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Quantum Learning Model for Enhancing Instructional Capability: A Community Service on Muslims Student Associations Aceh

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ABSTRACT

This article discusses challenges in achieving quality education, especially improving teacher quality, learning motivation, and effective communication skills between instructors and students. This phenomenon includes a decrease in learning motivation due to the 'shutdown' of learning, as well as the need for a learning model that can see student potential holistically based on reason and heart. While many instructors do not pay attention to effective learning methods in improving the quality of education, it is necessary to provide a supportive learning environment for all students and how to improve positive communication skills between instructors and students. This community service activity was carried out by lecturers from Syiah Kuala University to the Islamic Student Association (HMI) Aceh. The result of implementing this learning model is to produce increased understanding and strategies in the way of learning, especially to increase learning motivation, academic scores, and positive attitudes toward learning among students. The application of innovative learning models such as the Quantum Learning Model, together with the strengthening of positive communication skills between teachers and students, can be an effective step in improving the quality of education and addressing gaps in achieving educational equity.

Keywords: Quantum Learning, Instructional Capability, Community Service.

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INTRODUCTION

The phenomenon of education reflects the complexity of challenges in achieving quality equity. Starting from the problem of teacher quality that has not been able to meet the needs of future competencies. One phenomenon that is not realized by a trainer is learning shutdown which can make learning motivation decrease such as rejection of validation of feelings experienced by students, the teacher's paradigm should not be denied and may be scolded. Even though a lecturer plays a role in students' competence in the future. Even some learning methods can bring anxiety to students, this can harm their morals and ethics. Therefore, there needs to be a learning model that can be applied to students to see student potential based on heart and reason so that students can develop skills and confidence competently (Chen et al., 2024).

A trainer or teacher must consider the desire and potential of the brain to enlighten learning that learning is not that scary. With a different approach, a teacher must improve his abilities so that students can learn according to the potential of the brain and heart. This is in line with the view (Sitti et al., 2013) which asserts that trainers need to learn learning skills to be successfully applied to college students. The importance of effective learning methods among students to improve the quality of education by providing confidence and motivation to students, as well as helping them develop deep thinking and learning (Khozaei et al., 2022).

The inability to learn and remember teaching materials can cause excessive stress among students, even affecting their overall performance (Khozaei et al., 2022). Therefore, trainers are needed to be able to tailor their teaching according to the educational needs of diverse students. An important question that arises is how trainers can be supported in developing the knowledge and skills needed to adapt their teaching to differences between students (van Geel et al., 2022).

One fun learning model that allows students to use all their potential is the quantum learning model. This learning model analyzes the ability of the left brain and right brain about how the human brain works and how it works effectively. In addition, the model reviews visual, auditorial, and kinesthetic learning styles, and learns through enjoyable game experiences and activities. Quantum learning models can be used to change the behavior of children with conduct disorders (El-Eqapy, 2018).

The quantum learning model is very well applied by the Aceh Islamic Student Association (HMI) or the Islamic Student Association which has the task of teaching among fellow students who do not understand and practice Islamic teachings. Through HMI, students are expected to know more about the application of religious teachings properly and correctly in life. HMI needs to be equipped with appropriate learning methods so that educated students can learn effectively. Therefore, lecturers from Syiah Kuala University descended directly through community service in providing training related to this Quantum Learning Model. This community service not only provides social benefits but also results in a higher level of accountability in fulfilling social responsibilities (Afzal, 2020).

METHOD

This community service activity carried out by a team from Syiah Kuala University is intended for the Aceh Islamic Student Association (HMI) or Islamic Student Association at the Aceh Student Training Management Board Unit II Neuheun, Aceh Besar on March 30, 2024. The Muslim Students' Association (literally "Islamic Students' Association", abbreviated as HMI) is an Indonesian Muslim student organization. HMI is an independent organization with the objective of "connecting academics, creators – servants of Islam, and taking responsibility for creating a just people blessed by Allah.

In this activity, the lecturer team will be moderators and speakers, and the team will provide material related to the Quantum Learning Model, and others for operations. In the activity, HMI participants and the community service team discussed learning methods. Technically, the implementation of activities will begin by communicating with HMI Aceh to obtain permits for the implementation of activities. Once approved, the activity that will be carried out is Quantum Learning Model training to improve instructional skills as a method used to teach fellow HMI Aceh students. The activity began with an opening and remarks carried out by HMI Aceh. After the speech, the activity continued with material delivered by lecturers from Syiah Kuala University.

