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Efforts to Improve Class VIII C Student Learning Outcomes with the *Think-Pair-Share* Type Learning Model on Excretion System Material

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Abstract: Merdeka's curriculum is a program aimed at creating a fun education, developing skills and character, pursuing learning lags. This class action research aims to improve IPA integrated learning outcomes on human excretion system material through the application of a Think-Pair-Share learning model in class VIIIC MTs USB Branch MTsN1 Batam City Lesson Year 2023/2024. The subject of the research was a student of the VIIIC MTs USB Filial MTsN1 city of Batam composed of 35 people with a composition of 15 men and 20 women. The study was conducted using two cycles, each cycle being conducted twice face-to-face. Data compilation strategies include observations, interviews and documentation. Research results of this class action can be concluded that with the application of learning model Think-Pair-Share can improve learning outcomes and participation of students in integrated learning IPA on material excretion system in class VIIIC MTs USB Filial MTsN1 city Batam Year Lesson 2023/2024. This is demonstrated by the average percentage of student participation in each cycle increased from cycle I to cycle II: 77% to 83%, and the learning output in each Cycle increases from cycles I to II: 78% to 89%. Based on the results of interviews and observations, the whole student is moving actively, feeling happy and more happy with the Think-pair-share learning model.

Keywords: Integrated science learning outcomes, Think-Pair-Share Model

1. INTRODUCTION

Curikulum Merdeka is a program designed to create engaging education, develop critical thinking and resiliency, and address student behavior problems. According to Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 56/M/2022, there is a need to review curriculum development in the framework of higher education. This recommendation sets aside funds to implement the curriculum in a specific condition, mostly to address learning loss. According to Sherly, dkk (2020), the goal of the merdeka belajar curriculum is to provide an engaging learning environment for both teachers and students. The role of the teacher is to serve as a facilitator to encourage students so that learning can proceed in an effective and engaging way for them. The teacher's role is to serve as a facilitator to encourage students so that learning can be effective and enjoyable for them. There are still several challenges in the implementation of the Merdeka Curriculum in SMA/SMK, particularly related to infrastructure, student participation, and policy support. However, there have also been some successes, especially in terms of teacher competence and the use of teaching materials Bastian (2023).

An effective learning process is one of the most important factors in raising student learning outcomes. One possible approach would be to implement an innovative teaching strategy that encourages student participation. The goal of this study is to increase student learning outcomes in the humanities system material at SMP through the use of the Think-Pair-Share learning methodology. In their research published in the journal Communication Education, Meredith D. Gerson and Sarah M. Bateman (2019) found that the Think-Pair-Share approach is effective in increasing student participation and attentiveness during class discussions. They recommend using this strategy to maximize active learning and more in-depth discussions. Miguel Nussbaum, dkk. (2021), in their research published in the Journal of Computer Assisted Learning, concluded that using the *Think-Pair-Share* paradigm in computer-based learning can increase productivity.

Human expression system is one of the few materials that most large-scale students find difficult to understand. This material discusses the process of the body's sisa metabolism, which affects several internal organs and systems. Understanding the concepts found in the human skeletal system is crucial for helping students understand the various physiological processes that occur in the human body. In their book "Anatomy and Physiology from Science to Life" (2022), Kathleen M. Kahle and Raphael M. Meyers highlight the novel insights that emerge from the ekskresi system in controlling the inflammatory and immune responses of the body. They assert that ginseng not only functions in inflammation but also produces steokin and inflammatory mediators that affect the body's immune response.

Think-Pair-Share is one of the cooperative learning models that can best support students' active participation in the learning process. This model is composed of three primary stages: (1) *Think* (Berpikir), where students actively generate a problem or solution on their own; (2) *Pair* (Berpasangan), where students collaborate with a partner to identify a problem or solution that has already been determined; and (3*) Share* (Berbagi), where students present a problem or solution to the class.

According to the IPA teacher in the course "System ekskresi pada manusia," there are a few factors that can lead to an ineffective learning process that is not well-received by students and results in subpar learning outcomes. This is caused by among other things:1) Literature related to the human ekskresi system mostly uses Latin, making it difficult for students to understand. 2) It usually uses ceramah, group discussions, and question-

and-answer sessions in a non-threatening manner. 3) The results of student learning through the use of the ceramah method, group discussions, and monotonous questioning yielded results that did not meet or exceed the minimal critical knowledge (KKM).

It is hoped that by using the *Think-Pair-Share* learning paradigm, students will become more engaged in the learning process, foster positive peer interactions, and increase their understanding of concepts in human expressive systems. This study's tindakan kelas research will examine this form of education in a methodical way and assess its impact on students' learning outcomes.

