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Building a Great Mindset: The Relationship between Critical Thinking Skills and Selangor Tahfiz Student Achievement

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Abstract

Critical Thinking Skills (CTS) can assist students in their academic achievement. Additionally, attention and clear exposure to generating critical thinking ideas among school students, particularly tahfiz students, is necessary. This study aims to assess the level of critical thinking skills, the level of academic achievement of students, and to analyze the relationship between critical thinking skills and the academic achievement of tahfiz students at selected tahfiz schools under the Persatuan Institut Tahfiz Al-Quran Negeri Selangor (PITAS) in the Kuala Selangor district. A total of 302 tahfiz students from four tahfiz schools in the Kuala Selangor district, namely Smart Tahfiz Masjid Unisel, Akademi Syahadah Tahfiz Al-Faizin (ASTAF), Sekolah Menengah Islam Addimyati, and Maahad Tarbiah Islamiah Al-Ansar (MTIAA), were involved as the study sample using convenience probability sampling. This study employs a quantitative design with a survey method approach. Data were analyzed using descriptive methods and Pearson's correlation test to determine the relationship between CTS and the academic achievement of tahfiz students. The findings indicate that the level of critical thinking skills is moderate with a mean score of 3.264. Meanwhile, the academic achievement of tahfiz students is also at a moderate level with a mean score of 3.221. Furthermore, the relationship between critical thinking skills and the academic achievement of tahfiz students shows no significant correlation. These findings suggest that stakeholders must seek immediate solutions to ensure that CTS can be enhanced continuously.

Keywords: Critical Thinking Skills, Academic Achievement, Tahfiz Students, Knowledge, Attitude, Readiness

Introduction

The Malaysian education system has transformed into a more dynamic approach to enhance learning effectiveness and achieve the aspirations outlined in the Malaysia Education Blueprint 2013-2025 (Idris et al., 2024a). Malaysia Education Blueprint (PPPM) aims to ensure that all students benefit from the plan's aspirations in the areas of science, bilingual leadership, ethics and spirituality, national identity, and thinking skills (Idris et al., 2023a). Critical thinking is a key thinking skill emphasized in PPPM and is also aligned with 21st-century learning descriptions (Idris et al., 2024b).

Critical thinking skills (CTS) have been a significant focus of the Malaysian education system since the 1990s. The Ministry of Education Malaysia (KPM) has established CTS as a fundamental skill for acquiring knowledge and skills in school subjects (Jima'ain et al., 2022). Critical thinking (CT) is not a novel concept in Malaysian education. It has long been recognized as a crucial element in the desired profile of students across all levels of education, from early childhood to secondary school (Ali & Noordin,2010). CT also serves as a cornerstone for developing essential human capital skills among university graduates, fostering their well-roundedness and competence (Ali & Noordin, 2010).

Educational institutions play a pivotal role in nurturing critical thinkers, aligning with the PPPM's goal of producing graduates equipped with exceptional critical thinking abilities. According to Idris and Bacotang (2023), this aspiration aligns with the second pillar of human capital development and talent pool outlined in the National Mission of the Ninth Malaysia Plan (RMK9). Critical thinking, often interchangeably referred to as brilliant thinking or the ability to think well, is a vital human capital skill. It encompasses the ability to assess the credibility of concepts (Ismail et al., 2020).

While critical thinking skills should be emphasized in the teaching and learning (T&L) process, teachers often prioritize content delivery over fostering critical thinking among students. This raises questions about the underlying reasons for this imbalance. Are teachers placing excessive emphasis on content, lacking clarity on the nature of good thinking, or unsure of effective strategies to cultivate critical thinking in students? Critical thinking, like any other skill, can be trained and developed through appropriate methods. Teachers' lack of clarity regarding critical thinking can lead to misconceptions about assessing and evaluating good thinking, including the assessment and evaluation of critical thinking (Azmi et al., 2023).

Numerous studies have investigated the relationship between student achievement and critical thinking skills. Their findings consistently indicate a significant correlation between critical thinking abilities (CTA) and cumulative grade point average (CGPA) (Watson & Glaser, 1980: Gadzella, 2002). The majority of these studies have been conducted at the primary and secondary (Haron et al., 2015: Wan et al., 2016: Othman & Kassim, 2018)) levels, with a notable lack of research specifically focusing on tahfiz students, particularly in Malaysia. Existing studies at the school and university levels often focus on specific subjects or institutions, further highlighting the scarcity of research involving tahfiz students. Consequently, there is a compelling need for a study to examine the relationship between

critical thinking skills and academic achievement among tahfiz students in the Kuala Selangor district.

