participate in class with extra grades.”

APPENDIX 4: OBSERVATION INSTRUMENTS

Study Program:

Subjects:

Lecturer:

Time:

A. Lecturer Activities in the Classroom

1. Observe the lecturer's activities in the classroom while conducting teaching and learning interactions.
2. Give a comment or reflection according to the observed situation.

	Observed aspect	Comment/Reflection
Classroom organization and Quality of Classroom interaction	Presented overview of the lesson	
	Paced lesson appropriately	
	Presentence topics in a logical sequence	
	Related today's lesson to previous/ future lessons	
	Summarized significant points of the lesson	
	Create a summary with the help of students.	
	Reflecting on learning by involving students	
	Interaction, Time/Percentages spent in discussion, and lecturers' acceptance of Students.	Actively encourage students' questions.
Asked questions to monitor students' understanding		
Waited sufficient time for students to answer questions		

	Listened carefully to students' questions	
	Responded appropriately to students' questions	
	Restated questions and answer when necessary	
Teaching approaches generally and critical thinking conveying skills	Explained major /minor points with clarity	
	Defined unfamiliar terms, concepts, and principles	
	Use good examples to clarify points	
	Use media that can stimulate students to think critically	
	Show all the steps in the solution to homework problems	
	The varied explanation for complex or difficult material	
	Give assignments that can stimulate students to think critically.	
	Encouraging students to process learning materials to develop metacognitive abilities	
	Use a learning approach following the competence to be achieved	
	Emphasized important points	

	Writes key terms on the blackboard	
	Integrates materials from real-world	
	Active, collaborative, and cooperative learning favored over passive learning	

Your comment on Lectures' approaches strength (Briefly explain)

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Summary Comment.....

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APPENDIX 5: SAMPLE OF OBSERVATION REPORT

Subjects: Aqidah and Reading *Tasawuf* Nash

Lecturer: Ahmad

Time: May 8, 2023 at 13:00 pm – 15:30 pm

A. Lecturer Activities in the Classroom

1. Observe the lecturer's activities in the classroom while conducting teaching and learning interactions.
2. Give a comment or reflection according to the observed situation.

	Observed aspect	Comment/Reflection
Classroom organization and Quality of Classroom interaction	Presented overview of the lesson	The lecturer began with a prayer and provided a brief explanation of the previous lesson. However, there were no questions asked of the students regarding what they had read in the previous session.
	Paced lesson appropriately	This reading lesson primarily focuses on reading the yellow book.
	Presentence topics in a logical sequence	The lecturer's explanations were not logical as he seemed fixated on simply translating the yellow book.
	Related today's lesson to previous/ future lessons	The lecturer is notably interested in connecting the characters mentioned in the text with present-day figures in various sections of the lesson.
	Summarized significant points of the lesson	The lecturer does not provide a summary of the lesson. Despite asking the question "anyone

		wants to ask a question" several times, most students remain passive and do not actively participate.
	Create a summary with the help of students.	The lecturer does not provide a summary of the lesson. Despite asking the question "anyone wants to ask a question" several times, most students remain passive and do not actively participate.
	Reflecting on learning by involving students	The lecturer did not offer any reflection on the lesson taught, and the class concluded with a prayer reading.
Interaction, Time/Percentages spent in discussion, and lecturers' acceptance of Students.	Actively encourage students' questions.	The lecturers only ask basic questions such as "Who doesn't understand?" or "Does anyone have something to ask?" They do not delve into more in-depth or thought-provoking inquiries.
	Asked questions to monitor students' understanding	After reading the text, the lecturer typically asks the students about any aspects they still don't comprehend or find unclear.
	Waited sufficient time for students to answer questions	The lecturers also allocate time for students to read texts and translate them without requiring in-depth analysis.

	Listened carefully to students' questions	The lecturers actively listen to their students' explanations.
	Responded appropriately to students' questions	The lecturers actively listen to their students' explanations. Moreover, they take the time to answer various questions that the students might still not fully understand, even if those questions are limited to vocabulary-related issues.
	Restated questions and answer when necessary	Lecturers not only provide answers but also pose questions to students when deemed necessary.
Teaching approaches generally and critical thinking conveying skills	Explained major /minor points with clarity	The lecturer's explanation of the points is not clear, as this lesson primarily focuses on understanding vocabulary.
	Defined unfamiliar terms, concepts, and principles	The lecturer indeed explains certain terms or concepts that may be unfamiliar to the students.
	Use good examples to clarify points	However, the lecturer fails to provide real examples to clarify the explanations.
	Use media that can stimulate students to think critically	Lecturers solely concentrate on the yellow book as the primary reference, without making use of other media sources for reference.

