



## Application of Problem Based Learning Strategies to Overcome Students Learning Difficulties

Indayana Febriani Tanjung<sup>1</sup>, Miftha Sandia Arilla<sup>2</sup>, Putri Puspita Sari<sup>3</sup>, Vira Putri Fadhillah<sup>4</sup>

<sup>1</sup> (North Sumatra State Islamic University Medan)

<sup>2</sup> (North Sumatra State Islamic University Medan)

<sup>3</sup> (North Sumatra State Islamic University Medan)

<sup>4</sup> (North Sumatra State Islamic University Medan)

\* Corresponding Author. E-mail: [indayanafebriani@uinsu.ac.id](mailto:indayanafebriani@uinsu.ac.id)

Receive: 10/08/2022

Accepted: 11/09/2022

Published: 01/10/2022

### Abstract

Penelitian ini bertujuan untuk 1) Mendeskripsikan proses penerapan strategi Problem Based Learning (PBL) pada mata pelajaran Biologi, pada materi Sistem Respirasi kelas XI dan 2) untuk mendeskripsikan hasil penerapan Metode Problem Based Learning (PBL) dalam mengatasi kesulitan belajar siswa pada matapelajaran Biologi, pada materi Sistem Respirasi kelas XI. Penelitian ini merupakan penelitian deskriptif. Penelitian dilaksanakan pada Di SMA Negeri 5 Pematang Siantar kecamatan Siantar Martoba kota Pematang Siantar tahun 2021/2022 sebanyak 33 siswa. Waktu penelitian dilaksanakan pada semester genap tahun 2021/2022 pada bulan Mei 2022. Hasil yang didapatkan pada penelitian ini berhasil dilakukan dengan menerapkan strategi pembelajaran problem based learning untuk mengatasi kesulitan belajar siswa dengan hasil nilai rata-rata 30 (kategori sangat baik) pada pertemuan I dengan rincian kategori nilai 1 - 12 ditemukan sebanyak 2 siswa, untuk kategori nilai 12-24 didapatkan sebanyak 8 siswa selanjutnya untuk kategori nilai 24-36 ditemukan sebanyak 22 siswa dan kategori nilai 36-48 ditemukan sebanyak 1 siswa serta pada pertemuan ke-II didapatkan hasil rata-rata nilai 39 (kategori sangat baik) dengan rincian nilai 24-27 ditemukan sebanyak 27 siswa dan kategori nilai 36-48 ditemukan sebanyak 6 siswa.

**Keywords :** Strategi Pembelajaran, Problem Based Learning, Tindakan Kelas.

### Abstract

*This study aims to 1) describe the process of implementing Problem Based Learning (PBL) strategies in Biology subjects, on the Respiration System material for class XI and 2) to describe the results of implementing Problem Based Learning (PBL) methods in overcoming student learning difficulties in Biology subjects, in Class XI Respiratory System material. This research is descriptive. The research was carried out at SMA Negeri 5 Pematang Siantar, Siantar Martoba district, Pematang Siantar city in 2021/2022 as many as 33 students. The time of the research was carried out in the even semester of 2021/2022 in May 2022. The results obtained in this study were successfully carried out by applying a problem-based learning strategy to overcome students' learning difficulties with an average score of 30 (very good category) at the first meeting. with details of the category grades 1-12 found as many as 2 students, for the category grades 12 -24 obtained as many as 8 students, then for the category values 24 - 36 found as many as 22 students and category values 36 - 48 found as many as 1 student and at the second meeting, it was found the average score of 39 (very good category) with details of the value of 24 – 27 found as many as 27 students and the category value of 36-48 found as many as 6 students.*

**Keywords:** Learning Strategy, Problem Based Learning, Class Action.

### Introduction

Every student entitled get the opportunity in reach performance satisfactory academic *performance*. But in reality seen clear that students that have difference in Thing ability intellectual, ability physical, the background behind family, habits and methods of learning that is sometimes very conspicuous with other students. But in the

implementation in schools in general only addressed to students with average ability, so that students capable more or capable not enough neglected. From here arise difficulty learning (learning difficulty) that does not only overwrite capable students low just will but overwrite to capable students high (Muhibbin Shah, 2010:169-170)

Difficulty study is something condition where child educate no could study by reasonable, thing this caused because existence threat, obstacle or disturbance in learn (Syaiful Bahri, 2011:23).

