Optimizing Student Achievement with a Quantum Teaching Approach

Fauzan
IAI Al-Khairat Pamekasan
masfauzan@gmail.com
Artamin Hairit
IAI Al-Khairat Pamekasan
aminhidayat@alkhairat.ac.id
Raden Ahmad Muhajir Ansori
Brawijaya University Malang
muhajir86@ub.ic.id

Corresponding Author: Fauzan
Article history: Received: september 17, 2023 | Revised: Oktober 12, 2023 | Available Online: Januari 25, 2024

Abstract

Problems in learning activities often hinder teachers and students in achieving educational goals. Students' learning difficulties are usually due to the use of inappropriate methods as well as obstacles in providing feedback and improving students' learning skills. This research explores and analyzes the use of Quantum Teaching methods in increasing motivation through a fun and interactive approach. The approach used is descriptive qualitative to provide a detailed description of the use of Quantum Teaching methods in classroom learning. Data were collected from relevant and credible literature sources such as books, scientific articles, newspapers, magazines, and other publications. Content analysis techniques organize information based on relevant themes or categories. This study found that using Quantum Teaching techniques through the TANDUR phase (Grow, Experience, Name, Demonstrate, Repeat, and Celebrate) improved students' cognitive, affective, and psychomotor achievements. Analysis shows that six levels of cognitive learning, five levels of affective activities, and seven stages of psychomotor activities can all be improved by this method. This research provides an in-depth insight into the effectiveness of Quantum Teaching in improving student achievement. The findings provide a basis for educators to adopt more interactive and fun learning strategies and identify factors that influence the effectiveness of this method in the educational context.
Keywords: quantum teaching; achievement. Cognitive; affective; psychomotor

INTRODUCTION

Whether formal or non-formal, education is on the applicative side, and achieving educational goals is highly dependent on the learning process. However, until now, the learning process often faces challenges that hinder teachers and students in achieving academic goals. Some research highlights the problems in learning (Gunawan et al., 2017), (Sari, 2021), (Rachmawati & Lestariningrum, 2022). This phenomenon is inseparable because, until now, no learning strategy can be used in all learning materials and situations. This requires teacher creativity in implementing innovative learning strategies.

One of the learning problems above is rooted in the application of ineffective learning methods where teachers focus on knowledge transfer only. As a result, teachers face difficulties in improving students' skills. In fact, according to Nahar et al., in the 21st century, the ease of various methods and tools, especially with the help of science and technology (IT), should make it easier for teachers to apply applicable learning methods, allow students to learn comfortably and enjoyably, and allow teachers to improve their thinking, communication, collaboration, and other skills.

Specifically, this article will explore the effectiveness of Quantum Teaching in the K-12 classroom. We can create a conducive and enjoyable learning environment by integrating quantum concepts into our teaching practices. This approach will improve students' confidence, critical thinking skills, creativity, and learning outcomes. Teachers, as the main actors in teaching activities, should be able to use various teaching methods to increase students' enthusiasm and motivation to learn. The *Quantum Teaching* method is one of the teaching methods that can be used effectively in teaching activities.

Jayantika, in her research, concluded that applying *quantum teaching methods in learning can increase student learning activities and* boost learning outcomes. (Jayantika et al., 2019). Gunarhadi et al. (2014) also concluded that using *Quantum Teaching* methods is more effective than conventional teaching strategies in improving student achievement because students can develop their potential through social interactions in their environment. Students also feel more motivated because they feel valued so that they can improve their learning achievement.

The basic assumption in this paper is the need to empower teachers and students. By adopting Quantum Teaching, educators can unearth students' potential, foster motivation, and prepare them for a future where technology becomes a fundamental aspect of their lives and careers.

This study aims to provide a more meaningful space for readers, especially teachers, to use effective teaching methods to create a comfortable and pleasant learning atmosphere, boosting students' self-confidence, learning skills, critical and creative thinking, and improving student achievement.

