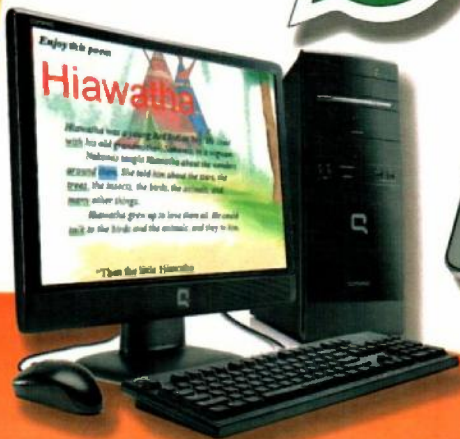
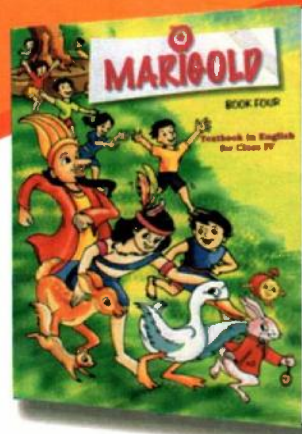
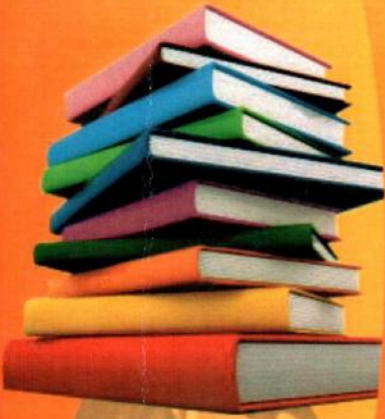




**EFFECTIVENESS OF AUDIO-VIDEO MATERIALS  
FOR DEVELOPING READING SKILLS  
OF FOURTH GRADE STUDENTS OF  
DEMONSTRATION MULTIPURPOSE SCHOOL, BHOPAL**



Programme Co-ordinator

**Dr. Jose J. Kurisunkal**

REGIONAL INSTITUTE OF EDUCATION  
(National Council of Educational Research and Training, New Delhi)  
Shyamla Hills, Bhopal - 462013



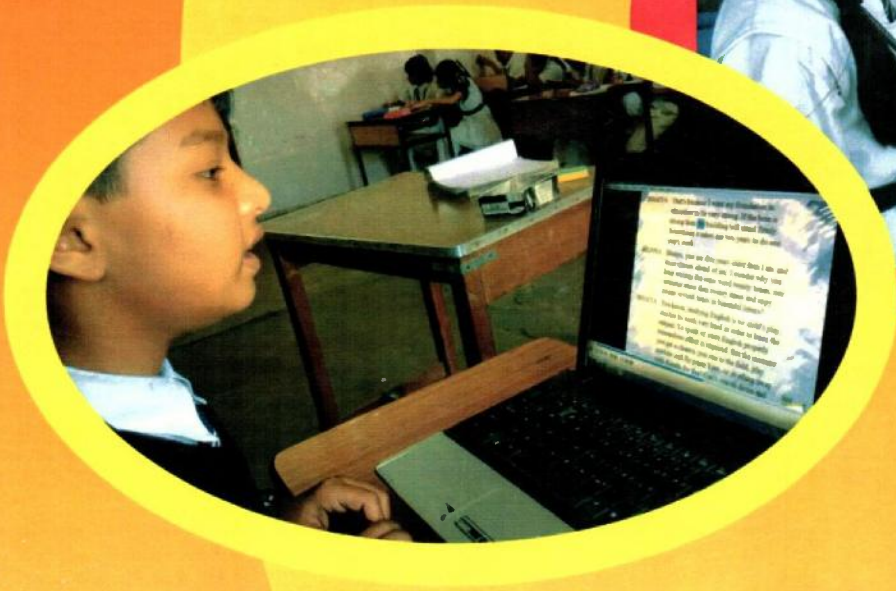
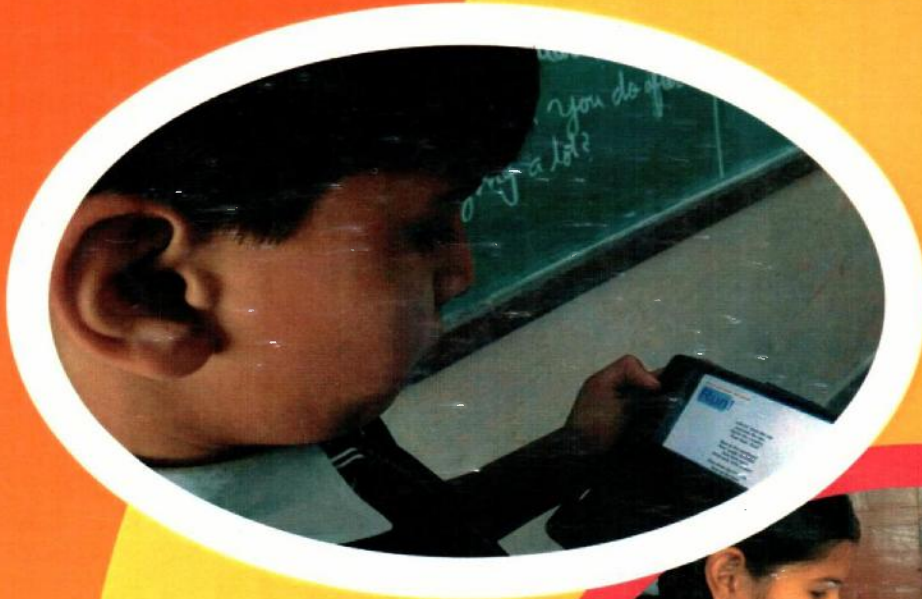
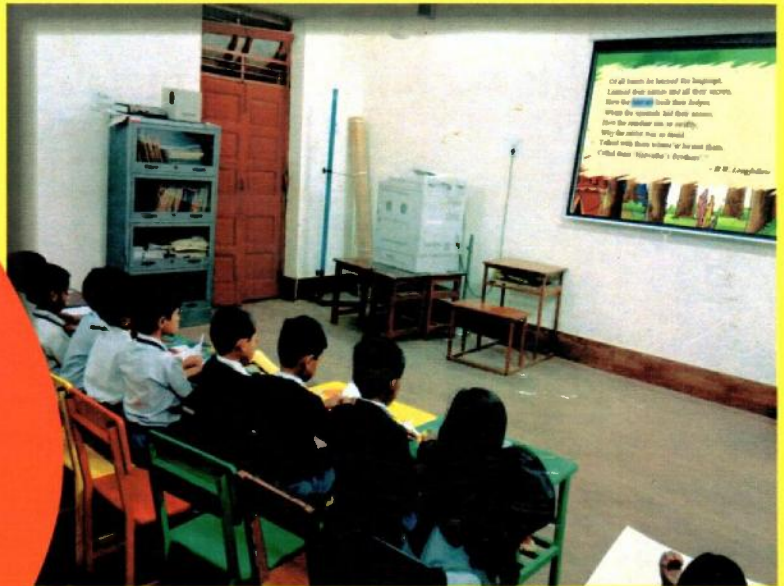
COMPREHENSION

SPELLING

READING

FLUENCY

PRONUNCIATION



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BHOPAL**

**(PAC 16.07)**

**2017 – 2018**

**A REPORT**

**Programme Coordinator**

**Dr. Jose J. Kurisunkal**

**Demonstration Multipurpose School,  
Regional Institute of Education  
[A Constituent Unit of National Council of Educational  
Research and Training (NCERT)]  
Shyamla Hills, Bhopal - 462013**



## PREFACE

*Demonstration Multipurpose School (DMS), Bhopal, serves as the laboratory of Regional Institute of Education, Bhopal for the identification and analysis of major problems in school education. It enables prospective teachers practice, learn and develop various innovative teaching strategies that contribute to the curriculum development. Reading is the one of the most integral part of the whole learning process as it leads to comprehension. Comprehension is the ability to actively listen to, read, and understand language. To comprehend a text, one's decoding skills must allow for fluent reading (reading that is as smooth and full of expression as when we talk), thus allowing a reader's cognitive energy to be used to draw connections, ask questions and make predictions. Research suggests a tested approach to improve reading comprehension levels significantly by using audio formats of the text books. The use of these audio formats can improve reading and academic performance of the learners. The components involved in reading are pronunciation, fluency, comprehension and spelling recognition, It is necessary to develop the reading skills of Grade IV students as this is the penultimate year in primary where the foundation for the future is laid. The next academic year will be their last year in the primary and hence it should be ensured that the students have developed optimum reading skills. In DMS Bhopal, a number of students come from the economically weaker sections of the society, moreover most of them are first generation English learners, hence they, literally get no support from the parents and other members of the family with regards to learning of English.. The study is an account of the successful endeavour into delving into innovative practices whereby the utilization of textbooks in audio and video form has lead to successful development of various aspects of reading skills namely, pronunciation, fluency, comprehension and spelling. This development of reading skills has further lead to improvement in the academic achievement of the students. PAC programmes are an excellent opportunity for the teachers at school level to work independently. As a school teacher this proves to be a wonderful chance to carry out innovations with the students.*