	Show all the steps in the solution to homework problems	Lecturers seldom assign homework problems.
	The varied explanation for complex or difficult material	Lecturers are reported to employ the same method when delivering lessons.
	Give assignments that can stimulate students to think critically.	Normally, lecturers tend to assign tasks such as summarizing texts. However, several other assignments, such as writing papers and analyzing various stanzas or sentences in "Kita Kuning," are also considered to stimulate students' critical thinking.
	Encouraging students to process learning materials to develop metacognitive abilities	In this lesson, the lecturer does not incorporate an approach that supports metacognitive skills, as the class is quite passive, mainly focusing on reading and understanding vocabulary.
	Use a learning approach by the competence to be achieved	Lecturers are fixated on only using learning approaches such as lectures and reading and explaining unfamiliar vocabulary
	Emphasized important points	The lecturer also took the time to explain important points repeatedly and emphasized their significance.

	Writes key terms on the blackboard	Lecturers do not utilize the blackboard as a medium for teaching.
	Integrates materials from real-world	There are instances when the lecturer connects the content discussed in the book to real-life contexts in the present time.
	Active, collaborative, and cooperative learning favored over passive learning	Students prefer an active atmosphere, but this class is considered passive as its focus lies on understanding rather than analysis.

Your comment on the Lecturers' approaches strength (Briefly explain):

Lecturers who are responsible for teaching Aqidah (Islamic creed) and Reading Sufism Nash (Sufi spiritual literature) have a unique advantage in their approach to instruction. The primary focus of their lesson is to facilitate students' understanding of foreign vocabulary found in a specific book, often referred to as the "yellow book."

The strengths of lecturers lie in their ability to focus on and emphasize the finer details of foreign vocabulary, facilitating students' comprehension of the yellow book's content and promoting a deeper engagement with the subject matter of Aqidah and Reading Sufism Nash.

Summary Comment:

Apart from the strengths mentioned earlier, the lecturers in this course adopt a less active teaching style compared to their counterparts in other courses. Their main focus is to facilitate students' comprehension of vocabulary without necessarily requiring them to provide explanations or in-depth analysis. Instead, the emphasis is on understanding the meaning and usage of the words.

The primary source utilized for teaching in this class is the kitab kuning, or yellow book, which holds traditional significance. This book is often a repository of essential knowledge in Islamic studies, including Aqidah and Reading Sufism Nash. By using this traditional text, the lecturers aim to impart a deeper understanding of the subject matter while preserving the rich cultural and historical context.

The learning atmosphere in this class centers around the lecturer and follows a reading-based method. It closely resembles the traditional teaching and learning approach prevalent in Islamic boarding schools, where students sit around their teacher, attentively listening and translating the text. This method emphasizes the direct transmission of knowledge from the lecturer to the students.

Despite the passive nature of this teaching approach, the lecturer does encourage student participation to some extent. Students are stimulated to ask questions, fostering a degree of engagement and active involvement in the learning process. Additionally, the lecturer assigns some students to read passages from the yellow book and translate them, allowing for practical application and reinforcing comprehension.

However, one aspect that could be further improved is the lack of emphasis on students' articulation of their understanding of the text. The lecturer does not prompt the students to express their comprehension or provide explanations of what they have learned from reading the text. Encouraging students to verbalize their understanding can deepen their grasp of the subject matter and enhance their critical thinking skills.

While the lecturers in this course have strengths in using traditional teaching methods and facilitating vocabulary comprehension, their teaching style tends to be more passive. Incorporating opportunities for students to express their understanding would further enrich the learning experience and foster a more interactive classroom environment.

