

**EFEKTIVITAS PENERAPAN STRATEGI PEMBELAJARAN
COLLABORATIVE INQUIRY PROBLEM BASED LEARNING (CIPBL)
TERHADAP KETERAMPILAN PROSES SAINS SISWA PADA
PEMBELAJARAN BIOLOGI KELAS XI MAN KARANGASEM**

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui perbedaan keterampilan proses sains siswa antara siswa yang belajar menggunakan strategi pembelajaran *Collaborative Inquiry Problem Based Learning* (CIPBL) dan strategi konvensional. Penelitian ini menggunakan *quasi experiment* dengan *non equivalent control group posttest-only design*. Populasi penelitian adalah siswa kelas XI Umum di MAN Karangasem yang tidak dipilih secara acak. Sampel penelitian terdiri dari siswa kelas XI Umum di MAN Karangasem yang dipilih melalui teknik undian, di mana kelas XI Umum 1 menjadi kelas eksperimen dan kelas XI Umum 2 menjadi kelas kontrol. Metode penelitian meliputi tes uraian dan lembar observasi. Data dianalisis secara deskriptif menggambarkan peningkatan keterampilan proses sains dan efektivitas CIPBL, serta menggunakan analisis statistik untuk menguji hipotesis perbedaan keterampilan proses sains antara kedua strategi tersebut. Hasil analisis menunjukkan peningkatan keterampilan proses sains siswa dengan rata-rata total 87,278 (sangat baik) dan nilai Indeks Efektivitas (IE) 100% dalam kategori sangat baik. Uji hipotesis menunjukkan adanya perbedaan signifikan keterampilan proses sains antara siswa yang belajar menggunakan strategi CIPBL dan strategi konvensional. Hasil uji t yang digunakan adalah asumsi varian homogen, menghasilkan t hitung = -6,452 dengan signifikansi 0,0001 (lebih kecil dari 0,0001). Kesimpulannya, keterampilan proses sains siswa yang belajar dengan strategi CIPBL lebih baik dibandingkan dengan siswa yang belajar dengan strategi konvensional.

Kata Kunci: *Collaborative inquiry problem based learning* (CIPBL), efektivitas pembelajaran, keterampilan proses sains, konvensional, pembelajaran biologi.

**THE EFFECTIVENESS OF IMPLEMENTING LEARNING STRATEGIES
COLLABORATIVE INQUIRY PROBLEM BASED LEARNING (CIPBL) ON
STUDENTS' SCIENCE PROCESS SKILLS IN BIOLOGY LEARNING
CLASS XI MAN KARANGASEM**

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ABSTRACT

This study aims to determine the differences in students' science process skills between those who learn using the Collaborative Inquiry Problem Based Learning (CIPBL) strategy and those who learn using conventional strategies. This research employs a quasi experimental design with a non equivalent control group posttest-only design. The population of the study comprises 11th-grade general students at MAN Karangasem, who were not randomly selected. The research sample consists of 11th-grade general students at MAN Karangasem, chosen through a lottery technique, where class XI general 1 becomes the experimental class and class XI general 2 becomes the control class. The research methods include essay tests and observation sheets. The data are analyzed descriptively to describe the improvement in science process skills and the effectiveness of CIPBL, as well as using statistical analysis to test the hypothesis of differences in science process skills between the two strategies. The result of the analysis show an improvement in students' science process skills with an average total score of 87,278 (very good) and an effectiveness Index (IE) value of 100% in the very good category. Hypothesis testing indicates a significant difference in science process skills between students learning using the CIPBL strategy and those using conventional strategies. The result of the t-test assuming homogeneous variances of -6,452 with a significance of 0,0001 (less than 0,0001). The conclusion, the science process skills of students who learn using the CIPBL strategy are better compared to those of students who learn using conventional strategies.

Keywords: *Collaborative inquiry problem based learning (CIPBL), effectiveness of learning, science process skills, conventional, biology learning.*