Research Objectives

1. To identify the level of critical thinking skills among tahfiz students in the Kuala Selangor district.
2. To identify the level of academic achievement among tahfiz students.
3. To analyze the relationship between critical thinking skills and academic achievement among tahfiz students.

Literature Review

The researcher has cited several previous studies to support their argument about the relationship between critical thinking skills and academic achievement of Tahfiz students in the Kuala Selangor district. Consequently, this section will explain and expand on the definition of critical thinking skills, the academic achievement levels of students, and the relationship between critical thinking skills and the academic achievement of Tahfiz students in the Kuala Selangor district.

Critical Thinking Skills

Critical thinking is a thought process that begins with questioning a problem to gain and enhance understanding (Jima'ain et al., 2022). It involves three levels of critical thinking skills: knowledge, attitude, and readiness of an individual. Critical thinking can encourage someone to scrutinize statements and seek valid and strong evidence before concluding, and it is a skill. According to past studies, critical thinking skills (CTS) are currently transforming the Malaysian education system, in line with the implementation of the Malaysian Education Blueprint (MEB) 2013-2025. It is also applied to all subjects through the use of Bloom's taxonomy of cognitive skills and Anderson's processing theory (Jima'ain et al., 2022).

Critical thinking can also be defined as the process of thinking carefully to clarify and enhance understanding, in other words, critical thinking can encourage people to test their beliefs. A critical thinker not only can use internal (micro) skills but also possesses certain attitudes. Critical thinking can be understood as not merely accepting or agreeing with something, but rather considering the pros and cons first (Ismail et al., 2020). Therefore, critical thinking can motivate individuals to be rational, such as reasoning critically, and even being able to examine their experiences, and evaluate and weigh various opinions and ideas before making a decision. Critical thinking also involves judgment skills, namely the ability to consider and determine the validity of statements made by various parties.

The study conducted by Ali & Noordin (2010) shows that the level of critical thinking skills (CTS) of these students is assessed using the Cumulative Grade Point Average (CGPA). This study also uses several instruments, namely interpretation skills, inference skills, skills in examining assumptions, deduction skills, and argument evaluation skills, which can help the effectiveness of CTS in student thinking.

Academic Achievement Level

The level of academic achievement of each student varies. This difference occurs due to various factors. Student achievement is also considered an important indicator of superior

academic performance. Academic achievement is something that a student achieves at a stage of progress through individual effort and perseverance towards mastering knowledge and skills learned, based on the grades obtained (Ismail et al., 2020). Lack of cluster academic achievement has become a hot topic of discussion among leaders, academic figures, and society because it is one of the factors contributing to Malaysia's unemployment rate (Idris et al., 2023b).

Past Studies on Students' Academic Achievement Level

The study conducted by Ahmad et al (2022), indicates that the achievement level of Tahfiz students was measured through the implementation of the Plus Tahfiz program. This study employed a qualitative approach involving the analysis of documents related to the Plus Tahfiz program. Student memorization records and the average cumulative grade point average (CGPA) were used to determine students' achievement levels. In previous studies, 72% of students achieved an average CGPA of 3.00 to 4.00, demonstrating high levels of achievement.

Past Studies on the Relationship between Critical Thinking Skills (KBK) and the Academic Achievement Level of Students

The study regarding the relationship between Critical Thinking Skills (KBK) and the academic achievement level of students utilizes the Integrated Curriculum (KBD) and Integrated Tahfiz Curriculum (KBT) teaching systems, which align with its primary goal of producing balanced and outstanding students based on 'aqli and naqli principles, in preparing scholars and religious leaders (Mohd Zhaffar et al., 2020). This is because they can connect 'aqli and naqli, which require cognitive skills in the form of flexible thinking abilities.

Critical thinking skills and academic achievement are two important and interrelated elements for students. The holistic application of KBK elements can contribute to the academic achievement levels of Tahfiz students who do not initially have exposure to academic subjects (Mohd Zhaffar et al., 2020). In conclusion, the purpose of this study is to ensure the relationship between critical thinking skills and academic achievement levels among Tahfiz students in the Kuala Selangor district.