Based on the above statement, the following kelas-level research is being conducted with the following rumor: "Can the *Think-Pair-share* learning model be used to improve the performance of eighth-grade students studying the MTs USB Filial MTsN1 Batam material on human evolution?" 2. "How can the *Think-Pair-share* learning model implemented in a human-centered educational system improve student learning outcomes in Grade VIIIC MTs USB Filial MTsN1 Batam?"

2. METHODS

This method of kelas tindakan analysis uses the Model Kurt Lewin, which is composed of two sections. Every chapter consists of four components: (1) preparing (perencanaan), (2) acting (pelaksanaan), (3) observing (pengamatan), and (4) reflecting. The results of this study are consistent with the research protocol of Subroto dkk (2016, hlm. 37). MTs USB Filial MTsN 1Batam Kepulauan Riau, yang beralamat: Kavling Sungai Lekop, Kelurahan Sungai Lekop, Kecamatan Sagulung, Telpon (0773) 4099 867-Email: mtssagulung@gmail.com, NSM: 121121710001-NPSN 40503215, is where now conducting this study.

Subject of this study is the cohort of 35 students from VIIIC MTs USB Filial MTsN 1 Batam Tahun 2023/2024. The students are composed of 15 female students and 20 male students, with varying backgrounds in economics and society. Furthermore, the researcher is a master in the field of IPA transcription. This study will be conducted over the course of one month, from March 25, 2024, to April 25, 2024, in two sections. Section I will consist of two times the sample, and Section II will also consist of two times the sample.

This study employs data collection techniques such as posttests, collaborator observations during ongoing learning, and activity documentation. Posttests are completed following the completion of the learning process for Semester I and the subsequent semester II learning processes. The observational study conducted to assess student activity and creativity during the learning process is conducted using a learning model *Think, pair, and share.*

The information gathered from every observation activity in every semester is analyzed in a deskriptif manner with a focus on more concise, straightforward, and easy-to-understand presentations (Prof. Sukardi, Ph.D., 211:86). Sentase techniques to observe the problems that arise throughout the learning process include the following: 1) The degree of student participation, or student activity during the learning process, classified into three categories: low, moderate, and high. 2). The student learning outcomes are expressed as a daily learning curve for KD.3.10 (shown), success rate using the *Think-Pair-share* model with successful, less successful and unsuccessful categories. with active involvement of students (100%) who asked questions (65%) and who answered questions (65%).

3. FINDINGS AND DISCUSSION

3.1. *The Think-Pair-Share* learning model can improve students' performance in developing the human ekskresi system.

From this research, observations made before to sampling are used. (pre cycle). To identify the initial circumstances of the students' collaboration in groups, observations are made. During the training exercises, researchers, and mentors are tasked with formulating hypotheses for applying the *Think-Pair-Share* learning model to human systems of ekskresi, how to create a learning rencana, how to create a collaborative observation sheet that the mentor will use to assess student collaboration results, and how to create a work-based learning logmaterials that are used in accordance with the guidelines for the English language proficiency program at Madrasah Tsanawiyah (MTs). Based on observational data, it can be inferred that there are 18 active students (51%), 5 students who ask questions (14%), and 5 students who answer questions (14%). The percentage of students who do not answer questions reaches 26%. Based on the data above, it can be inferred that the students' behavior is consistently disrespectful to Rendah. Therefore, in order to address this, the researchers need to make the following corrections.

Prior to starting Semester I, the researchers first administer a pretest (test awal). The purpose of this text is to understand how students' abilities to comprehend the material are affected. The pretest results indicate that out of the 35 students that took the test, only 5 students (14%) had successful outcomes, while 30 students (86%) did not.

According to the learning outcomes above, students have very little understanding of the human body's ejaculatory system. Here are the results of data collection prior to tindakan, which the authors will use as

guidance to minimize errors in further work, perhaps yielding more accurate results and meeting the minimal ketuntasan criteria (KKM).

3.1.1. Cycle I

In Section I, during the discovery phase, the following tasks are carried out: 1) The investigators examined Standard of Competence (SK) 4.1 and Basis of Competence (KD 3.10). 2) Formulating an educational program based on the curriculum and IPA textbook for grade 8C on the human body's expressive system. 3. Emphasize the Lembar Kegiatan Peserta Didik (LKPD) that outlines learning objectives according to the human body's ekskresi material. 4. Creating assessment tools related to experimental systems for humans using the Think-Pair-Share learning approach. 5. Implementing a research design that serves as a guide for student work assignments in group discussions including Think-Pair-Share materials related to human eksresi systems.6. Emphasize the importance of observational learning for the individual observer.

