

The Grade Six Pupils' Learning Styles and Their Achievements and Difficulties on Fractions Based on Kolb's Model

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Abstract : One of the ultimate goals of any nation is to produce competitive manpower and this includes Philippines. Inclination in the field of Mathematics has a significant role in achieving this goal. However, Mathematics, as considered by most people, is the most difficult subject matter along with its topics to learn. This could be manifested from the low performance of students in national and international assessments. Educators have been widely using learning style models in identifying the way students learn. Moreover, it could be the frontline in knowing the difficulties held by each learner in a particular topic specifically concepts pertaining to fractions. However, as what many educators observed, students show difficulties in doing mathematical tasks and in great degree in dealing with fractions most specifically in the district of Datu Odin Sinsuat, Maguindanao. This study focused on the Datu Odin Sinsuat district grade six pupils' learning styles along with their achievements and difficulties in learning concepts on fractions. Five hundred thirty-two pupils from ten different public elementary schools of the Datu Odin Sinsuat districts were purposively used as the respondents of the study. A descriptive research using the survey method was employed in this study. Quantitative analysis on the pupils' learning styles on the Kolb's Learning Style Inventory (KLSI) and scores on the mathematics diagnostic test on fraction concepts were made using this method. The simple frequency and percentage counts were used to analyze the pupils' learning styles and their achievements on fractions. To determine the pupils' difficulties in fractions, the index of difficulty on every item was determined. Lastly, the Kruskal-Wallis Test was used in determining the significant difference in the pupils' achievements on fractions classified by their learning styles. This test was set at 0.05 level of significance. The minimum H-Value of 7.82 was used to determine the significance of the test. The results revealed that the pupils of Datu Odin Sinsuat districts learn fractions in varied ways as they are of different learning styles. However, their achievements in fractions are low regardless of their learning styles. Difficulties in learning fractions were found most in the area of Estimation, Comparing/Ordering, and Division Interpretation of Fractions. Most of the pupils find it very difficult to use fraction as a measure, compare or arrange series of fractions and use the concept of fraction as a quotient.

Keywords : difficulties in fraction, fraction, Kolb's model, learning styles

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