

## **Developing Student's Notion of Measurement Unit For Area**

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### ***Abstract***

Many researchers found that students have difficulties in understanding area measurement. Students mostly focus on applying formula to find the area of certain shapes without knowing what the area is and why the formula works. It is important for the students to know what attribute being measured and to construct the unit for area measurement. Therefore, the aim of this research is to develop activities that support students to know the attribute of area and the notion of measurement unit in learning area measurement. For this purpose, design research is chosen for achieving the research goal. Realistic Mathematics Education (RME) underlies the design of context and activities. A teacher and students in grade 3 in elementary school (SDN 21) in Palembang Indonesia will be involved in this research.

**Keywords:** Area measurement, unit, design research, RME

### ***Abstrak***

Banyak peneliti menemukan bahwa siswa mengalami kesulitan memahami pengukuran luas. Siswa kebanyakan hanya fokus pada penerapan rumus untuk menentukan luas bangun datar tertentu tanpa mengetahui pengertian luas dan tidak mengerti mengapa rumus tersebut dapat digunakan. Sehingga dirasa sangat penting bagi siswa untuk mengetahui karakteristik luas dan mengkonstruksi satuan luas. Oleh karena itu, tujuan dari penelitian ini adalah untuk membangun kegiatan kelas yang mendukung siswa mengenal karakteristik luas dan mengagaskan satuan untuk mengukur luas. Design research dipilih sebagai metode penelitian guna mencapai tujuan penelitian. Rancangan konteks dan aktivitas dilandasi oleh Realistic Mathematics Education (RME) atau yang lebih dikenal dengan Pendidikan Matematika Realistik Indonesia (PMRI). Guru dan siswa kelas 3 SDN 21 Palembang Indonesia dilibatkan dalam penelitian ini.

**Kata Kunci:** Pengukuran Luas, Satuan, Design Research, RME

### ***Introduction***

People deals with measuring situations every days such as measure how much ingredient put when cooking, how far the school from the student's house or how large a garden. Interpreting the number is important to communicate the result of measuring to the other. It means that competence in measuring is needed to teach in primary school. According to Reys et al (2007) measurement should be included in