In the first semester, the teaching process is conducted twice a week. Each lesson is taught for two hours and forty minutes (2 jam pelajaran). The first draft will be completed on March 25, 2024. Before beginning the learning process, students are given one lesson plan and are asked a series of questions designed to motivate them as they work through the material. The teacher then goes on to explain the human body's ekskresi system, as well as the Standar Kompetensi (SK), Dasar Kompetensi (KD), and learning indicator that must be followed in accordance with the material covered. Finally, the students are divided into five groups. Each group consisted of seven people. After that, the teacher identified each member of the group and recorded the results of the peer-led exercise program (LKPD). This served as a guide for the students who lived there, as there were materials related to four different types of expressive bodies and their functions, large gastrointestinal tracts, and small intestines.

The teacher provided tools and media such as five sheets of cardboard, pictures of four types of excretory organs as well as large printed scientific writings relating to the material of parts of the kidneys and scientific writing related to the process of the formation of urine in humans. The text was placed in the envelope, and then each of the group's heads got one that contained the scientific text. Each leader of the group returns to his group and explains to his members the material and methods of the learning process using pictures and writings related to the material of the excretion system in humans. After obtaining the explanation from the group leader (tutor equal) and distributed the scientific writings relating to the matter of the system of excretions in human beings, then the group members will find their partners according to the instructions on the leaflet of the students' activities. (LKPD).

The second cycle I meeting was held on March 27, 2024, the teacher resigned the student and motivated his pupils by asking some sounding questions related to the material about the functions of the four types of expression systems in humans, parts of the kidney organs that had been taught and performed at the first meeting. Students stay grouped and sit in their respective groups according to the first meeting using the Think-pair-share learning model.The second meeting, the material discussed is a continuation of the material about the urine formation process in humans. Then the students were divided into five groups. Each group consisted of seven people, then the teacher called each head of the group and distributed a leaf of students' activities (LKPD), as a guide for the students in which there is material related to the three types of processes of the formation of urine in humans. The teacher provided tools and media such as 5 sheets of cardboard as well as large printed scientific writings that relate to the process of urination in humankind. The text was placed in the envelope, and then each of the group's heads got one that contained the scientific text.

Each leader of the group returns to his group and explains to his members about the material and the way of work in the learning process by using the material related to the process of urine formation in humans. After obtaining the explanation from the group leader (tutor equal) and distributed the scientific writing relating to the material of the excretion system in human, then the group members will find their partner according to the guidance on the learner activity sheet (LKPD).At the observation stage, the observed things were: 1) student involvement in taking part in a group demonstration at the time of obtaining a paper writing and finding his partner on a motherboard paper on another group and sticking the writing to a mothercard according to the title of the Urination Process in humans. 2) the student's ability to responsibly present and maintain the results of the group discussions, 3) the students' ability to make and answer questions asked by other group friends during the learning process.

Data showed that in the first cycle of meeting 1, the average student participation rate in the learning process was: (63%) with active participation of students (90%), who asked questions (50%) and who answered questions (50%). This is due to the early introduction of the *Think-pair-share* model with the new learning model obtained by students, so students need to adapt to this learning model.

At the second meeting of cycle I, the data showed that at the first cycle of meeting 2, the average student participation rate in the learning process was: (77%) with active participation of students (100%) who asked questions (65%) and who answered (65%). From the observation results of the above student activity showed

the student activity involved in the demonstration increased the number of students, the whole student enthusiastically follow learning with the model Think-pair-share.

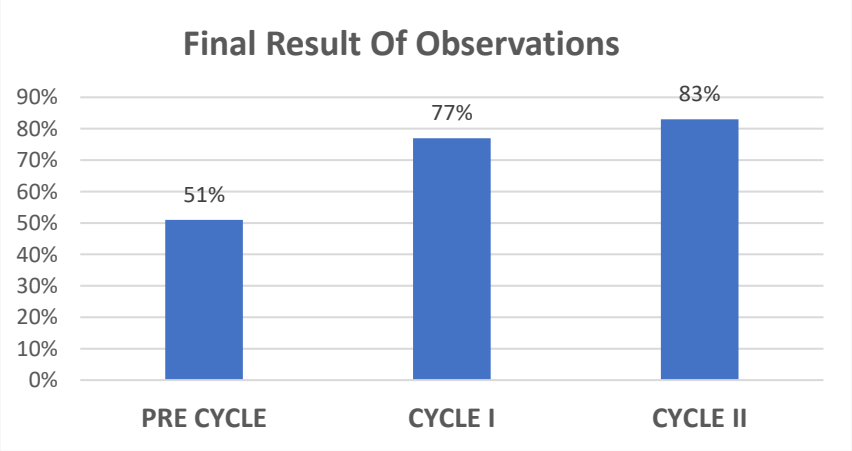
After the observation of the student's work demonstration is completed, the final test is conducted in the form of a post test. The aim of this post test is to see to what extent students' ability can absorb the learning material using a Think-pair-share learning model involving a tutor equal to his friend,

