# Efforts to Improve Student Learning Activities Using the Quantum Learning Model Theme of Events in Life Class V SD 101911 Sidodadi Batu 8 Pagar Merbau

# Sartika Eka Putri 1\*, Ahmad Landong 2

<sup>1\*,2</sup> Universitas Muslim Nusantara Al-Washliyah, Medan, North Sumatra, Indonesia <u>sartikaputri847@gmail.com</u>, <u>ahmadlandong@umnaw.ac.id</u>

DOI: https://doi.org/10.21107/Widyagogik/v10i2.18179

Received October 29, 2022; November 17, 2022; Accepted December 16, 2022

#### **Abstract**

This study aims to: (1) determine the results of student learning activities before learning by using the Quantum Learning model on the theme of life events in class V SD Negeri 101911 Sidodadi Batu 8 Deli Serdang. (2) knowing the efforts to increase student learning activities using the Quantum Learning model on the theme of events in life in class V SD Negeri 101911 Sidodadi Batu 8 Deli Serdang. Based on the results of observations and tests filled out by students, it can be concluded that teachers have been able to maintain and improve the implementation of teaching and learning activities using the Quantum Learning model and learning video media. This is based on the results of observations which show an increase with the improvement of teaching and learning activities based on observer observations. Student learning activities have also increased, this can be seen from the increase in the average percentage of student learning activities, namely in cycle I 68% to 91% in cycle II. It can be concluded that the percentage of student learning activities using the Quantum Learning model and learning video media in cycle II has increased by 41%. The percentage of implementation of the Quantum Learning model using video reaches 89% in teacher (researcher) activities in carrying out learning in the classroom.

**Keywords** – Quantum Learning Model; Student Learning Activities; Learning Videos.



© 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution ShareAlike (CC BY SA) license (https://creativecommons.org/licenses/by-sa/4.0/).

## 1. Introduction

Education is the most important thing in human life, this means that every Indonesian has the right to get it and is expected to always develop in it. Education will never end. Education in general means a life process in developing each individual to be able to live and live life. So being an educated person is very important. Humans are educated to become people who are useful both for the State, the Homeland and the Nation (Masliani. 2018);.(Hafizhah, Wardana, & Setiabudi. 2022).

Education is not just a transfer of knowledge from a teacher to students, education must also be used as a moral development program (Suwandiari. 2019); (Maulidi. 2022). In this way education is directed at producing quality human beings who are able to compete, but besides that these students also have good character and morals and can face life in the future with a logical, creative, innovative mindset and the ability to work effectively together. Teachers have an obligation to create conducive learning conditions with various models, methods and learning media that are appropriate to the characteristics of students, the learning environment and subject groups. However, what happens in the field is that teachers often dominate learning activities without involving students. Students are used as passive objects, recipients of learning material so that learning takes place in one direction only from the student teacher (Lede. 2020); (Trisnoningsih. 2021).

Based on research conducted by Nida Adillah (2017: 99) "Using the lecture method can cause students to get bored and bored in participating in learning activities." For this reason, an effort is needed by a teacher to improve the quality and quality of education and the learning process can be achieved properly, namely the teacher must have the provisions and be able to choose the right learning model and can improve student learning outcomes. One of the factors that greatly influences student learning activities is the selection of a learning model, namely a condition that is expected to be the desire of the students

themselves to get a fun learning and easy-to-understand concept to achieve learning goals (Indrayani, Pujani, & Devi. 2019); (Sari. 2018).

Quantum Learning is a set of learning models and philosophies that have proven effective in schools and work businesses for all types of people and all ages Ma'ruf Zhran (2019:145). While the main idea in the Quantum Learning learning model is to have specific instructions for creating an effective learning environment, designing teaching materials, conveying learning content, and facilitating the learning process (Bobbi DePorter, et al., 2006) (Emawati, Burhendi, Harahap, & Sugianta. 2020).

The Quantum Learning model can train students in critical and creative thinking, and can improve self-quality (Surel, 2015); (Sirimeno. 2022); (Anggara, & Rakimahwati. 2021). Quantum Learning also emphasizes the level of fun and good memory, so that students are able to achieve good results (Herman, 2013). Learning activities in schools are quite varied and if these various kinds of activities can be created in schools, then schools will really become centers of maximum learning activities. Because by using the Quantum Learning learning model, students will be more active, easy to understand learning, learn comfortably, great curiosity and enthusiasm which can make it easier for students to learn in an effort to understand learning material, so that student learning activities are as expected by the school. With this learning model it is hoped that it can influence student activities towards friends and teachers in class. Besides that, it can also increase understanding and enhance an active, effective and fun learning atmosphere (Sugiati, Zainuddin, & Yuniawatika. 2019); (Djenawa. 2020).

