ABSTRAK

PENGEMBANGAN MODUL AJAR IPAS BERBASIS *PROJECT BASED LEARNING* PADA MATERI FOTOSINTESIS UNTUK PESERTA DIDIK KELAS IV SD KARITAS NANDAN

Mesak Para Jami
Universitas Sanata Dharma
2025

Penelitian ini dilatarbelakangi oleh kebutuhan guru di SD Karitas Nandan akan modul ajar berbasis *Project Based Learning* (PjBL) khususnya pada materi fotosintesis. Selama ini, pembelajaran berbasis proyek masih minim diterapkan, sedangkan materi fotosintesis yang bersifat abstrak sering menyulitkan pemahaman peserta didik. Guru membutuhkan modul pembelajaran yang tidak hanya bersifat sistematis, tetapi juga mampu menghadirkan pembelajaran yang aktif, kontekstual, dan bermakna. Penelitian ini bertujuan mengembangkan serta mengetahui kelayakan modul ajar berbasis PjBL pada materi fotosintesis untuk peserta didik kelas IV SD Karitas Nandan.

Metode penelitian yang digunakan adalah *Research and Development* (R&D) dengan model ADDIE (*Analyze, Design, Develop, Implement, Evaluate*). Data dikumpulkan melalui wawancara, angket validasi, dan tes, lalu dianalisis secara kualitatif dan kuantitatif. Validasi dilakukan oleh ahli materi dan guru kelas IV, serta uji coba terbatas pada siswa. Hasil validasi menunjukkan skor rata-rata 3,74 yang tergolong "sangat baik", sehingga modul pembelajaran dinilai layak digunakan sebagai bahan ajar IPAS. Dengan demikian, modul ajar berbasis PjBL ini dapat menjadi alternatif pembelajaran fotosintesis yang efektif dan relevan untuk peserta didik kelas IV SD Karitas Nandan.

Kata kunci: Modul Ajar, *Project Based Learning*, Fotosintesis.

ABSTRACT

DEVELOPMENT OF PROJECTION BASED LEARNING BASED IPA TEACHING MODULE ON PHOTOSYNTHESIS MATERIAL FOR GRADE IV STUDENTS OF KARITAS NANDAN ELEMENTARY SCHOOL

Mesak Para Jami
Sanata Dharma University
2025

This research was motivated by the need for teachers at SD Karitas Nandan for a teaching module based on project-based learning (PjBL), especially on photosynthesis material. So far, the project approach is still minimally applied, while the abstract photosynthesis material often makes it difficult for students to understand. Teachers need a module that is not only systematic but also able to present active, contextual, and meaningful learning. This study aims to develop and determine the feasibility of PjBL-based teaching modules on photosynthesis material for grade IV students of SD Karitas Nandan.

The method used is research and development (R&D) with the ADDIE model (Analyze, Design, Develop, Implement, Evaluate). Data were collected through interviews, validation questionnaires, and tests, and then analyzed qualitatively and quantitatively. Validation was conducted by material experts and grade IV teachers, as well as limited trials on students. The validation results showed an average score of 3.74, which was classified as "very good," so the module was considered suitable for use as IPAS teaching material. Thus, this PjBL-based teaching module can be an effective and relevant alternative to photosynthesis learning for grade IV students of SD Karitas Nandan.

Keywords: *Teaching Module, project-based learning, photosynthesis.*