METHODS

This research uses a descriptive qualitative approach to answer questions about what, who, where, and when related to certain phenomena known by trusted sources. The approach used in this research is a descriptive qualitative approach that aims to provide a detailed description of the use of the Quantum Teaching method in classroom learning. This approach focuses on collecting and analyzing descriptive data from various library sources to understand how the technique is applied and affects student achievement. Data were collected utilizing multiple sources such as books, scientific articles, newspapers, magazines, and other publications (Kim et al., 2017). These sources were selected based on their relevance and credibility in providing information about the Quantum Teaching method and its application in educational contexts. The collected data were analyzed by the researcher using content analysis techniques. This process involves organizing information based on relevant themes or categories, such as Quantum Teaching learning strategies, their impact on student achievement, and factors that influence the effectiveness of this method. This analysis is done critically to identify patterns, relationships, and significant findings from the data. With the approach and methodology described, this research is expected to provide deep insight into using Quantum Teaching methods to improve student achievement in the classroom.

RESULTS AND DISCUSSION

Quantum Teaching Concept

Quantum teaching is believed to be effective for people of all ages in schools. Quantum Teaching combines confidence, learning, and communication skills in a fun environment. The Quantum Teaching method was born in 1970, inspired by a business school in Burklyn, Vermont, United States, that applies a learning model that combines several elements of the curriculum in learning developed from a philosophy that learning should be fun that combines self-confidence, learning skills, and communication skills. (Sultan and Hajerina, 2020).

Bobbi DePorter introduced *Quantum Teaching* through the institution he founded, the Learning Forum, which is based in the United States. DePotter et al. (2020) emphasize the academic development of personal skills by utilizing the potential that exists in students and the learning environment through interactions that occur in the classroom.

The Quantum Teaching method is a natural way of teaching that motivates and excites students. The environment is prepared with didactic material to absorb at their own pace. Students learn without formal pedagogical machinations and without feeling like they are learning. *Quantum Teaching is* based on educational theories such as *Accelerated Learning* (Lozanov), *Multiple Intelligences (*Gardner), *NeuroLinguistic Programming (*Csnder and Bandler), *Experiential Learning (*Hahn), *Socratic Inquiry*, *Cooperative Learning* (Johnson and Johnson), and *Elements of Effective Instruction (*Hunter).(Selman et al., 2011). *The Quantum Teaching* learning model is a fun learning method with well-established interactions between teachers and students. (Malik & Afandi, 2020) This method creates an effective learning environment by utilizing the elements that exist in students, such as curiosity and the learning environment through interactions that occur in the classroom.(Sultan & Hajerina, 2020) Quantum Teaching uses stages abbreviated as TANDUR (grow, experience, name, demonstrate, repeat, and celebrate). (Romadhoni & Relmasira, 2018).

Handayani explained the stages of *Quantum Learning* (TANDUR) as follows:

a. T: Grow, fostering students' interest in learning by establishing interactions with students and convincing them what they are learning. The teacher can apply this method by making stories, asking students about their daily experiences, or showing learning videos. Then, the teacher asks questions or asks students to respond to train them to develop ideas.
b. A: Experience, inviting students to experience firsthand what they are learning. Involving students in the learning process will sharpen their abilities and make them easy to remember and understand because they are involved.
c. N: Name; when students' interest and attention grow, and questions arise, the teacher can provide the desired information or concept. This step is called naming. This naming is expected to answer doubts and questions in the experiencing stage.
d. D: Demonstration: After students have learned something, the teacher allows them to demonstrate their abilities. With this experience, students will understand and know they have enough skills and information.

e. U: Repeat; before the lesson ends, the teacher needs to repeat or provide confirmation of things that are not clear. The teacher can also offer opportunities for students to teach their friends who have not understood the lessons they have learned.
f. R: Celebrate appreciating students' achievements, no matter how small. Expressing appreciation for students' success will encourage them to strengthen their responsibility and increase motivation. It can also foster a sense of pleasure in students. (Handayani, 2010).