In diagnose students who experience difficulty learning, Dalyono (2007:247) calcifies there are many symptoms that show student experience difficulty in study, that is as following :

1. Showed with low performance, i.e achievements obtained below the average of what did the group achieve class.
2. Imbalance Among results achieved with effort made. He attempted with hard however achieved value always low.
3. Tend slow in complete tasks study. In work question he tend slow and lagging with his friends. Likewise in Duty else, he always left behind compared his friends

Based on observations we made on 27-28 May 2022 researchers throw about statement about difficult sub material studied from eye hard lesson studied. of the number respondents 30 students, responses about the sub-material being studied.

On feedback student about problems that have described above, it is necessary existence solution in resolve difficulty learning experienced by students. In Thing this researcher interested for try experiment To do gift solution solving problem in resolve difficulty experience learning students, namely with apply other methods in learning. With use method learning other, hope student capable resolve difficulty in learn it. one Method learning that can used in resolve difficulty study student is with application Problem Based Learning (PBL) method.

Problem Based Learning, Wena (2010: 91) "Problem Based Learning (PBL) is learning with confront students on problems practical as footing in study or in other words students study through problems "Problem Based Learning provides the role of the teacher as a giver problem, facilitate investigation and dialogue, as well as give Support in learning. So that more students many active and with method this student triggered for can with independent resolve difficulty learn and the teacher plays a role as facilitator in taking decision student with this student have role important and be maker decision (M. Taufiq Amir, 2015:12).

The Problem Based Learning (PBL) method is assessed have many superiorities compared with other methods in resolve difficulty experience learning students . Besides that researcher see Problem Based Learning (PBL) method focuses on focus on learning based problem so that student sued capable complete the problem by independent. This

Problem Based Learning (PBL) method could made as one solution for teachers in resolve difficulty learning experienced by students.

### Method

Study this is a review process through system cycle as framework thinking developed by Raka Joni, et al that is covers stages : 1) development focus problem research, 2) planning action improvement, 3) implementation action improvement, observation and interpretation, 4) analysis and reflection, 5) planning action continued.

#### Cycle I

1) Planning, including activity (a) compiling scenario learning, (b) making Observation Sheets, (c) preparing tool learning. 2) Implementation action, i.e doing learning by scenario by actual. 3) Observation-interpretation : in the same time, implementation learning observed use sheet observation, then result interpreted. 4) Analysis and reflection, result observations that have been interpreted analyzed and reflected for determining steps action in the second cycle.

#### Cycle II

1) Planning, (a) preparing scenario learning with notice results reflection in the 1st cycle, (b) preparing learning tools. 2) Implementation action, i.e carry out corrective action following scenario learning that has been perfected based on results reflection in the 1st cycle. 3) Observation-interpretation in the same time, implementation learning observed use sheet observation, then result interpreted. 4) Analysis and reflection, results from data analysis in this 2nd cycle used as reference for determine level achievement the purpose of the teacher in effort Resolve Difficulty Study Student through Implementation of Learning Strategies *Problem Based Learning*.

### Results Research and Discussion

#### Cycle I

Based on results observations that have been conducted from cycle 1 at the meeting first obtained significant results however some students are still in category very bad value good and not good. In Thing it's on cycle first with category value 1-12 found as many as 2 students, for category value 12-24 is obtained as many as 8 students next for category value 24-36 found as many as 22 students and categories value 36-48 found 1 student as well as with the total average value as many as 30 (category good). For could understand results findings at meeting 1 in cycle I, can be seen in the diagram as following.