Methodology

The study uses a survey approach as a descriptive study design, utilizing quantitative methods. The respondents were selected among students from Tahfiz high schools in the district of Kuala Selangor under Persatuan Institut Tahfiz Al Quran Negeri Selangor (PITAS) by using the convenience sampling method. This study included 302 students between the ages of 13 and 18.

The instrument consists of four components: demographic information such as gender, age, school, level of education, and academic performance. The high-level thinking skills (KBAT) were measured using the questionnaire adapted from Lasan et al. (2017). The high-level thinking skills (KBAT) questionnaire is a self-report questionnaire and has 30 items, which are the students' critical thinking skills (CTS) knowledge (Part B, 10 items), students' attitudes towards critical thinking skills (CTS) (Part C, 10 items), and students' readiness for critical thinking skills (CTS) (Part D, 10 items). All items were measured on a five-point Likert scale ranging from 1 = 'very weak' to 5 = 'very good'.

The analysis was conducted in Statistical Packages for the Social Sciences (SPSS) software version 29. Descriptive analysis was used to identify the means, SD, and percentage, while correlation was used to measure the relationship between the variables. The pilot study was conducted, and the Cronbach Alpha value for this questionnaire is 0.956 with the students' CTS knowledge (α = 0.900), students' attitudes towards CTS (α = 0.909), and students' readiness for CTS (α = 0.909). This value indicates that this instrument has high reliability.

Demographic Information

302 of respondents, 203 (67.2%) were males and 99 (32.8%) were females. Four Tahfiz high schools contributed to this study which are Smart Tahfiz Masjid Unisel (23.2%), Akademik Syahadah Tahfiz Al-Faizin (9.3%), Sekolah Menengah Islam Addimyati (16.2%) and Maahad Tarbiah Islamiah Al-Ansar (51.3%). Meanwhile, in terms of exposure to Critical Thinking Skills (CTS), 83.4% of respondents were exposed to that and the rest 16.6% did not get exposure to Critical Thinking Skills (CTS). In terms of academic results, all subjects showed a satisfactory level. Bahasa Melayu subjects recorded 30.8%, English (32.8%), History (29.8%), Mathematics (33.4%), Science (36.8%) and Pendidikan Islam (37.7%).

Table 1
Demographics Information

Demographic Information (n= 302)		**Frequency (f)**	**Percentage (%)**
Gender	Male	203	67.2
	Female	99	32.8
Age	13-year-old	44	14.6
	14-year-old	38	12.6
	15-year-old	52	17.2
	16-year-old	53	17.5
	17-year-old	48	15.9
	18-year-old and above	67	22.2
School	Smart Tahfiz Masjid Unisel	70	23.2
	Akademi Syahadah Tahfiz Al-Faizin	28	9.3
	Sekolah Menengah Islam Addimyati	49	16.2
	Maahad Tarbiah Islamiah Al-Ansar	155	51.3

High School Study Level	Lower Secondary	131	43.4
	Upper Secondary	171	56.6
Exposure to CTS in school	Yes	252	83.4
	No	50	16.6
Academic Result: Bahasa Melayu	Very Excellent	40	13.2
	Excellent	75	24.8
	Very Satisfying	73	24.2
	Satisfying	93	30.8
	Fail	21	7.0
English	Very Excellent	36	11.9
	Excellent	58	19.2
	Very Satisfying	68	22.5
	Satisfying	99	32.8
	Fail	41	13.6
History	Very Excellent	37	12.3
	Excellent	69	22.8
	Very Satisfying	59	19.5
	Satisfying	90	29.8
	Fail	47	15.6
Mathematics	Very Excellent	27	8.9
	Excellent	32	10.6
	Very Satisfying	55	18.2
	Satisfying	101	33.4
	Fail	87	28.8
Science	Very Excellent	34	11.3
	Excellent	53	17.5
	Very Satisfying	62	20.5

	Satisfying	111	36.8
	Fail	42	13.9
Pendidikan Islam	Very Excellent	54	17.9
	Excellent	54	17.9
	Very Satisfying	45	14.9
	Satisfying	114	37.7
	Fail	35	11.6

Result Findings

This study uses descriptive methods and all the analysed findings will be displayed in table form showing the mean and standard deviation, as depicted by the average mean score in Table 2.