The stages above reinforce DePorter and Hernacki's view that there are five main principles in the *Quantum Teaching* method, namely: 1) everything speaks, 2) everything aims, 3) experience before naming, 4) recognize every effort, and 5) if it is worth learning, it is also worth celebrating (DePotter et al., 2020). The detailed explanation is as follows:

a. Everything speaks.
   Everything from the environment to body language, papers handed out to lesson plans, and other learning materials. Everything conveys a message about learning.
b. Everything is purposeful
   All activities carried out by teachers should not be separated from specific goals. Teachers may not convey the desired objectives to students depending on the situation and conditions.
c. Experience before naming
   Students are encouraged to find as much information as possible about the material taught in class.
d. Acknowledge every effort
   Teachers do not hesitate to recognize students' efforts, no matter how small.
e. If it's worth learning, it's worth celebrating.
   Teachers should praise students who are actively involved in the lesson and show results, for example, by applauding, rewarding candy, saying good, sound, and others.

Application of Quantum Teaching Method in Learning

The Quantum Teaching method is a teaching method that prioritizes student activeness in learning. With this method, teachers are expected to be able to encourage students to interact with the learning situation and environment. In its implementation, Tayeb explained that teachers must be able to create a learning atmosphere that encourages

students to be more enthusiastic, enthusiastic, and have high curiosity so that it can spark the development of affective, cognitive, and psychomotor abilities (Tayeb, 2017).

According to Eggen and Kauchak, students can learn effectively if they are actively involved in organizing the discovery of data linkage information faced by students. Students can be said to be active if they participate in preparing lessons, are happy in learning, and have the will and creativity (Eggen and Kauchak, 2001). For the practical application of the Quantum Teaching method in learning, Hendriani explained the steps that can be applied in learning, among others:

a. The power of ambak (what's in it for me) is the motivation teachers use to foster students' interest in learning. Teachers will also be motivated to learn new methods and techniques by connecting the subject matter with the student's daily lives to make the learning atmosphere exciting and fun.
b. We are arranging the learning environment so that the learning environment becomes interesting and can prevent students from boredom.
c. Cultivate a winning attitude by encouraging student learning and appreciating student learning achievements by giving praise.
d. Liberate students' learning styles with various learning styles, such as visual, auditory, and kinesthetic.
e. Accustoming students to take notes while learning is a creative activity so that students will not only receive but also be able to express what they have obtained according to their style.
f. Encourage students to get used to reading because reading can increase vocabulary and insight.
g. Stimulate students to be more creative by encouraging them to be highly curious and want to try so that they can generate fresh ideas.
h. Train students' memory power (Hendriani, 2011).

Yaqin (2021) added that the Quantum Teaching model can be implemented through several steps, namely:

a. Teachers become role models for students, such as telling the truth, being good listeners, and always smiling.
b. Teachers create a comfortable and pleasant learning atmosphere so that students are not bored, not sleepy, and can understand the material being taught.

c. Teachers create a pleasant learning environment by arranging tables and chairs in various formats, creatively decorating the classroom using posters containing slogans and encouraging pearls, and understanding students' feelings and attitudes during the learning process.

The application of the *Quantum Teaching* method in learning is expected to improve student learning outcomes that include the cognitive domain (thinking ability), the affective domain (feelings, attitudes, and emotions), and the psychomotor domain (skills). Nurfadilah and Nurachadijat (2023) explained that applying *Quantum Teaching* methods in learning can increase students' understanding of the material they learn, where students actively ask questions, argue, and comment on each other during the lesson. In the affective aspect, the application of the *Quantum Teaching* method with a pleasant learning atmosphere, good learning space settings, classroom light settings, the use of music as a learning instrument, and the arrangement of learning benches can affect students' souls to increase positive attitudes, enthusiasm, feelings of joy, pleasure, openness to others, and self-confidence. A pleasant learning atmosphere in the classroom can improve students' psychomotor skills. This method can encourage students to be skilled in the learning process so that they become brave in speaking, discussing, and working in groups, eventually becoming skills due to the learning process in class.

