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## APPLICATION OF QUANTUM LEARNING MODEL TO GET USED TO LEARNING COMFORTABLY AND FUN AT THE ELEMENTARY SCHOOL LEVEL

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### ABSTRACT

Education is a difficult matter to avoid from a dynamic human life that is always moving forward. One of the important parts of education is learning. By creating a comfortable atmosphere, students will be enthusiastic and not bored when learning takes place. The argument is in line with quantum learning. Quantum learning is one of the methods that attracts students to learn with a comfortable and exciting atmosphere and conditions so that students will be free to discover new things in learning. The purpose of this study is to explain three important things, namely: how the model, framework and strategy of Quantum learning at the elementary school level. This research uses a literature study the reason for choosing the method is to describe simply the thesis of this study.

**Keywords:** Learning Model, Quantum Learning.

### ABSTRAK

Pendidikan adalah perihal yang sulit dihindarkan dari hidup manusia yang dinamis dan selalu bergerak maju. Salah satu bagian penting di dalam pendidikan ialah pembelajaran. Suasana yang nyaman membuat peserta didik semangat dan tidak bosan ketika pembelajaran berlangsung. Argument tersebut sejalan dengan quantum learning. Quantum learning atau pembelajaran quantum adalah salah satu metode yang menarik peserta didik belajar dengan suasana dan kondisi yang nyaman dan seru sehingga peserta didik akan leluasa menemukan hal baru dalam pembelajaran. Tujuan dari penelitian ini adalah menjelaskan tiga hal penting yaitu: bagaimana model, kerangka, dan strategi quantum learning jenjang sekolah dasar. Penelitian ini menggunakan studi kepustakaan alasan pemilihan metode tersebut adalah untuk mendeskripsikan secara sederhana tesis dari penelitian ini.

**Kata Kunci:** Model Pembelajaran, Quantum Learning

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### INTRODUCTION

Education is one of the tools to improve its human resources to be of high quality. Through education, it is coveted to be able to produce a good quality society that can play a role in development and support the progress of the state and nation. For this reason, the Ministry of Education and Culture of the Republic of Indonesia implements it through a curriculum. Elementary schools are systems, especially in education that have vital elements such as learning activity programs, students, educational facilities, the environment, and staff. All elements of

education in primary school are essential to achieving instructional goals.

The results of education and development are determined by the experience that the learner gains throughout his life; Thus, education is aimed at the individual child, who must be guided and directed towards goals that include the values of social life; and every teacher's learning must be able to make the learning material fun. Teachers can make subjects more active and develop student creativity with the help of learning media, namely the Quantum Learning method.

Quantum Learning is an approach, a way of communicating by honing students'

memory and ability to communicate ideas so that learning remains fun (Nst et al., 2022). Learning doesn't always have to be learning, learning, and learning, but it can also be interspersed with games or games; if student activity increases, student learning outcomes can increase by increasing their enthusiasm for learning; and curiosity can help students solve any problem. The quantum learning model is a balanced blend of learning and play, as well as stimuli coming from inside and outside (Siregar, 2022). The main principle of quantum learning methods is that suggestion can have both a positive and negative effect on learning outcomes.

Positive suggestions are given by placing students comfortably, playing music during learning, increasing individual participation, utilizing posters to make a big impression and emphasizing information, and utilizing media to liven up the learning atmosphere to be fun and comfortable (Mukhlis, 2018). The existence of a comfortable and interesting learning environment will foster a good understanding in learning activities in the classroom, thus causing positive emotions that stimulate the brain to work more effectively.

In general, Quantum learning is a learning process that focuses on maximizing student interaction with their learning environment. Aspects of effective learning such as interest and encouragement of learning are involved (Fitri et al., 2021). As a result, it can change and maximize students' skills and potential. These two things can later become achievements and learning outcomes by having benefits for yourself and those around you.

So, Quantum learning can provide comfort to students because it can make students feel comfortable because they use the surrounding environment as learning materials or combine it with music. Changes in various interactions that when learning is defined as quantum learning. These interactions include aspects that can support the effectiveness of learning, such as the enthusiasm and enthusiasm for learning of students. These relationships also make the skills and potential of learners turn into something useful for both the personal and others.

## **METHOD**

This research uses a descriptive method, where the author analyzes the content of the research in the nature of Library Research. The author makes use of references to scientific articles or scientific writings that are appropriate to the topic covered. This research uses several theoretical sources that discuss what is a Quantum learning model, How is the learning framework of the Quantum Learning Model and How is the quantum learning strategy to create a learning model.

## **RESULT AND DISCUSSION**

### **A. Understanding the Quantum Learning Model**

The term "quantum" refers to the relationship of creating light from energy changes. As a result, this learning model is able to create an efficient environment that utilizes aspects in students and the learning environment as a result of existing relationships (Tafonao, 2018).

