

ABSTRAK

MUHAMMAD GHILMAN FIRDAUS: “Pengaruh Pendekatan STREAM (*Science-Technology-Religion-Engineering-Arts-Mathematics*) Terhadap Literasi Sains Siswa Pada Materi Sistem Pertahanan Tubuh”

Literasi Sains merupakan aspek yang harus dikuasai peserta didik pada abad 21. Penelitian ini bertujuan untuk menganalisis pengaruh pendekatan STREAM terhadap literasi sains siswa. Penelitian *Mixed Method* dengan desain *Embedded* digunakan dalam penelitian. Perangkat penelitian berupa *task* kinerja siswa dengan instrumen penelitian meliputi: rubrik beserta lembar observasi keterlaksanaan, soal uraian singkat menggunakan indikator literasi sains, rubrik beserta lembar observasi asesmen kinerja produk, angket kendala siswa dan catatan lapangan. Sampel dipilih melalui *purposive sampling* terdiri dari 35 orang siswa kelas eksperimen dan 35 orang siswa kelas reguler di salah satu SMA di kabupaten Kuningan. Keterlaksanaan aktivitas siswa dan guru (mahasiswa peneliti) keseluruhan mencapai kriteria baik dengan kriteria kurang sekali, baik dan sangat baik pada setiap tahapannya. Peningkatan literasi sains siswa kelas eksperimen berkriteria tinggi dengan perolehan 0,77 sedangkan kelas reguler berkriteria sedang dengan perolehan 0,49. Hasil uji statistik menunjukkan terdapat perbedaan yang signifikan literasi sains siswa kelas eksperimen dan reguler dengan sig (0,000) < 0,05. Hasil asesmen kinerja produk minuman herbal jeruk nipis menunjukkan 67% siswa kelas eksperimen dan 56% siswa kelas reguler berkriteria sangat baik. Sebagian kecil siswa mengalami kendala pada saat mengidentifikasi masalah, membuat desain langkah kerja, membuat minuman herbal jeruk nipis dan mengujinya. Hasil penelitian mengindikasikan bahwa pendekatan STREAM berpengaruh terhadap literasi sains siswa. Pendekatan STREAM dapat digunakan untuk membekalkan literasi sains siswa.

Kata Kunci: Literasi Sains, Sistem Pertahanan Tubuh, STREAM.

ABSTRACT

MUHAMMAD GHILMAN FIRDAUS: *“The Influence of the STREAM (Science-Technology-Religion-Engineering-Arts-Mathematics) Approach to Students' Science Literacy on the Materials of the Body's Defense System”*

Science literacy is an aspect that must be mastered by students in the 21st century. This study aims to analyze the STREAM approach to students' scientific literacy. Mixed Method Research with Embedded design used in the study. Research tools in the form of student performance with research instruments include: rubrics and implementation observation sheets, brief descriptions using scientific literacy indicators, rubrics and product performance assessment observation sheets, student constraint questionnaires and field notes. The sample was selected through purposive sampling consisting of 35 experimental class students and 35 regular class students in one of the senior high schools in Kuningan district. The implementation of student and teacher activities (research students) with good criteria with very less, good and very good criteria at each stage. The increase in scientific literacy of the experimental class students has high criteria with the acquisition of 0.77 while the regular class has moderate criteria with the acquisition of 0.49. The results of statistical tests showed significant differences in scientific literacy of experimental and regular class students with sig (0.000) <0.05. The results of the performance assessment of lime herbal drink products showed that 67% of experimental class students and 56% of regular class students had very good criteria. A few students experienced problems when identifying problems, designing work steps, making lime herbal drinks and testing them. The results indicate that the STREAM approach effect on students' scientific literacy. STREAM approach can be used to equip students with scientific literacy.

Keywords: *Body Defense System, Scientific Literacy, STREAM.*