Effective learning is learning that provides opportunities for self-study or self-activity. The learning process carried out in the classroom is an activity of transforming knowledge, attitudes, and skills (Martinis Yamin, 2007: 75). Activities are very important principles or principles in teaching and learning interactions (Sardiman, 2006: 96).

In simple terms, Baharuddin and Wahyuni (2015: 13) define learning as "a human process to achieve various kinds of competencies, skills and attitudes".

Learning starts from birth to death. Almost the same thing was stated by Thobroni (2015: 15) that learning is "a very vital human activity and will be carried out continuously as long as the human is still alive". Humans are not able to live as humans if they are not educated or taught by other humans.

Based on the theories and opinions regarding the learning activities mentioned above, there are a lot of student learning activities in learning activities. These learning activities can be created during learning activities, namely by presenting exciting and fun learning. One way to increase student activity is by implementing learning that can make students more active (Lisnawati, Suryaningsih, & Muslim. 2020).

The quantum learning model makes a person an individual who always uses the "active learning" method. Active learning means, a person plays a role and does not allow himself to follow what is there. An active learner will be open to the experiences and lessons life has to offer. Have an open mind and absorb and process the knowledge you have and then enthusiastically seek more knowledge. This allows one to be introspective and adventurous in the wide world. The rationale is for someone to dare to explore, try new things and new ways to gain knowledge (Hakim, & Nirwana. 2022); (Swandewi, Gita, & Suarsana. 2019).

Direct learning is a learning model that is teacher center. According to Sanjaya (2011: 179) the direct learning model (Direct Instruction) is a learning model that emphasizes the process of delivering material verbally from a teacher to a group of students with the intention that students can master the subject matter optimally. In this model, the subject matter is delivered directly by the teacher, and students are not required to find the material.

# 2. Method

This study uses an action research model developed by Kemmis and Mc. Taggart. The action research model includes four components which also show the steps in the cycle, namely planning, acting, observing, and reflecting. The four

components are interconnected to form a cycle or repetitive activity. This cycle is one of the main characteristics of action research (Suharsimi Arikunto, 2010: 131). Subjects in research on the development of the Quantum Learning learning model to increase the learning activities of elementary school students. Observation sheets and test sheets which are then validated by expert lecturers.

The population in the study of students at SDN 101911 Sidodadi Batu 8 who were the samples in this study were 28 students. This research will be conducted in 2022 with an estimated research schedule, namely in the 2022/2023 school year which will take place at SDN 101911 Sidodadi Batu 8, which is in Pagar Merbau District, Deli Serdang Regency, North Sumatra Province.

The instrument used in this study was a grid of student observation sheets. Observation activities to obtain a direct description of student learning activities. This instrument is taken from the types of learning activities revealed by Paul B. Diedrich. Collecting data in this study is Observation, Documentation, Interview.

Data analysis in this study used descriptive qualitative and quantitative descriptive analysis. Qualitative descriptive analysis is used to interpret the observed data, in this case devoted to teacher activities during the learning process. The data analyzed using a qualitative descriptive analysis is the data generated from the teacher's observation sheet. Meanwhile, quantitative descriptive analysis is used to determine the increase in activity and student learning outcomes through the Quantum Teaching learning model. The data analyzed using quantitative descriptive analysis is data generated from student observation sheets and learning achievement test questions. Increasing student learning activities through the Quantum Learning learning model can be said to be successful if at least 80% of the number of students is in the very high learning activity category (75% -100%).

## 3. Result and Discussion

Based on the results of the researcher's interview with the class V teacher at Sidodadi Public School 101911, the problem to be overcome is the low student

learning activity. Based on the results of observations of student activity in the pre-cycle, the teacher has taught according to the steps of the direct learning model (Direct Instruction). The percentage of achievement of thematic learning using the direct learning model (Direct Instruction). In prasikus there was no increase in student learning activities, therefore to increase student learning activities, the teacher continued research in cycle I.