Table 2
Average Scores and Mean Interpretation

Mean Score	**Interpretation**
1.00 - 2.33	Low
2.34 – 3.66	Moderate
3.67 – 5.00	High

Students' Knowledge of Critical Thinking Skills

Section B of the questionnaire is related to students' Critical Thinking Skills (CTS) knowledge. Respondents were asked to rate based on a Likert scale of 1-5, representing the statements: Very Weak (VW), Weak (W), Moderate (M), Good (G), and Very Good (VG). The data collected and analysed is to obtain the mean value to provide a clear picture of students' knowledge of CTS in selected Tahfiz schools in Kuala Selangor, Selangor.

Table 3
Students' Knowledge Level of Critical Thinking Skills

No	Item	M	SD	Interpretation
1	I know the meaning of Principles and basic concepts in Critical Thinking Skills (CTS)	3.14	1.016	Moderate
2	I know the Application of Critical Thinking Skills (CTS) taught by teachers.	3.22	1.002	Moderate
3	I can identify the 6 levels of CTS in exam questions.	2.86	1.031	Moderate
4	I know the use of technique and strategies in answering CTS questions.	3.12	1.031	Moderate
5	I can discuss a topics well using various questions.	3.20	0.939	Moderate
6	I know the use of mind maps and I-THINK maps in Learning and Teaching.	3.40	1.035	Moderate
7	I can critically explain ideas and solve problems given by teachers.	3.15	0.949	Moderate
8	I know the general characteristics in CST questions.	3.08	1.013	Moderate
9	I can solve problems given by teachers related to CTS questions.	3.07	0.975	Moderate
10	I can evaluate situations given by teachers in answering CTS questions.	3.11	0.952	Moderate
Overall mean		3.135	0.722	Moderate

Table 3 shows the level of tahfiz students' knowledge about CTS on item 6, "I use mind maps and i-THINK maps in Teaching and Learning," which received the highest mean score of 3.40. This is followed by the level of tahfiz students' knowledge about CTS on item 2, "I use the Critical Thinking Skills (CTS) applications taught by the teacher" (M = 3.22). The level of tahfiz students' knowledge on item 5, "I use questioning techniques effectively about something using various questions" (M = 3.20). The level of tahfiz students' knowledge on item 7, "I can critically explain ideas and solve problems given by the teacher" (M = 3.15). The level of tahfiz students' knowledge on item 1, "I can understand the meaning, principles, and basic concepts of CTS" (M = 3.14). The level of tahfiz students' knowledge on item 4, "I know the use of techniques and strategies in answering KBK questions" (M = 3.12). The level of tahfiz students' knowledge on item 10, "I can evaluate a situation given by the teacher in answering CTS questions" (M = 3.11). The level of tahfiz students' knowledge on item 8, "I can understand the general characteristics of CTS questions" (M = 3.08). The level of tahfiz students' knowledge on item 9, "I can solve problems given by the teacher related to CTS questions" (M = 3.07). The aspect that received the lowest mean score in assessing the level of tahfiz students' knowledge about CTS on item 3, "I have knowledge in identifying the 6 Levels of CTS in exam questions" (M = 2.86).

This shows that the majority of tahfiz students have a good level of knowledge about KBK in using mind maps and i-THINK maps in Teaching and Learning compared to other aspects of CTS knowledge. Additionally, the mean scores for all aspects in this section range from 2.86 to 3.40. These findings indicate that the level of tahfiz students' knowledge about KBK in school is at a moderate level.

Students' Attitude towards Critical Thinking Skills (CTS)

In this section, the researcher analyzes the students' attitudes towards CTS. The study data was obtained from Section C of the questionnaire, where respondents were required to evaluate based on a Likert Scale of 1-5 representing the following statements: Very Poor (SL), Poor (L), Moderate (S), Good (B), and Very Good (SB). After being collected, this data was analyzed to obtain the mean value for each aspect to provide a clear picture of the students' attitude towards KBK at selected tahfiz schools in the Kuala Selangor district, Selangor.