*I owe a sincere debt of gratitude to Prof. H. K. Senapaty, Director, NCERT, who motivated me to conduct this research work. I place my deepest appreciation and*



*thanks to Prof. N. Pradhan, Principal, R.I.E., Bhopal who regularly enthused me with vigour to continue this daunting project work. I thank Prof. I. B. Chugtai, Dean of Instructions, Prof. L. K. Tiwari, Head, Department of Extension Education and Prof. Ramesh Babu, Dean, Research for their continuous support in successful completion of this research work.*

*I would like to place on record my sincere gratitude to Prof. Ratnamala Arya and Dr. N. C. Ojha, , ICT In-charge Department of Education, Regional Institute of Education, Bhopal, for their readiness to provide suggestions whenever approached and for providing the necessary motivation and facilities in the department.*

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*I express my heartfelt thanks to my mother Mrs. Sosamma Joseph and father Mr. K. J. Joseph, for their love, encouragement and regular motivation to complete the work. They cared and shared all my pains and pleasures through out the research work. I am heartily thankful to my wife, Mrs. Fancy Jose, who supported me with her co-operation and constant encouragement. I am also thankful to my affectionate daughters Gloria, Christina and Grace for putting up so sensibly with my inevitable negligence of her indispensable needs.*

*At last I express my thankfulness to God who makes all things possible and without whom I could not have embarked upon this endeavour, for, "Those who trust in the Lord will find new strength. They will soar on wings like eagles; they will run and not grow weary, they will walk and not be faint." (Isaiah 40:31)*

**Dr. Jose J. Kurisunkal**  
**Programme Co-ordinator**

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## ABSTRACT

The mastery of any language depends on mastery of listening, speaking, reading and writing. While listening and speaking comes naturally to the students, reading is specialized skill that needs concentrated efforts both on the part of the teacher and the taught. The components involved in reading are pronunciation, fluency, comprehension and spelling recognition. Research suggests a tested approach to improve reading comprehension levels significantly by using audio formats of the text books (Whittingham, Huffman, Christensen and McAllister, 2013). However the researcher was of the view that providing text both in audio and video format would further improve the reading ability of the students. No such efforts have been made in the near past where the text has been provided both in the audio and video format. Moreover current ICT tools and technologies have greatly made it possible to use such an approach in all classrooms. The present paper is an account of an experiment done in a CBSE primary school. It includes the strategy to improve the reading ability of the students by converting the NCERT primary level textbooks into audio and video format using ICT tools and measuring its effectiveness on the reading and over all achievement of the students. The objectives of the present experimental study were to study the effectiveness of providing NCERT primary level textbooks in audio and video format on the students' reading ability, overall achievement, pronunciation, comprehension, language fluency and spelling. Sample consisting of seventy students of Class-IV for the session 2016-17 were divided into two groups of 35 students each. One group was randomly chosen as the experimental group and the other as the control group. The tool includes the rubrics provided by CBSE to evaluate the reading ability of the students based on their performance on Pronunciation, Fluency, Comprehension and Spelling. The final examination marks was taken as academic achievement. The findings revealed that providing textbooks in audio and video format enhanced students' academic achievement, reading ability, pronunciation, fluency and comprehension and had no influence on spelling.

## CHAPTER – 1

### INTRODUCTION

#### 1.0 Background of the Study

It is difficult to trace history of teaching and learning. It is as old as civilizations. It grew with us. Human beings learnt many things by themselves and eventually teaching would have begun. It was a time when teaching and learning used to take place in *Gurukuls* or *Ashrams*. *Rishies* used to teach using direct teaching method. It traveled from one generation to another and will continue to travel. As civilizations grew the scene of teaching and learning changed. Today the number of students has increased. There are separate schools and institutions for graded education. There are specializations of subject and faculty. It gave raise to experiments in teaching methods. Hence many teaching methods were developed. Looking at the demand of the day many innovations took place in teaching and learning methods.

As one of the teacher and learner, investigator also experiments and tries various innovations in the field. As a teacher it is many time difficult to cater to the problems of each and every child, even if a lot of efforts are put in especially in the case of developing reading skill. It is a time consuming affair and the technicalities of reading shows that reading is developed gradually with regular efforts on the part of the learner. The teacher has in his part to provide as many opportunities for exposure. The school that the investigator teaches is one which caters to the students from low socio economic status. Many of the students are first generation learners or at least first generation English learners. The parents have never learnt English themselves and thus are not able to help their children. They have no resource to expose their children to proper and correct English. Their problem lies in the fact the language skills such as listening, reading, speaking and writing. These skills are the base of any language learning. Among these four skills, listening and speaking skills can be acquired naturally with exposure. The researcher wanted to find out better option for improving reading skills of primary students.

In Indian context English is the second language. Since reading is very important in learning second language, a great effort has been given to develop reading skill. Although many ways have been promoted in order to improve reading skill among students,

reading is still something that is seems problematic. Students can't understand English text. These problems occurred because according to Noormah (2000) the students are lacking of vocabulary, hardly understand the words and less interest to English subject. Besides that, there are also several factors contributing to the diffident of this particular skill. Based on Sivaguru (2000) those factors are home, school and social environment. If the student is living in a family where English to them is a familiar language, frequently spoken by the members of the family then the student will have the advantage of being exposed to the language. Unlike student with no English familiarity in his family where English is seen as a bizarre language to be spoken, this kind of environment demodulates his motivation to learn the language.

Moreover, school is also one of the factors that contribute to the incompetence in reading. This is where the role of teacher in promoting the language to the students. Some teacher just might not fully use English during English class especially in the primary school. This is just because the teacher intended to suit her level with the students and as a result a lot of code switching is used. This early exposure to the lack of using English in class causes a serious impact when they further their study in a higher education level.

Learning to read is complex. Children don't learn one reading-related skill and then move on to the next in a step-by-step process. Instead, they must develop competency in four areas simultaneously: word identification, comprehension, fluency, and motivation. They begin to develop these competencies by listening to books read aloud. That's one reason why it's so important for children to have experiences with books. However, most children don't learn to read independently until they receive formal instruction in school, which is why good reading instruction is so important. Reading is a complex developmental challenge that we know to be intertwined with many other developmental accomplishments: attention, memory, language, and motivation, for example. Reading is not only a cognitive psycholinguistic activity but also a social activity. Being a good reader in English means that a child has gained a functional knowledge of the principles of the English alphabetic writing system. Young children gain functional knowledge of the parts, products, and uses of the writing system from their ability to attend to and analyze the external sound structure of spoken words. Understanding the basic alphabetic principle requires an awareness that spoken language can be analyzed into strings of



separable words, and words, in turn, into sequences of syllables and phonemes within syllables. Beyond knowledge about how the English writing system works, though, there is a point in a child's growth when we expect "real reading" to start. Children are expected, without help, to read some unfamiliar texts, relying on the print and drawing meaning from it. There are many reasons why children have difficulty learning to read. In order to address these problems and to bridge the gap an effort is made through the use of multimedia.

Technology and multimedia materials offer the potential for addressing the challenges of reading instruction. For more than 2 decades, researchers have been using innovative technology to engage students, build connections between oral and written language, prompt active reading, and provide supplemental tutoring. In the process, technology and the understanding of how to support reading instruction and achievement have both advanced. Multimedia reading materials and environments offer a variety of flexible supports including text-to-speech, voice recognition, animation, music and sound effects, embedded dictionaries, linked videos to boost background knowledge and vocabulary, study tools such as highlighters and annotation capabilities, and animated agent tutors. In the present study suggestions for choosing multimedia materials and integrating them into reading instruction effectively is stated as a strategy to improve reading skills.

### **1.1 Reading**

Reading is a complex "cognitive process" of decoding symbols in order to construct or derive meaning (reading comprehension). Reading is a means of language acquisition, communication, and of sharing information and ideas. Like all languages, it is a complex interaction between the text and the reader which is shaped by the reader's prior knowledge, experiences, attitude, and language community which is culturally and socially situated. The reading process requires continuous practice, development, and refinement. In addition, reading requires creativity and critical analysis. Consumers of literature make ventures with each piece, innately deviating from literal words to create images that make sense to them in the unfamiliar places the texts describe. Because reading is such a complex process, it cannot be controlled or restricted to one or two interpretations. There are no concrete laws in reading, but rather allows readers an escape

to produce their own products introspectively. This promotes deep exploration of texts during interpretation. Readers use a variety of reading strategies to assist with decoding (to translate symbols into sounds or visual representations of speech) and comprehension. Readers may use context clues to identify the meaning of unknown words. Readers integrate the words they have read into their existing framework of knowledge or schema (schemata theory).

