



## ANALYSIS OF STUDENTS' RESPONSE OF THE IMPLEMENTATION OF RMS (READING, MIND MAPPING, AND SHARING) LEARNING MODEL IN PHILOSOPHY OF SCIENCE

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### Abstract

The purpose of this study is to describe the student's response towards the implementation of RMS learning model (Reading, Mind Mapping, and Sharing) in Philosophy of Science Learning. Type of research used is pre experimental design. The research sample is 40 students from first odd semester in the year of 2017/2018. Technique of analysing data used is quantitative descriptive. The result of the research shows that student response after implementation of RMS learning model gave positive response of 92.5%. The highest student response indicator is on attention aspect with average of 32, and the lowest on the satisfaction aspect with average of 23.5.

## INTRODUCTION

Learning is a process of teaching and studying process which has specific aim to transform knowledge and information to students. The success in achieving learning goals is influenced by various factors, such as: educators, lesson plans, and learning models (Muhlisin et al., 2016). The success of learning can be measured by looking at student learning outcomes and responses. Response defines as react to a treatment, reaction, and answer (KBBI, 2017). Response is coordinated movement by someone's perception towards any events in society (Hamalik, 2011).

Result of the questionnaire that conducted on 29 August 2017 to odd semester Students in the year of 2017/2018, Science Education Department related to perception and lecturing in Science Philosophy course, it shows that students have less good response about the course and less motivated in following it. The symptoms can be seen from many aspects, such as students' lack of enthusiasm in learning process, like passive in learning; not carrying handbook of the course, and looks difficult in understanding material of Philosophy Science course. This is because the course is new for the students, they have never studied about it during High School. Moreover, information related to the course that is written in book or any other resources is difficult to be understood, thus students have lack motivation in joining the course.

Response is coordinated movement by one's perception towards any events in environment (Hamalik, 2011). Response in learning is important because it has relationship with learning outcomes or learning objectives to be obtained by students. as stated by Febrianti et al., (2015) that there is relationship between student response and the task received.

Students' response can be increased by teaching and learning process inside or outside the classroom (Majid, 2013). Students' response in teaching and learning process can be seen by several clues, such as their expression in joining the class, comment or enthusiasm to something, difficulty degrees in understanding Learning material, even by how they listen in to teacher's explanation (Riyana & Susilani, 2007).

The response indicator can be either happy (positive) or unhappy (negative). Someone gives a positive response will tend to like something.

Conversely, the negative response will certainly avoid and dislike something. Response in learning is related to motivation. If students are not motivated in learning, it means they have low response, so that students hard to receive messages delivered in the learning process (Muhlisin, 2012). Learning activities to improve student responsiveness should include some aspects that must be met, that is awaken and pay to attention during the learning (attention), using the subject matter that has relevance to the daily life (relevance), instill confidence, and cultivate students' satisfaction with learning (satisfaction) (Maya & Evy, 2014).

The importance of response in attaining learning objectives is that increasing students' learning motivation. Learning motivation will increase learning intensity, and in turn the learning intensity to interact with basic skills will determine a person's learning achievement. It is possible for students who have high motivation in learning to get high learning result. It means that the higher motivation, try, and effort done, the higher learning result will be obtained (Hamdu & Agustin, 2011). Learning motivation will foster desire and ambition to improve learning outcomes (Maya & Evy, 2014). One of the efforts to improve motivation in learning is using meaningful learning model for students.

An effort that is done in order to overcome this problem is by applying learning model that can increase students' response and motivation in teaching and learning process. Statement above is clearly elaborated in some researches from Febrianti et al., (2015); Suryati (2012); Norsaputra & Johansyah (2017) which concluded that there is a positive relation between students' response and learning outcomes toward learning process that is used. Learning model that can be applied is RMS which has three main steps in learning. The main steps of RMS are : 1) reading: students read critically on certain topics obtained through various information / learning resources; 2) mind mapping: students create mind maps on topics that have been read individually and collaboratively; 3) sharing: students share mind maps to all students (Muhlisin, et al., 2016).

The excellence of RMS learning model based on research result (Muhlisin, et al., 2016) is that the learning syntax is easy to remember and implemented; more intriguing because it facilitates activities to prepare themselves in the learning process; helps the brain to organize, remember,

compare, and make connections between one subject and another; more able to explore ideas through the making of mind map both individuals and groups; more interesting, fun and motivating to learn because it uses interesting images, symbols and colors; easier to learn a material because it has a concise note and clear and easier to remember the material because the learning process is done with the activities of individuals and groups so as to make meaningfulness in learning. The result from research (Muhlisin, 2016) related to the influence of the RMS learning model on mastery of the concept shows the result that the RMS learning model significantly influences compared to the conventional class.