RESULTS AND DISCUSSION

The Quantum Learning Model

The Quantum Learning model has the advantage of using models to improve teachers' ability to inspire students to become excellent students. This method is taught to HMI Aceh so that they can apply this technique when teaching other HMI members. Activities carried out by teams and partners in carrying out community service are providing material on good quantum learning model techniques. These activities can be seen in the picture as follows.



Figure 1. Community Service Activities Source: Personal Documentation

Quantum learning comes from the term quantum physics, a physical science that studies the relationship of energy and light, popularized by Bobbi De Porter and Mike Hernacki. Quantum learning was introduced by Dr. Georgi Lozanov, an education and psychology expert from Bulgaria. This learning model is an effective learning model that can transform "energy" (self-potential) into "light" (success). Quantum learning is used as a learning theory that combines neural structures in the brain to create meaningful information.

The model aims to provide participants with academic skills and lifelong learning skills. Academic skills are note-taking, memory, writing, and effective reading techniques. While lifelong learning skills are problem-solving techniques, and effective communication skills, mistakes lead to success, having a positive orientation, focusing on targets, attaching importance to every job, and being open to new approaches. In the quantum teaching model, a supportive and convincing teaching environment where everyone is valued and respected (Afacan &; Gürel, 2019).

Jeannette Vos Groenendal's (1991) research involved 6042 people, 97% of students with an IP of 1.9 or lower managed to increase their grades by an average of 1 point. In this study, the quantum learning model has several advantages, as Figure 2:

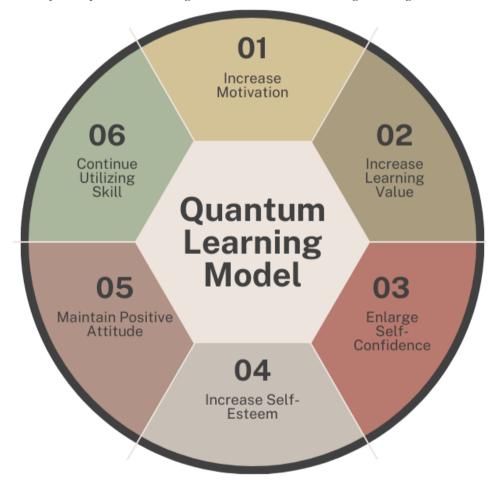


Figure 2. The Advantages of Quantum Learning Model

Based on Figure 2, there are several advantages of the Quantum Learning Model, such as increased motivation, increased learning value, enlarged self-confidence, increased self-esteem, and maintaining a positive attitude towards super camp, continue utilizing skills In the book entitled An Investigation on Quantum Learning Model, 2017, The quantum learning model had positive effects on success, attitude,

and self-direct learning. This model has the advantage of using models to improve teachers' ability to inspire students to become excellent students. When students feel comfortable and happy in learning, this can increase learning success through improved memory of the material. Through this learning, students are trained to use all the potential of their brains (El-Eqapy, 2018).

This learning model needs to be applied with the assumption that participants have high self-esteem and should not be shamed. A teacher should pay attention to several things such as cultivating interest through positive impact analysis, and positive comments, the paradigm of failure is feedback. This will encourage success, perfection, confidence, and new motivation. In Jack Canfield's 1982 study, each child received an average of 460 negative comments and 75 positive comments per day. This will create a shutdown of learning, which is the destruction of creative energy for learning. Children are creative by nature, but creativity declines sharply with age unless cared for properly.

Audio, Visual, Kinesthetic Learning

Audio, visual, and kinesthetic learning analysis has been widely developed in both academia and industry in recent decades (Zhu et al., 2021). The characteristics of this learning have several advantages over other media and become an attraction for students. If used as a learning medium, it can support the learning process (Fuady &; Mutalib, 2018). Students have different learning abilities. In the quantum learning model, a teacher must pay attention to differences in the abilities of learners. Here are the differences of audio, visual, and kinesthetic learning:



Figure 3. The Characteristics of Audio, Visual, and Kinesthetic Learning

Learning by understanding brain processes has become an attraction. A greater understanding of how knowledge is acquired becomes a learning concern from disciplines such as neuroscience. The concept of neuro-biological science of the brain is included in learning strategies. Learning by memorization becomes learning by solving problems to optimize student capacity (Harden &; Jones, 2022). The capabilities of the human brain as Figure 4.

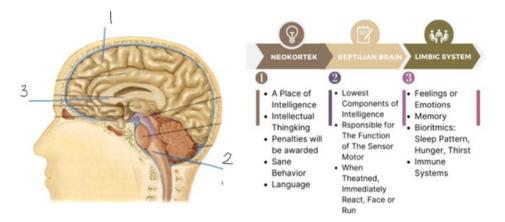


Figure 4. The Capabilities of the Human Brain

The brain is a parallel processor with thoughts, emotions, and imagination that can function interactively. Therefore, learning actively involves the body's physiological responses to environmental factors, emotions, stressors, nutrients, and various other factors. Each brain simultaneously perceives and creates parts and wholes where information is organized separately but understood within or as a whole (Harden & Jones, 2022).

