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## **The Influence of the TPACK Approach Based on Canva and Quizizz Media on Students' Learning Motivation**

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### **Abstract**

This study aims to analyze the influence of the media-based TPACK approach. Canva and Quizizz on the learning motivation of class XI students in the subject of the Qur'an Hadith *MA Al-Hasani Ma'arif*. This research uses quantitative methods, specifically a pre-experimental one-group pretest-posttest design, with a research sample of 22 students. The data collection technique in this study used a questionnaire to measure students' learning motivation. Based on the processing of the data obtained by using the Paired Sample T-Test, a significant value of 0.000 was obtained. with a significance level (0.05), so it can be stated that H<sub>0</sub> is rejected and H<sub>a</sub> is accepted. It can be concluded that the TPACK approach, based on Canva media and Quizizz, influences the learning motivation of class XI students in the subject of Al-Qur'an Hadith at *MA Al-Hasani Ma'arif*.

**Keywords:** *TPACK, Canva, Quizizz Media Learning, Motivation*

### **1. Introduction**

Technological Pedagogical Content Knowledge (TPACK) Framework understood as the professional competence of teachers in integrating knowledge technology, pedagogy, and content in harmony to create a learning process Effective and contextual learning (Dong et al., 2019). Technological Pedagogical Approach and Content Knowledge (TPACK) is a conceptual framework that emphasizes the importance of integration between the three main components in practice learning, namely content knowledge, knowledge pedagogical knowledge, and technological knowledge knowledge) (Anggraini Waris, Syekh Adiwijaya Latief, 2025). Akyuz refers to Shulman on Pedagogical Content Knowledge (PCK) which was later developed by

Koehler & Mishra into TPACK, by adding elements of technology (TK). In the TPACK model, There are seven knowledge domains, namely TK (Technological Knowledge), PK (Pedagogical Knowledge), CK (Content Knowledge), PCK (Pedagogical Content Knowledge), TCK (Technological Content Knowledge), TPK (Technological Pedagogical Knowledge) TPACK (a complete combination of all three) (Akyuz, 2018). TPACK requires mastery of conceptual representation and application of pedagogical methods which utilizes technology constructively (Bilici et al., 2013). The TPACK framework can be used as a strategic guide in integrating technology learning and assessing teachers' pedagogical abilities, in order to strengthen development of a teacher education curriculum that is adaptive to progress technology (Chukwuemeka & Falode, 2019).

Among the media that are suitable to support this approach is Canva and Quizizz. Canva is a web-based graphic design media that facilitates teachers in producing interesting and communicative visual teaching materials. Through With a variety of templates, collaborative features, and ease of use, Canva is capable of increase students' learning motivation (Wulandari et al., 2025). Meanwhile, Quizizz functions as a game-based evaluation platform that allows students actively participate in answering questions online with feedback directly (Syarif, 2025). Critically, the two media complement each other, Canva is effective in the presentation and concept strengthening stage, while Quizizz is optimal in interactive formative evaluation. The integrated use of both supports creating creative, meaningful and adaptive digital learning 21st century needs.

Learning motivation is an encouragement that arises from within oneself. both from outside the students, encouraging them to carry out learning activities in order to achieve success (Suharni, 2021). A high level of motivation will raise students' enthusiasm for learning so that it makes it easier for them in achieving optimal learning outcomes. Conversely, low motivation will reduce students' enthusiasm and passion for learning (Sipayung, 2025). Therefore, Educators are required to continue to present innovations in learning media. With innovation, teachers can attract students' attention and increase motivation. learn what is within them so that they are always enthusiastic. Such that As stated by Hamalik in Yamin, motivation has three main functions: (1) encourage the emergence of actions or behavior; (2) provide direction for actions and (3) become a driving force (Farida, 2021).

According to Uno, people who have the following characteristics can be considered have high learning motivation: a. Having a desire and dream to successful. Students must have a strong dream or desire and big to be able to successfully achieve targets and satisfactory grades. b. The existence of encouragement and needs in learning. So that students will feel lacking in science and technology so by encouraging it to continue learning. c. Having hopes and aspirations for the future. So students must always be diligent in studying because they have goals. ambition to become a PAI educator etc. d. The existence of awards or rewards in Study. By working hard and seriously in studying so get appreciation from teachers so you have a sense of pride the results of his own hard work in studying. e. The existence of interesting activities in learning. The learning activities that take place are not monotonous and Educators often use a variety of learning methods so that students do not get bored. f. There is a calm or quiet learning environment conducive, so that it can enable a student to learn well and truly (Uno Hamzah, 2006). Therefore, motivation is important elements that influence the emergence of direction and speed of behavior a person. Without

motivation, a person usually acts passively and less have the desire to act. On the other hand, with high motivation, a person tends to be more focused, directed, and efficient in achieving desired goals (Amin & Amin, 2021). Thus, motivation can be considered as a key factor in the success of the learning process.