Quantum Teaching is a transformation of dynamic learning. Quantum Teaching is concerned with dynamic relationships that exist in the classroom, relationships with laying the foundation and forms of work for learning. The Quantum Learning Model aims to incorporate all the connections, interactions, and differences that can enhance learning. The Quantum Learning Model emphasizes a fun learning experience. The basic premise of Quantum Learning is that learning is a lifelong activity that can be carried out in an interesting and fun way. Regardless of the subjects taught, the Quantum Learning Model explains the new effort of facilitating the learning process through the integration of artistic elements and targeted achievement. This learning model seeks to combine multi-sensory and intelligence improvements with the brain which will then have an impact on improving learner achievement.

The benefit of this model is that it strengthens the position of a learner who is responsible for himself in order to improve his life through learning as much as possible in each circumstance and applying it to himself or those around him. This model also changes a person to use the "active learning" method.

This learning requires taking a role rather than just following what is presented. Engaged learners are free to access the available experience and knowledge. Keep an open mind, absorb and process what Master knows, then seek out more information with passion. This makes it possible to introspect and explore the world. This thinking is based on allowing one to dare to explore and try new things to learn a lesson.

The Quantum Learning model explores the concept of "Bring their world into our world, and usher our world into theirs". It confirms how teaching using the Quantum Learning Model gives students more than just material to learn. However, learners will be taught how to develop positive emotional relationships while studying. We can teach using Quantum teaching by involving the right and left brains according to their functions. According to studies from the University of California, each of these brains controls a different type of intellectual activity.

### **B. Characteristics of Quantum Learning Model**

Generally, this learning model has the following characteristics:

1. Based on cognitive psychology and its humanistic nature. Learners are the center of learning attention for a teacher. By eliminating punishments and rewards, students' potential, mental skills, and motivational power can develop themselves optimally because all students' efforts are valued.
2. It is constructivistic. This requires the integration, collaboration, and synergy of human potential factors as learners with the environment to become a context in learning. As a result, all of these things must be achieved equally and equally in order to achieve success in learning.
3. Focusing attention on quality and meaningful relationships. This quality and meaningful relationship is considered to be able to cause a change in the ability to think and the talents of students into something useful. Focusing on accelerating learning with a high success rate. During the process of removing obstacles and obstacles to

create pleasant conditions, comfortable areas, and relaxed chair arrangements.

4. Focusing on the meaning and quality of a learning process. (Legi, Giban, et al., 2022) This emphasis will create an easy-to-understand and meaningful experience for learners especially experiences that must be well facilitated. There is a model by combining context and learning materials. A good learning environment, a solid foundation, a good area, and a dynamic design consist of a learning context. While the learning content includes: excellent presentation, adaptive facilitation, learning ability, and life skills.

### **C. Quantum Learning Model Planning Framework**

"TANDUR", is a term known for the form of quantum learning design (DePorter et al., 2010) namely:

1. Grow up. Growing is the concept of "bringing their world into our world", which implies that teachers should cultivate a positive attitude in the introduction (preparation) of learning starting with realizing a good learning area, social environment (study group), learning facilities, and a bright and meaningful desire to students, in order to generate curiosity. These questions can be used as a reference for teachers: What do learners understand? What do students agree on? What benefits does the material bring to students and what it means? What are students interested in/feeling? Plant application strategies are not just questions and answers, or taking notes on learning objectives on board, but can also feature good or funny media, current topics, or short stories related to experiences.
2. Natural. This stage, if written in the RPP, is in the core activities. The concept of Natural means creating the natural desire of the brain to explore, the teacher is obliged to provide the benefits and experience of the knowledge created by the student. The question that can be a teacher's guide to the concept of nature is: what is the best way for learners to understand information?

What are some games that use the knowledge that students have? What kind of activities have benefits for learners? Donkey bridges, games, or stimuli with the assignment of tasks to individuals can be the strategy of this concept,