APPENDIX 6: SAMPLE OF CODING

Coding Process Example

Data	Code
<p><i>“There is no doubt that critical thinking is important. Students need to think critically in the university, such as by combining lectures with seminars to write papers and give presentations so that activities are centered on the students. <u>They can be more active and critical in their learning</u>”.</i></p>	<p>(ICT) Importance of critical thinking</p> <p>(SE) Student engagement</p>
<p><i>“Despite Islamic culture, it is not hampered by a lack of thinking. Even Muslims are expected to have broad perspectives. During the Islamic period, many scientists were born because of intensive thinking activities. I place a high priority on the discussion in my class when studying Islamic history. <u>Students are assigned to write papers</u> on topics such as Islam during the Abbasiyah period. Afterward, <u>they discussed, and I allowed them to express</u> their views.”</i></p>	<p>(IT) Islamic culture and thinking</p> <p>(SE) Student engagement in learning</p> <p>(EV) Encouraging expression of view</p>

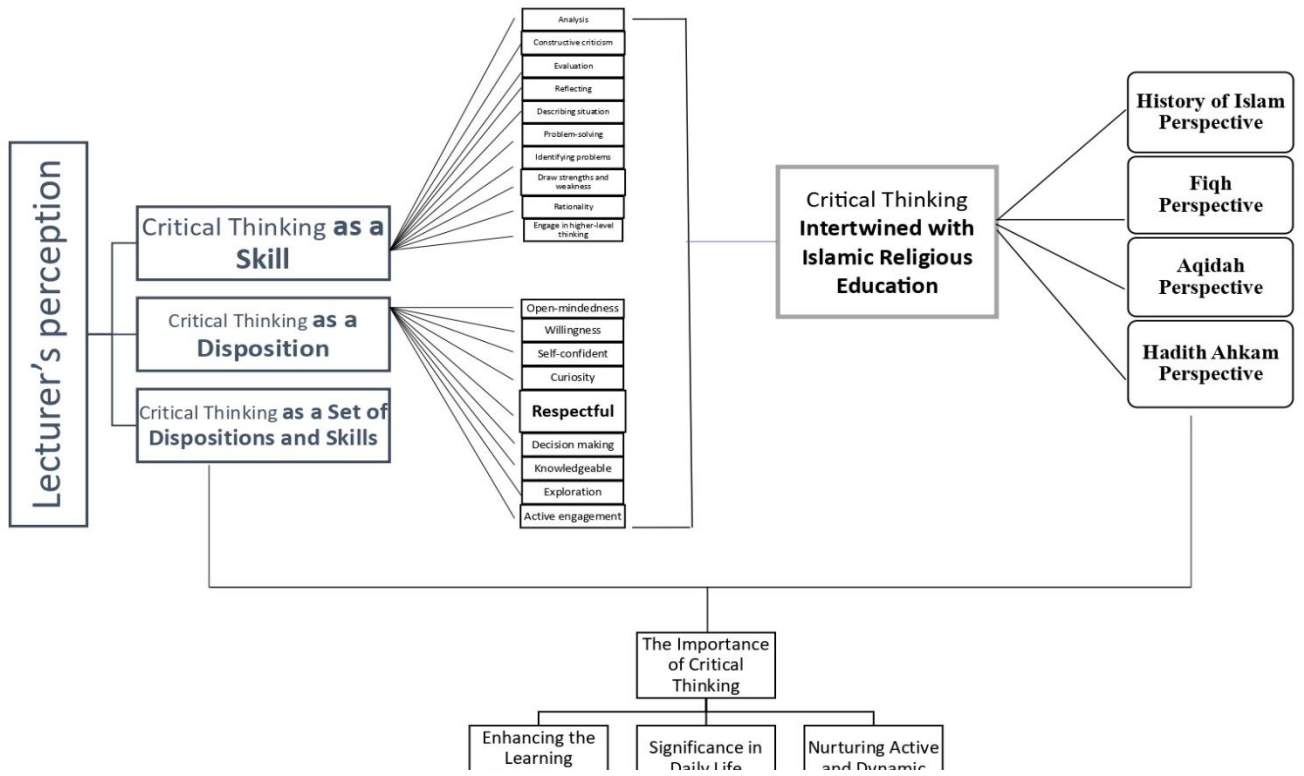
Code Categorization

Appearing Code	Category
<p>(ICT) Importance of critical thinking</p> <p>(IT) Islamic culture and thinking</p>	<p>Lecturers regard critical thinking as important and recognize its significance as the foundation of Islamic religious culture. It also serves as the rationale for comprehending Islamic studies.</p>
<p>(SE) Student engagement</p> <p>(SE) Student engagement in learning</p> <p>(EV) Encouraging expression of view</p>	<p>Lecturers acknowledge that one effective approach to fostering student critical thinking is by encouraging active student engagement in the classroom teaching and learning process.</p>

Categorization to theory

Appearing Code	Category	Theme	Theory
(ICT) Importance of critical thinking (IT) Islamic culture and thinking	Lecturers regard critical thinking as important and recognize its significance as the foundation of Islamic religious culture. It also serves as the rationale for comprehending Islamic studies.	The importance of critical thinking and its role in improving student performance	One significant rationale for the importance of critical thinking lies in its ability to enhance the learning experience.
(SE) Student engagement (SE) Student engagement in learning (EV) Encouraging expression of view	Lecturers acknowledge that one effective approach to fostering student critical thinking is by encouraging active student engagement in the classroom teaching and learning process.	Infusion approach to teaching critical thinking	An infusion approach, specifically student collaboration and engagement, is considered one of the methods to enhance students' critical thinking skills.