Table 4
Level of Students' Attitude towards Critical Thinking Skills (CTS)

No	Item	M	SD	Interpretation
1	Teaching using CTS stimulates my interest in thinking critically	3.37	1.037	Moderate
2	Teaching using CTS makes me want to learn problem-solving skills	3.45	0.960	Moderate
3	Teaching using CTS enhances my mastery of concept and facts in answering exam questions	3.44	0.980	Moderate
4	Teaching using CTS helps me understand important concepts in the teaching and learning process with the teacher	3.20	0.976	Moderate
5	Teaching using CTS enables me to give opinions in answering the exam questions	3.46	1.037	Moderate
6	Teaching using CTS generates interest in the teaching and learning process in the classroom	3.38	0.985	Moderate
7	Teaching using CTS is suitable to be applied in thinking skills	3.48	1.002	Moderate
8	Teaching using CTS can improve students' thinking levels in learning thinking skills	3.59	1.059	Moderate
9	Teaching using CTS gives me the opportunity to ask questions during the learning session in the classroom	3.42	1.025	Moderate
10	Teaching using CTS encourages me to answer reinforcement questions after the learning session in the classroom	3.25	1.003	Moderate
Overall Mean		3.402	0.746	Moderate

Table 4 shows the mean score values resulting from the data analysis regarding students' attitudes towards critical thinking skills in school. This study focuses on ten aspects in evaluating students' attitudes towards critical thinking skills in school. The findings show that the majority of tahfiz students have the highest attitude on item 8, "teaching using CTS can improve students' thinking levels in learning thinking skills," with the highest mean score of 3.59. This is followed by item 7, "teaching using CTS is suitable to be applied in thinking skills" (M= 3.48), item 5, "teaching using KBK enables me to give opinions in answering exam questions" (M= 3.46), item 2, "teaching using CTS makes me want to learn problem-solving skills" (M= 3.45), item 3, "teaching using CTS enhances my mastery of concepts and facts in answering exam questions" (M= 3.44), item 9, "teaching using CTS gives me the opportunity to ask questions during the learning session in the classroom" (M= 3.42), item 6, "teaching

using CTS generates interest in the teaching and learning process in the classroom" (M= 3.38), item 1, "teaching using CTS stimulates my interest in thinking critically" (M= 3.37), item 10, "teaching using CTS encourages me to answer reinforcement questions after the learning session in the classroom" (M= 3.25), and finally, the lowest mean score for students' attitudes on item 4, "teaching using CTS helps me understand important concepts in the teaching and learning process with the teacher" (M= 3.20).

This shows that the majority of tahfiz students have a good attitude towards CTS in terms of using it to improve their thinking levels in learning critical thinking skills compared to other aspects of their attitude towards CTS.. Additionally, the mean scores for all aspects in this section range from 3.20 to 3.59. These findings indicate that the level of tahfiz students' attitudes towards CTS in school is at a moderate level.

Students' Readiness towards Critical Thinking Skills

Section B of the questionnaire pertains to students' readiness towards CTS. Respondents were required to evaluate based on a Likert Scale of 1-5, representing the following statements: Very Poor (SL), Poor (L), Moderate (S), Good (B), and Very Good (SB). The data collected and analyzed was to obtain the mean value to provide a clear picture of the level of students' readiness towards CTS at selected tahfiz schools in the Kuala Selangor district, Selangor.

Table 5
Level of Students' Readiness towards Critical Thinking Skills

No	Item	M	SD	Interpretation
1	I am ready to participate in activities using CTS in the classroom	3.18	1.077	Moderate
2	I am ready to participate in Q&A sessions using CTS in the classroom	3.08	0.923	Moderate
3	I am ready to participate in group work interactions using CTS in the classroom	3.29	0.990	Moderate
4	I am ready to ask questions during learning sessions using CTS in the classroom	3.13	0.995	Moderate
5	I am ready to try exercises given by the teachers using CTS in answering questions during T&L sessions in the classroom	3.30	1.058	Moderate
6	I am ready to use CTS to solve learning problems	3.36	1.009	Moderate
7	I am ready to use CTS in group work	3.45	0.973	Moderate
8	I am ready to use CTS to improve my understanding in answering questions given by the teacher	3.36	1.027	Moderate
9	I am ready to use CTS to relate learning concepts in answering exam questions	3.30	0.995	Moderate
10	I am ready to answer reinforcement questions using CTS after the learning session in the classroom	3.20	0.958	Moderate
Overall Mean		3.255	0.737	Moderate