3. **Namai.** Naming is the subject of activity, whose name implies that naming satisfies the brain's desire (which causes learners to be curious and wonder about their experiences) to provide identity, reinforce, and meaning. On this issue, naming refers to the teaching of concepts, the development of thinking skills, and the development of learning strategies. What learning differences should be made to guide teachers in understanding the concept of names? What do teachers need to do to help learners understand? What strategies, ways, and ways of thinking are taught or used by learners? A series of images in the form of colors, images, paper, posters, and photos can be used to apply naming. (Legi, Riwu, et al., 2022, pp. 9499–9507)
4. **Demonstrate.** Activities are underway at this stage. The purpose of this step is to allow learners to demonstrate their knowledge. It also allows learners to show off their understanding of the subject matter. How can students demonstrate their level of proficiency with new knowledge? is a reference that teachers can use. What kind of teachers can help teachers and learners collaborate to encourage demonstrations of learners' skills? Strategies include practicing, preparing reports, designing presentations with PowerPoint, analyzing data, moving limbs such as hands and feet simultaneously.
5. **Repeat.** When included in the RPP, this stage is nearing its end. This stage is carried out to strengthen the neural connections and generate the feeling of "I know that I know this". This activity is carried out with multimodal and multiintelligence. A guideline that can be used as a reference for teachers, namely how should students repeat this lesson? How is each student given the opportunity to repeat? This is an

opportunity for students to spread their knowledge to people, or can solve post-test questions.

6. **Celebrate.** This step is included in the conclusion of learning. Intending to complete, acknowledge the effort, seriousness, and success that in the final creates a sense of satisfaction and joy. If at the end of the activity a sense of pleasure is obtained, it will arouse the enthusiasm of students to learn next.
7. What is the most appropriate way to celebrate this lesson? How can Master recognize everyone's achievements? Is an example of a teacher's question guide in this activity.
8. Singing together, class parties, and clapping hands as gifts are all strategies that can be used.

#### **D. Sample Steps of a Quantum Learning Model**

1. **Opening Remarks**  
The opening greeting is used as the teacher's learning begins and then the student's attendance check is carried out by the teacher.
2. **Core Activities**
  - a. The teacher gives a one-variable linear equation (PLSV) problem that has a connection with life as a way to stimulate students' memory.
  - b. The teacher explains the One Variable Linear Equation (PLSV) and then groups the learners into two groups. Then, the teacher invites students to play a game about chains or relays followed by music.
  - c. The teacher gave a similar question to the previous two pieces and then invited a student to solve the problem.
  - d. The teacher draws conclusions from the results obtained by the students and then provides practice questions to strengthen students' understanding.
  - e. Teachers and students evaluate activities that have been going on and then celebrate by high-five either students to the teacher or between students.
3. **Concluding Activities**

The teacher gives homework to the students which is then collected at the next meeting. The activity then closes with a prayer.

### E. Quantum Learning Strategies

1. Creating an atmosphere of enthusiasm and vibrancy. According to Walberg and Greenberg, the main psychological determinant that affects academic learning is the classroom environment. The key to creating this environment is:
  - a. Intention. The intention or ability of the teacher has a great influence on the ability to motivate students. The bond of sympathy and belonging to each other. Teachers can create bridges that connect with the world of learners to know their strong interests, and communicate with their hearts by building networks of sympathy and mutual understanding.
  - b. Joy and a Sense of Amazement. Excitement and admiration can make participants more willing to learn and even eliminate their vices. Applause, woosh, finger pinning, public posters, individual notes, conspiracies, acknowledging abilities, surprises, compliments to peers, affirmations, and "wows" are common expressions of excitement or excitement.
  - c. A sense of belonging to each other. These feelings streamline the learning process and develop student responsibilities, such as clapping hands, every time before, entering, or ending a study session.
  - d. Exemplary. Exemplifying exemplary is the most powerful path that can be used in creating relationships and understanding people and adding abilities in learning.
  - e. The principle of similarity of values. One set of principles consists of 8 things, namely: Sincerity (honesty), Failure is the door to success, Good speaking Live in the present, commitment, responsibility, flexibility, fit.
  - f. Confidence in Learner Ability, Learning And Teaching Educators must believe in the skills of their

learners. It can start with teaching which starts with the perspective that teachers who are taken for granted can be extraordinary and can influence people around them.

- g. Agreements, policies, procedures and regulations. Agreement: informal form of a rule, and real to facilitate the lesson. Policy: Support study groups. Procedure: Provides information about objectives and actions that should be taken.
2. Set up a supportive learning environment. Students feel safe when in the school environment, use posters with symbols or posters that contain various motivations. For example, arranging the seats into a semicircle to carry out the discussion and the facilitator acts as the leader of the discussion. Occasionally use Music in the learning process. Consciously or unconsciously, music helps learners to work better, remember more, and stimulate learning performance.
3. Implement dynamic teaching planning
  - a. From their world to ours  
This means that educators must be able to connect the world of students with the world of teachers in order to make it easier for teachers to establish good relationships with students.
  - b. Vak modality (Visual Auditorial Kinesthetic)
    - 1) Visual  
Characteristics: Paying close attention to all things, the appearance of being awake, the image as a reminder, requiring an image and context to maximize absorption, and like to be considerate.
    - 2) Auditorial  
Characteristics: attention is easily distracted, speech is rhythmic, learning styles tend to listen, and reading by voice for maximum absorption such as utilizing singing, poetry, or discussion.
    - 3) Kinestics  
Characteristics: tend to be easy to memorize, do a lot of movement and learn by doing hands-on, like

activities that involve physical activity to maximize absorption, and tend to use media that can be touched directly.