SAMPLE OF CODING



No	Approach / Method	Anisa	Fatimah	Asep	Budi	Bunga	Ahmad
1	Critical Reading Approach	1	0	1	1	1	1
2	Non-book-oriented Approach	1	1	1	1	1	1
3	Real-world Context	1	0	0	1	1	1
4	Oral Exam	1	1	1	1	1	1
5	Thought-provoking Assignments	1	0	1	0	1	0
6	Resume Paper	1	1	1	1	1	1
7	Writing Paper	1	1	1	1	1	1
8	Student Contribution	1	0	1	1	1	1
9	Student-centered Learning	1	1	0	1	0	1
10	Collaborative Learning	1	0	1	0	0	1
11	Role-play Approach	1	0	0	0	0	0
12	Presentation Method	1	1	1	1	1	1
13	Question-and-answer Session	1	1	1	1	1	1
14	Addressing Weak Points	1	0	1	0	0	0
15	Feedback Approach	1	1	1	0	1	0
16	Incorporation of Multimedia Sources	1	0	0	0	0	0
17	Seminar Approach	1	0	0	0	0	0
18	Lecture Approach	1	1	1	1	1	1

Please note that in the table, "1" represents the presence of a particular approach or method for a specific lecturer, while "0" indicates its absence.

APPENDIX 7: STUDENT ASSIGNMENT

<p>INDIKATOR SOAL: Disajikan gambar dan/atau narasi tentang peristiwa sejarah Indonesia pada zaman Hindu/Buddha. Peserta diminta untuk memilih hasil analisis yang tepat.</p>	No. Soal	<p>SOAL:</p>  <p>Kerajaan Hindu Budha di Indonesia bermula dari perdagangan dan penyebaran agama. Agama Hindu dan Budha merupakan agama yang pertama kali masuk ke Indonesia dimana sebelumnya masyarakat Indonesia masih mengenal <i>animisme</i>. Sebutkan beberapa teori masuknya Kerajaan Hindu ke Indonesia!</p> <p>a. Teori Brahmana, teori Waisya, teori Ksatria, dan teori Arus Balik b. Teori Waisya, teori Sudra c. Teori Brahmana, teori Mahabarata d. Teori China dan teori India e. Teori Gajahmada</p>
	1.	
	Jawaban a.	
<p>PEMBAHASAN:</p> <p>Beberapa teori masuknya Kerajaan Hindu ke Indonesia yaitu:</p> <ol style="list-style-type: none"> Teori Brahmana: Teori ini mengatakan bahwa ajaran agama yang disebarkan di Indonesia berasal dari kasta Brahmana. Dimana pada saat itu para Brahmana merupakan tamu yang diundang oleh raja-raja penganut agama tradisional Indonesia. Seiring berjalannya waktu para Brahmana ikut menyebarkan ajaran agama Hindu di Indonesia. Teori ini berdasarkan pernyataan ilmuwan yaitu Van Leur. Teori Waisya: teori ini mengatakan bahwa ajaran Hindu di Indonesia disebarkan oleh kasta Waisya, terutama para pedagang. Para pedagang memiliki hubungan dan kerjasama yang kuat dengan raja-raja di Indonesia. Di sela-sela kegiatan berdagang itu kemudian para Waisya menyebarkan agama Hindu pada masyarakat Indonesia. Ilmuwan yang sependapat dengan teori ini yaitu N.J. Krom. Teori Ksatria: teori ini mengatakan bahwa ajaran Hindu di Indonesia adalah berasal dari kasta Ksatria. Dimana golongan ksatria ini berasal dari prajurit perang dan bangsawan. Menurut teori ini, masalah politik di India menyebabkan pertumpahan darah dan menyebabkan prajurit dan bangsawan yang kalah mencari tempat pelarian. Salah satunya yaitu di Indonesia. Asumsi ini berdasarkan seorang ilmuwan yang bernama C.C. Berg dan Mookerji. Teori Arus Balik: Teori ini berasal dari asumsi seorang ilmuwan bernama F.D.K. Bosch. Menurut teori ini penyebaran agama Hindu di Indonesia adalah berasal dari orang Indonesia itu sendiri. Ajaran agama Hindu dibawa oleh orang Indonesia yang berkunjung ke India kemudian mendirikan suatu organisasi (Sangha). Setelah kembali, lalu mereka mulai menyebarkan ajaran agama Hindu <p>a. Teori Brahmana, teori Waisya, teori Ksatria, dan teori Arus Balik*</p>		