Islamic Religious Education Teachers have a crucial role in develop competence and professionalism in selecting media effective learning, especially in facing challenges in accommodate student learning differences (Supriani et al., 2022). Utilization of technology in Islamic education has great potential to increase effectiveness and efficiency of the learning process. With the presence of technology as a means learning, it is hoped that the class atmosphere will become more interesting so that participants Students can be more motivated and enthusiastic in following lessons (Annisa et al., 2024). However, The reality on the ground shows that there are still many teachers and students who not fully ready to face changes from traditional learning methods towards a technology-based system, so that much of the learning is still watching and not using a variety of learning media, which is less increased students' learning motivation (Raihan et al., 2024). This fact confirms that learning media is innovative so that students' learning motivation can be maintained and even increased.

Several previous studies have shown the important role of technology. as a means to increase students' learning motivation in Islamic Religious Education (PAI) learning. Research by Salsabila et al., shows that the use of digital learning media such as animated videos, images, and interactive applications can create a more enjoyable learning atmosphere. interesting, so that it has a positive impact on students' learning motivation (Salsabila et al., 2025). Findings Similar findings were also expressed in research at Junior High Schools (SMP) Negeri 2 Sangatta Utara stated that the use of media based on multimedia in Islamic Religious Education learning significantly increases engagement and students' enthusiasm for learning (Nadila & Hikmah, 2025). In addition, Siregar's study shows that technologies such as educational videos and learning apps are capable of transforming the learning atmosphere, which was previously passive becomes active and participatory (Siregar, 2024). Thus, the integration of technology media in Islamic Religious Education learning is not only relevant as a form of innovation, but also an important strategy for building and maintaining students' learning motivation amidst challenges in an era that continues to develop.

The problem that is still often encountered in madrasas is the lack of optimal use of digital media in Religious Education learning Islam. Many teachers still use conventional lecture methods, so that the learning atmosphere feels monotonous and less interesting to students. As a result, students' learning motivation decreases and their involvement in the learning process becomes low. In fact, current technological developments open up huge opportunities for teachers to provide more interactive and meaningful learning.

Based on these conditions, this research tries to offer a solution. through the application of the TPACK (Technological Pedagogical and Content) approach, Knowledge, by combining Canva and Quizizz media. This research is different from previous studies, which generally only examined one digital media or one TPACK aspect separately. This study presents a TPACK approach in its entirety with two integrated media. Canva at the material presentation stage and Quizizz at the evaluation stage in the context of learning the Al-Qur'an Hadith in a madrasah. This approach not

only emphasizes the technological aspect, but also how teachers combine it with pedagogical strategies and content Islam so that learning becomes more meaningful and motivating.

This study aims to analyze the influence of the TPACK approach Canva and Quizizz media-based learning on the learning motivation of class XI students in Al-Qur'an Hadith subject MA Al-Hasani Ma'arif. Through this research It is hoped that scientific contributions will be obtained in the development of learning media. based on innovative technology and relevant to the needs of modern education.

## **2. Method**

### **2.1 Participants**

This study employed a quantitative approach using a pre-experimental design, specifically a one-group pretest–posttest design. The population of this study consisted of all students in class XI at MA Al-Hasani Ma'arif, Otakrarangan Village, Wanasaba District, East Lombok Regency. The total number of students was 22, comprising 15 male students and 7 female students.

The sample of this study was identical to the population, consisting of the same 22 students. This study applied a saturated sampling technique, in which all members of the population are included as research participants. According to Sugiyono (2016), saturated sampling is appropriate when the population size is relatively small (typically fewer than 30 individuals) or when the researcher aims to minimize sampling error. Therefore, no participants were excluded, and all students were involved in the study.