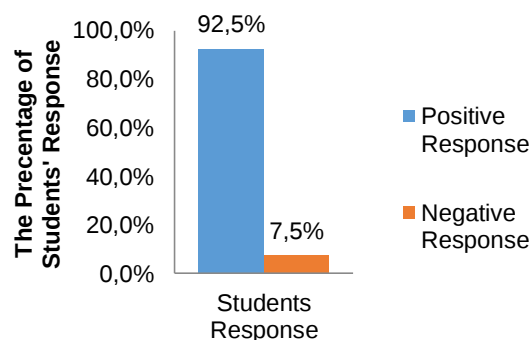
Based on explanation above, it necessary to examine students' responses in RMS learning model implementation in philosophy science Learning, in order to get factual overview of students responses in learning process. The factual overview of students responses as an evaluation in learning process, so that learning outcomes or learning objectives can be attained optimally.

## METHODS

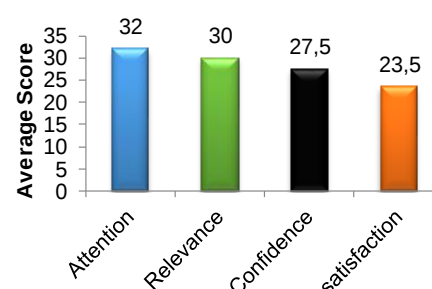
The type of research is pre experimental design, with research sample 40 students of first odd semester student in the year of 2017/2018. The instrument used is a questionnaire developed by (Muhlisin, 2017) with a reliability level of 0.672. Data analysis using quantitative descriptive. Student response questionnaire grid can be seen in Table 1.

## RESULTS AND DISCUSSION

Students response towards implementation of RMS learning model in philosophy science Learning in Science Education Program of Untidar that surveyed by questionnaires with "Yes" and "No" choices in their answers. Result of students response analysis can be seen in Figure 1. Based on figure 1, it can be conclude that majority of students gives positive response towards the implementation of RMS learning model in phylosophyscience Learning. in detail, students response in every developped response indicator that included attention, relevance, confidence, and satisfaction, can be seen in Figure 2.



**Figure 1.** The percentage of Students' response toward the implementation of learning model RMS



**Figure 2.** Average of Students response on each indicator

The average of response result on each indicator shown in Figure 2 shows that the highest student response indicator is on attention aspect with average of 32 and the lowest on satisfaction aspect with an average of 23.5. It gives an illustration that indicator of attention which includes "enjoying learning" variable, there is no wrong concept, improve retention, and easy to learn the subject matter become the reason of student in giving positive response to RMS learning model.

The students' positive response to the implementation of RMS learning model is influenced by several factors. The step of RMS learning model purposely facilitates students to be able to prepare themselves in following learning, by reading critically the material that will be studied with various sources of learning. As informed in previous research by Kirmizi (2015) that learning readiness has a positive effect on motivation and learning success.

**Table 1.** Students' responses questionnaire grid

| No | Indicator    | Variable                                                 | Description                                           | Item                                                                                                    | Item no |
|----|--------------|----------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|
| 1  | Attention    | Enjoy learning                                           | Have a high motivation to the learn                   | Did the learning that has been implemented made you have a high willingness to follow the lesson?       | 1       |
|    |              | There is no wrong concept                                | Eliminating the wrong concept                         | Is the learning that has been implemented can eliminate the concept of mistakes in yourself?            | 2       |
|    |              | Improve retention                                        | Concepts can be remembered longer / meaningful        | As the learning that has been implemented gives meaning and makes it easier to understand the material? | 3       |
|    |              | Easy to understand material of the course                | Understand the material easier                        | Does learning make you easy to understand the material being taught?                                    | 4       |
| 2  | Relevance    | Not boring                                               | Interesting and not boring                            | Is the learning interesting, fun, and not boring?                                                       | 5       |
|    |              | Reduce the time needed to master the concept of learning | Time needed to master the concept of learning shorter | Do you feel the time spent in understanding the concept is getting shorter?                             | 6       |
| 3  | Confidence   | Motivated to Learn                                       | Motivated to get achievement                          | Are you motivated to get good achievement?                                                              | 7       |
|    |              | Improving individual critical thinking                   | Individual critical thinking is improved              | Does the learning can improve your individual critical thinking?                                        | 8       |
| 4  | Satisfaction | Rewarded in expressing opinions                          | More appreciated in expressing opinions               | Do you feel more valued in expressing opinions when learning?                                           | 9       |
|    |              | Dare to express opinions                                 | Dare to deliver opinions                              | Do you feel braver in delivering your opinion in learning process?                                      | 10      |