## **1.2 History of Reading**

The history of reading dates back to the invention of writing during the 4th millennium BC. Although reading print text is now an important way for the general population to access information, this has not always been the case. With some exceptions, only a small percentage of the population in many countries was considered literate before the Industrial Revolution. Some of the pre-modern societies with generally high literacy rates included classical Athens and the Islamic Caliphate. Scholars assume that reading aloud was the more common practice in antiquity, and that reading silently was unusual. In his *Confessions*, Saint Augustine remarks on Saint Ambrose's unusual habit of reading silently in the 4th century AD. During the Age of Enlightenment, elite individuals promoted passive reading, rather than creative interpretation. Reading has no concrete laws, but rather allows readers an escape to produce their own products introspectively, promoting deep exploration of texts during interpretation. Construction, or the creation of writing and producing a product, was believed to be a sign of initiative and active participation in society, while consumption or reading, was viewed as simply taking in what constructors made. Also during this era, writing was considered superior to reading in society. Readers during this time were considered passive citizens, simply because they did not produce a product. Michel de Certeau argued that the elites of the Age of Enlightenment were responsible for this general belief. Michel de Certeau believed that reading required venturing into an author's land, but taking away what the reader wanted specifically. Writing was viewed as a superior art to reading during this period, due to the hierarchical constraints the era initiated.

In 18th-century Europe, the then new practice of reading alone in bed was for some time considered dangerous and immoral. As reading became less of a communal, oral practice and more of a private, silent one, and as sleeping likewise more often took place in

individual bedrooms rather than in communal sleeping areas, concerns were raised that reading in bed could give rise to various dangers, such as fires caused by bedside candles. Modern critics have argued, however, that these concerns were based on the fear that readers – especially women – could escape their familial and communal obligations and transgress moral boundaries by losing themselves in the private fantasy worlds that books made available.

### **1.3 History of Print in India**

There is evidence that the use of the concept of mass duplication in India dates back to the time of the Indus Valley Civilization. Grants of land were originally recorded by engraving the information on copper plates and etchings on different surfaces like wood, bone, ivory and shells. However, printing arrived about a hundred years after the Gutenberg Bible was first printed. Many factors contributed to the necessity of the initiation of printing in the subcontinent, the primary being evangelization and the Jesuits were solely responsible for this. Francis Xavier is known to have been teaching the Bible in Tharangambadi (Tranquebar), Tamil Nadu around 1542. Also, when the Viceroy of Goa, on behalf of King Joao III of Portugal, opened schools for Indians, Francis Xavier pressured Portugal to make printing presses available to India, Ethiopia and Japan. Meanwhile, the Emperor of Abyssinia (now Ethiopia) also requested Portugal to send a press along with missionaries. Consequently, the first batch of Jesuit missionaries, along with the printing press, left for Ethiopia on March 29, 1556, on a Spanish ship. The Patriarch designate of Abyssinia, Joao Nunes Barreto, as well as a team of technicians accompanied the press. The prevalent route from Portugal to Abyssinia then required ships to round the Cape of Good Hope, touch Goa and reach Abyssinia. The press thus reached Goa, but soon after, news reached Goa that the Abyssinian Emperor was not keen on receiving the missionaries. Around the same time, the clergy in Goa felt the need for a printing press and on their request to the then Governor-General the press was made available to them. Thus, the press stayed in Goa.

Printing operations began in Goa in 1556 (with the first printing press being established at the Jesuit Saint Paul's College in Old Goa), resulting in the publication of *Conclusiones Philosophicas*. 1557 saw the posthumous printing of St. Francis Xavier's *Catecismo da*



Doutrina Christa five years after the death of its author. Another Spaniard to play a major role in the history of printing in India was Joao Gonsalves, who is credited with preparing the first printing types of an Indian script- Tamil. The first book dates back to October 20, 1578. On the eventful day, Portuguese missionary Henrique Henriques (also Anrique Anriquez) published 'Thambiraan Vanakkam' with paper imported from China. The book was a translation of the Portuguese 'Doctrina Christam,' authored by Francis Xavier. Mr. Raju says the book was published as a result of Father Henriques' efforts to have a prayer book in Tamil. The book was printed in Kollam using a printing machine imported from Portugal in 1556. This was the first book to be published in an Indian language. Much of the books published for long thereafter had to do with Christianity. The first Tamil book to be published in Tamil was Thirukkural in 1812, thanks to the efforts of the then Chennai Collector Francis White Ellis, who established the Chennai Kalvi Sangam. It was only in 1835 that Indians were permitted to establish printing press. From 1940 to 1960 there were four to six printers in Goa, of which the prominent ones were JD Fernandes, Gomantak Printers and Borkar Printers. Smaller entrepreneurs also joined the fray. One of these was a teacher in a local school in Churchorem. Rohidas Bandekar quit his profession to start a press—Bandekar Offset—with a meagre investment of Rs 24,000.

#### **1.4 Definitions of Reading**

Reading is a mental process. There are many definitions of reading. Reading is when someone looks into a written text and starts to absorb the information from the written linguistic message. Reading has been defined differently by different sources. Below is given an account of different definitions.

*Perceiving a written text in order to understand its contents. This can be done silently (silent reading). The understanding that result is called reading comprehension. Saying a written text aloud (oral reading). This can be done with or without understanding of the content.*

**Longman Dictionary of Applied Linguistic**

*Reading is an act of looking at and understanding point.*

**Collins English Learner's Dictionary**

Besides all the definitions from the dictionary there are also definitions made by several people.

*Reading as a process whereby one looks at and understands what has been written.*

**William**

*Reading as a highly personal activity that is mainly done silently, alone.*

**Rohani Ariffin**

*Reading is an interactive process between the reader and the writer.*

**Brunan W.K**

*Reading is an act of communication in which information is transferred from a transmitter to a receiver.*

**Smith**

*Reading is a complicated procedure. Readers read to get information from the printed pages. They should be able to pronounce and comprehend the printed words, signs, letters, and symbols by assigning meaning to them.*

**Stallfter**

*Reading is where words go into your eyes and out of your mouth.*

**Jensen and Petty**

*Reading is not a single skill that we use all the time in the same way but it is multiple skill that used differently with kind of text and fulfilling different purpose.*

**Chitravelu et. al**

*Reading as a communicative skill along with listening, speaking writing and thinking.*

**Thomas and Loving**

This reading entails the use of vision to understand several words in a sentence and make them meaningful. Same goes to each sentence in order to understand the entire text. There is a clear understanding that reading is something related to the activity of

acquiring information and it is done either silently or aloud. Further reading is not single skill but consists of a number of skill which need to be acquired gradually in order to master the skill of reading.

### **1.5 Purpose of Reading**

- Many or any people can read a text but hardly can understand what the writing was all about. This is because the reading was not providing any information to the reader. Why is this happen? This happened when the reader merely read the text without understanding the content. So it defeats the purpose of reading as a means to gain information. According to Mariam (1991) she proposed that a major avenue of learning is through reading. Yet, if we do not understand what we are reading, we cannot learn or remember it. A person is limited in what they can accomplish without good reading and comprehension skills. Reading is important because it develops the mind. The mind is a muscle. It needs exercise. Understanding the written word is one way the mind grows in its ability. Teaching young children to read helps them develop their language skills. Reading helps children [and adults] focus on what someone else is communicating. Books, magazines and even the Internet are great learning tools which require the ability to read and understand what is read. A person who knows how to read can educate themselves in any area of life they are interested in. We live in an age where we overflow with information, but reading is the main way to take advantage of it. Reading is fundamental in developing a good self image. Non-readers or poor readers often have low opinions of themselves and their abilities. Good reading skills improve spelling. As students learn to sound out letters and words, spelling becomes easier. Also, reading helps to expand the vocabulary. Reading new words puts them in their mind for later use. Seeing how words are used in different contexts can give a better understanding of the word usage and its definitions rather than just the cold facts of a dictionary. Thus reading helps in getting an overview or the gist of a subject or topic, determining if more concentrated reading is necessary, gathering supporting evidence for project or essay, summarising main points, understanding, critiquing or evaluating the material and ultimately reading helps to enjoy for leisure.



## 1.6 Models of Reading

There are three theories related to reading. The first theory is the traditional view of reading (Dole et al, 1991). According to this theory, novice reader's needs to acquire a set of hierarchically ordered sub-skills that consecutively build toward comprehension ability. Contained in this theory, the students have the ability to comprehend the texts by making sense of the words within the context of the sentence. According to Nunan (1991), being able to read using this view is being able to interpret a series of written symbols to the auditory equivalents as a way for the readers to make sense of the text they are reading and to reproduce the meaning of the reading itself. In other words, this process is called the "bottom-up". The bottom-up reading is done step by step as mentioned by Mariam Mohamed Nor and Rahmad Sukor Abd. Samad (2006). The technique begins with the eyes identifying visual information in the materials and this technique begins with the identification of the letter and the sounds follows subsequently. Next, the identification of the lexical items is done through grapheme-phoneme correspondence and being put in the short term memory (STM). This is where the phrases, clauses and sentences are being constructed. This model requires an accurate comprehension, sequential identification of letters, words, phrases, clauses, sentences and the pronunciation. The other meaning of this view is that it is also a process of "outside-in" as mentioned by McCarthy (1999). To make it simple, the bottom-up model recommends that reading should begins from the low-level processing. The printed texts that being read by the reader can only be interpreted and understood by the reader himself. Apart from the definition given below, this traditional view of reading always been under attack because of the insufficiency and lacking one or more of the usual forms of grammatical inflection mainly the words and structure.