# Cycle I.

At this stage the researcher made direct observations of student learning activities by paying attention to student behavior during the learning process. Student observation sheets will be used by researchers to assess student learning activities.

	Lembar Observasi Siswa Siklus		Penilaian					
No	Aspek yang diamati	1	2	3	4	5		
1	Siswa memperhatikan apresepsi yang di sampaikan			/		- 1		
	oleh guru		_	,		-		
2	Siswa mengikuti ice breaking yang dilakukan oleh guru	-	_	~		-		
3	Siswa menyimak tujuan pembelajaran yang disampaikan oleh guru			/				
4	Siswa membaca buku yang disediakan oleh sekolah			/				
5	Siswa melihat gambar yang telah disediakan guru terkait mata pelajaran				~			
6	Siswa membuat pertanyaan dari materi yang telah disampaikan oleh guru				~			
7	Siswa menyimak pertanyaan dari siswa yang lain			V				
8	Siswa menyimak jawaban dari siswa yang lain			V				
9	Siswa menanggapi jawaban dari siswa yang bertanya					1		
10	Mengemukakan pendapat atau komentar terhadap jawaban siswa yang menanggapi pertanyaan				~	1		
1	Sisw menyimak penjelasan dari guru	$\top$		~		$\top$		
- 1	Siswa menyimak informasi yang disampaikan guru diakhir pembelajaran			~	1			
Jumlah Skor			41			6		
Skor Maksimum		-	60					
rsentase Nilai (Jumlah skor dibagi skor maksimum) x 100%			68%					
91	Kategori Penilaian :		3-10	03 /	9			
	1. 20% = Tidak Baik 4 1 1 2. 40% = Kurang Baik 5. 60% = Cukup Baik 4. 80% = Baik	_ ×	10	0 %	, =	68		
	5. 100% = Amat Baik							

**Figure 1.** The Table of observation Results of Students' Ability to Implement Learning in Cycle I

Based on the results of the first cycle of observations on thematic learning using direct learning models (Direct Instruction) and Quantum Learning in class V SDN101911 Sidodadi student learning activities have reached 68% in the Good

category. This achievement has not met the predetermined success criteria because the number of students who have learning activities in the Good category is still below 80% of the total number of students.

Based on the learning activities described that were still very low, the researchers made improvements to learning by continuing in cycle II using the quantum learning model and teaching video media on the thematic themes of 7 events in life. Implementation in this action the researcher acts as a teacher, while the homeroom teacher acts as an observer (observer). To increase student learning activities, the researchers made improvements in cycle II.

# Cycle II

At this stage the researcher acts as a teacher, while the homeroom teacher acts as an observer. The observation was carried out based on the observation sheet that had been prepared by the researcher according to the reflection results of cycle I.

	Aspek yang diamati	Penilaian							
No		1	2	3	4	5			
1	Siswa memperhatikan apresepsi yang di sampaikan oleh guru					~			
2	Siswa mengikuti ice breaking yang dilakukan oleh guru					/			
3	Siswa menyimak tujuan pembelajaran yang disampaikan oleh guru					-			
4	Siswa membaca buku yang disediakan oleh sekolah				~				
5	Siswa melihat gambar yang telah disediakan guru terkait mata pelajaran					~			
6	Siswa membuat pertanyaan dari materi yang telah disampaikan oleh guru					~			
7	Siswa menyimak pertanyaan dari siswa yang lain					~			
8	Siswa menyimak jawaban dari siswa yang lain				1	1			
9	Siswa menanggapi jawaban dari siswa yang bertanya	$\top$			1	1~			
10	Mengemukakan pendapat atau komentar terhadap jawaban siswa yang menanggapi pertanyaan			-	/				
11	Sisw menyimak penjelasan dari guru	+		_	12	+			
	Siswa menyimak informasi yang disampaikan guru diakhir pembelajaran				~	1			
Jumlah Skor			4	7 55		+			
Skor Maksimum		60							
Persent	ersentase Nilai (Jumlah skor dibagi skor maksimum) x 100%		91%						
-	Kategori Penilaian :			11%		_			
	1. 20% = Tidak Baik 2. 40% = Kurang Baik 3. 60% = Cukup Baik 4. 80% = Baik 5. 100% = Amat Baik	55 ×100% +51 %							

Figure 2. The Table of observation Results of Students' Ability to Implement

Learning in Cycle II

Based on the results of the teacher's observation of student learning activities in carrying out learning in Cycle II. The percentage of achievement of

thematic learning using the quantum learning model and using learning videos can be categorized as very good. This can be seen in table 2 of the student observation sheet in cycle II, which is 91%.

