ABSTRAK

ALYA MARTHIA ROFI. 2023. **PENGARUH MODEL** *SCIENCE, ENVIRONMENT, TECHNOLOGY, SOCIETY* **BERBANTUAN** *FISHBONE DIAGRAM* **TERHADAP** *SELF REGULATED LEARNING* **DAN KEMAMPUAN BERPIKIR KRITIS** (Studi Eksperimen pada Konsep Perubahan Lingkungan di Kelas X MIPA SMA Negeri 6 Tasikmalaya Tahun Ajaran 2022/2023). Jurusan Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Siliwangi, Tasikmalaya.

Pembelajaran yang berkualitas ditandai dengan adanya proses pembelajaran yang dapat mengoptimalkan kemampuan peserta didik. *Self regulated learning* dan berpikir kritis menjadi kemampuan yang perlu dikembangkan pada proses pembelajaran. Untuk mengupayakan hal tersebut maka diperlukan ketepatan dalam menentukan model pembelajaran. Penelitian ini bertujuan untuk mengetahui pengaruh model *science, environment, technology, society* berbantuan *fishbone diagram* terhadap *self regulated learning* dan kemampuan berpikir kritis peserta didik di kelas X MIPA SMAN 6 Tasikmalaya tahun ajaran 2022/2023. Metode penelitian yang digunakan adalah eksperimen semu dengan populasi seluruh kelas X MIPA yang terdiri dari 7 kelas dengan jumlah siswa sebanyak 255 orang. Sampel diambil dengan menggunakan teknik *purposive sampling* yaitu kelas X MIPA 1 sebagai kelas eksperimen dan X MIPA 4 sebagai kelas kontrol. Instrumen yang digunakan yaitu *Motivated Strategies for Learning Questionnaire* (MSLQ) bagian *self regulated learning strategies* sebanyak 25 pernyataan dan soal kemampuan berpikir kritis sebanyak 20 soal. Data hasil penelitian menunjukkan bahwa nilai rata-rata *self regulated learning* pada kelas eksperimen sebesar 83 sedangkan pada kelas kontrol sebesar 71. Kemudian nilai rata-rata kemampuan berpikir kritis pada kelas eksperimen sebesar 84 sedangkan pada kelas kontrol sebesar 77. Dalam hal ini, kelas eksperimen memiliki rata-rata nilai *self regulated learning* dan kemampuan berpikir kritis yang lebih tinggi daripada kelas kontrol. Data hasil penelitian diolah dengan menggunakan uji ANCOVA dan menunjukkan nilai signifikansi $< 0,05$ $(0,000 < 0,05)$ artinya Ho ditolak. Sehingga hasil penelitian menunjukkan bahwa terdapat pengaruh model pembelajaran *science, environment, technology, society* berbantuan *fishbone diagram* terhadap *self regulated learning* dan kemampuan berpikir kritis peserta didik pada materi perubahan lingkungan di kelas X MIPA SMAN 6 Tasikmalaya.

Kata Kunci: *Model Pembelajaran SETS, Diagram Fishbone, Self Regulated Learning, Kemampuan Berpikir Kritis.*

ABSTRACT

ALYA MARTHIA ROFI. 2023. **THE EFFECT OF THE SCIENCE, ENVIRONMENT, TECHNOLOGY, SOCIETY MODELS WITH FISHBONE DIAGRAM ON SELF REGULATED LEARNING AND CRITICAL THINKING ABILITY** *(Experimental Study on Environmental Change Concept in Class X MIPA of SMA Negeri 6 Tasikmalaya in Academic Year 2022/2023). Biology Education Department, Faculty of Teacher Training and Education, Siliwangi University, Tasikmalaya.*

Quality learning is characterized by a learning process that can optimize students abilities. Self regulated learning and critical thinking are abilities that need to be developed in the learning process. To strive for this, it requires accuracy in determining the learning model. This study aims to determine the effect of the science, environment, technology, society model with fishbone diagrams on self regulated learning and critical thinking ability of students in class X MIPA SMAN 6 Tasikmalaya in the 2022/2023 school year. The research method used was quasi experiment with the population of all X MIPA classes consisting of 7 classes with a total of 255 students. The sample was taken using purposive sampling technique, namely class X MIPA 1 as the experimental class and X MIPA 4 as the control class. The instruments used were Motivated Strategies for Learning Questionnaire (MSLQ) part of self-regulated learning strategies as many as 25 statements and critical thinking ability questions as many as 20 questions. The research data showed that the average value of self regulated learning in the experimental class was 83 while in the control class was 71. Then the average value of critical thinking ability in the experimental class was 84 while in the control class was 77. In this case, the experimental class has a higher average value of self regulated learning and critical thinking ability than the control class. The research data were processed using the ANCOVA test and showed a significance value <0.05 $(0.000 <0.05)$, meaning Ho was rejected. So the results showed that there was an effect of science, environment, technology, society learning model with fishbone diagram on self regulated learning and critical thinking ability of students on environmental change material in class X MIPA SMAN 6 Tasikmalaya.

Keywords: SETS Learning Model, Fishbone Diagram, Self Regulated Learning, Critical Thinking Ability.