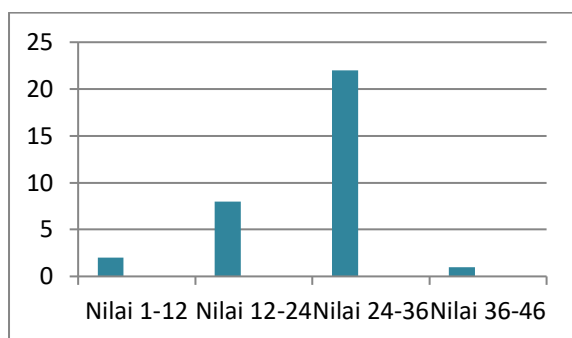


Figure 1. Data Value of Meeting I

According to Hanik, 2015 mentions if the learning process is something aspect from an environment-organized school. The environment this supervised and regulated so appearance so that the learning process focused on the goals that have been set. However in the learning process activity study no always successful, often some things cause emergency failure or difficulty learning experienced by students. Happening a difficult study because the student no capable to link Among knowledge new with knowledge long so that cause not understanding or obscurity to something lesson. Difficulty study this no always caused factor intelligence, but can also because non-intelligence factor. High IQ not yet of course ensure success in study.

Difficulty study could be marked with student's average score low. Low student average score could caused by several factor, that is internal factors and factors external. Internal factors that can cause difficulty study for student including : ability intellectual, motivation, health, attitude, interest. Whereas factor external that can cause difficulty study for student in the form of teachers, environment family, environment school, and environment society. So that possibility have results from meeting first caused by from one of factors that.

Due to existence not ability student in understand material presented earlier at the meeting first so in Thing this researcher To do meeting second. The activities carried out in the form of strengthening Theory earlier at the meeting first with expected student capable by equally understand learning delivered with topics discussion system respiration.

The data findings from meeting second obtained more results significant from meeting before. At the meeting second in the form of activity strengthening to many less students understand draft conducted explanation return with results obtained for category value 24-27 found as many as 27 students and categories value 36-48 found as many

as 6 students. So that the total average value in the second cycle is 39 (very good category). The data presented as following.

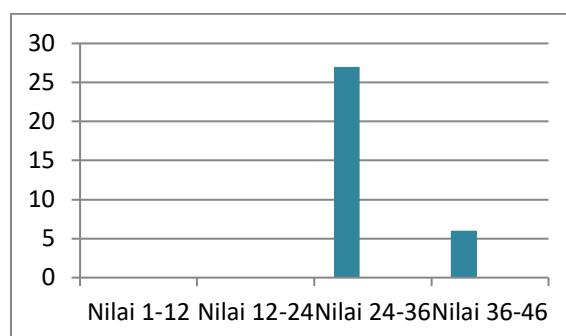


Figure 2. Value Data for Meeting II

In graph 2 shows if no found students who don't understand the material presented. In the learning process, there are frequent problems experienced by participant educate in activity learning. Problems that occur is because not yet mastered material that has been taught by the teacher in learning in class, so participant educate not yet have enough supplies in understand the activity next in To do activity learning. With not yet mastered material, then will give impact difficulties for students in To do learning. So that important conducted strengthening for prove results from previous data. However from data from this second meeting by equally student capable understanding draft the material being taught.

Based on the observations made by the observer in the first cycle of activities, the following were found:

- a) Some students are still less active in asking and answering questions
- b) There are still students who do not cooperate in doing LKS
- c) Students still look embarrassed to ask about things they don't understand.

Based on the reflection of the first cycle, the actions that will be carried out in the second cycle are:

- 1) Educators should provide motivational guidance by way of an individual approach to these students.
- 2) Educators guide and give instructions to students when doing learning
- 3) Educators motivate students to dare to come forward and ask educators.

### Cycle II

Based on results the value of the observations in table 4. which have conducted from cycle 2 at the meeting first obtained significant

results. not available students who are still is in category of very bad value good and not good. In Thing it's on cycle second student with category values 1-12 not found, for category value 12-24 is obtained as much 3 students next for category value 24-36 found as much 5 students and categories value 36-48 found as much 25 students as well as with the total average value as many as 33 and 40 ( category very good). To could understand the findings of the results at meeting 1 of cycle II, can see the diagram as follows.