Table 5 shows the mean scores for students' readiness towards CTS. Based on Table 5, the highest mean score for students' readiness towards CTS is for item 7, "I am ready to use CTS in group work" (M= 3.45). This indicates that students are prepared to use CTS when given group work. The second highest mean is for item 8, "I am ready to use CTS to improve my understanding in answering questions given by the teacher" (M= 3.36). The third highest mean is for item 5, "I am ready to try exercises given by the teacher using CTS in answering questions during T&L sessions in the classroom" (M= 3.30). This is followed by item 9, "I am ready to use CTS to relate learning concepts in answering exam questions" (M= 3.30), item 3, "I am ready to participate in group work interactions using CTS in the classroom" (M= 3.29), item 6, "I am ready to use CTS to solve learning problems" (M= 3.28), item 10, "I am ready to answer reinforcement questions using CTS after the learning session in the classroom" (M= 3.20), item 1, "I am ready to participate in activities using CTS in the classroom" (M= 3.18), and item 4, "I am ready to ask questions during learning sessions using CTS in the classroom" (M= 3.13). The lowest mean score is for item 2, "I am ready to participate during Q&A sessions using CTS in the classroom" (M = 3.08).

This indicates that tahfiz students have a good readiness towards CTS, particularly in using CTS for group work compared to other aspects of readiness. Additionally, the mean scores for all aspects in this section range from 3.08 to 3.45. These findings suggest that the level of tahfiz students' readiness towards CTS in school is at a moderate level.

Significant Relationship between Critical Thinking Skill Levels and Academic Achievement Levels of Tahfiz Students in Kuala Selangor District

To examine the relationship between critical thinking skills and academic achievement levels among tahfiz students in the Kuala Selangor district, a Pearson correlation test was employed. This test is utilized to assess the strength of relationships between interval data, where the association between variables is linear. The interpretation of the correlation coefficient (r) is based on the strength levels outlined by Chua (2014), which serves as the reference framework, as illustrated in Table 7.

Table 7
Strength of Correlation Coefficient Values

Size of Correlation Coefficient (r)	Strength of Correlation
0.91 to 1.00 or -0.91 to -1.00	Very Strong
0.71 to 0.90 or -0.71 to -0.90	Strong
0.51 to 0.70 or -0.51 to -0.70	Moderate
0.31 to 0.50 or -0.31 to -0.50	Weak
0.1 to 0.30 or -0.1 to -0.30	Very Weak
.00	No Correlation

A correlation coefficient value between 0.91 and 1.00 indicates a very strong correlation. If the coefficient is between 0.71 and 0.90, it indicates a strong relationship between the two variables. A coefficient between 0.51 and 0.70 suggests a moderate relationship. If the coefficient is between 0.31 and 0.50, the relationship is weak. A coefficient of 0 indicates no correlation. To examine the relationship between critical thinking skill levels and academic achievement levels of Tahfiz students in Kuala Selangor district, the Pearson correlation test

was used. This test measures the strength of the relationship between variables in an interval scale and checks if the relationship is linear. The findings are presented in Table 8 below.

Table 8
Pearson Correlation-r Between Critical Thinking Skills and Academic Achievement Levels of Tahfiz Students

Variable	r	p	Sig.
Critical Thinking Skills (CTS)	- 0.240	0.001	Not Significant
Academic Achievement Level	- 0.240	0.001	Not Significant

The results of the Pearson Correlation analysis indicate that there is no significant relationship between critical thinking skill levels (r = -0.240) and academic achievement levels. The correlation for academic achievement levels among Tahfiz students also shows no significant correlation, with a value of r = -0.143. All analysis results show that the r values exceed the significance level α = 0.05.

Therefore, the null hypothesis, which states that there is no significant relationship between critical thinking skill levels and academic achievement levels of Tahfiz students, cannot be rejected at the 0.05 significance level. Meanwhile, Hypothesis 1, which posits that there is a significant relationship between critical thinking skill levels and academic achievement levels of Tahfiz students, is rejected. Thus, the data do not provide sufficient evidence to conclude that there is a significant correlation between critical thinking skill levels and academic achievement levels of Tahfiz students

Discussion

The findings of the study indicate that there is no significant relationship between Co-curricular Activities (CTS) and the academic achievement levels of Tahfiz students at the association level of the Tahfiz Al-Quran Institute in the state of Selangor, specifically in the district of Kuala Selangor. Thus, the researcher suggests other factors that might contribute to the absence of a significant relationship between CTS and the academic achievement of Tahfiz students. Among the factors that could cause the lack of a significant relationship are the competency levels of teachers in implementing CTS. Additionally, there is a connection between the teachers' teaching experience and their efficiency in the implementation of CTS. Lastly, there are challenges faced by students regarding CTS.