The research conducted in class V of SDN 101911 Sidodadi aims to increase student learning activities through the Quantum Learning learning model. This research is a classroom action research consisting of planning, acting, observing, and reflecting steps. The action was carried out in two cycles, and each cycle consisted of two meetings.

The research instruments used in this study included: student activity observation sheets and teacher activity observation sheets. The resulting data is then analyzed to determine the results obtained for each cycle and to determine the progress of each given action.

Based on the results of observations using the teacher's activity sheet, it can be seen that the steps in the Quantum Learning learning model can be carried out properly. These steps are "TANDUR", i.e. Grow, Experience, Name, Demonstrate, Repeat, and Celebrate. In the first cycle still using the Direct Instruction steps (direct learning model) the percentage of implementation of the Direct Instruction model (direct learning model) reached 68% in student learning activities.

After discussing with the class V teacher at SDN 101911 Sidodadi, the researchers made improvements to learning by continuing in cycle II using the quantum learning model and teaching video media on thematic themes of 7 events in life. Implementation in this action the researcher acts as a teacher, while the homeroom teacher acts as an observer (observer). From these results indicate that the teacher (researcher) has mastered the Quantum Learning learning model. The percentage of implementation of the Quantum Learning model reaches 91% in student learning activities. The percentage of implementation of the Quantum Learning model using learning videos reaches 89% in teacher (researcher) activities in carrying out learning in the classroom.

### 4. Conclusion

The conclusions of this study are:

- a. Through the use of the quantum learning learning model students are invited to be actively involved in learning. After that students are also required to remember the material that has been delivered by the teacher.
- After using the quantum learning model, student learning activities in thematic learning increased, according to the results obtained from cycle I and cycle II.
- c. The pre-cycle still uses the Direct Instruction steps (direct learning model) the percentage of Direct Instruction model implementation (direct learning model).
- d. In cycle II the percentage of implementation of the Quantum Learning model reached 91% in student learning activities. The percentage of implementation of the Quantum Learning model using video reaches 89% in teacher (researcher) activities in carrying out learning in the classroom.

## References

Ade, Sanjaya. 2011. Model-model Pembelajaran. Jakarta: Bumi Aksara.

- Adilah, Nida.2017.Perbedaan Hasil Belajar IPA Melalui Penerapan Metode Mind Map dengan Metode Ceramah.Indonesian Journal of Primary Education,1 (1),99-100.
- Anggara, A., & Rakimahwati, R. (2021). Pengaruh Model Quantum learning terhadap Aktivitas dan Hasil Belajar Peserta Didik dalam Pembelajaran Tematik di Sekolah Dasar. *Jurnal Basicedu*, *5*(5), 3020-3026.

Arikunto. (2010). Penelitian Tindakan Kelas. Jakarta: Bumi Aksara.

Baharuddin & Wahyuni, E.N.(2015).Teori Belajar & Pembelajaran.Yogyakarta:Ar-Ruzz Media.

Bobbi dePorter, dkk. 2005. Quantum Teaching. Bandung:Kaifa.

Djenawa, A. (2020). Penerapan model pembelajaran quantum learning untuk meningkatkan hasil belajar IPA peserta didik kelas V sekolah dasar. *Jurnal Pendidikan Dasar Flobamorata*, 1(1), 22-30.

