

ABSTRAK

Safithri, R. 2021. Pengaruh Penerapan *Problem Based Learning* (PBL) dan *Project Based Learning* (PjBL) Berdasarkan *Self Efficacy* Terhadap Kemampuan Pemecahan Masalah Barisan dan Deret. Tesis, Program Magister Pendidikan Matematika, Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Jambi. Pembimbing : (I) Dr. Drs. Syaiful, M.Pd., (II) Dr. Nizlel Huda, M.Kes.

Pandemi COVID-19 mengakibatkan pembelajaran dilaksanakan secara daring, guru harus tetap mengembangkan kemampuan pemecahan masalah siswa. PBL dan PjBL dilaksanakan dengan aplikasi *Zoom Cloud Meeting* membuat siswa dapat mengkonstruksi ide penyelesaian masalah. Tujuan penelitian ini adalah untuk melihat apakah terdapat pengaruh penerapan pembelajaran PBL dan PjBL secara daring terhadap kemampuan pemecahan masalah siswa, serta melihat apakah terdapat perbedaan kemampuan pemecahan masalah siswa berdasarkan *self efficacy* dan melihat interaksinya. Desain penelitian menggunakan *quasi experimental non-equivalent control group design*, dengan populasi seluruh siswa kelas XI IPA SMA N 5 Kota Jambi, dengan teknik pengambilan sampel yaitu *simple random sampling* didapat 2 kelas eksperimen dan 1 kelas kontrol. Instrumen penelitian yaitu tes, angket, dan lembar observasi. Hasil penelitian diuji dengan *two way ANOVA*, menunjukkan terdapat pengaruh penerapan pembelajaran PBL dan PjBL secara daring terhadap kemampuan pemecahan masalah siswa, juga terdapat perbedaan kemampuan pemecahan masalah siswa yang memiliki *self efficacy* tinggi, sedang, rendah yang diajarkan dengan PBL dan PjBL, dan juga terdapat interaksi antara pembelajaran PBL dan PjBL dengan *self efficacy* siswa terhadap kemampuan pemecahan masalah. Hal ini dikarenakan, semakin baik metode yang digunakan, maka akan dapat membuat *self efficacy* dan juga kemampuan pemecahan masalah siswa menjadi semakin baik pula.

Kata Kunci : Kemampuan Pemecahan Masalah, PBL, PjBL, *Self Efficacy*

ABSTRACT

Safithri, R. 2021. *Effect of Problem Based Learning (PBL) and Project Based Learning (PjBL) Based on Self Efficacy Toward Problem Solving Ability Sequences and Series*. Thesis, Program Magister Pendidikan Matematika, Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Jambi. Pembimbing : (I) Dr. Drs. Syaiful, M.Pd., (II) Dr. Nizlel Huda, M.Kes.

Pandemic Covid-19 has made learning process become online learning. Teachers still have to develop student's problem solving ability. PBL and PjBL with Zoom Cloud Meeting application make students construct their ideas to solve mathematics problems. The purpose of this research is to see if there is an influence on the application of the PBL and PjBL online learning on students problem solving abilities, and to see if there were differences in student's problem solving abilities based on self efficacy and to see their interactions. This research uses quasi experimental non-equivalent control group design, with a population of all students of class XI IPA SMA N 5 Jambi City, with the sampling technique is simple random sampling obtained 2 experimental classes and 1 control class. The research instruments were tests, questionnaires, and observation sheets. The results of the study were tested with two way ANOVA, showing that there was an effect of the application of PBL and PjBL online learning on student's problem solving ability, there were also differences in the problem solving ability between students who had high, medium, and low self efficacy taught by PBL and PjBL, and also have an interaction between PBL and PjBL learning with student's self efficacy toward problem solving ability. This is because, the better method that used by teacher, the better self efficacy and problem solving ability of students will have.

Keywords : Problem Solving Ability, PBL, PjBL, Self Efficacy