Level of Teacher Competence in Implementation (CTS)

Previous studies have shown that teacher competency in the areas of knowledge, skills, and attitudes in the implementation of CTS in national schools in the Sepang district is still at a moderate level. This is consistent with a study conducted by Hasan and Mahamod (2016) involving 226 teachers in the Kuala Terengganu district, which found that the understanding, knowledge, and implementation of CTS by Malay Language teachers in the teaching of Malay Language in secondary daily schools in the Kuala Terengganu district were still at a moderate level.

Furthermore, the results of this study are consistent with the findings of Rajendran (2008) involving Malay Language and English Language teachers from 22 schools in the Selangor district. The study showed that teacher preparation in terms of knowledge, ability, and

attitudes towards the use of CTS for Malay Language and English Language subjects at the lower secondary level was still at a moderate level.

However, the study's findings contradict Saad et al. (2012), which found that teacher competency levels in terms of attitudes and perceptions in the implementation of CTS for mathematics subjects were at a high or good level. This study is also supported by research conducted by Hashim and Daud (2014), which found that educators, particularly teachers, had high levels of efficiency and performance. This is attributed to the facilities and incentives provided by the government. Previous discussion findings indicate that there are both moderate and excellent levels of teacher competency. Teacher knowledge competency in the implementation of CTS is crucial. Teachers must always ensure that they have a strong understanding of CTS , both in terms of topic knowledge and pedagogical expertise (Maher et al., 2010).

Additionally, teacher competency may be recognized in terms of teachers' abilities and skills in the application of CTS in schools. Teacher abilities encompass planning for the implementation of CTS, methods and strategies for managing teaching and learning (T&L), communication skills, information and communication technology (ICT) skills, and classroom management skills. According to Gul et al. (2014), a teacher must possess extensive abilities and skills in T&L tactics and strategies to enhance students' thinking skills and ensure that the teaching and learning process is more critical and engaging.

Besides knowledge and abilities, attitude is a crucial factor in determining a teacher's level of competency. Previous studies have shown that teachers' competency levels in terms of attitude are high and excellent (Saad et al., 2012). According to Baharuddin and Badusah (2016), teachers' attitudes towards using the internet to enhance thinking skills are still at a moderate level.

Therefore, all stakeholders, including teachers, leaders, school administrators, senior management, and the community, should play a role in ensuring teacher competency in the implementation of CTS. Teacher competency or good teacher quality is one of the factors that produce students with high levels of critical thinking and can improve student learning performance (Ahmad & Jinggan, 2015)

The Relationship between Teaching Experience and Teacher Proficiency in Implementation CTS

The findings of Shukla and Dungsungneon (2016) suggest a significant difference in the implementation and application of CTS among teachers based on their teaching experience and academic qualifications. This finding contrasts with the study conducted by Saido et al. (2017), which found a significant relationship between gender, years of teaching experience, and classroom teaching strategies. Furthermore, Hamzeh (2014), discovered a significant correlation between teachers' years of teaching experience and the techniques and strategies they employ in the classroom.

Nevertheless, the findings of this study reveal no significant relationship between teachers' teaching experience and their proficiency in implementing CTS in schools. Other factors influencing teacher proficiency include the efforts made by teachers to maintain their

competency. Additionally, administration, higher management, and community support are crucial. For example, offering courses or workshops for teachers and providing facilities to ensure the continuous enhancement of teacher proficiency are important elements.

Challenges Faced by Students Critical Thinking Skills (CTS)

The discussion continues with the challenges faced by students regarding CTS (Critical Thinking Skills) in schools. According to the study's findings, the primary challenge faced by students is the lack of exposure to CTS during classroom teaching and learning sessions. The development of critical thinking is further hampered by students' own perspectives, weak metacognitive abilities, entrenched mindsets, and cognitive biases (Persky et al., 2019). Nonetheless, there are methods for improving these abilities. In secondary education, problem-solving games can enhance critical thinking (McDonald, 2017).

Approaches that work include thoughtful learning environments, cognitive processes demonstrations, and guidance (Persky et al., 2019). Coordination at the curriculum and lesson levels is necessary for the implementation of critical thinking teaching, and instructor preparation is essential (Persky et al., 2019). Developing critical thinking abilities is essential for students' future contributions to society, despite obstacles (McDonald, 2017).

