

ABSTRAK

Nuraida Lathifah: “Model Project Based Learning terintegrasi Science Technology Engineering and Mathematics (STEM) pada Materi Pencemaran Lingkungan untuk Meningkatkan Kemampuan Berpikir Kreatif Siswa”.

Kemampuan berpikir kreatif siswa sangat dibutuhkan di abad 21. Penelitian ini bertujuan untuk mengetahui peningkatan kemampuan berpikir kreatif dengan model PjBL terintegrasi *STEM*. Metode yang digunakan dalam penelitian adalah *pre-eksperimental* dengan desain *one-group pretest-postest*. Populasi dari penelitian ini adalah siswa kelas X-IPA di sekolah menengah atas sebanyak 27 siswa. Sampel tersebut diperoleh dengan menggunakan *sampling jenuh*.

Hasil penelitian menunjukkan bahwa : 1) keterlaksanaan model PjBL terintegrasi *STEM* menunjukkan keterlaksanaan dengan kategori sangat baik. 2) kemampuan berpikir kreatif siswa menunjukkan kategori sedang dengan nilai *n-gain* sebesar 0,47. 3) Penilaian kemampuan berpikir kreatif dengan menggunakan interpretasi Tingkat Kemampuan Berpikir Kreatif (TKBK) menunjukkan siswa berada pada tingkat tiga berkategori kreatif, dan 4) Kendala terbesar yang ditemukan pada siswa adalah manajemen waktu dan manajemen kelompok. Diskusi kelompok dengan pembuatan produk membantu siswa berpikir kreatif selama proses pembelajaran dengan PjBL terintegrasi *STEM*.

Kata Kunci : Berpikir kreatif, *Project Based Learning*, *STEM*, dan Pencemaran Lingkungan

ABSTRACT

Nuraida Lathifah : “Project Based Learning integrated Science Technology Engineering and Mathematic (STEM) in enviromental pollution material to improve the ability to think creatively student”.

The learning process in school still assessed student’s creative thinking abilities rarely. Actually, it is needed in the 21st century. This research aimed to find out the improvement of creative thinking abilities with PjBL model integrated by STEM. The research was pre-experimental with one group pretest-posttest design. The population of this research was students of class X-IPA at High School. The sample was chosen by saturated sampling with 27 students.

The implementation data of project based learning process integrated by STEM learning was obtained from observation sheets. The improvement of creative thinking ability was obtained by using descriptive tests. The improvement of student’s creative thinking ability on making products was done by using student’s worksheets, and its obstacles was done by using interview. The result showed: 1) the process of learning with integrated STEM project based learning model was showed hight category, 2) the creative thinking of student showed medium category with n-gain score on 0.47, 3) the creative thinking ability’s used Creative Thinking Ability Level (TKBK) showed that students were on level “three” or creative level, 4) the biggest obstacles factors that found on student were time management and group work management. The group discussion, with product making, helped the students to think creatively during the process of PjBL learning integrated by STEM. Keywords : Creative thinking, Project Based Learning, STEM, dan problem in environment