

## ABSTRACT

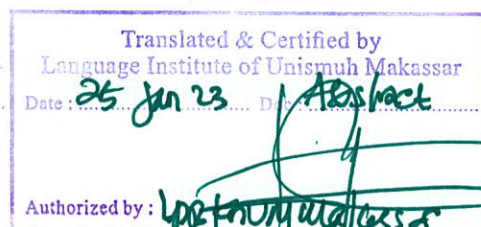
**Titin Nursyamsi, 2023.** The Effectiveness of a Realistic Mathematics Approach Based on Mathematical Literacy on the Problem Solving Ability of Class VI Elementary School Students in Cluster III Panakkukang, Makassar. Supervised by Baharullah and Hj. Hidayah Quraish.

This study aimed at determining the effectiveness of the Realistic Mathematical Approach Based on Mathematics Literacy on the Problem Solving Ability of Class VI Elementary School Students in Cluster III, Panakkukang, Makassar in 2020/2021 academic year. This research was a quantitative research with a quasi-experimental design research design with a Pretest-Posttest Comparison Group Design. This study involved 48 students as research samples which were divided into experimental class 1 and experiment class 2. This study used data collection techniques, namely written tests ; learning outcomes test instruments related to students' problem solving abilities and observations using students' activity observation sheets and students' response questionnaires. The data obtained were analyzed by descriptive statistics and inferential analysis.

The results showed that 1) the learning outcomes of mathematics, especially the problem-solving abilities of sixth graders at Inpres Elementary School Pampang I before the application of the Realistic Mathematics Approach based on mathematical literacy were in the low category, but after the application of the Realistic Mathematics Approach based on mathematical literacy were in the high category, as seen in the results of problem solving ability reached the Minimum Completeness Criteria and N-Gain was in the high category, 2) the activity of class VI students at Inpres Elementary School Pampang I in the learning process with the Realistic Mathematics Approach based on mathematical literacy was at the score 3.15 with a category that categorized as active, and 3) The response of class VI students at Inpres Elementary School Pampang I on learning how to construct space with a the Realistic Mathematics Approach based on mathematical literacy was at a the score 3.31 with a positive tendency category. This can be proven in the t-test output and it was known that  $t_{count} = 2,345$  and  $t_{table} \text{ value} = 2,0106$  then  $t_{count} = 2,345 > t_{table} = 2,0106$  while a significance value of  $0.02 < 0.05$  means  $H_1$  is accepted and  $H_0$  is rejected.

Based on the effectiveness criteria, it can be concluded that the Realistic Mathematics Approach based on mathematical literacy is effective in solving mathematics problems for sixth grade elementary school students in Cluster III, Panakkukang, Makassar. Furthermore, these findings indicated that PMR based on Mathematics Literacy can be used as an alternative method to enhance learning outcomes, especially on the students' mathematics problem solving abilities.

**Keywords:** *Effectiveness, Realistic Mathematics Approach based on Mathematics Literacy, Mathematical Problem Solving*





## ABSTRAK

**TITIN NURSYAMSI. 2021.** *Efektivitas Pendekatan Matematika Realistik Berbasis Literasi Matematika terhadap Kemampuan Pemecahan Masalah Siswa Kelas VI SD Se-Gugus III Kecamatan Panakkukang Kota Makassar.* Tesis. Jurusan Pendidikan Dasar Pascasarjana Universitas Muhammadiyah Makassar. Pembimbing Dr. Baharullah, M.Pd. dan Dr. Hj. Hidayah Quraisy, M.Pd.

Penelitian ini bertujuan untuk mengetahui efektivitas Pendekatan Pendekatan Matematika Realistik Berbasis Literasi Matematika terhadap Kemampuan Pemecahan Masalah Siswa Kelas VI SD Se-Gugus III Kecamatan Panakkukang Kota Makassar tahun ajaran 2020/2021. Penelitian ini merupakan penelitian kuantitatif dengan jenis penelitian quasi eksperimental design dengan desain penelitian Pretest-Posttest Comparison Group Design. Penelitian ini melibatkan 48 siswa sebagai sampel penelitian yang terbagi atas kelas eksperimen 1 dan eksperimen 2. Penelitian ini menggunakan teknik pengumpulan data yaitu tes tertulis yaitu instrumen tes hasil belajar terkait kemampuan pemecahan masalah siswa dan observasi menggunakan lembar observasi aktivitas siswa serta angket respon siswa. Data yang diperoleh dianalisis statistika deskriptif dan analisis inferensial.

Hasil penelitian menunjukkan bahwa 1) hasil belajar matematika khususnya kemampuan pemecahan masalah siswa kelas VI di SD Inpres Pampang I sebelum penerapan pendekatan matematika realistik berbasis literasi matematika berada pada kategori rendah, namun diterapkan pendekatan matematika realistik berbasis literasi matematika berada pada kategori tinggi, terlihat pada hasil kemampuan pemecahan masalah mencapai Kriteria Ketuntasan Minimal, serta N-Gain berada pada kategori tinggi, 2) aktivitas siswa kelas VI di SD Inpres Pampang I pada proses belajar dengan pendekatan matematika realistik berbasis literasi matematika berada pada nilai 3,15 dengan kategori cenderung aktif, dan 3) Respon siswa kelas VI di SD Inpres Pampang I Makassar pada pembelajaran bangun ruang dengan pendekatan matematika realistik berbasis literasi matematika berada pada nilai 3,31 dengan kategori cenderung positif. Hal tersebut dapat dibuktikan pada output uji-t dan diketahui pada  $t_{hitung} = 2,345$  dan nilai  $t_{tabel} = 2,0106$  maka  $t_{hitung} = 2,345 > t_{tabel} = 2,0106$  sedangkan nilai signifikansi  $0,02 < 0,05$  berarti  $H_1$  diterima dan  $H_0$  di tolak.

Berdasarkan kriteria keefektifan disimpulkan bahwa pembelajaran matematika realistik berbasis literasi matematika efektif dalam memecahkan masalah matematika siswa kelas VI SD se Gugus III kecamatan Panakkukang Kota Makassar. Dan temuan ini menunjukkan bahwa PMR berbasis Literasi Matematika dapat dijadikan alternatif metode untuk mengoptimalkan hasil belajar terutama kemampuan pemecahan masalah matematika siswa.

**Kata kunci** : Efektivitas, Pendekatan Matematika Realistik berbasis literasi matematika, pemecahan masalah matematika