Implementation of the *Quantum Teaching* Method in Improving Student Achievement

Improving student achievement is the dream of every parent. Winkel (1996) defines learning achievement as evidence of a person's success. Astuti et al. (2012) also mentioned that achievement is the same as learning outcomes. This follows the opinion of Tu'u (2008) in his book "*The Role of Discipline in Student Achievement Behavior*," which states that learning achievement is an element of learning outcomes.

Benyamin S. Bloom, in the *Taxonomy of Education Objective,* divides learning outcomes into cognitive, affective, and psychomotor domains. The cognitive domain is related to students' thinking power, knowledge, and reasoning. This domain includes students remembering to solve problems and combining their learned concepts. The affective domain includes acceptance, participation, assessment, and determination of attitudes, organization, and formation of student life patterns. The psychomotor domain includes physical and

motor skills related to limbs or actions requiring coordination between nerves and muscles. (Hazenbos et al., 1996).

Quantum Teaching Method to Improve Students' Cognitive

The Quantum Teaching method can improve intelligence in the cognitive domain. According to Bloom, the cognitive domain involves all brain activities, such as memorizing, understanding, applying, analyzing, synthesizing, and evaluating. According to Agarwal et al., achievement of cognitive aspects can be achieved through six levels ranging from the lowest to the highest level, namely *knowledge, comprehension, application, analysis, synthesis, and evaluation,* as in the following picture (Agarwal and Solanki, 2022)

Figure 1 Levels of the Cognitive Domain

The six levels that can be done in classroom learning, as described by Djazari and Sagoro, are as follows:

a. *(knowledge*), which is the ability to remember or recognize names, terms, ideas, formulas, and so on without expecting the ability to use them. This level is the lowest process.
b. *Comprehension* is the ability to understand or comp*rehend* something after knowing and remembering. Understanding can be interpreted as knowing something, seeing it from various sides, and explaining it in detail in his own words.
c. *Application* is the ability to apply or use general ideas, procedures, methods, principles, formulas, theories, and so on in new and concrete situations. An example of application-level cognitive learning outcomes is how students think about applying social concepts in everyday life.
d. Analysis *(analysis*) is the ability to detail or describe a material or situation, starting from small things and understanding the relationship of one factor with other factors.
e. *Synthesis* (*synthesis*) is the opposite of the analysis process, which combines parts or elements logically into a structured pattern. Examples of cognitive learning outcomes

from the synthesis level include students' ability to write essays by incorporating theories or concepts.

f. Assessment/appreciation/evaluation *(evaluation)* is a person's ability to judge a condition, value, or idea. For example, if students are faced with several choices, they can choose the best option according to existing criteria. (Djazari and Sagoro, 2011)

Quantum Teaching Method to Improve Students' Affective

The affective domain in learning is related to students' attitudes and values, which include students' behavioral time, such as feelings, interests, attitudes, emotions, and values.(Djazari & Sagoro, 2011b) The quantum teaching method can be applied in teaching activities to improve student learning outcomes in the affective domain, which appears in various actions such as focus, discipline, and motivation in learning. According to Krathwohl (1961), five levels can improve the affective domain: *receiving* or *attending, responding, valuing, organization, and characterization*.