The second theory is the three major types of schemata. The types of schema mentioned by Carrell (1984) are the linguistic schemata, formal schemata and content schemata which are related to the reading comprehension. The linguistic schemata refer to the existing knowledge that the readers have in vocabulary and grammar. It is the foundation for other schemata as it is essential in helping the readers to grasp and decode the text they read. If the readers do not have this schema, it will be hard for them to understand

and to decode texts they read. The more linguistic schema the readers have, the easier for them to understand and decode what they are reading.

The second schema is the formal schema. This schema has been explained to be abstract, encoded, internalized, and having coherent patterns of meta-linguistic, discourse and textual organization that are being used to understand a text. The reader tries to use any information that they have in order to understand and to comprehend the English text they are reading at that particular time. But the formal schema offers less power in the reading process as mentioned by Carrell (1984). The formal schema helps the students to make relations between the background knowledge that they have with the new one that they just bumped into under the same topic. This helps them in comprehending the reading English texts in the best possible way as they can.

The third schema in the schemata theory is called content schema. In other terms, this schema explains about the reader having the information or background knowledge on the topic that is being brought up in the texts they read. A language is not only the combination of vocabulary or grammar but it also involves the culture of the language and this is where the information came. With the content schema, it can complete the lack of language schemata and thus helps the students in comprehending texts and to be able to put aside any ambiguities and irrelevant words or sentences in the texts.

The third theory used in this study is the affective filter hypothesis by Stephen Krashen. This theory involves the attitudes towards the target language and its relationship with the input achieved by the students. It shows that how attitude is very important in learning language. If the students have a very high or strong affective filter, they tend to have less input. If the students do understand the input, the input will not reach part of the brain that takes charge of the language acquisition. It is different to students who have low affective filter who will have the tendency to obtain more information and because they have more positive attitudes to the language they are learning, they are more open to the input they obtain.

## 1.7 Components of Reading

Reading is an astoundingly complex cognitive process. It is often thought that reading is a singular act but in reading our brains are actually engaging in a number of tasks simultaneously each time we sit down with a book. There are five aspects to the process of reading: phonics, phonemic awareness, vocabulary, reading comprehension and fluency. These five aspects work together to create the reading experience. As children learn to read they must develop skills in all five of these areas in order to become successful readers.

- a) **Pronunciation:** Pronunciation is the way in which a word or a language is spoken. It has two aspects phonics and phonemic awareness
  - i) **Phonics:** Phonics is the connection between sounds and letter symbols. It is also the combination of these sound-symbol connections to create words. Letters are arbitrary. Learning to make that connection between the individual sounds that each letter represents and then putting those together is essential to understanding the sound.
  - ii) **Phonemic Awareness:** Phonemic awareness is closely related to phonics because both involve the connection between sounds and words. While phonics is the connection between sounds and letters, phonemic awareness is the understanding that words are created from phonemes (small units of sound in language). These may seem like the same thing, but there is a subtle difference in the two. Phonics is used only in written language because it involves letters. Phonemes are sounds only. While they can be represented using letters, they can also be simply the auditory sounds of words. Phonemes are most often learned before a child begins to read because they are centered on the sounds of language rather than written words.
- b) **Vocabulary:** In order to read words we must first know them. As children become stronger, more advanced readers they not only learn to connect their oral vocabularies (the words that are spoken) to their reading vocabularies (the words that are used in print) they also strengthen each of these areas by adding new words to their



repertoires. Vocabulary development is an ongoing process that continues throughout one's "reading life".

- c) **Fluency:** Fluency is a reader's ability to read with speed, accuracy and expression. Thus it requires him to combine and use multiple reading skills at the same time. While fluency is most often measured through oral readings, good readers also exhibit this skill when they are reading silently. The ability to move through a piece of text at a fluid pace while evoking the meaning and feeling of it demonstrates your fluency.
- d) **Reading Comprehension:** Reading comprehension is understanding what a text is all about. It is more than just understanding words in isolation. It is putting them together and using prior knowledge to develop meaning.
- e) **Spelling:** Spelling is the combination of alphabetic letters to form a written word. It is a linguistic process of correct writing with the necessary letters present in a comprehensible, usually standardized order. Learning to spell helps to cement the connection between the letters and their sounds, and learning high-frequency "sight words" to mastery level improves reading. The more deeply and thoroughly a student knows a word, the more likely he or she is to recognize it, spell it, define it, and use it appropriately in reading. They also note that "the major goal of the English spelling system is not merely to ensure accurate pronunciation of the written word – it is to convey meaning. If words that sound the same (e.g., rain, rein and reign) were spelled the same way, their meanings would be harder to differentiate.

In the present research study the rubrics provided by CBSE to assess reading of the students was used which assessed the aspects of pronunciation, fluency and comprehension. Vocabulary was not included in the aspect of reading hence it is not taken as an aspect of assessment in the present study. Spelling was taken as an aspect as it could be easily assessed through dictation which is a popular means of assessing the knowledge of spelling among the students.

## 1.8 Stages of Reading Development

For a child, acquiring reading abilities consists of a series of processes and component skills, which is a fluid, continuous process. Reading proficiency is achieved not as a series of defined levels, but more as a continuum of learning. According to emergent literacy theory, a child's literacy development begins long before she or he begins to read or write in the conventional sense. During the early reading stages, the child begins to understand concepts of print, such as directionality of text and flipping of pages, through exposure to reading material and by observing reading behaviors in her or his immediate environment. The development of oral language skills, through communicating with peers and adults and by being exposed to conversations and interactions, takes place parallel to the understanding of print. These developments enable the child to grasp the idea that sounds or speech can also be represented as written symbols or letters.

Eventually, these early reading skills translate into more conventional reading. The child starts relating particular sounds to letters of the alphabet, stringing together letters to form words, and eventually creating sentences and paragraphs. The understanding of language syntax and semantics takes place at the stage of basic reading. These developments require skilled guidance, carefully selected teaching and learning materials, and an environment that supports the different learning levels of the children.

As the reader gains fluency, she or he is able to derive more nuanced meaning from the text and to draw meanings which at times go beyond the literal meaning of the text. It is important, at this stage, to enable and support the child in viewing the text from different perspectives, and to provide access to reading material on a range of subjects. This is essential for her or him to derive pleasure from reading as well as knowledge.

Fluency, comprehension, and motivation are intrinsically related aspects of reading necessary for ensuring higher reading proficiency in children. These relate not only to the ability of a child to read, but also to her or his interest in reading. The goal of reading interventions should be to create a culture of reading and not just literate citizens. For this, it is essential to look at reading not only as a necessary literacy skill, but as an act providing emotional involvement, knowledge, and growth for the individual and her or

his community. Table 1.1 shows the stages of development, the milestones and the explications of necessity.

<b>Stage of Reading Development</b>	<b>Milestone</b>	<b>Explication of Necessity</b>
Early Reading or Pre Reading	Concept of print	A common behavioral and visual logic underlies reading as an activity: one starts a book from one side or the other, and reads in a single direction, all of which requires cueing and orientation. A child begins to understand these when exposed to reading material early in life.
	Word-Sound –Symbol association	A child needs to understand that a spoken sound can be represented as a symbol or a written word.
	Background knowledge of the language	Knowing how the everyday world works, both in terms of content and procedures, is a crucial component of language comprehension. Background knowledge helps the child understand the structure of language.
Basic Reading	Phonemic awareness and character recognition	The most basic technical elements of reading have to do with character recognition, decoding and encoding letters to form words and then sentences.
	Learning to assemble characters into words and	Knowledge of the alphabetic principle refers to an understanding that spoken



	awareness of the alphabetic principle and Letter Knowledge	words are made up of phonemes and that those phonemes can be represented in text as letters or groups of letter knowledge
	Syntax Awareness and learning to assemble words into sentences	
		All languages have rules regarding how words can be combined to form sentences, and an understanding of the implicit rules of sentence structure and phrasing is essential to achieving reading with comprehension.
Proficient Reading	Semantics and importance to word meaning	Semantics deals with the meaning components of language, both at the level of individual units and at the higher levels that combine these units. Thus, part of linguistic knowledge involves learning the individual meanings of words (or vocabulary) as well as the meaning of larger segments such as sentences and discourse structures (e.g., narratives and expositions).
	Automatically reading familiar texts	
Independent Reading	Correlate prior and strategic knowledge	Using background knowledge to support and understand what is being read becomes an important part of the child's higher reading abilities.
	Think critically about read material	In acquiring higher reading skills, the child is expected to be able to read more than one meaning of the text, or look at the text from multiple
	Formulation of knowledge from reading	

	on a higher level of abstraction	perspectives. This is also essential for the child to build perspectives of her own, paving the path for reading to translate into knowledge.
	Critically analyse the viewpoint of others and construct own	