- Emawati, I. R., Burhendi, F. C. A., Harahap, N., & Sugianta, S. (2020). Efektifitas Model Pembelajaran Quantum Learning di Tinjau dari Metakognitif Fisika Siswa Di SMAN 48 Jakarta. *Jurnal Pendidikan Fisika*, 8(1), 24-32.
- Hafizhah, I., Wardana, I. A., & Setiabudi, D. I. (2022). EFEKTIVITAS PENGGUNAAN MODEL PEMBELAJARAN QUANTUM LEARNING DALAM UPAYA MENINGKATKAN KEMAMPUAN PSIKOMOTORIK PADA PELAJARAN MATEMATIKA. Jurnal Riset Sosial Humaniora dan Pendidikan, 1(1), 11-21.
- Hakim, R., & Nirwana, H. (2022). Studi Literatur: Quantum Learning Sebagai Upaya Meningkatkan Hasil Belajar Siswa. *eductum: Jurnal Literasi Pendidikan*, 1(2), 390-401.
- Herman. (2013). Pengaruh Quantum Learning Terhadap Hasil Belajar Ditinjau Dari Motivasi Belajar. 3(2),178–191.
- Indrayani, K. A. A., Pujani, N. M., & Devi, N. P. L. (2019). Pengaruh Model Quantum Learning Terhadap Peningkatan Hasil Belajar Ipa Siswa. *Jurnal Pendidikan Dan Pembelajaran Sains Indonesia (JPPSI)*, 2(1), 1-11.
- Lede, M. (2020). Peningkatan Aktivitas Dan Hasil Belajar IPA Menggunakan Model Quantum Learning Pada Siswa Kelas 4A SDI Bhoanawa 1. *Ekspektasi: Jurnal Pendidikan Ekonomi, 5*(2), 103-110.
- Lisnawati, L., Suryaningsih, S., & Muslim, B. (2020). Penerapan Model Quantum Learning Sebagai Upaya Menurunkan Kejenuhan Belajar Siswa Dalam Mempelajari Kimia. *Jambura Journal of Educational Chemistry*, 2(1), 18-27.
- Martinis Yamin, 2007. Kiat Membelajarkan Siswa. Jakarta. Gaung Persada Press dan Center for Learning Innovation (CLI).
- Masliani, S. (2018). Peningkatan intelegensi dan hasil belajar siswa melalui pembelajaran fungsi logaritma menggunakan model quantum learning. *MaPan: Jurnal Matematika Dan Pembelajaran*, 6(1), 70-81.
- Maulidi, A. (2022). Implementasi Model Pembelajaran Quantum Learning dalam Meningkatkan Motivasi Belajar. *Fakta: Jurnal Pendidikan Agama Islam, 2*(1), 13-22.
- Sadirman (2006). Interaksi dan Motivasi Belajar-Mengajar. Jakarta: PT Raja Grafindo Persada.
- Sari, R. T. (2018, April). Penggunaan metode quantum learning untuk meningkatkan aktivitas belajar IPA siswa sekolah dasar. In *PROSIDING SEMINAR NASIONAL LINGKUNGAN LAHAN BASAH* (Vol. 3, No. 2).

- Sirimeno, M. M. (2022). PENGGUNAAN METODE QUANTUM LEARNING UNTUK MENINGKATKAN MOTIVASI BELAJAR BAHASA INDONESIA SISWA SEKOLAH DASAR. *Renjana Pendidikan Dasar*, *2*(1), 91-98.
- Sugiati, I., Zainuddin, M., & Yuniawatika, Y. (2019). Peningkatan Hasil Belajar Materi Perkalian dan Pembagian Bilangan Pecahan Melalui Model Quantum Learning Tipe TANDUR. *Wahana Sekolah Dasar*, *27*(1), 25-31.
- Surel. (2015). Penerapan Metode Quantum Learning Berkarakter Pada Pembelajaran Pendidikan Kewarganegaraan (Pkn) Siswa Kelas VI A SD Al-Falah Tropodo, (2), 161–167.
- Suwandiari, N. N. (2019). PENERAPAN QUANTUM LEARNING UNTUK MENINGKATKAN AKTIVITAS BELAJAR DAN KEMAMPUAN MENULIS HASIL KARANGAN DESKRIPSI PADA SISWA KELAS IX SMP. *Jurnal IKA*, *17*(1), 50-68.
- Swandewi, N. L. P., Gita, I. N., & Suarsana, I. M. (2019). Pengaruh model quantum learning berbasis masalah kontekstual terhadap kemampuan berpikir kreatif siswa SMA. *Jurnal Elemen*, *5*(1), 31-42.
- Trisnoningsih, D. (2021). Peningkatan Kemampuan Menulis Teks Eksplanasi Menggunakan Metode Quantum Learning Berbantuan Gambar Berseri. *Jurnal Educatio Fkip Unma*, 7(3), 863-871.
- Zahran, Ma'ruf. 2019.Quantum Learning: Spesifikasi, Prinsip, Dan Factor Yang Mempengaruhinya.2(2),145.