



# A Study of the Opinions of Science Teacher about the Current Text Book of Science and Technology for Standard 10

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## Abstract:

*Text book is an important part of a curriculum. It is the best teaching mean. It directly comes in the hand of the students, the students refers it as 'Bhagved Geeta' referred by Hindus and Quran referred by Muslims. Therefore its quality is most important. The text book is prepared according to the curriculum. Some times neither teachers nor students know about the curriculum but they know it by the text book. The teacher teaches I and evaluates in the limitation of text book. So in teaching learning process, the teachers and students are mostly depend on the text book. In science, many inventions are done and the knowledge of science is expanded day and night. So it must be updated. From this study the researcher wanted to know the qualities and limitations of the text book of 'science and technology' of Std.-10. It can help us to make the text book best. From this study we can get good suggestion for marking the text book better.*

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**Keywords:** *Opinion, Science & technology, Science teacher, Text book*

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## 1. Introduction

The science teachers who teach standard 10<sup>th</sup> "Science and Technology" know about text books very well. They know which topics are hard and which are not interesting. They are much familiar with the text book. So they can give good suggestions about the book. So their suggestions are valuable for the next generation of the text book. This study will bring new ideas about the text book.

## 2. Identification of the variables

### 2.1 Independent variable

Opinions of the teachers about the text book of science and Technology of standard 10.

### 2.2 Dependent variables

- (1) Sex (a) male (b) female
- (2) Experience (a) up to 5 years (b) more than 5 years
- (3) Types of schools (a) Granted (b) Non granted

### 2.3 Controlled (Structured) variables

- (a) Ahmedabad city (b) Medium of study: Gujarati

## 3. Objectives of study

Objectives of the study are as follows,

1. To make Opinionnaire for getting the opinion on the text book of Science and Technology.
2. To study the opinion of science teachers on the text book of Science and Technology.
3. To study the opinion of science teachers on the text book of Science and Technology according to their sex.

4. To study the opinion of science teachers on the text book of Science and Technology according to their experience.
5. To study the opinion of science teachers on the text book of Science and Technology according to types of their school

#### **4. Limitations of the study**

1. In this study only Gujarati medium's text book of Science and Technology is included.
2. In this study only the teachers who teach Science and Technology of standard 10 are included.
3. In this study only the teachers of Ahmadabad's Secondary Schools who serve during the year 2008-2009 are include.
4. In this study only the schools of Ahmedabad city are included.

#### **5. Selection of the Sample**

In this study the group of all the science teachers of the schools of Ahmedabad city is the population. Ahmedabad District Education office divides all the schools of Ahmedabad city in to 10 division known as "Shala Vikas Sankul 1 to 10."From each division above 10% schools are selected. By using stratified purposive sampling method, the research selected 150 schools from each schools, only one teacher is selected for the sample.

#### **6. Tool of research**

The Gujarat state board to school textbook has prepared a questionnaire cum Opinionnaire to evaluate and get proper information about the textbook. This tool can be used for any textbook. The researcher modified this tool according to the need of science subject. It has been shown to the expert and then the final Opinionnaire was prepared.

#### **7. Research methodology**

In this study, in order to collect the information about different variables from the sample of population. The researcher used the survey method.

#### **8. Data Collection**

The researcher got list of schools and the names and mobile numbers of principals from the Ahmedabad District Education office. After taking permission of the school principal, the researcher met, the Science teachers at given time. He gave the Opinionnaire to them and collected the information.

#### **9. Method of Data Analysis**

In this study, after collecting the opinions about the text book, the frequency distribution is prepared. Then finding the percentage, the collected data is analyzed.

#### **10. Findings and Suggestions**

1. The text book is developed according to the curriculum decided by NCERT as per national education policy.
2. In all the chapters, many figures are given in 3D format. Thus should also be given in 2D format. So the Students can draw it easily.
3. In the first chapter, the vast knowledge is given and explained the importance of non-Technology. There is nothing about the disadvantage of Nano-Technology. There would also be danger and misuse of it.

4. Questions of the exercises are based on the various objectives of teaching like knowledge, understanding. Application and skills. In some chapters, No of questions are less.
5. In chapter 2 the topic. 'Regular reflection and irregular reflection' is repeated.
6. Presentation of content of all the chapters except chapter 6 and 7 is K interesting.
7. In chapter 8, in some illustrations, it is necessary to use logarithm. But logarithm table is not given in the text book and how logarithmic calculations can be done is not also explained.
8. In chapter 2, the equation of magnification is derived in a wrong way. It leads the students' misconception. There is mistake in figure 2.10.
9. Some teachers except that some topic given below should be added in chapter 2.
  - Atmospheric refraction
  - Scattering of light
  - Colour and size of the Sun at Sunrise and Sunset.
10. With the topic of Myopia and Hypermetropia, there should be given the importance of eye donation. The information is also given. What we have to keep in mind when eyes have to be donated.
11. To make the learning, process investing, many photographs are given in the book, but more photographs should be added like below :  
Amoeba, The sensitive plant, etc.
12. Chapter 9, 12 and 17 are found hard to teach. Chapter 6 and 7 are lengthy. While teaching them children lose interest at the end.
13. Cover page of the book is not enough strong. It should be thicker; cost of book is found little high. Some books have dark colour printing and some books have faint colour printing. There is no continuity in printing. The fonts printed in blue colors are so faint that they could not be read properly.
14. Most of the parents have not any idea about the text book. They don't know about anything about the textbook. Except some printing mistakes, the printing quality is good.
15. The knowledge of science expands day and night. We can't bind it in the boundaries of the text book. Internet is the ocean of the knowledge. We can get a lot of information from it. If the students want to know more about the topics given in the book, they can use internet. In order to help the student, name of websites related to the topics, should be given in the text book at the end of each topic.
16. In future, the text book should be prepared on e-media. The text book should be available on DVD or in the pen-drive. In the e-text book we can use a lot of pictures, graphics, tables, sounds, movies, videos etc. we can put more illustrations and figures. We can show the experiments of science by video movie or animated films. In biology we can show the video clippings of animals, plants and creatures for teaching, and learning easy and interestingly.

## References

1. Atkins, A. (2001). An evaluation of the course book used for oral communication one at privately funded senior high school in Japan/www.cels.bham.ac.uk/resources/essays/atkins3.pdf.
2. Cunningsworth, A. (1995). Choosing your course book. London: Macmillan: Heinemann.
3. Johnson, K. (2006). A step forward: Investigating expertise in material evaluation. ELT Journals, 60(3) 1-7.
4. Text book on Science and Technology of Standard 10 (2011). Gujarat Rajaya Shala Pathyapustak Mandal, Gandhinagar.