**Table 1.1 shows the stages of development, the milestones and the explications of necessity**

### 1.9 Methods of Reading

There are several types and methods of reading, with differing rates that can be attained for each, for different kinds of material and purposes:

- *Subvocalized* reading combines sight reading with internal sounding of the words as if spoken. Advocates of speed reading claim it can be a bad habit that slows reading and comprehension, but other studies indicate the reverse, particularly with difficult texts.<sup>[30][31]</sup>
- *Speed reading* is a collection of methods for increasing reading speed without an unacceptable reduction in comprehension or retention. Methods include skimming or the chunking of words in a body of text to increase the rate of reading. It is closely connected to speed learning.
- *Incremental reading* is a software-assisted reading method designed for long-term memorization. "Incremental reading" means "reading in portions": in each session, parts of several electronic articles are read inside a prioritized reading list. In the course of reading, important pieces of information are extracted and converted into flashcards which are then scheduled for review by a spaced repetition algorithm.
- *Proofreading* is a kind of reading for the purpose of detecting typographical errors. One can learn to do it rapidly, and professional proofreaders typically acquire the ability to do so at high rates, faster for some kinds of material than for others, while they may largely suspend comprehension while doing so, except when needed to select among several possible words that a suspected typographic error allows.
- *Rereading* is reading a book more than once. "One cannot read a book: one can only reread it," Vladimir Nabokov once said.<sup>[32]</sup> A paper published in the *Journal of*

*Consumer Research* (Cristel Antonia (2012)) found re-reading offers mental health benefits because it allows for a more profound emotional connection and self-reflection, versus the first reading which is more focused on the events and plot.

- *Structure-proposition-evaluation (SPE)* method, popularized by Mortimer Adler in *How to Read a Book*, mainly for non-fiction treatise, in which one reads a writing in three passes: (1) for the structure of the work, which might be represented by an outline; (2) for the logical propositions made, organized into chains of inference; and (3) for evaluation of the merits of the arguments and conclusions. This method involves suspended judgment of the work or its arguments until they are fully understood.
- *Survey-question-read-recite-review (SQ3R)* method, often taught in public schools, which involves reading toward being able to teach what is read, and would be appropriate for instructors preparing to teach material without having to refer to notes during the lecture.
- *Multiple intelligences*-based methods, which draw upon the reader's diverse ways of thinking and knowing to enrich his or her appreciation of the text. Reading is fundamentally a linguistic activity: one can basically comprehend a text without resorting to other intelligences, such as the visual (e.g., mentally "seeing" characters or events described), auditory (e.g., reading aloud or mentally "hearing" sounds described), or even the logical intelligence (e.g., considering "what if" scenarios or predicting how the text will unfold based on context clues). However, most readers already use several intelligences while reading, and making a habit of doing so in a more disciplined manner—i.e., constantly, or after every paragraph—can result in more vivid, memorable experience.
- *Rapid serial visual presentation (RSVP)* reading involves presenting the words in a sentence one word at a time at the same location on the display screen, at a specified eccentricity. RSVP eliminates inter-word saccades, limits intra-word saccades, and prevents reader control of fixation times (Legge, Mansfield, & Chung, 2001). RSVP controls for differences in reader eye movement, and consequently is often used to measure reading speed in experiments.



Although a number of strategies are in use still it is seen that the students struggle while reading. Technology and multimedia materials offer the potential for addressing the challenges of reading instruction. For more than two decades, researchers have been using innovative technology to engage students, build connections between oral and written language, prompt active reading, and provide supplemental tutoring.

### **1.10 Multimedia**

Multimedia is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content. Multimedia contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material. Multimedia can be recorded and played, displayed, interacted with or accessed by information content processing devices, such as computerized and electronic devices. it has typically meant one of the following:

- Text and sound
- Text, sound, and still or animated graphic images
- Text, sound, and video images
- Video and sound
- Multiple display areas, images, or presentations presented concurrently
- In live situations, the use of a speaker or actors and "props" together with sound, images, and motion video

Thus it can be said that Multimedia means that computer information can be represented through audio, video, and animation in addition to traditional media (i.e., text, graphics drawings, images). Some definitions of multimedia include;

*Multimedia* is the field concerned with the computer-controlled integration of text, graphics, drawings, still and moving images (Video), animation, audio, and any other media where every type of information can be represented, stored, transmitted and processed digitally.

A *Multimedia Application* is an Application which uses a collection of multiple media sources e.g. text, graphics, images, sound/audio, animation and/or video.

Multimedia is today widely used in the field of education to enhance the achievement of the students.

### **1.11 Multimedia and Education**

With the advancement of technology in this world, we can see that the world that we live in is changing rapidly and the field of education are one of the field that are growing to be much better. The old day education where the learning environment are passive is long gone. We can see that the use of multimedia in education has grown a lot in this recent year and is looking to expend ever further in the future.

Teacher primarily requires resources in order to help students to understand better. By enabling teacher to have access in multimedia learning resource, which help to support constructive concept development, allowing the teacher to be more focus to teaching the subject while working to help the students to understand the topic individually. The development of multimedia also help to ease learning by enabling students not to just learn in just school but also at home. This will potentially help students to improve their learning skills. With the help of multimedia elements, which is text, graphic, video, sound and animation, it can create an interactive learning environment that can help teacher and students teaching and learning. Instead of just limiting you with a linear presentation such as reading text from a book, multimedia makes many improvement in learning by bringing various elements in order to make it more dynamic. Multimedia is a synthesis: a hybrid offering the advantages of the user-driven book with the wonders of electronic technology.

### **1.12 Multimedia Elements in Education**

Multimedia elements can be use for many things. With the help of computer softwares various multimedia elements can be created and combined to produce a great project. The various elements of multimedia are given in the lines that follow.

**i) Text:** Text are the most basic element in multimedia and it is very easy to use. Text can give the most impact on the quality of the multimedia interaction compared to the other elements. This is because text contains a lot of fonts. A font is a collection of characters of a single size and style belonging to a particular typeface family. In general, text are used in order to provide important information. This is because text are more direct and easy to understand rather than the other multimedia elements. In learning, text are the most commonly used element. But, by using multimedia text, the word can be much more interesting rather than plain text thus increasing the learning effectiveness.

**ii) Graphic:** Graphic are two-dimensional figure or illustration. It is the most creative ways of learning approach. It can be either be a photograph, drawing or picture. There are many types of picture format such as GIF, JPEG and PNG. Using graphic in education increases the students' understanding. It enhances their memory skill because pictures are easy to remember. Images use a massive amount of cortical skills such as color, form, line, dimension and imagination.

**iii) Audio:** Audio has been used in education for many decades. As everything that we learn can be recorded, it is an effective tool for the students because they use it to interact with the course content provided by their teacher at any times and any location that they want. There are a few widely uses softwares that can be use for this such as Wechat, Whatapps, Hike and Skype. When compared to meeting face-to-face it not only saves time but also can be used for long distance learning. Sound can also be use by teacher to present a lot of information at oncc. This will help teacher to explain the content of the topic in a much interesting ways which will help the students to understand the topic. Learning by using audio also can help disable people such as blind people to learn. Moreover it have reproducibility.

**iv) Video:** Video is the most popular and widely used multimedia element. There are a few standard video format for educational use such as MP4 that is used for Digital Versatile Disc (DVD) playback or MP for home video. Sometimes, using text or other multimedia elements to convey information are hard and complex. This type of multimedia element are used because it can provide visual stimulation for students so that



they can have a better understanding in learning. Teacher can also ask their students to make a video project. This is because it can help them getting in touch with the real element of what they are learning and show it to their other classmates as well. It aid exposure to the real world even in the in the classroom.

**v) Animation:** Animation is the process of designing, drawing, making layouts and preparation of photographic sequences which are integrated in the multimedia and gaming products. Animation involves the exploitation and management of still images to generate the illusion of movement. Animation are different than video. This is because video is taken from real life event while animation are usually taken from drawing. Animation also can help students to learn faster and easier. This is because they can help teacher to explain a difficult topic. For example, the flow of blood throughout the body cannot be seen. The explanation of flow of blood in and out of the heart are difficult for students to understand as it is an abstract concept but by providing a structural animation of our blood circulatory system and the heart, students can see clearly how it works. This can help provide a better understanding about the topic to students. Computer animation contributes to increase focus and concentration in class while having fun,

The use of multimedia in education is very useful as it leads to deeper understanding, improved ability of problem solving, increases positive emotions, provides access to a vast variety of information and provides opportunities of exploration and discovering. Moreover as it is available on a number of platforms it is easy to be carried around and to transferred to be used at ease at any time and any place. In the present research study an effort is made in this direction.

