

**PENGARUH MODEL *PROJECT BASED LEARNING* BERBANTUAN
VIDEO PEMBELAJARAN TERHADAP NALAR KRITIS DAN LITERASI
SAINS SISWA KELAS IV SD**

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ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan dan menjelaskan: (1) perbedaan nalar kritis dan literasi sains antara kelompok siswa yang mengikuti pembelajaran dengan Model *Project Based Learning* berbantuan video pembelajaran dan kelompok siswa yang mengikuti pembelajaran dengan Model *Direct Learning*, (2) perbedaan nalar kritis antara kelompok siswa yang mengikuti pembelajaran dengan Model *Project Based Learning* berbantuan video pembelajaran dan kelompok siswa yang mengikuti pembelajaran dengan Model *Direct Learning*, (3) perbedaan literasi sains antara kelompok siswa yang mengikuti pembelajaran dengan Model *Project Based Learning* berbantuan video pembelajaran dan kelompok siswa yang mengikuti pembelajaran dengan Model *Direct Learning* di kelas IV SD di Gugus IV, Kecamatan Buleleng Tahun Pelajaran 2023/2024. Jenis penelitian ini adalah eksperimen semu, dengan desain *Posttest-Only Control Group Desain*. Populasi dalam penelitian ini adalah seluruh kelas IV SD di Gugus IV, Kecamatan Buleleng. Sampel penelitian adalah kelas IV SDN 1 Banyuasri sebagai kelompok eksperimen dan kelas IV SDN 4 Banyuasri sebagai kelompok kontrol yang diperoleh dengan teknik random sampling. Metode pengumpulan data dilakukan dengan teknik tes. Metode analisis yang digunakan dalam penelitian ini meliputi analisis statistik deskriptif dan analisis inferensial yang menggunakan *Multivariate Analysis of Variance (MANOVA)*. Hasil penelitian menunjukkan bahwa rata-rata skor nalar kritis pada kelompok eksperimen (89,03) lebih besar dari kelompok kontrol (65,16) dan rata-rata skor literasi sains pada kelompok eksperimen (80,34) lebih besar dari kelompok kontrol (69,03). Dan berdasarkan hasil analisis *MANOVA* data nalar kritis dan literasi sains menunjukkan bahwa nilai F hitung untuk *Pillai's Trace*, *Wilks' Lambda*, *Hotelling's Trace*, dan *Roy's Largest Root* signifikan (0,000) lebih kecil dari (sig. 0,05). Dengan demikian, pembelajaran dengan Model *Project Based Learning* berbantuan video pembelajaran berpengaruh terhadap nalar kritis dan literasi sains siswa kelas IV SD di Gugus IV, Kecamatan Buleleng Tahun Pelajaran 2023/2024.

Kata-kata kunci: Model *Project Based Learning*, Video Pembelajaran, Nalar Kritis, Literasi Sains

ABSTRACT

This research aims to describe and explain: (1) differences in critical reasoning and scientific literacy between groups of students who took part in learning using the Project Based Learning Model assisted by learning videos and groups of students who took part in learning with the Direct Learning Model, (2) differences in critical reasoning between groups students who take part in learning using the Project Based Learning Model assisted by learning videos and groups of students who take part in learning with the Direct Learning Model, (3) differences in scientific literacy between groups of students who take part in learning with the Project Based Learning Model assisted by learning videos and groups of students who take part in learning with Direct Learning Model in class IV elementary school in Gugus IV, Buleleng District, Academic Year 2023/2024. This type of research is a quasi-experiment, with a Posttest-Only Control Group Design. The population in this study was all class IV elementary schools in Cluster IV, Buleleng District. The research sample was class IV at SDN 1 Banyuasri as the experimental group and class IV at SDN 4 Banyuasri as the control group obtained using random sampling techniques. The data collection method was carried out using test techniques. The analytical methods used in this research include descriptive statistical analysis and inferential analysis using Multivariate Analysis of Variance (MANOVA). The results showed that the average critical reasoning score in the experimental group (89.03) was greater than the control group (65.16) and the average scientific literacy score in the experimental group (80.34) was greater than the control group (69. .03). And based on the results of MANOVA analysis of critical reasoning and scientific literacy data, it shows that the calculated F value for Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root is significantly (0.000) smaller than (sig. 0.05). Thus, learning with the Project Based Learning Model assisted by learning videos has an effect on the critical reasoning and scientific literacy of class IV elementary school students in Gugus IV, Buleleng District for the 2023/2024 academic year.

Key words: Project Based Learning Model, Learning Video, Critical Reasoning, Scientific Literacy