

ABSTRAK
PENERAPAN TEORI SOSIOKULTURAL DALAM PEMBELAJARAN HUKUM
ARCHIMEDES DENGAN METODE EKSPERIMEN SISWA KELAS VIII B SMP
KANISIUS GAYAM YOGYAKARTA

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Penelitian ini bertujuan untuk (1) mengetahui profil *Zone of Proximal Development (ZPD)* siswa tentang hukum Archimedes, (2) mengetahui efektivitas penerapan konsep *scaffolding* dalam pembelajarn hukum Archimedes dengan metode eksperimen, (3) mengukur dampak penerapan konsep *scaffolding* dalam pembelajaran hukum Archimedes setelah pembelajaran dirancang berdasarkan *Zone of Proximal Development* terhadap pemahaman siswa.

Penelitian ini dilaksanakan pada bulan Januari - Juni 2020. Dengan subyek penelitian adalah siswa kelas VIII B SMP Kanisius Gayam Yogyakarta. Pengumpulan data menggunakan (1) *pretest* (2) wawancara pendalaman *pretest* (3) *posttest* dan (4) wawancara pendalaman *posttest*. Hasil dari *pretest* dan wawancara pendalaman *pretest* akan membantu peneliti untuk menentukan profil *Zone of Proximal Development* siswa.

Hasil penelitian menunjukkan bahwa ditemukannya profil ZPD siswa tentang hukum Archimedes yang menjadi acuan peneliti dalam merancang pembelajaran dengan konsep *scaffolding*. Siswa mengalami peningkatan pemahaman mengenai hukum Archimedes berdasarkan hasil *posttest* dan wawancara pendalaman *posttest* siswa. Peningkatan pemahaman juga ditunjukkan berdasarkan hasil analisis statistik dengan menggunakan SPSS. Berdasarkan hasil analisis *T-Test* untuk dua kelompok independen diperoleh hasil $t = - 3,679$. $p = .001 < 0,05$, maka hasilnya signifikan.

Kata kunci : Teori Sosiokultural, *Zone of Proximal Development (ZPD)*, *scaffolding*

ABSTRACT

THE IMPLEMENTATION OF SOCIOCULTURAL THEORY IN THE ARCHIMEDES' LAW LEARNING BY USING AN EXPERIMENTAL METHOD TOWARDS VIII B STUDENTS OF KANISIUS GAYAM YOGYAKARTA JUNIOR HIGH SCHOOL

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This research aims to (1) identify the profile of students' Zone of Proximal Development (ZPD) about Archimedes' Law, (2) measure the effectiveness of the implementation of scaffolding concept in Archimedes' Law learning, and (3) measure the impacts of the implementation of the scaffolding concept in Archimedes' Law learning after having the Zone of Proximal Development based learning on student understanding.

This research was conducted from January to June 2020. The research subjects were students of class VIII B of Kanisius Gayam Yogyakarta Junior High School. The data was gathered through (1) pre-test, (2) in-depth interview about the pre-test, (3) post-test, and (4) in-depth interview about the post-test. The results of the pre-test and in-depth interview about the pre-test helped the researcher determine the profile of students' Zone of Proximal Development.

The results showed that the profile of students' ZPD about Archimedes' law became the reference for the researcher in designing scaffolding learning concepts. According to the results of the post-test and in-depth interview about the pre-test, students developed an increased understanding of Archimedes' Law. The increased understanding was also shown by the results of statistical analysis using SPSS. Based on the results of the T-Test analysis for two independent groups, it was known that the $t = - 3.679$. If the $p\text{-value} = 0.001 < 0.05$, the result was significant.

Keywords: Sociocultural theory, Zone of Proximal Development (ZPD), scaffolding