Figure 2 Levels of the Affective Domain

a. *Receiving* trains students' sensitivity to receiving stimuli (stimuli) from outside in the form of problems, situations, symptoms, and others. At this level, education can maintain the attention of students who are the object of learning, such as directing students to enjoy reading books and working together.

b. *Responding* means active participation. At this level, students are trained to include themselves actively in certain phenomena. Educators emphasize the acquisition of responses, the desire to respond, and the satisfaction of giving students responses such as being happy to ask questions, helping friends, like cleanliness and tidiness, and so on.

c. *Valuing* means assessing or appreciating. This level expresses feelings and beliefs that a particular idea or way of thinking has value. At this level, students accept the value of the concepts taught and are trained to assess the concepts or phenomena they have learned

by judging good or bad. The ability of students to give values, such as saying it is good, means that students have undergone the assessment process. Educators can train students' beliefs, actions, and arguments.

d. *Organization* means arranging or organizing. This level links other values, resolves conflicts between values, and builds a consistent internal value system. Learning outcomes at this level are value conceptualization or value system organization. Learning activities that teachers can implement at this level by training students to modify, compare, and decide.
e. *Characterization* means the integration of the value system that students have that affects their personality and behavior. Internalization of values that have been embedded in students can affect their emotions. This level is the highest in the affective domain, which is the accumulation of previous values and cultivation to form personal, emotional, and social systems in students.

Quantum Teaching **Method to Improve Student Psychomotor Skills**

Bloom (1979) argues that the psychomotor domain relates to learning outcomes achieved through manipulation skills involving muscle and physical strength. Simpson suggests seven activities that can be done in learning activities to improve learning outcomes in the psychomotor domain, namely *perception, set, guided response, mechanism, complex overt response, adaptation, and origination.*

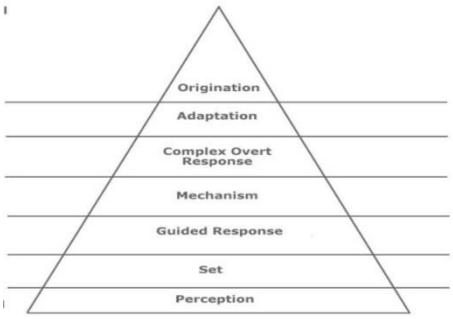

Figure 3 Levels of the Psychomotor Domain

a. *Perception* (perception) assists students in interpreting stimuli received by sensory organs to adjust to their environment. Teachers can provide early opportunities for students to participate in nerve stimulation activities and observe various movements to develop their perceptual abilities.

b. *Set* (regularity) is the readiness of students to act. Student readiness includes mental, physical, and emotional factors. From the beginning, these three sets are innate and allow a person to respond to different situations, often called mindset.
c. *Guided response* (guided response) is assisting students through a role model performance where the teacher practices it directly, using the help of a prop model or through video shows, and then students practice independently.
d. *Mechanism* (mechanism) is the ability to transform learned responses into habitual actions with proficiency so that they can perform confidently, such as students' ability to dance after training.
e. *Complex overt* response (rapid response) is the ability to perform complex movements skillfully, such as typing on a computer without looking at the keyboard.
f. *Adaptation* (adaptation) is modifying learned skills to meet specific needs. For example, students can use bottles to make art creations.
g. *Origination* (initiation) is the ability to create new movement patterns to adapt to certain situations or problems, such as the ability of students who have learned to dance by creating new movements.

CONCLUSIONS

The findings of this study indicate that the Quantum Teaching approach significantly enhances students' holistic learning outcomes, encompassing cognitive, affective, and psychomotor domains. Students who engaged in learning through the TANDUR framework (Grow, Experience, Name, Demonstrate, Repeat, and Celebrate) demonstrated measurable improvements in critical and analytical thinking, communication, and adaptability skills. These outcomes suggest that the approach effectively fosters academic achievement and students' personal and social development.

The cognitive gains observed were marked by an increased ability to process and apply knowledge in reflective and interactive learning settings. Affective development was evidenced through heightened motivation and engagement, while psychomotor improvements were supported by learning activities that required fine and gross motor coordination, creativity, and innovation.

Moreover, Quantum Teaching promotes a dynamic and student-centred learning environment that aligns with the needs of 21st-century education. However, successful

implementation requires careful instructional planning and professional development for educators to optimize its benefits.

Future research is recommended to examine the long-term effects of Quantum Teaching across diverse educational settings and student populations and its integration with digital learning tools to further enhance student engagement and performance.