Although teaching students to think critically is important, there are several obstacles to overcome when integrating critical thinking into the classroom. In the classroom, teachers hardly ever employ practices that foster critical thinking (Al-Kindi & Al-Mekhlafi, 2017). Class sizes, problems with extracurricular activities, inadequate teacher preparation, and problems with course materials are some of the challenges (Al-Kindi & Al-Mekhlafi, 2017; Abdulazeez & Ali, 2021).

Conclusion and Future Agenda

In order to examine students' knowledge, attitudes, and preparedness for critical thinking skills (CTS) in a subset of Tahfiz schools in Kuala Selangor, Selangor, this study used a descriptive methodology. The average mean score table, which shows the mean and standard deviation values obtained from the questionnaire data, served as the foundation for the study. Understanding the degree of students' knowledge, attitudes, and preparedness for interacting with CTS and its connection to academic success depends heavily on the analysis's conclusions.

The overall mean score of 3.135, which is in the "moderate" range, was found by analyzing the students' knowledge of CTS. This suggests that most students know something about CTS, but not a great deal. With a mean score of 3.40, the item "I use mind maps and i-THINK maps in Teaching and Learning" demonstrated the highest level of student understanding on the usage of these tools in the learning process. On the other hand, the item "I have knowledge in identifying the 6 Levels of CTS in exam questions" had the lowest mean score (2.86), suggesting a lack of understanding of some CTS components. These results imply that although students have a basic understanding of the ideas and applications of CTS, more work needs to be done in certain areas to improve their overall understanding of the subject.

Examining the students' attitudes regarding CTS, the mean score was 3.402 overall, which suggests a moderately positive attitude. The item "Teaching using CTS can improve students'

thinking levels in learning thinking skills" (M = 3.59) had the highest mean score, indicating that students are aware of the benefits of CTS in improving their cognitive capacities. On the contrary, the item "Teaching using CTS helps me understand important concepts in the teaching and learning process with the teacher" has the lowest mean score (3.20), indicating that in order to improve students' conceptual understanding, CTS needs to be more effectively integrated into regular teaching methods. The results show that people have a generally positive attitude toward CTS, but they also point out areas where instructional tactics should be improved to encourage deeper knowledge and participation.

The study also looked at how prepared the students were for the CTS; the total mean score was 3.255, which is also in the moderate range. The item "I am ready to use CTS in group work" (M = 3.45) showed the highest level of preparedness, indicating a significant preference for CTS-based collaborative learning. Conversely, the question "I am ready to participate during Q&A sessions using CTS in the classroom" had the lowest average score (3.08), suggesting that students might not feel as equipped for impromptu critical thinking exercises. This shows that even while most students are prepared to participate in CTS, there can be difficulties using these abilities in less structured settings. These could be resolved with focused interventions.

There was no discernible association found when Tahfiz kids' critical thinking abilities and academic achievement levels were examined; the Pearson correlation value was reported at r = -0.240. The lack of a significant association implies that although students may be somewhat prepared, knowledgeable, and ready for CTS, there is no clear connection between these attributes and improved academic performance. The results suggest that other variables, such teachers' proficiency with CTS implementation, might be more crucial in determining students' academic results. The study points out that prior research has demonstrated that teachers have a modest degree of proficiency in the information, abilities, and attitudes related to implementing CTS, which may have an effect on how well CTS is taught.

The study also addresses the difficulties students encounter while interacting with CTS, such the lack of opportunities for critical thinking in the classroom and the impact of ingrained attitudes and cognitive biases. These difficulties imply that although students could be ready and eager to participate in CTS, there are instructional and structural constraints that prevent them from fully realizing these talents in the real world. The results highlight the significance of developing teacher competency, fostering supportive learning environments, and offering students focused support to help them navigate through these obstacles.

The study concludes that although Tahfiz students in Kuala Selangor have a reasonable degree of knowledge, attitudes, and preparedness for critical thinking, there is no discernible relationship between these and academic accomplishment. According to the findings, raising teacher competency and resolving instructional difficulties are essential for boosting CTS implementation and efficacy in classrooms. In order to better prepare children for upcoming academic and life issues, the study highlights the necessity of ongoing professional development for educators, curricular modifications, and a more integrated approach to cultivating critical thinking abilities in students.

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