Another factor that influence student has positive response is activity of mind map making. Mind mapping activities require students to understand and remember reading material, which will be poured through their writing in the form of mind map. This activity focuses students in organizing meaningful information and provides an opportunity to review information that has been obtained so that students are able to understand a concept well. Mind mapping also uses images and symbols that can make students interesting to follow the learning process. This is reinforced by the results Muhlisin (2016) that the activity of drawing with symbols and colors can make learners more happy in doing so that learners are better able to understand a certain thing

The final step in the RMS learning model is sharing. This activity is facilitated by students interaction, with each other in describing the mind map results among them. Students have a positive response on sharing, because in this step the students only explain the result of mind map they made. This is different from other presentations that have been done by them. Sharing in the step of the RMS learning model is simple but can be able to describe a whole explanation.

## CONCLUSION

Based on data analysis and discussion that has been explained then it can be concluded as follows.

1. Student response after implementation of RMS learning model gave positive response of 92.5%.
2. The highest student response indicators on aspects of attention that include learning pleasure variables, no misconceptions, improved retention, and easy to learn student content with an average of 32.
3. Student's positive response is shown by their activeness in the learning process activities both individuals and groups.

Implementation of RMS learning model in order to get the optimal response, so it is necessary to pay attention to some suggestions as follows.

1. Students are expected to read books or information from various sources of learning online / offline and research results related topics to be studied.
2. The lecturer should manage time well if the subject matter / topic is in many categories.

3. Emphasize more on image symbol on the process of mind map making to make it more interesting.

## REFERENCES

- Febrianti, Enawaty, E., & Lestari, I. (2015). Pengaruh Media Booklet Cherlys dengan Pendekatan Konstruktivistik terhadap Hasil Belajar dan Respon Siswa SMA. *Jurnal Pendidikan dan Pembelajaran*, 4(9), 1-16.
- Hamalik, O. (2011). *Kurikulum dan Pembelajaran*. Jakarta: Bumi Aksara.
- Hamdu, G. & Agustina, L. (2011). Pengaruh motivasi belajar siswa terhadap prestasi belajar IPA di sekolah dasar. *Jurnal Penelitian Pendidikan*, 12(1), 90-96.
- KBBI. 2017. (Online), (<http://kbbi.web.id/>), diakses pada 20 November 2017.
- Kirmizi, O. (2015). The Influence of Learner Readiness on Student Satisfaction and Academic Achievement in an Online Program at Higher Education. *The Turkish Online Journal of Educational Technology*, 14(1), 133-142.
- Norsaputra, A., & Johansyah. (2017). The Effect of Problem Based Learning with Experiment on Students' Responses and Learning Outcome in the Reflection and Refraction Concept Learning. *Proceedings of International Conference on Applied Science and Health*. ICASH: Faculty of Graduate Studies Mahidol University.
- Majid, A. (2013). *Strategi Pembelajaran*. Bandung: Remaja Rosdakarya.
- Maya, S. & Evy. (2014). Pengaruh Strategi ARCS (Attention, Relevance, Confidence and Satisfaction) terhadap Motivasi dan Hasil belajar TIK Siswa Kelas VII di SMP Negeri 4 Negara. *e-Journal Program Pascasarjana Universitas Pendidikan Ganesha Program Studi Teknologi Pembelajaran*, 4(1), 1-10.
- Muhlisin, A. (2012). Pengembangan Perangkat Pembelajaran IPA Terpadu Berbasis Contextual Teaching And learning (CTL) dengan Model Pembelajaran Kooperatif Tipe Student Achievement Division (STAD) Tema Polusi Udara. *Journal of*

*Educational Research and Evaluation*, 2 (1), 139-145.

- Muhlisin, A. (2016). Pengembangan Model Pembelajaran RMS (*Reading, Mind Mapping, And Sharing*) Dan Pengaruhnya Terhadap Penguasaan Konsep, Keterampilan Berpikir Kritis, Keterampilan Metakognitif, Serta Retensi Mahasiswa Berkemampuan Akademik Berbeda. *Disertasi*. Universitas Negeri Malang.
- Muhlisin, A., Susilo, H., Amin, M., & Rohman, F. (2016). Improving Critical Thinking Skills of College Students Through RMS Model for Learning Basic Concepts in Science. *Asia Pacific Forum on Science Learning and Teaching*, 17(1), Article 12.
- Suryati, W. (2012). Pengaruh Penerapan Metode PQ4R (Preview, Question, Read, Reflect, Recite, Review) Terhadap Hasil Belajar Ips Siswa Kelas VII Semester Genap Smp Muhammadiyah Bandar Lampung. *Lentera*, 1(1), 16-25.
- Riyana, C. dan R. Susilana. (2007). *Media Pembelajaran*. Bandung: CV. Wacana Prima