LITERATURE

Agarwal, Shivani, and Vijender Kumar Solanki. "Creating Awareness and Implementing Bloom's Taxonomy in Teaching Pedagogy-with Special Reference to Higher Education," 75-79, 2022. https://doi.org/10.15439/2022M7014.

Astuti, Wiwin Wiji, FX Sukardi FX Sukardi, and Partono Partono. "The Effect of Learning Motivation and Learning Methods on Integrated Social Studies Learning Outcomes of Class VIII SMP PGRI 16 Brangsong Kendal Regency". *Economic Education Analysis Journal* 1, no. 2 (2012). https://journal.unnes.ac.id/sju/eeaj/article/view/540.

Bloom, B.S. *1979. Taxonomy of Objectives, The Classification of. Education Goals, Handbook 1: Cignitive Domain*. USA: Longman Inc. Borg, W.R & Gall

Bobbi DePotter, Mark Peardan, and Sarah Singer. 1999. *Quantum Teaching: Orchestrating Student Success*. Boston: Allyn and Bacon.

Chaerul, Wahidin, (1999). *Islamic Education Renewal*. Dissertation, unpublished. UIN Jakarta

Djalil, M. Bisri. "Paradigms, Principles, and Applications of Quantum Learning and Quantum Teaching in Learning". *Lentera Journal: Religious, Scientific and Technological Studies* 13, no. 2 (September 15, 2015): 128-36. https://ejournal.kopertais4.or.id/mataraman/index.php/lentera/article/view/1260/889

Djazari, M., and Endra Murti Sagoro. "Evaluation of Student Learning Achievement in the Continuing Study Program of Accounting Education Department in View of D3 GPA and College Origin". *Journal of Indonesian Accounting Education* 9, no. 2 (December 1, 2011). https://doi.org/10.21831/jpai.v9i2.970.

Eggen, P. D., & Kauchak, D. P. 2001. *Strategies for Teachers: Teaching Content and Thinking Skills*. Boston: Allyn and Bacon.

Gardner, R., and Cowell, N. (1995). *Teacher and Student Development Techniques; A Guidebook for Elementary School Owners*. Jakarta: Grasindo. Translator: Setyani D. Sjah.

Gunarhadi, Mustapa Kassim, and Abdull Sukor Shaari. "The Impact of Quantum Teaching Strategy on Student Academic Achievement and Self-Esteem in Inclusive Schools." *Malaysian Journal of Learning and Instruction* 11 (December 25, 2014): 191-205. https://e-journal.uum.edu.my/index.php/mjli/issue/view/325

Handayani, Baiq Sri. "Quantum Learning Tandur Model to Build Effective Communication in Learning." *Journal of Pijar Mipa* 5, no. 2 (September 1, 2010). https://doi.org/10.29303/jpm.v5i2.171.

Hazenbos, WL, Gessner Je, Hofhuis Fm, Kuipers H, Meyer D, Heijnen Ia, Schmidt Re, et al. "Impaired IgG-Dependent Anaphylaxis and Arthus Reaction in Fc Gamma RIII (CD16) Deficient Mice." *Immunity* 5, no. 2 (August 1996). https://doi.org/10.1016/s1074-7613(00)80494-x.

Hendriani, Ani. "Application of Quantum Learning Method to Improve Student Learning Outcomes." *Journal of Educational Administration* 8, no. 1 (2011). https://doi.org/10.17509/jap.v13i1.6388.

Jayantika, I. G. A. N. T., N. N. Parmithi, and N. P. A. Dyanawati. "Quantum Teaching Learning Model as Solution to Improve Learning Activity and Mathematics Learning

Outcome." *Journal of Physics: Conference Series* 1321, no. 2 (October 2019): 022119. https://doi.org/10.1088/1742-6596/1321/2/022119.