Dibuat Soal

THE TRANSLATION FOR THE ABOVE STUDENT ASSIGNMENT

READ THE QUESTION:

Displays pictures and/or narratives about Indonesian historical events during the Hindu/Buddhist period. **Participants were asked to choose the right analysis results. The Hindu-Buddhist kingdom in Indonesia began with trade and the spread of religion. Hinduism and Buddhism were religions that first entered Indonesia, whereas previously Indonesian people still knew animism.**

There are several theories regarding the entry of the Hindu Kingdom into Indonesia. They are as follows:

Brahmana Theory: This theory suggests that the religious teachings spread in Indonesia come from the Brahmin caste. At that time, the Brahmins were invited by the kings of Indonesian traditional religion and helped spread the teachings of Hinduism in Indonesia. This theory is based on the statement of the scientist Van Leur.

Vaisya theory: According to this theory, Hindu teachings in Indonesia were spread by the Vaisya caste, particularly traders. The traders had strong relations and cooperation with the kings in Indonesia, and they spread Hinduism to Indonesian society. This theory is supported by scientist N.J. Chrome.

The Knight Theory: This theory states that Hindu teachings in Indonesia originated from the Kshatriya caste, which includes war soldiers and nobles. The theory suggests that political troubles in India led defeated warriors and nobles to seek refuge in Indonesia. This theory is based on the work of scientists C.C. Berg and Mookerji.

Backflow Theory: According to this theory proposed by scientist F.D.K. Bosch, the spread of Hinduism in Indonesia came from the Indonesians themselves. The teachings of Hinduism were brought by Indians who visited India and later established an organization (Sangha). After returning, they began to spread the teachings of Hinduism.

In summary, the theories regarding the entry of the Hindu Kingdom into Indonesia include the Brahmana Theory, Vaisya theory, Knight Theory, and Backflow Theory.

STUDENT ASSIGNMENT

SOAL UAS ISLAM DAN ILMU PENGETAHUAN KELAS PAI 2 B

Buatlah essay tentang Sains dan Islam, yakni; fungsi sains dan teknologi untuk mempermudah aktifitas umat manusia serta meningkatkan produktifitas mereka. Kemudian tentang peran umat Islam dalam pengembangan sains dan peradaban di masa klasik, dan mengapa kini sangat kuat upaya integrasi Sains dan Agama, mengapa dan untuk apa upaya-upaya integrasi tersebut dilakukan ?

THE TRANSLATION FOR THE ABOVE STUDENT ASSIGNMENT

Writing essays on science and Islam, the class is addressing problems pertaining to UAS PAI 2B. Specifically, they are discussing the function of science and technology in facilitating human activity and enhancing productivity. The topics also include the role of Muslims in the classical period in developing science and civilization. Furthermore, the class explores the reasons behind the current strong drive to integrate science and religion, as well as the purpose behind these integration efforts.