### **2.2 Data Collection**

#### **2.2.1 Instrument of Collecting Data**

The instrument used in this study was a questionnaire designed to measure students' learning motivation. The questionnaire was administered in two stages: pretest and posttest. The pretest was conducted before the implementation of the TPACK approach based on Canva and Quizizz media, while the posttest was conducted after the treatment. The instrument aimed to identify changes in students' learning motivation in the subject of Al-Qur'an Hadith.

#### **2.2.2 Techniques for Collecting Data**

Data were collected through the administration of questionnaires during the pretest and posttest phases. In the pretest phase, students were asked to respond to the questionnaire to assess their initial level of learning motivation. Afterward, the researcher implemented the TPACK-based learning approach utilizing Canva and Quizizz as instructional media. Following the treatment, the posttest questionnaire was distributed to measure any improvement in students' motivation. All participants completed both stages of data collection.

### **2.3 Data Analysis**

The collected data were analyzed using quantitative statistical methods. The scores obtained from the pretest and posttest questionnaires were compared to determine the effect of the TPACK

approach on students' learning motivation. Descriptive statistics were used to calculate the mean scores of both tests, while inferential statistics, such as a paired sample t-test, were applied to examine whether there was a significant difference between pretest and posttest results. This analysis helped to identify the effectiveness of the implemented learning approach

### 3. Results

Measurement of student learning motivation is carried out by utilizing a questionnaire instrument containing 25 statements. The learning motivation questionnaire compiled by including positive and negative statements to maintain balance of respondents' perceptions and minimize answer bias. Statement Positive responses were scored 4, 3, 2, and 1 for the options Strongly Agree (SS) to Strongly Disagree (Strongly Disagree). Agree (STS), while negative statements are scored 1, 2, 3, and 4 respectively. sequentially. The use of these two types of statements aims to obtain a more objective and valid picture of learning motivation according to conditions Actually. From the results of the analysis using SPSS 26 software, the following data was obtained:

**Table 1. Normality Test Results**

| Test                                     | Value |
|--|-------|
| N (Sample)                               | 22    |
| Test Statistic Motivation Pretest Study  | .938  |
| Test Statistic Motivation Posttest Study | .937  |
| Asymp.Sig. Motivation Pretest Study      | .176  |
| Asymp.Sig. Motivation Posttest Study     | .174  |

Based on the analysis of the pretest data using SPSS version 26, a significance value of 0.176 was obtained. Because this value is greater than the specified significance level ( $0.176 > 0.05$ ), the pretest data can be concluded to have a normal distribution. Next, the posttest data analysis Using SPSS 26, the significance value was 0.174. This value is also greater than the significance level ( $0.174 > 0.05$ ), so the posttest data is also normally distributed.

**Table 2 Descriptive Analysis Results of the Pretest Posttest Questionnaire and Student Learning Motivation Percentage Category**

| Indicator          | Pretest | Posttest | Category Beginning | Category End |
|--------------------|---------|----------|--------------------|--------------|
| Minimum Value      | 36      | 55       | Low                | -            |
| Maximum Value      | 77      | 94       | -                  | High         |
| Average            | 54.68   | 78.68    | Medium             | High         |
| Standard Deviation | 12.609  | 11.378   | -                  | -            |
| Increase (%)       | 43.89%  |          |                    |              |

Based on the results of the analysis of the mean (average) values from the pretest and posttest questionnaires of students' learning motivation, there was a significant difference in the level of student learning motivation before and after implementing the approach using Canva and Quizizz media on student learning motivation in class XI on the subject of Al-Qur'an Hadith MA Al-Hasani Ma'arif. After implementation of the TPACK approach based on Canva and Quizizz media, student motivation and student learning increased to the "High" category with an average score of 78.68, compared to the conditions before implementing the TPACK approach based on Canva and Quizizz media, which were in the "Medium" category with an average score of 54.68. This difference shows an increase of 43.89%.

Based on the pretest percentage category table, 9 students are in the "Low" category, with a percentage of 40.9%. Meanwhile, of that number, there were 12 students who fell into the "Medium" category, which includes 54.5% of the total respondents, and 1 student who fell into the "High" category, with a percentage of 4.5%. From these results, it can be concluded that student learning motivation before implementing the media-based TPACK approach, Canva, and Quizizz are generally in the "Medium" category.

Next, for the posttest percentage category table, there are 0 students. which is in the "Low" category, with a percentage of 0%. Meanwhile, there were 7 students who fell into the "Medium" category, which covered 31.8% of the total respondents, and 15 students who were included in the "High" category, with a percentage of 68.2%. From these results, it can be concluded that student learning motivation after implementing the media-based TPACK approach, Canva, and Quizizz, generally improved in the "High" category.

