ABSTRAK

Lusiana Santri Vem Tanggo. 2026. *Pengembangan LKPD Berbasis Team Assisted Individualization (TAI) untuk Meningkatkan Pemahaman Konsep Siswa pada Materi Bangun Ruang di SMP Sunan Giri*. Program Studi Pendidikan Matematika, Fakultas Ilmu Pendidikan, Universitas Tribhuwana Tunggadewi Malang. Pembimbing I: Rudy Setiawan, S.Pd., M.Pd. Pembimbing II: Elita Mega Silvia Wijaya, S.Pd., M.Pd.

Kata Kunci: LKPD, Team Assisted Individualization (TAI), Pemahaman Konsep, Bangun Ruang, Pengembangan.

Penelitian ini bertujuan untuk mengembangkan Lembar Kerja Peserta Didik (LKPD) berbasis Team Assisted Individualization (TAI) yang valid, praktis, dan efektif untuk meningkatkan pemahaman konsep siswa pada materi bangun ruang di SMP Sunan Giri. Penelitian ini menggunakan metode Research and Development (R&D) dengan tahapan analisis, desain, pengembangan, implementasi, dan evaluasi. Subjek penelitian terdiri atas validator ahli, guru matematika, dan siswa kelas VIII SMP Sunan Giri.

Teknik pengumpulan data menggunakan lembar validasi, angket respons guru dan siswa, observasi, wawancara, serta tes pemahaman konsep berupa pretest dan posttest.
Hasil penelitian menunjukkan bahwa LKPD berbasis TAI yang dikembangkan memiliki tingkat kevalidan yang sangat tinggi dengan persentase validasi sebesar 96,43% sehingga termasuk kategori sangat valid. Kepraktisan LKPD berdasarkan respons guru memperoleh persentase 95% dan respons siswa sebesar 97,08%, yang termasuk kategori sangat praktis. Keefektifan LKPD ditunjukkan oleh peningkatan hasil belajar siswa, dengan nilai rata-rata pretest sebesar 68,75 meningkat menjadi 89,58 pada posttest.

Hasil analisis N-Gain memperoleh nilai rata-rata 0,73 yang termasuk kategori tinggi. Dengan demikian, LKPD berbasis Team Assisted Individualization (TAI) dinyatakan valid, praktis, dan efektif untuk digunakan dalam pembelajaran matematika serta mampu meningkatkan pemahaman konsep siswa pada materi bangun ruang.

ABSTRACT

Lusiana Santri Vem Tanggo. 2026. *Development of Team Assisted Individualization (TAI)-Based Student Worksheets to Improve Students' Conceptual Understanding on Solid Geometry Materials at Sunan Giri Junior High School*. Mathematics Education Study Program, Faculty of Education, Tribhuwana Tunggadewi University Malang. Advisor I: Rudy Setiawan, S.Pd., M.Pd. Advisor II: Elita Mega Silvia Wijaya, S.Pd., M.Pd.

Keywords: Student Worksheet (LKPD), Team Assisted Individualization (TAI), Conceptual Understanding, Solid Geometry, Development.

This study aimed to develop a Team Assisted Individualization (TAI)-based Student Worksheet (LKPD) that is valid, practical, and effective in improving students' conceptual understanding of solid geometry at Sunan Giri Junior High School. The research employed the Research and Development (R&D) method consisting of the stages of analysis, design, development, implementation, and evaluation. The research subjects included expert validators, mathematics teachers, and eighth-grade students of Sunan Giri Junior High School. Data were collected through validation sheets, teacher and student response questionnaires, observations, interviews, and conceptual understanding tests in the form of pretests and posttests.

The results showed that the developed TAI-based LKPD had a very high level of validity with a validation percentage of 96.43%, categorized as highly valid. The practicality level based on teacher responses reached 95%, while student responses reached 97.08%, both categorized as highly practical. The effectiveness of the LKPD was demonstrated by the improvement in students' learning outcomes, where the average pretest score increased from 68.75 to 89.58 in the posttest. Furthermore, the average N-Gain score was 0.73, which falls into the high category. Therefore, the TAI-based LKPD is considered valid, practical, and effective for mathematics learning and can improve students' conceptual understanding of solid geometry concepts.