Kim, Hyejin, Justine S. Sefcik, and Christine Bradway. "Characteristics of Qualitative Descriptive Studies: A Systematic Review." *Research in Nursing & Health* 40, no. 1 (February 2017): 23–42. https://doi.org/10.1002/nur.21768.

Krathwohl, D. R. Bloom, B. S. and Masia, B. B. 1961, *Taxonomy of Educational Objectives: Affective Domain*. Michigan United States: D. McKay.

Lodge, Jason M., Gregor Kennedy, Lori Lockyer, Amael Arguel, and Mariya Pachman. "Understanding Difficulties and Resulting Confusion in Learning: An Integrative Review." *Frontiers in Education* 3 (2018). https://www.frontiersin.org/articles/10.3389/feduc.2018.00049.

Malik, Abdul, and Muhamad Afandi. "Improving Discipline and Learning Achievement of Islamic Religious Education through Quantum Teaching Learning Model for Class VII MTs NU Al Ishlah Binabaru." *Scientific Journal of Basic Education* 7, no. 1 (January 29, 2020): 60–67. https://doi.org/10.30659/pendas.7.1.60-67.

Nahar, Syamsu, Suhendri, Zailani, and Hardivizon. "Improving Students' Collaboration Thinking Skill under the Implementation of the Quantum Teaching Model." *International Journal of Instruction* 15, no. 3 (July 2022): 451–64. https://www.e-iji.net/dosyalar/iji_2022_3_25.pdf

Nurfadilah, Khoirunnisa, and Kun Nurachadijat. "The Role of Quantum Learning in Improving Student Motivation and Achievement at MA AL-Istiqomah in Sukabumi City." *Journal of Innovation, Evaluation and Learning Development (JIEPP)* 3, no. 1 (August 1, 2023): 22–28. https://doi.org/10.54371/jiepp.v3i1.243.

Romadhoni, Mesti Fajar, and Stefanus C. Relmasira. "Differences in the Effect of Course Review Horay Learning Model and Quantum Teaching Judging from the Mathematics Learning Outcomes of 3rd Grade Elementary Students." *Scholars: Journal of Education and Culture* 8, no. 1 (January 16, 2018): 93–104. https://doi.org/10.24246/j.js.2018.v8.i1.p93-104.

Selman, Victor, Ruth Corey Selman, and Jerry Selman. "Quantum Learning: Learn Without Learning." *International Business & Economics Research Journal (IBER)* 2, no. 4 (February 25, 2011). https://doi.org/10.19030/iber.v2i4.3787.

Sultan, Lisdayanti, and Hajerina Hajerina. "Application of the Quantum Learning Model to Improve Student Learning Outcomes in Class VII A MTs. Alkhairaat Biromaru on Social Arithmetic Material." *Guru Tua: Journal of Education and Learning* 3, no. 1 (May 17, 2020): 7–20. https://doi.org/10.31970/gurutua.v3i1.40.

Simpson, E.J. 1972. *The Classification of Educational Objectives in the Psychomotor Domain*. *The Psychomotor Domain*. 3:43-56. Gryphon House.

Syafni, Elgi, Yarmis Syukur, and Indra Ibrahim. "Student Learning Problems and Their Handling." *Counselor* 2, no. 2 (June 5, 2013). https://doi.org/10.24036/02013221721-0-00.

Tayeb, Thamrin. "Analysis and Benefits of Learning Models." *Auladuna: Journal of Islamic Basic Education* 4, no. 2 (June 30, 2017): 48-55. https://journal.uin-alauddin.ac.id/index.php/auladuna/article/view/5961

Yaqin, Mokhammad Ainul. "Implementation of Quantum Teaching in Islamic Religious Education Learning." *Indonesian Journal of Education* 2, no. 2 (February 25, 2021): 257–69. https://doi.org/10.36418/japendi.v2i2.93

Tu'u, Tulus. 2008. The role of discipline on student achievement behavior. Jakarta: Grafindo.

Winkel, W.S. (1996). Guidance and Counseling in Educational Institutions. Jakarta: Gramedia, 226.