**Table 1.3 t-Test Results**

| <b>Paired Samples T-Test</b>                            | <b>N</b> | <b>Sig.</b> |
|---|----------|-------------|
| Motivation Pretest Study & Posttest Motivation to learn | 22       | .000        |

Hypothesis testing is carried out to analyze pretest data and posttest data to determine if there are any significant differences in student motivation and student learning before and after the implementation of the TPACK approach based on Canva and Quizizz media. Data processing is carried out using SPSS software version 26, with a significance level ( $\alpha$ ) of 0.05. With the decision criteria If the significance value (2-tailed)  $< 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. If the significance value (2-tailed)  $> 0.05$ , then  $H_0$  is accepted and  $H_a$  is rejected.

The results of data processing using SPSS version 26 show that the significance obtained is 0.000. Because this value is smaller than the established significance level ( $0.000 < 0.05$ ), the null hypothesis ( $H_0$ ) is rejected, and the alternative hypothesis ( $H_a$ ) is accepted. This indicates that there is an influence of the TPACK approach based on Canva and Quizizz media on the learning motivation of class XI students in Al-Qur'an Hadith subject MA Al-Hasani Ma'arif.

#### 4. Discussion

The results of the study show that the application of the TPACK approach to Canva and Quizizz media-based platforms has a significant impact on the learning motivation of class XI students in the subject of Al-Qur'an Hadith MA Al-Hasani Ma'arif. This was proven through a paired sample t-test. produces a significant value of  $0.000 < 0.05$ , as well as an increase in the average value from 54.68 to 78.68 after being given treatment. This can be explained through the following aspects:

a. Technological Aspects (Technological Knowledge). Using Canva assists teachers in presenting material in an interesting and visual way, making it easier for students to understand the concept. Quizizz provides a fun learning experience through interactive quizzes.

b. Pedagogical Aspect (Pedagogical Knowledge). The teacher plays a role as facilitator by utilizing technology to create active, collaborative, and student-centered learning. This strategy in accordance with the characteristics of today's digital generation.

c. Content Aspect (Content Knowledge). The material presented through Canva is combined with evaluation questions on Quizizz that are relevant to learning indicators, thus strengthening understanding as well as increasing students' intrinsic motivation.

d. Effectiveness of the Combination of Canva and Quizizz Media. The combination of the two media is able to create a fun and interactive learning atmosphere. Students feel challenged to get high scores on Quizizz, while Canva's look caught their attention from the start.

The findings of this study are in line with the views of Nuraina et al., that the application of TPACK in the realm of Islamic Religious Education strengthens spiritual relevance and cognitive development of students through modern media. Canva helps beautify messages and values of the Qur'an, while Quizizz strengthens the reflective and participatory.

The TPACK approach with Canva and Quizizz media is capable of significantly increasing students' learning motivation. Students are more active, creative, and show a high interest in digital learning. Media interaction plays a big role in creating meaningful and enjoyable learning. There is a positive change in students' attitudes towards the lesson, especially in terms of self-confidence and participation. This finding is supported by McClelland's learning motivation theory, about the need for achievement emphasizes that individuals who have high motivation will take responsibility for tasks, set realistic goals, seek feedback on their performance.

Based on McClelland and Uno's theory, it can be synthesized that a person's learning motivation is influenced by internal drives to achievement, personal responsibility, and appreciation for effort. McClelland emphasized that individuals with special needs high achievers (need for achievement) will try hard to achieve goals, set realistic targets, and value feedback. concrete results of his work. Meanwhile, Uno emphasized that the motivation for high learning arises from the existence of dreams, the need to develop, future hopes, appreciation, learning activities that are interesting, and a conducive learning environment.

These two theories show that learning motivation is not only triggered by external factors such as rewards, but also by a sense of responsibility and intrinsic desire to achieve. In the context of TPACK -based learning, especially through Canva and Quizizz media, these elements can appear

simultaneously. Using Canva provide visual and aesthetic stimuli that encourage interest in learning (elements interesting activities and a conducive environment), while Quizizz provides strengthening achievement motivation through a scoring system, healthy competition, and direct feedback, which is in line with the characteristics of the needs McClelland's achievements.