APPENDIX 8: CURRICULUM DOCUMENT

14. Program Learning Outcomes (PLO)

PLO	INTENDED LEARNING OUTCOMES	TEACHING AND LEARNING METHODS	ASSESSMENT
A. ATTITUDE			
PLO 0.1	Menjunjung tinggi nilai-nilai keIslaman yang mencakup ketakwaan terhadap Tuhan YME, penghargaan terhadap nilai-nilai kemanusiaan, internalisasi nilai dan norma,	Ceramah, tutorial, seminar, membaca artikel, riset mandiri	Esai, seminar presentasi, keterlibatan dalam diskusi, praktek
PLO 0.2	Menjunjung tinggi nilai-nilai keIndonesiaan dan kemasyarakatan, meliputi, penghargaan terhadap keanekaragaman, nasionalisme dan tanggungjawab bernegara, dan peningkatan kehidupan bermasyarakat, kerjasama, kepedulian terhadap sesama, berbangsa, dan bernegara berdasarkan Pancasila	Ceramah, tutorial, seminar, membaca artikel, riset mandiri	Esai, seminar presentasi, keterlibatan dalam diskusi
PLO 0.3	Menjunjung tinggi nilai-nilai etika akademik, yang meliputi kejujuran dan kebebasan akademik dan otonomi akademik.	Ceramah, tutorial, seminar, membaca artikel, riset mandiri	Esai, seminar presentasi, keterlibatan dalam diskusi
B. TECHNICAL KNOWLEDGE AND COMPETENCIES			
<i>(i) Mastery of an appropriate body of knowledge</i>			
PLO 1	Menunjukkan pengetahuan tentang keagamaan dan keIndonesiaan	Ceramah, tutorial, seminar, membaca buku dan artikel, riset mandiri	Esai, seminar presentasi, keterlibatan dalam diskusi, kinerja
PLO 2	Menunjukkan pengetahuan tentang teori pendidikan dan pedagogi secara umum dan spesifik untuk kepentingan pendidikan Agama Islam	Ceramah, tutorial, seminar, membaca buku dan artikel, riset mandiri	Esai, seminar presentasi, keterlibatan dalam diskusi, kinerja
PLO 3	Menunjukkan pengetahuan tentang dasar-dasar teori agama Islam	Ceramah, tutorial, seminar, membaca buku dan artikel, riset mandiri	Esai, seminar presentasi, keterlibatan dalam diskusi, kinerja, ujian praktek
<i>(ii) Understanding and application of key concepts and techniques</i>			
PLO 4	Menjelaskan teori pengembangan kurikulum, teori pembelajaran, media pembelajaran dan teori pendidikan serta mampu mengaplikasikannya dalam proses pembelajaran secara tepat	Ceramah, tutorial, seminar, membaca artikel, riset mandiri, kegiatan praktikum mengajar (<i>micro teaching</i>)	Esai, seminar presentasi, keterlibatan dalam diskusi, kinerja, ujian praktek mengajar
PLO 5	Mengaplikasikan pengetahuan tentang materi agama Islam untuk kepentingan proses pembelajaran di sekolah	riset mandiri, kegiatan praktikum mengajar (<i>micro teaching</i>), kegiatan praktikum laboratorium	Esai, seminar presentasi, keterlibatan dalam diskusi, kinerja, ujian praktek mengajar
PLO 6	Mengaplikasikan pengetahuan tentang integrasi ilmu, agama, dan keIndonesiaan dalam proses pembelajaran	riset mandiri, kegiatan praktikum mengajar (<i>micro teaching</i>), kegiatan praktikum laboratorium	Esai, seminar presentasi, keterlibatan dalam diskusi, kinerja, ujian praktek mengajar
<i>(iii) Critical analysis of key issues</i>			
PLO 7	Menganalisis perkembangan pendidikan agama Islam di Indonesia	Riset mandiri, ceramah, tutorial, seminar, diskusi	Esai, seminar presentasi, kerja kelompok

APPENDIX 9: APPROVAL FOR RESEARCH PERMIT



Kementerian Agama Republik Indonesia
Universitas Islam Internasional Indonesia
Jalan Raya Bogor KM. 33.5
Cisalak, Sukmajaya, Depok, Jawa Barat 16416
secretariat@uii.ac.id
www.uui.ac.id

Depok, March 31, 2023

Ref. No : 60/Dek.FIP/UIII/UM.02/03/2023
Attachment :-
Subject : Request for Research Permit

Assalamu'alaikum Wr. Wb.,

We hereby certify the following student:

Name : Mariam Ulpah
Student ID Number : 04242110007
Faculty : Faculty of Education
Study Program : MA in Education

is conducting research for her thesis with the following details:

Thesis Title : Exploring Lecturer's Perception and Approaches of Critical Thinking Skill
in Religious Institutions: A Case Study in Islamic Higher Education.
Research Duration : ± 1 month

We respectfully request your assistance in granting research permission to the aforementioned student. The research data will only be used for academic purposes and will not be disseminated for other purposes.

This request letter is made for its definite intent, thank you for your kind attention and cooperation.

Wassalamu'alaikum Wr. Wb.,

Kind Regards,
Dean of the Faculty of Education



Prof. Nina Nurmila, PhD