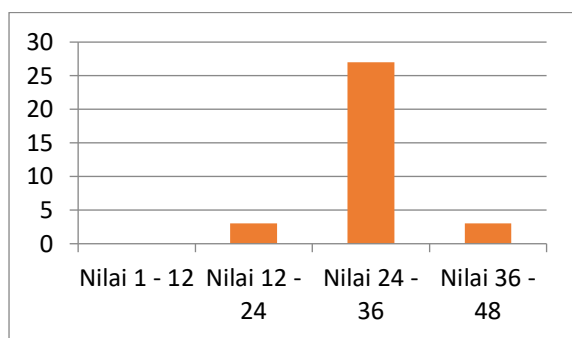


Figure 3. Data Value of Meeting I

Based on Chart 3 above results I Meeting Value Data after action cycle II obtained as for finding data from meeting the second cycle 2 obtained more results significant from meeting before. At the meeting second in the form of activity strengthening to many fewer students understand draft conducted explanation return with results obtained for category value 24-27 found as much as. and the category value of 36-48 found as many as 6 students. So that the total average value in the second cycle is 40 (very good category). The data presented as follows.

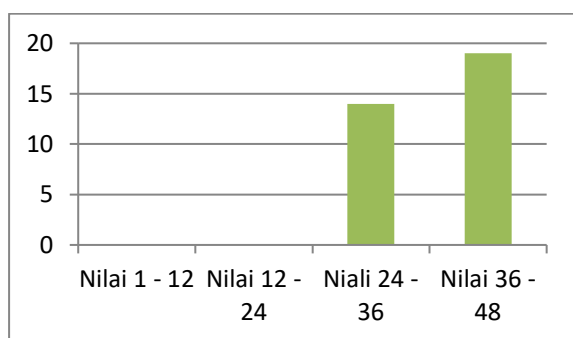


Figure 4 . Second Meeting Value Data

The table above shows that there are no more students who do not understand the material presented. This means that the learning difficulties experienced by students have decreased.

Based on the results of observations about student learning difficulties, it can be described that

students participate in learning accompanied by feelings of pleasure. Student activity also increased. They are enthusiastic about carrying out questioning activities so that the available time allocation is used optimally. Students begin to actively ask and respond to questions from their friends. And students also more quickly understand the material taught by the teacher.

### Discussion

From the results of the research on the initial conditions, Cycle I, and Cycle II of students' learning difficulties, we can describe as follows:

	Cycle I		Cycle II	
	Meetin g I	Meetin g II	Meetin g I	Meetin g II
Average Value of Observation Results	30	39	33	40
Amount Overall	69		73	
Percentage	48%		55%	

Table 1 . Average Value of Observation Results

Based on table 5, the average value from the observations can be seen that in the first cycle the percentage of the entire first cycle is 48% while in the second cycle the percentage in the second cycle is 55%. It can be seen from the table that there is an increase between cycle I and cycle II. This shows that the application of *Problem Based Learning* in resolve difficulty study student at eye lesson biology Theory system at SMA5 Pementang Siantar, that the learning process carried out succeed with category very good implementation. At the time of research students showed activeness in asking or responding and students also quickly understood the material presented

### Conclusion

Based on results of research and discussion about the application method *Problem Based Learning* in resolving difficulty study students at eye lesson biology Theory system at SMA5 Pementang Siantar, can concluded following results application method *Problem-Based Learning* in class seen from results percentage observations made that the average achievement activity stages of the learning

process carried out by student teachers in the first cycle of 48% and in the second cycle of 55%. This thing show that the learning process carried out succeed with category very good implementation.