### **1.13 Reading and Audio-Visual Aids**

Audiovisual education or multimedia-based education is instruction where particular attention is paid to the audio and visual presentation of the material with the goal of improving comprehension and retention. Today's students and classrooms are becoming more diverse and unique each day. The emergence of information and communication technology (ICT) has made it possible for teachers and students to collaborate with each other in diverse ways. While reading, students often encounter problems in decoding and

pronouncing the assigned texts. in the literature component. It has been proven that students do not feel motivated to due to lack of language proficiency and inadequate supply of teaching materials. There are a number of benefits in using visual aids in developing the skill of reading. These benefits are of paramount importance in maintaining a good momentum of reading interest among students. Firstly, using visual aids in developing the skill of reading creates strong engagement between students and the texts. The use of visual aids like pictures, videos and projectors encourage students to read texts with interest, which make it easier for them to learning reading. This proves the use of visual aids act as 'vehicles' that can be used to enrich and enhance the act of reading. it allows the students to have full concentration on the texts which leads to their understandability of the content and flow of the texts. The characteristics of visual aids like sound, light and color trigger and stimulate students' interest in learning reading and thus automatically creates a fun learning environment. Audio visual aids can be fully utilized as an effective learning tool as they help students to understand clearly the the aspects of reading such as pronunciation. This phenomenon was most probably because of the graphics along with the sound input used in the visual aids undeniably served as a helpful tool in facilitating students' understanding of the skill of reading. The fact that students initial reading is through remembering the structure of the word rather than the spelling is well known. This gives an important insight regarding the use of sight words to develop initial reading.

#### **1.14 Concept of Sight Words**

Sight words, often also called high frequency sight words, are commonly used words that young children are encouraged to memorize as a whole by sight, so that they can automatically recognize these words in print without having to use any strategies to decode. Sight words account for a large percentage (up to 75%) of the words used in beginning children's print materials. The advantage for children being able to recognize sight words automatically is that a beginning reader will be able to identify the majority of words in a beginning text before they even attempt to read it; therefore, allowing the child to concentrate on meaning and comprehension as they read without having to stop and decode every single word. Advocates of whole-word instruction believe that being able to recognize a large number of sight words gives students a better start to learning to

read. Recognizing sight words automatically is said to be advantageous for beginning readers because many of these words have unusual spelling patterns, cannot be sounded out using basic phonics knowledge and cannot be represented using pictures. For example, the word "was" does not follow a usual spelling pattern, as the middle letter "a" makes an /o/ sound and the final letter "s" makes a /z/ sound, nor can the word be associated with a picture clue since it denotes an abstract state (existence). If students master learning sight words in their elementary years, they will be less likely to have reading problems later in life. As Fleming states, it is a "vital skill" that needs to be learned in elementary school. However, if older students learning English have problems reading, they can get help from sight word tutoring because "a competent literacy tutor will check this area carefully and re-teach these words as needed to build confidence and reading efficiency." For the present study the investigator is of the notion that if the words are given along with the pronunciation of the word, the students will be able to develop the skill of reading faster and without much effort. Moreover as there is immediate availability of the word with the correct pronunciation, parents, students or care givers who themselves are not aware of the correct pronunciation of a word and hence find themselves helpless in helping the child can be empowered and motivated to help the child develop the skill of correct reading.

### **1.15 Reading and Academic Achievement**

Academic achievement or academic performance is the outcome of education to the extent to which a student, teacher or institution has achieved their educational goals. Academic achievement is commonly measured by examinations or continuous assessment. A creative and pragmatic education involves the habit of personal investigation. The act of personal investigation requires self-study to be followed by self-thinking and analysis. Self-study, otherwise referred to as reading at one's own accord, requires a habit, which is known as reading habit. Reading makes way for a better understanding of one's own experiences and it can be an exciting voyage to self-discovery. "Reading habit is best formed at a young impressionable age in school, but once formed it can last one's life time (Green, 2001). It is the reading habits which help the learner in obtaining meaningful and desirable knowledge. Good reading habits act as



a strong weapon for the students to excel in life (Bashir & Mattoo, 2012). Reading is the identification of the symbols and the association of appropriate meaning with them. It requires identification and comprehension. Comprehension skills help the learner to understand the meaning of words in isolation and in context. To know about the world and its environment, a child helps himself through reading books, newspapers and other magazines. Once the child has been taught to read and has developed the love for books, he can explore for himself the wealth of human experiences and knowledge through reading. All the knowledge of the world is available in words and in order to get success academically it is essential that the student acquires good reading skills.

#### **1.16 Demonstration Multipurpose School**

Demonstration Multipurpose School (DMS), Bhopal serves as a laboratory of Regional Institute of Education, Bhopal for the identification and analysis of major problems in school education. We as reflective teachers of this esteemed institute, practice, learn and develop various innovative teaching strategies that contribute to make the learning of the students effortless, joyful and interesting and ultimately adding to curriculum development. We believe in inducing thinking and making the students curious to know more with the limited resources available. In the primary section of the school the regular teachers have to plan and organize both curricular and co-curricular activities. All the teachers are professionally trained. The school specifically caters to the economically weaker sections of the society where many of the students are first generation English learners. The parents of these students are not aware of English language. They are not able to help the students with the pronunciation, fluency, comprehension and spellings in English. Many of them are not able to read the NCERT English textbooks to their child; hence it is impossible for them to help them in reading. The present study aims to provide resources in the form of audio – visual form by converting the English textbook to audio visual form to aid development of reading skill of the students.

#### **1.17 Need and Justification of the Study**

The mastery of any language depends on mastery of listening, speaking, reading and writing. While listening and speaking comes naturally to the students, reading is specialized skill that needs concentrated efforts both on the part of the teacher and the

taught so that this skill is acquired in such a manner that motivates the student to learn further. Reading requires one to identify and understand strings of words in a fluid manner. It is a detailed process that includes phonemic awareness, phonics, word recognition (vocabulary), comprehension, and fluency. Reading is the first step towards understanding and comprehending the content by decoding the symbols in the form of letters. It has been seen that just by reading the lesson once or twice in the class the students do not develop proper reading skills especially pronunciation. As most of the students in DMS are first generation English learners they get very less support from home. They later resolve to tuitions which is just a waste of precious time and money as these people are money driven and do not care about the proper development of the students. Moreover tutors just emphasis on the reproduction of the answers in the written form. Thus reading, which is one of the important aspect which drives future urge to learn gets seriously hampered and thus the academic achievement of the students is also affected. Providing the lessons, especially the NCERT primary level books in an audio and video format will help the students to have an alternative to the model reading by the teachers. Further these audios and videos of the poems and the prose ones recorded can be used again and again to improve the reading skills of the students. In today's age of technology, all possess a smart phone and these audio-video files can also be provided to the mobiles of the parents of the students so that they can access them at ease and whenever they feel to do so. Taking these points and the implications it carries the researcher has taken up the present project and is sure that with these efforts there will be marked improvement in the reading skills of the students and ultimately in the academic performance of the students. NCERT is nodal agency in suggesting improvements in school education and its textbooks are used throughout the country. The researcher further is of the view that just providing the audio formats of the book is of less value; hence efforts are made to provide the video of the read material as well where the words being spoken are being highlighted when being read. No such efforts have been made in the near past where the text has been provided both in the audio and video format. Converting and providing the audio and video formats of the text book will not only benefit the students of DMS but will be useful for the teachers and students throughout the country as the researcher is going to upload the prepared resource on WHATSAPP,

NROER, YOUTUBE and other free to access sources. Hence the researcher aims to experiment and provide empirical data in support of the thought.

### **1.18 Statement of the Problem**

Effectiveness of Audio-Video Materials for Developing Reading Skills of Fourth Grade Students of Demonstration Multipurpose School, Bhopal.

### **1.19 Objectives of the Study/Project:**

The objectives of the present study are as follows:

1. To study the effectiveness of audio-video material in terms of pronunciation of the students.
2. To study the effectiveness of audio-video material in terms of comprehension of the students.
3. To study the effectiveness of audio-video material in terms of fluency of the students.
4. To study the effectiveness of audio-video material in terms of spellings of the students.
5. To study the effectiveness of audio-video material in terms of students' reading ability.
6. To study the effectiveness of audio-video material in terms of students' academic achievement.

### **1.20 Hypothesis of the Study**

In order to fulfill the above objectives a few hypothesis were tested. The hypotheses prepared for the present study according to the objectives are as follows.

- a) There is no significant effect on pronunciation of the students before and after the treatment.
- b) There is no significant effect on comprehension of the students before and after the treatment.
- c) There is no significant effect on fluency of the students before and after the treatment.
- d) There is no significant effect on spellings of the students before and after the treatment.



- e) There is no significant effect on the students' reading ability before and after the treatment.
- f) There is no significant effect of treatment on the students' academic achievement.

### **1.21 Operational Definition**

The operational definition of the variables gives an idea of the direction in which the study is moving. A brief description of the same is given.

**Audio – Video Material:** Audio – Video Material means materials that possess both a sound and a visual component. For the present study Audio – Video Material is operationally defined as the lessons that have been converted into audio and video format to enhance the reading skills of the students.

**Reading Skills:** Reading is a cognitive process that involves decoding symbols to arrive at meaning. Reading is an active process of constructing meanings of words. Reading with a purpose helps the reader to direct information towards a goal and focuses their attention. For the present study reading skills is define as the score obtained by the students by combining the scores of various aspects of reading such as pronunciation, fluency, comprehension and spelling.