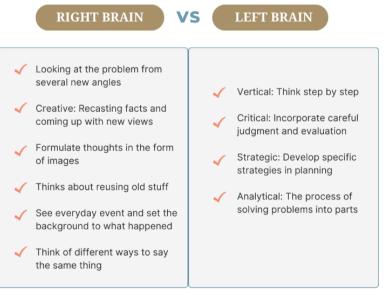


Figure 5. Brain Process

The Positive Communication

The ability to communicate is a person's competence to perform various tasks. One of the competencies that must be mastered by a teacher is social competence that must have the ability to communicate effectively, empathically, and politely with others (Purwaningratri, 2022). Some phenomena regarding teacher communication in the learning process, such as lack of communication between teachers and students in the ongoing learning process (Bimas Saputra, 2022).

According to Larson and Knapp (2016), effective communication can be achieved by striving for the highest degree of accuracy among communicators in the communication process. A communication is effective if: 1). The message can be received and understood and understood as intended by the sender. 2). The message conveyed by the sender can be approved by the recipient and followed up with actions that are of interest to the sender. 3). There are no meaningful obstacles to doing what should be done to follow up on the message sent (Mahadi, 2021).

The relationship between students and teachers is important because both are equally responsible for the successful realization of the learning and learning process. The instructor must stimulate the establishment of good conditions through the use of relational behavior with positive student experiences. Such relational behaviors include social, psychological, and emotional interactions. Therefore, effective instruction is usually actualized in the context of a positive teacher-student relationship that uses positive communication. When instructors use efficient interpersonal communication to fulfill learners' relational and rhetorical desires, learners are more likely to experience a variety of desired outcomes including learning, interest, engagement, empowerment, motivation, and achievement (Xie & Derakhshan, 2021).

Here are some strategies used to build positive communication between teachers and students.

- 1. Avoid criticism, "If you want to take honey, don't kick the honeycomb"
- 2. Give honest and sincere appreciation
- 3. Increase interest in others
- 4. Be genuinely interested in others
- 5. Smile
- 6. Say the name of the student
- 7. A smart listener, encourages others to talk about themselves
- 8. Make others feel important, do it sincerely
- 9. Attract others with our way of thinking
- 10. Avoid debates
- 11. Show respect for other people's opinions, avoid saying "You're Wrong"
- 12. If you're wrong, admit it
- 13. Let others talk more
- 14. Let others feel that it was his idea
- 15. Try to see things from someone else's eyes
- 16. Throw a challenge
- 17. If someone else's faults must be brought up, start with honest praise and appreciation
- 18. Tell the error non-frontally

- 19. Talk about your own mistakes before criticizing others
- 20. Ask questions, not give orders
- 21. Let others save face
- 22. Support others for success, with sincere praise for every small positive change
- 23. Give others a reputation-building and self-actualization opportunity
- 24. Make mistakes seem easy to fix
- 25. Make others happy to do what we suggest

CONCLUSION

The complexity of challenges in achieving quality equity in education, especially in the context of improving teacher quality, learning motivation, and effective communication skills between teachers and students. A phenomenon that is neglected in the learning process is the 'shutdown' of learning which can reduce learning motivation, as well as the need for a learning model that can see student potential holistically based on reason and heart. A key challenge in improving the quality of education is how to provide a supportive learning environment for all students, considering differences in learning styles and diverse educational needs. The Quantum Learning Model, as one of the learning approaches that integrates neurobiological understanding of the learning process with interactive and supportive learning techniques, offers promising solutions.

The application of the Quantum Learning Model in the context of community service, such as that carried out by the Syiah Kuala University Team to the Aceh Islamic Student Association (HMI), shows great potential to improve the instructional skills of teachers and stimulate student motivation. The successful implementation of this learning model is seen in increased learning motivation, increased academic grades, and increased positive attitudes toward learning. In addition, positive communication between teachers and students is also considered important in creating a conducive learning environment. Effective communication not only facilitates good understanding between teachers and students but also increases student involvement in the learning process. Therefore, strengthening positive communication skills among teachers is also an important step in improving the quality of education. By adopting innovative learning models such as the Quantum Learning Model, as well as improving positive communication skills between teachers and students, we can open the door to a more meaningful, inclusive, and quality education for all students.

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