# Grade 11 Students' Euclidean Geometry Learning Opportunities in Some South African Schools

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## Abstract

To address student underachievement in mathematics, especially in Euclidean geometry at the secondary school level as noted in many examination reports and research studies there is a need to understand the learning opportunities made available to students at schools. This qualitative case study investigated students' opportunity to learn Euclidean Geometry in Grade 11 in some schools in South Africa. To achieve this, the study explored the Euclidean geometry content taught in the school and the time devoted to the teaching of the content. The study was conducted in six secondary schools in one education district in Gauteng province. Data was gathered using teaching and learning artefacts. It was found that most of the Grade 11 Euclidean geometry contents (Investigate and prove the theorems of the geometry of circles, and of the theorems and their converses to solve riders) were taught in the school however the contents were not covered in depth. Concerning the instructional time, three schools used far less than the recommended instructional time in teaching the content. These findings imply that the students were not given sufficient opportunity to learn the topic. The implications of the findings are discussed, and recommendations are made.

**Keywords:** Content coverage, Geometry, instructional time, mathematics content, time on task