### **1.22 Scope and Delimitations of the study**

The scope of the study covers a wide range. It studied the impact of audio-video materials in developing reading skills. However, due to time and budgetary constrains the study was delimited on different aspects as follows

- The study is confined to only fourth grade students of Demonstration Multipurpose School, Bhopal.
- The study caters to the impact of intervention on only one section i.e. 35 students.
- Although a number of aspects are included in reading skill but the study tries to find the impact only on the aspects of pronunciation, fluency, comprehension and spelling.

## CHAPTER – II

### REVIEW OF RELATED LITERATURE

#### 2.0 Introduction

The review of related literature is an important pre-requisite to actual planning and execution of any research work. Every research project should be based on all of the relevant thinking and research that has preceded it. When completed it becomes part of the accumulated knowledge in the field and so contributes to the thinking and research that follows.

According to L. Koul, “Research takes advantage of the knowledge which has accumulated in the past as a result of constant human endeavour. It can never be undertaken in isolation of the work that has already been done on the problems which are directly or indirectly related to the study proposed by a researcher.” This implies the importance of reviewing literature related to the area in which the study is proposed. Charles V. Good, also said that , “ The keys to the vast storehouse of published literature may open doors to sources of significant problems and explanatory hypothesis and provide helpful orientation for definition of the problem, background for selection of procedure and comparative data for interpretation of results. In order to be creative and original, one must read extensively and critically as a stimulus to thinking.”

The purpose of reviewing literature include the following:

Reviewing related literature defines the limit of the field of research

- It avoids unfruitful and useless problem areas.
- It avoids unintentional duplication of well established findings
- It provides insight into the preferred methodology for the study.
- It makes known recommendations of previous researches listed in the study for further research.

Thus, for the present study, the researcher reviewed literature relevant to the present study in order to acquire knowledge about the various researches that have been conducted for the variables of the study – namely guidance need and study habits. When the researcher reviewed related literature she became aware of the different kinds of the

researches that had been conducted on the variables adversity quotient, school performance and school climate. This enabled her to propose a unique study, different from those done formerly.

In the present chapter the researcher attempts to present the literature and research studies pertaining to the variables under study. The review is presented where studies were conducted on use of multimedia in teaching listening, speaking, reading and writing at primary level.

## **2.1 Studies conducted in the Area**

**González-Vera and Corisco (2016)** aims to show the effective use of audiovisual materials in the teaching of EFL to primary school teachers. For that purpose a representative sample of undergraduate students of the Degree in Primary Education with a pre-intermediate B1 level was selected. The students, whose ages ranged from 18 the study a questionnaire was distributed in order to shed light on our students' level of English as well as on the ways and resources they have used to learn English. It revealed that oral communication skills (listening, speaking and pronunciation) were usually underestimated. Bearing in mind these results, the present study proposed two main activities, one focused on listening comprehension and another on the improvement of pronunciation through audiovisual materials.

**Shabiralyani, Hasan, Hamad and Iqbal (2015)** explored the teachers' opinions on the use of visual aids (e.g., pictures, animation videos, projectors and films) as a motivational tool in enhancing students' attention in reading literary texts. To accomplish the aim of the research, the closed ended questionnaire was used to collect the required data. The targeted population for this research was the staffs and students of the public and private educational institutions of District Dera Ghazi Khan. In this research the primary data was used for gathering information. The collected data is analyzed through the SPSS software and also data was represented in the percentage distribution of pie, line, and bar graphs. The analysis of the data indicated that the majority of the teachers and students had positive perceptions of the use of visual aids.



**Shende (2015)** attempted to compare the teaching process in English and Non-English medium secondary schools and junior colleges in India from grade 8 to grade 12. It aims to find out differences in these two sets of schools regarding teaching process with variables like language of instruction, comprehension of learners, use of audio visual aids, teaching skills, proficiency of teachers, etc. To realize the objectives, a survey study was conducted with randomly selected fifty-six teachers of both medium schools. The instrument used for the study was a self-designed questionnaire face-validated by two experts having considerable experience in empirical research. The findings of the study suggest that English Medium School Teachers' (EMST) use of English as a MI as well as for giving general instruction is more than the use of English by the Non-English Medium School Teachers (NEMST). Learners' level of comprehension after using English is higher in English medium schools. Secondly, teaching skills as well as proficiency of EMST in English are found better than the skills of the NEMST. But there are no statistical differences between both the types of schools regarding availability and use of audio-visual aids and their idea of final objectives of teaching.

**Bal-Gezegin (2014)** tried out the use of Using Video Vs. Audio For Teaching. Using both qualitative and quantitative methods, this experimental study seeks answers to the following research questions: 1) is there a significant difference between teaching vocabulary with video or audio-only materials? 2) what are students' attitudes and preferences for learning vocabulary with video vs. audio? he participants of the study are Turkish university students aged between 17 and 22 who are at intensive English (preparatory) classes at the department of Arts and Science at Amasya University in Turkey. For the purpose of this study two intact groups consisting of 24 and 26 students in each are included. The students participated in this study are in pre-intermediate level classes according to the English placement test results given in the beginning of the semester. Fifty students participated in the study. One of the groups (hereafter called Group A) was required to complete the Practical English sections of their books by watching videos of the conversations. On the other hand, the other group (hereafter called Group B) was not presented with video but only with the audio version of the same conversations. The videos take up to 2-3 minutes and in these videos students both hear

and see how the target expressions are used in real-life situations. The audio files include exactly the same conversations. Both video and audio files have background sounds such as announcements at a station or sounds of people eating at a restaurant etc. The pre and post activities related to the conversations require answering comprehension questions and true false questions, filling in the gaps, role playing the dialogue, repeating the phrases etc. The study covered six practical English sections from the book which means six hours of teaching for each classroom. Each session was completed in a separate week. The students were told that they were in an experiment; however, details about the study, the tests, and the target vocabulary items were not given. In order to find answer to the first research question whether teaching social expressions in Practical English sections with video materials foster better learning than teaching with only audio materials, each group was given a pretest, a posttest, and a delayed posttest. In the beginning of the teaching period the students were tested based on the expressions to be taught. Once all the six units were covered, the students were tested again one week after the last class meeting. As for the delayed posttest, without warning, two months after the teaching period was completed, the students were given the same posttest to find out to what extent the target vocabulary items were recalled. Each of the tests includes 25 items selected from the practical English sections of the book. The duration of each test was half an hour. This study demonstrates that use of video might lead better vocabulary learning in language classrooms when compared to the use of audio material only. This study can be considered as a contribution to the overall discussion of use of video in classroom.

**Woottipong (2014)** through this study proposed 1) to develop the listening skills of university students studying English with the use of video materials and 2) to evaluate students' attitudes towards the use of video materials in teaching listening skills. The sample of the student population for this study was 41 first-year English major students in the second semester of the academic year 2012 at Thaksin University, Thailand. They were selected by simple random sampling. The study was conducted over 20 teaching periods. The one-group pretest-posttest design was implemented in this study. The instruments used in this study were 1) lesson plans 2) English comprehension tests (pretest and posttest) and 3) a questionnaire of the students' attitude. Regarding the data

analysis, mean, percentage and t-test scores for the dependent sample were employed. The result indicated that 1) the students' English listening comprehension ability increased significantly after learning with videos and 2) students had positive attitudes towards using videos in teaching listening skills.

**Allou (2013)** in the research in order to test our hypothesis and for the purpose of introducing audio-visual aids as an effective strategy to enhance speaking and to provide a full illustration for the correct use of AVA we submitted a teachers' questionnaire which helped us to know the teachers' points of view about the use of audio-visual aids in teaching speaking. meanwhile, we submitted a questionnaire for 2nd year students of English at Biskra University for more accurate data. At the end of the research the obtained results could confirm our hypothesis which stated that students' speaking skill will improve if we use of audio-visual materials. Eventually, this study aims at suggesting some recommendations and tips for teachers as well as students that may serve for improving speaking skills.

**Al- Yaari (2013)** believed that reading is a receptive skill whose importance could involve abilities' variance from linguistic standard. Several evidences support the hypothesis stating that the more you read the better you write, with a different impact for speech language therapists (SLTs) who use audio-visual aids and computer-assisted language instruction (CALI) and those who do not. **Methods:** Here we made use of audio-visual aids and CALI for teaching reading skill to a group of 40 students of special needs of both sexes (range between 8 and 18 years old) at al-Malādh school for teaching students of special needs in Dhamar (Yemen) while another group of the same number is taught using ordinary teaching methods. Pre-and-posttests have been administered at the beginning and the end of the semester (Before and after teaching the reading course). The purpose was to understand the differences between the levels of the students of special needs to see to what extent audio-visual aids and CALI are useful for them. The two groups were taught by the same instructor under the same circumstances in the same school. Both quantitative and qualitative procedures were used to analyze the data. **Results:** The overall findings revealed that audio-visual aids and CALI are very useful for teaching reading to students of special needs and this can be seen in the scores of the



treatment group's subjects (25.77%, in post-test vs.70.92% in pre-test). In comparison to the scores of the second group's subjects (where audio-visual aids and CALI were not used) (22% in both pre-and-posttests), the first group subjects have fully understood the material of reading and this can be observed in their performance in the posttest. In addition, compared with males, females' performance was better (1371 scores vs. 1466 scores). Qualitative and statistical analyses showed that such comprehension is absolutely due to the use of audio-visual aids and CALI and nothing else. These outcomes confirm the evidence of the significance of using audio-visual aids and CALI as effective means for teaching receptive skills in general and reading skill in particular.

