Difficulty Value of Subject Mathematics for standard IX Semester II GSEB, Board, Gujarat

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Article Info.

A B S T R A C T

Mathematics is of great interesting subject related to Logical strength. If students understand properly and it is possible to make Mathematics easy then this subject sharper student properly and student's efficiency of learning Mathematics will increased and if at same movement they got opportunity to learn Mathematics individually then tremendous achievement they can do and achievement in Mathematics will create interest in other subject also sometime it is not that whole Mathematics subject become difficult but few content may be difficult and student feels whole Mathematics subject is difficult. So researcher made content question paper to find difficulty value of Mathematics subject of standard 9th (Sem. 2) by frequency distribution. For those 100 students of 10th standard with the help of 15 Mathematics teachers, researcher tries to find out difficulties of Mathematics in standard 9th (Sem. 2). Frequency distribution is used for interpreting student data and item analysis for teacher's qualitative data. In these interpreting geometry related chapter's found to be quite difficult to learn and students gets difficulties in figure identifying and drawing, specially circle chapter become tuff for student where as static algebra, herons equation, construction were quite easy for student.

Introduction

Mathematics is an important subject and it is said that "Prevention is better then cure." In today's time lots of experiments are performed to improve education. But before using all

this activities or experiment successfully, first actually we need to see, where exactly student are making mistake and where they are facing difficulties, then only efforts can be done to remove that difficulties. So if learning is done after removing problem faced by student point of view. That is very important to know about content related problem of Mathematics. As said student doing best achievement in Mathematics do well in other subject expert of std 9th (Sem. 2) selected the topic.

Objectives

- ➤ To get chapter wise information of tuff nest of std. 9th Mathematics.

- ➤ To get chapter wise information of difficulties faced by students in learning Mathematics in std. 9th (Sem. 2).

Questions to be answer

- ➕ Which chapters are difficult in learning by students of std. 9th (Sem. 2).

Importance of the Study

The importance of this study is as under

- ✓ We will be able to find out the difficulties faced by students in learning Mathematics.

- ✓ In the present syllabus ways to generate interest in learning Mathematics can be drawn.

- ✓ Students could be guided towards a more positive attitude for learning Mathematics.

- ✓ Interest in subject of Mathematics will create interest in other subjects.

Population and sample of the study

Population

All the students of Gujarat State studding in Std 9th (Sem. 2) Gujarati medium during academic year (2013-14) we considered as population of the study.

Sample

In this study sample of students and teachers are selected from Valsad District.

1) 15 Teachers who are currently teaching Mathematics subject in Std 9th from 8 different school.

2) 100 students studying in Std 10th gathered from 2 school.

Table No. 1

School Name with students

No.	School Name	Number of Student of Std 10th
1	Shri M. K. Mehta High School Solsumba	50
2	Shramjivi Vidhyalaya, Valsad	50

Preparation of Research Tool

In the present study to finding problems, researcher took self-made difficulty value measurement which contains every chapter of Std. 9th (Sem. 2) in Mathematics subject.

Table No. 2

Chapters with weight age

Sr.No.	Chapter Name	Marks
10	Quadrilaterals	5
11	Area of Parallelogram and Triangles	5
12	Circles	5
13	Construction	5
14	Herons' Formula	5
15	Surface area and Volume	5
16	Statistics	5
17	Probabilities	5
18	Logarithm	5
Total Marks		**45**

In addition to know difficulty value in Mathematics subject of Std 9th (Sem. 2), researcher made meeting with 15 Mathematics teacher from different 8 secondary school who teach Mathematics in Std 9th (Sem. 2). Researcher gave self-made difficulty value measurement to 5 different Mathematics teacher specially who teach Mathematics Subject in Std 9th (Sem. 2) for at least 5 to 10 years for check the reliability value and validity value of tool.

Research design

In the present study meeting method and content analysis techniques were used to collect the data from the 10th standard students and teachers who teach Mathematics subject in Std. 9th (Sem. 2).