From the post-test results on cycle I showed that 35 students took the test, stated only 20 students (57%) and 15 students (43%). Thus it can be stated that the student already has adequate or moderate knowledge of the matter of the expression system in humans. Based on the above data, the researchers decided to continue the learning process and improve learning processes in the second cycle.In Cycle II.

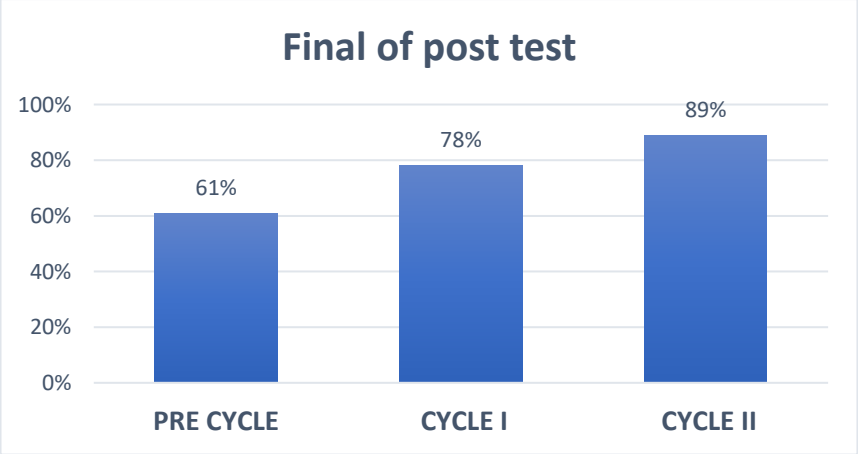
3.1.2. Cycle II.

The same steps will be taken as in Cycle I. The learning process plan (RPP) used is the same as in cycle I, but the participation of students in active participation in the demonstration on the material of the process of formation of urine in humans needs to be further enhanced, and students should further increase their participation to make questions and answer questions in the presentation discussion activities of their group. The second cycle will take place on April 22, 2024. In a demonstration and group discussion consisting of five groups, students conduct learning with a *Think-pair-share* learning model, that is, students discuss the material of the process of the formation of urine in humans, For the last 15 minutes, teachers and students make conclusions and teachers direct the students to summarize the lessons that have taken place.

At the time of cycle II observations carried out by observers in collaboration with peers, the instruments used were observation sheets prepared at cycle I. The assessed aspects were student involvement, student participation in asking questions, and student participating in answering questions referring to the learning process plan (RPP). The data showed that the average student's participation rate in learning process was: (83%) with a concentration of student active participation (100%), student asking (75%), and student answering the question (75%)., on average (At this stage, all students participated, joyfully following demonstrations and enthusiastically conducting group discussions using the *Thik-pair-share* model on the material of the human expression system. At the observation stage of the 2nd cycle of the 4th meeting, the whole student grew enthusiastic, joyful and compact between the leader of the group and the members of his group and his work was so apparent that the entire student was responsible in the learning process.



Picture 1. Summary of observations



Picture 2. Recapitulation of post-test results

The results of the post-test of the second cycle indicated that students who reached the minimum proficiency criteria (KKM) amounted to 31 people (89%) while students who did not reach the minimum criteria were 4 people (11%). Thus, it can be stated that students already have knowledge that exceeds the standard of the above-mentioned minimum Proficiency Criteria (KKM): (75). From such data can be categorized students of class VIII C MTs USB Filial MTsN1 city Batam in Implementation of learning model *Think-pair-share* on material expression system in humans have a value that High or exceeds the criteria of minimum accuracy (KKM).

3.2. The *Think-Pair-Share* learning activity in the human-extension system can improve the learning outcomes of eighth-grade students at the USB Filial MTsN1 in the Batam city.

