

ABSTRAK

Utama, I Made Sudarman (2026), Pengaruh Model PBL-RQA Terhadap Kemampuan Pemecahan Masalah dan *Self-Efficacy* pada Pembelajaran IPA Fase D. Tesis, Pendidikan IPA, Program Pascasarjana, Universitas Pendidikan Ganesha.

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Kata kunci: Kemampuan Pemecahan Masalah, PBL, PBL-RQA, *Self-efficacy*

Pemberdayaan kemampuan pemecahan masalah dan *self-efficacy* peserta didik merupakan tantangan utama sektor pendidikan di Indonesia baik secara makro maupun mikro. Tujuan penelitian ini antara lain (1) Untuk mengetahui dan mendeskripsikan perbedaan kemampuan pemecahan masalah dan *self-efficacy* secara simultan antara kelompok peserta didik yang belajar dengan model PBL-RQA dan PBL; (2) Untuk mengetahui dan mendeskripsikan perbedaan kemampuan pemecahan masalah antara kelompok peserta didik yang belajar dengan model PBL-RQA dan PBL; (3) Untuk mengetahui dan mendeskripsikan perbedaan *self-efficacy* antara kelompok peserta didik yang belajar dengan model PBL-RQA dan PBL. Penelitian ini adalah *quasi experiment* dengan desain *nonequivalent pretest-posttest group design* yang membandingkan PBL-RQA dan PBL. Penelitian ini dilaksanakan di SMP Negeri 2 Pekutatan. Populasi penelitian adalah peserta didik kelas VIII SMP Negeri 2 Pekutatan tahun ajaran 2025-2026 sebanyak 154 peserta didik. Sampel diambil secara *cluster random sampling* dengan jumlah 126 peserta didik. Teknik pengumpulan data dilakukan dengan observasi dan *pretest-posttest*. Data kemampuan pemecahan masalah dikumpulkan dengan tes esai sedangkan data *self-efficacy* dikumpulkan dengan kuesioner. Hasil uji reliabilitas instrumen kemampuan pemecahan masalah sebesar 0,874 dan *self-efficacy* sebesar 0,873 yang berarti memiliki reliabilitas sangat tinggi. Analisis statistik inferensial menggunakan Mancova dengan *pretest* sebagai kovariat dengan nilai signifikan 5%. Hasil penelitian menunjukkan: (1) tidak terdapat perbedaan kemampuan pemecahan masalah dan *self-efficacy* peserta didik secara simultan yang signifikan antara kelompok peserta didik yang belajar dengan model PBL-RQA dan PBL ($p=0,112$) pada tes multivariat; (2) tidak terdapat perbedaan kemampuan pemecahan masalah yang signifikan antara kelompok peserta didik yang belajar dengan model PBL-RQA dan PBL ($p=0,574$) pada *tests of between-subjects effects*; (3) terdapat perbedaan *self-efficacy* yang signifikan antara kelompok peserta didik yang belajar dengan model PBL-RQA dan PBL ($p=0,038$) pada *tests of between-subjects effects*. Berdasarkan temuan-temuan tersebut dapat disimpulkan bahwa penerapan model PBL-RQA belum mampu meningkatkan kemampuan pemecahan masalah dan *self-efficacy* secara simultan dan kemampuan pemecahan masalah secara parsial. Di sisi lain, model PBL-RQA mampu meningkatkan *self-efficacy* secara parsial.

ABSTRACT

Utama, I Made Sudarman (2026), *The Effect of the PBL-RQA Model on Problem-Solving Skills and Self-Efficacy in Phase D Science Learning*. Thesis, Science Education, Postgraduate Program, Ganesha University of Education.

This thesis has been approved and examined by Advisor I: Prof. Dr. Ida Bagus Putu Arnyana, M.Si. and Advisor II: Prof. Dr. Ni Ketut Rapi, M.Pd.

Keywords: *Problem-Solving Skills, PBL, PBL-RQA, Self-efficacy*

Empowering students' problem-solving skills and self-efficacy remains a major challenge in Indonesia's education sector, both at macro and micro levels. This study aimed to: (1) determine and describe the simultaneous differences in problem-solving skills and self-efficacy between students taught using the PBL-RQA model and those taught using the PBL model; (2) determine and describe the differences in problem-solving skills between students taught using the PBL-RQA model and the PBL model; and (3) determine and describe the differences in self-efficacy between students taught using the PBL-RQA model and the PBL model. This study employed a quasi-experimental approach with a non-equivalent pretest-posttest group design, comparing the PBL-RQA and PBL models. The research was conducted at SMP Negeri 2 Pekutatan, involving a population of 154 eighth-grade students from the 2025–2026 academic year. A sample of 126 students was selected using cluster random sampling. Data collection techniques included observation and pretest-posttest administration. Problem-solving skills data were gathered through essay tests, while self-efficacy data were collected via questionnaires. The instrument reliability tests yielded scores of 0.874 for problem-solving skills and 0.873 for self-efficacy, indicating very high reliability. Inferential statistical analysis was performed using MANCOVA, with the pretest as a covariate at a 5% significance level. The results demonstrated that: (1) there was no significant simultaneous difference in students' problem-solving skills and self-efficacy between the PBL-RQA and PBL groups ($p=0.112$) based on multivariate tests; (2) there was no significant difference in problem-solving skills between students in the PBL-RQA group and the PBL group ($p=0.574$) based on tests of between-subjects effects; and (3) there was a significant difference in self-efficacy between students in the PBL-RQA group and the PBL group ($p=0.038$) based on tests of between-subjects effects. Based on these findings, it can be concluded that the implementation of the PBL-RQA model has not yet been effective in simultaneously improving problem-solving skills and self-efficacy, nor has it shown a significant partial effect on problem-solving skills. On the other hand, the PBL-RQA model successfully enhanced students' self-efficacy partially.