

A Study of Difficulty in Understanding Word Problems in General Mathematics among Class 7th Students

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Abstract: *Students' chemistry performance is one of the main concerns in chemistry education. Nevertheless, many students perceive chemistry as one of the difficult core subjects to be learned. This negative thinking can be due to many factors that hinder their chemistry learning. To get a better picture of the hindering elements in students' learning, this study was therefore conducted to explore the challenges, obstacles and difficulties experienced by students in the process of chemistry learning. Qualitative research using case study design was employed*

Keywords: Chemistry performance

I. INTRODUCTION

Word problem solving in mathematics is an important aspect of learning mathematics and mathematical thinking. Unfortunately, in everyday work, students exhibit difficulties solving word-problems, even when they may be skilled in performing other mathematics tasks. They easily execute basic mathematical operations such as addition, subtraction, multiplication, and division. These students ably identify units of measurement and perform calculation tasks with numbers and equations. However, when the operations are behind word problems, many students struggle to know what to do. In some instances, students attempting to solve a word problem will be able to identify some elements of the problem but are unable to complete all of the required operations and will be unable to produce an acceptable answer. According to researchers, a particularly difficult part of solving word problems is the understanding of the problem, especially the words that are included in some problems. Not understanding certain words presents the first difficulties in word problem solving, causing misapplication of appropriate mathematical operations.

II. RESEARCH PROBLEM

Word problems have an important role mainly because most life situations are described in words. Word problems offer practice for situations in everyday life in which mathematics learners will need what they have learned in school; give students an idea about the importance of school mathematics when they grow up and move into the world; evaluate the intelligence or mathematical ability of solvers; train students to think creatively and/or to develop their heuristic skills and their problem-solving abilities and last but not least develop mathematical concept and skills. The most typical word problems in school mathematics are represented by a brief text description of a situation with not all quantities being explicitly given; the solver is required to give a numerical answer to a question using the information given in the text (Verschaffel, Greer & De Corte, 2000).

Examples:

- **Word problem:** Two daughters of Mr. Mahendra, Priya and Meera, earned together Rs.181. The difference between their two salaries was Rs. 37. How much did each daughter earn?
- **Verbally stated numerical problem (not considered as a word problem):** Solve the quadratic equation $x + 3x - 7 = 0$.

2.1 NEED OF PRESENT STUDY

The difficulty of students in solving social arithmetic story questions needs to get attention. Difficulties experienced by students in solving these problems need to be identified to determine the factors causing it. Analysis of student

difficulties in solving social arithmetic problems can be used to improve quality teaching and learning activities in mathematics and ultimately is expected to improve achievement learn math. This can be seen from the process of learning mathematics in schools that is not able mastering the material provided by the teacher which results in students being unable to identify and solve questions in the form of stories in mathematics. Groups the factors of student learning difficulties into two kinds namely factors from within (internal) and factors from outside of students (external). From an internal perspective, one of them is the student's intelligence. To overcome this knowledge is needed to know what factors become the causes of these difficulties so that efforts can be made to minimize difficulties experienced by students. The goal to be achieved in this study is to describe the types the difficulty of students in solving social arithmetic story questions in class VII and analyze the factors that cause difficulties in solving problems social arithmetic stories in class VII

2.2 STATEMENT OF PROBLEM

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III. CONCEPTUAL AND OPERATIONAL DEFINITION

WORD PROBLEM

THEORETICAL DEFINITION: - A problem is a situation, question, or thing that causes difficulty, stress, or doubt. A problem is also a question raised to inspire thought. In mathematics, a problem is a statement or equation that requires a solution.

OPERATIONAL DEFINITION: - A mathematics question written as one sentence or more that requires children to apply their mathematics knowledge.

3.1 OBJECTIVES

- This study generally aimed at identifying the challenges encountered by the students of Standard VII in solving mathematical word problems. Specifically, it sought to: 1. Identify the profile of the respondents in terms of age and gender.
- To identify the challenges encountered by the VII Standard students in solving mathematical word problems in terms of their attitudes toward Math.
- Determine the challenges encountered by the VII Standard students of in solving mathematical word problems in terms of the teaching skills.
- Ascertain the challenges encountered by the students of in solving mathematical word problems in terms of the instructional materials.

3.2 SCOPE OF PRESENT STUDY

- The study makes an attempt to understand the difficulties faced by the students while studying math's.
- The study makes an attempt to understand the difficulties that students face when understanding the word problems in math's subject in 7th std.

3.3 DELIMITATIONS

- The study is limited to a particular group of students of a particular age and standard.
- The study is limited to students of Chichavali Mumbai Public School.
- The study is limited to understand the difficulties faced by students in only one math's topic.

3.4 RESEARCH DESIGN FOR PRESENT STUDY

The design or the methodology of the research conducted is Descriptive Survey Method. The method adopted by the research includes questionnaire developed by the research making it a descriptive survey method.

3.5 SAMPLING FOR THE PRESENT STUDY

The sampling comprised of class 7th students, both male and female from Chichavali Mumbai public school, Malad (west). Random Sampling method is used for the school of data in this project. It seeks to obtain precise information concerning difficulties in understanding word problems in mathematics and draw valid and general conclusion.

3.6 PROCEDURE

- The Research studied articles, research papers pdf of many author's research work on various research papers of difficulty in understanding word problems in mathematics.
- Then the researcher discussed and decided sample, method and tool with the help of the guide teacher.
- The researcher prepared questionnaire for the action research topic, decided the format for the research rating scale. The questionnaire was checked and approved by the guide teacher.
- The researcher selected oneSchool- Chichavali Mumbai Public School, Malad (west)
- The researcher met the principal of Chichavali Mumbai Public School to take permission to conduct the survey.
- The researcher then formed a questionnaire from as research tool. With the cooperation of the respective teacher and students, the form was distributed.

3.7 TECHNIQUES OF ANALYSIS

The statistical measures used were:

1. Percentage: percentage out of total was obtained.
2. Pie diagram: it is a graphical representation of frequency obtained.
3. Bar diagram: it is graphical representation of frequency obtained.

IV. MAJOR FINDINGS OF THE STUDY

This study was designed to investigate the problems faced by higher secondary school students in learning word problems in mathematics. From the above researched and collected data the researcher has found out various importance aspects from this study of research.

The researcher collected her data from **Chichavali Mumbai public school, Malad (west)**.

The findings of the following data were:

- Mathematics subject was liked by the maximum number of students of standard 7th, Division A.
- The students liked to practice word problems.
- The students sometimes participated in the problem solving discussions.
- Majority of them claimed that they knew about the steps to solve word problems.
- The students preferred to study about the activity method in word problem solving.
- The students also preferred to study about operations that are used to solve word problems in mathematics.

V. RECOMMENDATIONS

- The researcher recommends this study to teachers who are teaching in schools.
- The researcher recommends this study to parents.
- The researcher recommends this study to students.

VI. SUGGESTIONS FOR FURTHER RESEARCH

- The researcher would suggest to conduct a study on another higher secondary standards
- The researcher would like to suggest to do this study in other boards.
- The researcher would suggest to conduct this study in a greater number of schools in Malad area.

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