Procedure for the data collection

For data collection researcher personally visited 2 Gujarati Medium secondary schools and gave difficulty value measurement check list to the students and taking interviews of 15 teachers from 8 schools who teach Mathematics subject in Std 9th (Sem. 2).

Techniques for Data analysis

For analyzing the data given by students, researcher used frequency distribution and qualitative analysis for data of interviews given by teachers.
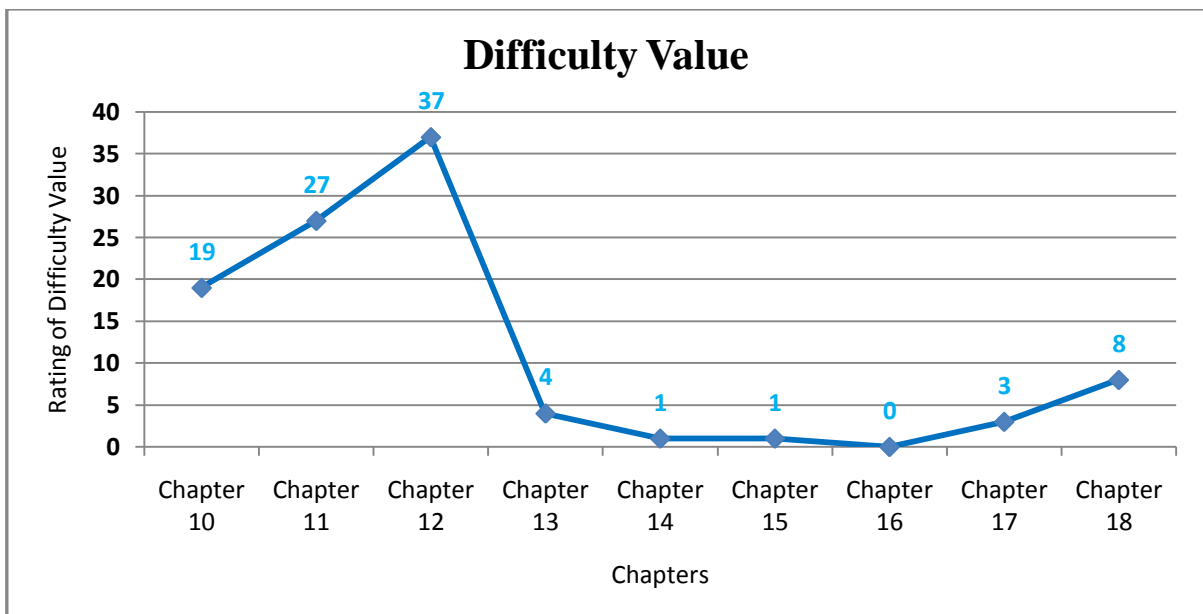
Results

Results derive from students

The tables and graphs are used for analysis are shown below as chapter wise difficulty value calculate by frequency distribution of student data.

Table No. 3

Chapter included with D.V. Rating

Sr.No.	Chapter Name	Difficulty value rating
10	Quadrilaterals	19
11	Area of Parallelogram and Triangles	27
12	Circles	37
13	Construction	4
14	Herons' Formula	1
15	Surface area and Volume	1
16	Statistics	0
17	Probabilities	3
18	Logarithm	8

Results derive from Teachers

During teachers meeting following problems were highlight.

$\Rightarrow$ Students feel difficulty in Geometry chapters.

$\Rightarrow$ Students gets difficulties in identify, understanding and drawing geometry figures.

$\Rightarrow$ The major difficulties of students are in circle chapter.

Educational Findings

✓ Students got difficulty in learning Mathematics in Std 9th (Sem 2).

✓ Students do mistake to draw figures related to definition.

✓ To draw geometry figure in group is difficult for students**.**

Conclusion

After knowing difficulties of students for learning Geometry in Mathematics we should use new teaching approach, which will be beneficial to make Mathematics easy for the students to understand. If student understand properly they will be interested in Mathematics and it will be helpful to create interest in other subject also and it helps to encourage students for higher studies too.

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