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Challenges Faced by Entry-level University Students in Word Problems Involving Fractions Terminology

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ABSTRACT This paper emanates from a larger study undertaken at a South African comprehensive university. The aim of the study was to identify students' prior knowledge in fractions when they enroll for science and technology related diploma courses at tertiary institutions. This enables appropriate educational scaffolding. The study involved a sample of 94 first-year national diploma students out of a population of 120 students from three cohorts, namely, Civil and Electrical Engineering and Analytical Chemistry. Almost all the students had English as second language in school. The instrument consisted of 20 items, three of which were multiple-choice questions (MCQs). The research design included a survey. The data was analyzed using Microsoft Excel 2013. Due to space constraints, this paper reports on the findings that a proportion of students exhibited difficulties with mathematical terminology when dealing with word problems on fractions.