## Reference

- Arikunto, Suharsimi. 2002. Metodologi Penelitian. Jakarta: Rineka Cipta.
- Azra, Azyumardi. 2012. Pendidikan Islam: Tradisi dan Modernisasi di Tengah Tantangan Milenium III. Jakarta: Kencana.
- Ar, Usman. 2013. Upaya Meningkatkan Minat Belajar Siswa Tentang Zakat dalam Pendidikan Agama Islam Melalui Metode Problem Based Learning pada Siswa kelas VI SDN 006. Sagulung Batam. . [www.uin-suska.ac.id](http://www.uin-suska.ac.id).
- Creswell, Jhon. 1997. Educational Research (Planing , Conducting, and Evaluating Quantitative and Qualitative). Diterjemahkan oleh: Helly Prajitno Soetjipto & Sri Mulyantini Soetjipto. Yogyakarta: Pustaka Pelajar.
- Dalyono, M. 2007. Psikologi Pendidikan. Jakarta: Rineka Cipta.
- Djamarah, Syaiful Bahri. 2011. Psikologi Belajar. Jakarta: Rineka Cipta.
- Etikasari, Fitri. 2015. Penerapan Pendekatan Problem Based Learning Untuk Meningkatkan Kemampuan Pemecahan Masalah dalam Pembelajaran PAI materi Zakat Mal di kelas VIII SMP Muhammadiyah 10 Belik Pematang. [www.iainpurwokerto.ac.id](http://www.iainpurwokerto.ac.id).
- El Ghazali, Ahmad Zulal Fahmi. 2016. Pengembangan Desain Pembelajaran Pendidikan Agama Islam Berbasis Problem Based Learning (PBL) untuk Meningkatkan Penalaran Moral di SMAN 1 Purwosari. [www.uin-malang.ac.id](http://www.uin-malang.ac.id).
- Hamalik, Oemar. 2014. Psikologi Belajar dan Mengajar. Bandung: Sinar Baru Algensindo.
- Hanisy, Ahmad. . Pengaruh Pendidikan Agama Islam terhadap Motivasi Sholat Berjamaah di MA Al-Qodiri Jember. [www.portalgaruda.org](http://www.portalgaruda.org)
- Hanik, Asti N. 2015. Faktor-Faktor Penyebab kesulitan belajar Peengolahan Makanan Kontinental Siswa Kelas XI Di Sekolah Menengah Kejuruan Negeri 3 Wonosari. [Skipti]. Universita Negeri Yogyakarta.
- Majid, Abdul. 2016. Strategi Pembelajaran. Bandung: Remaja Rosdakarya.
- Makmun, Abis Syamsuddin. 2007. Psikologi Pendidikan. Bandung: Remaja Rosdakarya.
- Muhannimah. 2016. Peningkatan Hasil Belajar Fiqih Melalui Model Problem Based Learning. . [www.uinjkt.ac.id](http://www.uinjkt.ac.id).
- Purwanto, M Ngalm. 2009. Prinsip-prinsip dan Teknik Evaluasi Pengajaran. Bandung: Remaja Rosdakarya.
- Rasyjid, H Sulaiman. 2016. Fiqh Islam. Bandung: Sinar Baru Algensindo.
- Rusmono. 2012. Strategi Pembelajaran dengan Problem Based Learning Itu Perlu. Bogor: Ghalia Indonesia.
- Sudijono, Anas. 2010. Pengantar Statistik Pendidikan. Jakarta: Rajawali Press.
- Sugiyono. 2015. Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D). Bandung: Alfabeta.
- Sunarya, Yaya & Priatna, Tedi. (2009). Metodologi Penelitian Pendidikan. Bandung: Azkia Putra Utama.
- Subana, dkk. 2000. Statistik Pendidikan. Bandung: CV. Pustaka Setia.
- Sudjana. 2005. Metode Statistika: Edisi ke-6. Bandung: Tarsito.
- Suherman, H. Erman,dkk. 2003. Strategi Pembelajaran Matematika Kontemporer. Bandung : Universitas Pendidikan Indonesia.
- Syah, Muhibbin. 2010. Psikologi Pendidikan dengan Pendekatan Baru. Bandung: Remaja Rosdakarya.
- Sakinah. 2016. Penerapan Model Problem Based Learning untuk Meningkatkan Hasil Belajar Siswa pada Pembelajaran Fiqh di kelas VIII MTsS Babun Najah Kota Banda Aceh. . [www.ar-raniry.ac.id](http://www.ar-raniry.ac.id).
- Taufiq Amir, M. 2015. Inovasi Pendidikan Melalui Problem Based Learning (Bagaimana Pendidik Memberdayakan Pemelajar di Era Pengetahuan). Jakarta: Kencana.
- Wahyudin, Dinn, dkk. 2008. Pengantar Pendidikan. Jakarta: Universitas Terbuka.