Thus, the implementation of the media-based TPACK approach Canva and Quizizz are able to facilitate students' motivational needs both from the intrinsic aspect (the drive to understand and achieve) as well as extrinsic (environmental encouragement and rewards), as explained in McClelland and Uno's theory. The integration of these two theories strengthens the argument that technology-based learning innovation not only increases cognitive engagement but also builds students' overall affective motivation.

This increase in learning motivation shows that the integration between learning content, pedagogy, and technology can create a more meaningful learning experience. This is in line with research Muh. Ismail, et al., that effective learning can be realized through the use and integration of technology and information in the process of teaching and learning. Teachers have a strategic role in creating meaningful learning, one of which is by applying the model learning based on a Technological approach Pedagogical and Content Knowledge (TPACK) (Ismail et al., 2022).

Implementation of Canva and Quizizz media in learning provide a significant positive impact. This finding strengthens the results Yesi, Yeni's research, that the use of the Canva application as a medium learning and Quizizz as an evaluation tool makes it easier for teachers to distribute materials to students, while also helping to improve teacher competence in mastering educational technology (Kartiwi & Rostikawati, 2022).

Furthermore, the results of this study are strengthened by several studies previously. The influence of the use of learning technology on The learning motivation of students at Muhammadiyah Lempangang High School shows that in the learning technology variable there are 5 students (10%) in low category, 40 students (78%) in the medium category, and 6 students (12%) in the high category. Meanwhile, in the learning motivation variable, as many as 6 students (12%) are in the low category, 41 students (80%) are in the medium category, and 4 students (8%) in the high category. Significance test obtained a value of  $0.0019 < 0.05$ , so it can be concluded that alternative hypothesis ( $H_a$ ) which states that learning technology influence on students' learning motivation is accepted, while the null hypothesis ( $H_0$ ) is rejected (Abu Dzar et ai., 2025).

Utilization of multimedia-based digital applications and interactive has been proven to increase student engagement, deepen understanding of the material, as well as creating a more enjoyable learning experience, fun and interesting. Increased student motivation is reflected in more active participation and higher motivation scores based on post-intervention questionnaire results. Thus, digital applications can used as an effective alternative to improve quality Islamic Religious Education learning, especially in the aspect of student learning motivation at the elementary school level elementary school (Lindasari, 2024).

Implementation of Quizizz Paper-based formative assessment media Fashion in class VII Ikhwan SMPIT Al Ridwan Karawang Regency showed very good results. This is reflected in the increase understanding and positive responses of students based on observation results. Apart from that, there is an increase in learning motivation in PAIBP subjects, which is indicated by the difference in the average pretest and posttest scores on experimental class was 3.77. The results of

the t-test showed a significant value  $0.008 < 0.05$ , so the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) accepted. Thus, it can be concluded that the application of media Quizizz Paper Mode-based formative assessment has a significant influence on students' learning motivation in PAIBP subjects in class VII Al Ridwan Islamic Junior High School, Karawang Regency (Raihan et al., 2024).

Practically, the findings of this study have significant implications for teachers and policy makers in the school environment. Teachers need to receive ongoing and targeted training on integration TPACK approach and the use of digital media in planning and implementation of learning (Nufus, 2025). Thus, teachers are not only capable mastering pedagogical aspects and teaching materials, but also being able to optimizing technology as a means to increase effectiveness learning.

Theoretically, this study confirms that the success of the process learning is not solely determined by the quality of the content of the material, but also by the media, delivery methods that are appropriate to characteristics of 21st century students, especially the digital native generation. The TPACK approach acts as a holistic conceptual framework because it integrates three main components of content, pedagogy, and technology in a dynamic, contextual, and interactive learning system responsive to changes in the digital era (Sumarni et al., 2024).

## 5. Conclusions

The TPACK approach based on Canva and Quizizz media is influential significant effect on the learning motivation of class XI students of MA Al-Hasani Ma'arif. The test results shows a significance value of  $0.000 < 0.05$ , indicating an increase learning motivation from the moderate category to high with an increase of 43.89%.

Using Canva makes learning materials more visually appealing, while Quizizz increases student engagement and enthusiasm for learning through interactive evaluation. Thus, the integration of technology, pedagogy, and content in the TPACK approach it has been proven effective in creating learning that innovative and motivating.

The application of these two media not only increases motivation and student participation, but also helps teachers create a more enjoyable classroom atmosphere. dynamic and fun. A combination of visual design from Canva and Educational games from Quizizz can foster self-confidence and student activity in the learning process.

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