4) Success model

Student success is determined by two main factors, namely the level of difficulty and individual risk. Teachers can help their students succeed in things like introducing the subject matter by always humming the V-A-K component, repeating frequently, forming study groups or individual completions.

c. Multiple Intelligences

The intelligence here is verbal linguistic, special visual, interpersonal, rhythmic musical, naturalist kinesthetic body and mathematical logic. However, teachers are obliged to leave their comfort zone when conducting and designing learning, students must be freed to use intelligence according to their talents and potentials.

d. Use of Metaphors and Parables with Suggestion

Metaphors help revive concepts that have been forgotten in order to reappear easily. Meanwhile, Parables make it easier for learners to understand that suggestion has power.

## F. Disadvantages and Advantages of Quantum

1. Excess

a. Quantum learning emphasizes academic development and skills.

Students get better results, are active, and are happy for their achievements as what was achieved during the Learning Forum at Supercamp that practices Quantum learning. Educators can integrate and blend into the world of students, allowing educators to understand more about their students, which is the main capital for producing efficient and fun methods.

b. A relaxed learning model of learning while listening to music.

Music is considered to maximize brain performance. So, learning accompanied by music can create calm conditions and easier material to absorb.

c. Natural presentation of the material.

Is the best learning process that arises when the student has been informed before mentioning what they learned which results in the learner preferring to be in his comfort zone and then stepping out of the zone to do the actual exploration. Students are the main goal of quantum. As a result, teachers strive for varied interactions and effectively remove learning barriers so that learners can learn easily. All this is done to improve the achievement of learners.

d. Quantum learning can combine all positive suggestions and their relationship to the environment.

That is, it can have an impact on learning activities. A good environment can generate motivation, influence the learning process of the Quantum Learning method using mind mapping, which is useful for developing the academic (learning achievement) and creative potential of students.

2. Debilitation

a. Need special skills of the teacher

b. The planning and preparation process must be optimal and well organized.

c. The existence of resources, limited tools and many learning conditions and time.

## CONCLUSION

There is no best or ideal model used out of the many approaches and models. It all depends on the circumstances of the learners, the school, and other influential aspects. We can't immediately say which model approach is best, before looking at that aspect. Moreover, in practice it takes many combinations of approaches and models to be used in which they have influence each other.

Quantum Learning is very much in line with how the brain works and can

optimize learning ability. Accelerated learning was created in order to eliminate distractions that hinder natural learning activities by utilizing music, giving color to the surrounding environment, preparing teaching materials, effective presentation methods, learning integrity, and active student participation. To foster a pleasant learning atmosphere. To maximize learning and time efficiency and maximize achievement, educational institutions can improve quantum learning-based learning methods.

## REFERENCES

- DePorter, B., Reardon, M., & Singer-Nourie, S. (2010). *Quantum teaching: practicing quantum learning in classrooms*. Kaifa.
- Fitri, R. A., Adnan, F., & Irdamurni, I. (2021). The influence of quantum teaching models on students' interest and learning outcomes in elementary school. *Journal of Basicedu*, 5(1), 88–101.
- Legi, H., Giban, Y., & Hermanugerah, P. (2022). Virtual Reality Education In Era 5.0. *Journal Research of Social, Science, Economics, and Management*, 2(04), 504–510.
- Legi, H., Riwu, M., & Djoweni, I. S. H. (2022). Implementation of School-Based Management in Curriculum Management to Realize Superior Schools. *Journal of Basicedu*, 6(6), 9499–9507.
- Mukhlis, M. (2018). Quantum Learning Strategies in Akidah Akhlak Education in Madrasah Ibtidaiyah. *Kariman: Journal of Islamic Education*, 6(2), 183–198.
- Nst, M. M., Apriliani, A., & Kalsum, U. (2022). Quantum learning learning methods to improve learning outcomes of mi students. *Pema (journal of education and community service)*, 1(3), 11–14.
- Siregar, Y. (2022). Improving the professional competence of teachers in applying the quantum learning learning model through workshops at SMP Negeri 4 Percut Sei Tuan Sei Tuan in the 2018/2019 academic year. *Cybernetics: Journal of Educational Research and Social Studies*, 63–69.
- Tafonao, T. (2018). Application of Effective Teaching Motode According to Quantum Teaching Theory. *Edudikara: Journal of Education and Learning*, 3(1), 1–13.