From the results of observations and interviews related to the application of the learning model *Think-pair-share* produced the following findings:

1) The student has responsibility for the individual tasks to be performed.
2) Encourage the active participation of each student in learning.
3) Improve students' ability to think critically and make decisions on their own.
4) Increase student involvement in learning and can build good relationships between students to each other.
5) Students can think a lot, respond, and help each other in their learning group.
6) Students become brave to speak in front of their friends in submitting opinions.
7) Students race to answer questions raised in group discussions.

Table 1. Raise student interviews using learning model *Think-pair-share*

No	Question	Group Name (score)				
		Nefron	Uretra	Glomerulus	Tubulus kontortus proksimal	Tubulus kontortus distal
1	Do you like learning with the Think pair share model ?	4	3	3	4	4
2	Does the Think Pair Share model help you understand the lesson material ?	3	3	4	4	4
3	Do you feel more active and responsible in learning with the Think-pair-share model?	3	3	4	4	4
4	Does pair discussion in the Think-pair-share model help you understand the material more easily ?	4	3	3	4	4
5	Does sharing ideas and understanding with classmates in the Think-pair-share model make you more confident?	4	3	3	3	4

6	Does the Think-pair-share model make you more motivated to learn?	3	4	4	3	4
7	Is the Think-pair-share model suitable for all subjects?	3	2	2	2	2
8	Can the Think-pair-share model in learning improve the quality of the learning process?	4	4	3	3	4
9	Do you agree that learning using the Think-pair-share model will be applied again at the next meeting?	4	4	3	3	4
10	Do you feel that your overall learning outcomes have improved with the Think-pair-share model?	4	4	4	4	4
Total Score		36	34	34	34	38

It turns out using the learning model *Think-Pair-Share* makes students active and cheerful as well as enjoyable, so that the student's understanding of the learning process on the material of the excretion system in humans is easily understood by the student as a whole.

Picture 3. When the student is guided by the teacher as a facilitator and the student thinks about what the teacher is delivering (*Think*)

Picture 4. When the student wants to find his partner in the mother card (*Pair)*

Picture 5. When students share knowledge with their friends in groups (*Share*)

Picture 6. When the student discusses with his group mate, he is guided by a peer tutor.

Picture 7. When students share their knowledge with their friends (*Share*)

Picture 8. Teacher Together students reflect and summarize the material of the excretion system in humans

Based on the excellence of the application of the *Think-Pair-share* learning model, there are several previous studies conducted (Asrika dkk, 2020), with the title: Improving the Activity and Learning Outcomes of Mathematics through the Learning Model *Think Pair Share* School Students Muhammadiyah 8 Yogyakarta. Research results show that there is an increase in student learning activity. According to the results of the study (Koyimah,K. 2021) entitled "Using Learning *Think Pair Share* to Increase Motivation and Learning Results" Islamic Religion Education and Budi Pekerti Students Class II SDN Ciporos 05 Semester 1 Year of Education 2019/2020.

There are also findings showing that: the presence of improved student activity and learning outcomes (Junaidi, A. (2018) with the title of research: Improving student activities and learning results with learning cooperative type *Think Pair Share* for the subject of language building flat side space in class VIII SMPN1 Pragan. Another study conducted by (Sulianto, dkk, 2019) entitled "The Impact of Think-Pair-Share Learning Model on Students' Learning Results of Class V (Five) Human and Animal Organ Materials" recommends that the Think-pair-Share model has a significant influence on the learning outcomes of students of class V (five) SDN. By using this learning model, students can train synergistically with peers.

According to Arikunto (1986: 62), it explains that the tutor-equal method is someone or even several students who have mastered the material and selected teachers to help guide classmates to carry out improvement programmes. With this method is expected to be able to help students who have not yet mastered the lessons of the teacher. According to Lasari, dkk (2021) with the researchers' title Application of Learning Model *Think Pair Share* to Improve the Activity and Learning Outcomes of Class IV Students.

4. CONCLUSION

Based on the analysis of data and research results of this class action, it can be concluded that with the application of learning model *Think-Pair-shar*e can increase student participation in learning IPA on the material of the excretion system in humans in Class VIIIC Mts USB Branch MTsN1 City Batam Learning Year 2023/2024. The increase in student participation in this learning process is seen from the very high active student involvement, all active moving students, students asking and students answering questions from cycle I (77%) increased to cycle II to (83%).

5. SUGGESTION

Based on the conclusions presented, the following suggestions were made:

1) Teachers should always be active in involving students by using peers in group discussions.
2) The selection of materials is adapted to a model of learning that is pleasant so that in the learning process goes interesting and not boring.

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