Ashaver and Igyuve (2013) studied the use of audio-visual materials in the teaching and learning processes in colleges of education in Benue state-Nigeria. The study was based on achieving the following purposes: To evaluate how the library meets the needs of the teachers in supply of audio-visual materials; the types and quality of audio-visual materials available in the college, their frequencies of use and inhibitions and finally what steps the librarian has taken in promoting or creating an awareness of the available audio-visual resources in the library. Two sets of questionnaires were administered to lecturers and staff in order to elucidate the needed information. The researcher also went to the college to observe and also to administer the questionnaire. Through the questionnaire and observation made by the researcher, data were collected, organized and analysed using non-parametric statistical techniques like percentages and frequencies; mean was also used in research question three for easy analysis and discussion because of the number of the items involved. It was finally discovered that: The College collection of audio-visual materials is fairly adequate. The lecturers in the college rarely use audio-visual resources in teaching. The chalkboard is the only audio-visual material frequently used by the lecturers. Non-availability, lack of supporting infrastructures and human factors are hindrances to the use of audio-visual aids in the college. There are numerous benefits that students derive from the use of audio-visual aids. The awareness of available audio-visual resources created by the librarian is not impressive.

**Mathew and Alidmat (2013)** found that A resourceful English language teacher equipped with eclecticism is desirable in English as a foreign language classroom. The challenges of classroom instruction increases when prescribed English as a Foreign Language (EFL) course books (textbooks) are constituted with too many interactive language proficiency activities. Most importantly, it has become a common phenomenon to integrate language textbooks with audio and video as additional or supplementary resources for classroom language learning activities. A study was conducted on the usefulness of audio-visual aids in EFL classroom at undergraduate level at Aljouf University, Saudi Arabia. Findings of the study give insights on EFL students' approach to using technological aids. EFL textbooks with technological aids are often viewed to be an inspiration and to provide motivation in classroom instruction. However, a close examination of classroom teaching aids and resources unveil many issues in EFL teaching and learning contexts. Insights, issues and implications presented in the paper are useful to English language educators, administrators, curriculum designers and English teachers in English as a Foreign Language setting.

**Yunus, Salehi & John (2013)** investigated the teachers' perceptions on the use of visual aids (e.g., animation videos, pictures, films and projectors) as a motivational tool in enhancing students' interest in reading literary texts. To achieve the aim of the study, the mixed-method approach was used to collect the required data. Therefore, 52 English teachers from seven national secondary schools in Kapit, Sarawak, Malaysia were selected. Five of the respondents were also randomly selected for the interview. The analysis of the data indicated that the majority of the teachers had positive perceptions of the use of visual aids. The use of visual aids enable the teachers to engage their students closely with the literary texts despite of being able to facilitate students of different English proficiency level in reading the texts with interest. This aspect is vital as literature helps to generate students' creative and critical thinking skills. Although the teachers had positive attitudes towards the use of visual aids, the study suggests that it will be more interesting and precise if it includes students' perceptions as well.

**Whittingham, Huffman, Christensen and McAllister (2013)** conducted to determine the impact of the use of audio books with struggling readers in a school library audiobook

club. The participants met weekly in the school library with the school librarian and researchers to discuss audio books and make reading recommendations to their peers. Standardized test data as well as pre- and post-study interviews and surveys, teacher questionnaires, parent questionnaires, and student interviews were analyzed. The findings indicated that struggling readers' use of audio books had a positive impact on reading skills and attitudes toward reading. These findings are significant given the dearth of research directly related to the impact of audio books, despite the prevalent usage of audio books.

**Alkhasawneh, Rahman, Ayub and Daud (2012)** suggested developing multimedia text for reading comprehension by using Mayer's cognitive theory of multimedia teaching (Mayer, 2010) and cognitive processes underlying text comprehension for Verhoeven and Perfetti (2008). This study suggested that students who use both channels (verbal and pictorial) in reading comprehension text will increase students' achievement in reading comprehension. Finally, the researcher developed reading comprehension text based on Mayer's cognitive theory of multimedia teaching (Mayer, 2010) and cognitive processes underlying text comprehension for Verhoeven and Perfetti (2008).

**Whittingham, Huffman, Christensen and McAllister (2012)** conducted a study to determine the impact of the use of audio books with struggling readers in a school library audio book club. The participants met weekly in the school library with the school librarian and researchers to discuss audio books and make reading recommendations to their peers. Standardized test data as well as pre- and post-study interviews and surveys, teacher questionnaires, parent questionnaires, and student interviews were analyzed. The findings indicated that struggling readers' use of audio books had a positive impact on reading skills and attitudes toward reading. These findings are significant given the dearth of research directly related to the impact of audio books, despite the prevalent usage of audio books.

**Cakir (2011)** aimed at promoting correct pronunciation through supported audio materials for EFL learners. This study has been conducted as a quasi-quantitative research. The participants comprise 102 male and 23 female students majoring in an



English Language Teaching Department, Faculty of Education of a state university, Erciyes University, Kayseri, in Turkey. The data were gathered from the freshman-ELT students through the instrument investigating participants' pronunciation competencies on some certain problematic words. The research instrument has been conducted at the beginning of the term to figure out the problem in detail. Depending on the results obtained in the pre-test, some techniques have been applied to the research group for 9 weeks. The same instrument used as a pre-test was also used at the end of the process as a post-test to check the influence of the activities. This study has been conducted with 125 freshman English Language Teaching major students. The participants, composed of 23 female and 102 male, have all particularly been chosen from the students who have just enrolled and taken the course first time. The instrument used for this study is a corpus that has been composed of the most commonly mispronounced words by non-native English language learners in Turkey. This study, which is a quasi-qualitative research, builds on research done into the effect of extensive listening activities on developing mispronounced words in foreign language teaching process. For this study the researcher focused on the use of the authentic reading materials accompanied with the audio supplements. It can justifiably be claimed at the outset that there are positive benefits associated with using the techniques suggested for this study. It was also found that extensive listening can improve lexical competence, self confidence of learners in the use of the target language.

**Dillon (2011)** conducted a study on to explore teachers' attitudes towards home language maintenance among children acquiring English and Irish as additional languages in the early years of primary school and to explore the experiences of mainstream teachers who are working with these children. The study includes a consideration of the pedagogical issues involved in teaching young English and Irish language learners and an examination of the support that the whole school community provides for the teachers and the children. Data were gathered using a mixed methods approach, bearing in mind the rights of children to use their home languages and learn additional languages in an age-appropriate manner and the complex linguistic ecologies that form part of the environment of these children. Phase I of the research involved four focus group interviews carried out with teachers of Junior and Senior Infant classes. This served to

inform parts of Phase II of the research, a nationwide postal questionnaire administered to teachers of Junior Infants. It was found that teachers do have positive attitudes towards the maintenance of home languages among these newcomer children, and that while attitudes inform practice, practical application of home language inclusion was rare. It was also found that while documents exist to support teachers in this endeavour, they are most often not consulted due to lack of training and lack of awareness. Classroom observation which focussed on teacher interaction with three newcomer children in one Junior Infant classroom was carried out during Phase III. This observation highlighted not only a variety of strategies for interactional scaffolding appropriate to facilitating newcomer children in the mainstream classroom but also the importance of environmental scaffolding. Positive results regarding children's English and Irish language skills were found during all phases of the research. Overall the study has shown many positive aspects of an education system that advocates for children speaking home languages other than English in the early years of primary school. However, this system requires a more consistent approach to support and training for the mainstream class teacher who is ultimately responsible for implementing policies and practices at the micro level.

## **2.2 Overview of Related Research Literature**

Research proves that while most students enter school with an enthusiasm for learning to read, many become progressively less motivated to read (Carbo, 1983). Preciado, Horner, and Baker, (2009) has found that low-income and first language English language learners generally struggle in reading. It is also found that students reading significantly below grade level have trouble keeping up with academic requirements expected of seventh and eighth-grade students. Students who struggle academically are more likely to develop problem behaviors designed to escape and avoid academic demands (McIntosh, Flannery, Sugai, Braun, and Cochrane, 2008; Moore, Anderson, and Kumar, 2005; Morgan, Farkas, Tufis, and Sperling, 2008; Preciado et al., 2009). Students who are unable to read and understand academic textbooks often become frustrated when trying to complete assignments in the classroom. When the majority of students in a classroom are significantly challenged by grade-level academic expectations, they are also less likely to engage effectively in cooperative or independent learning activities and are more likely to

engage in off-task behavior (Preciado et al., 2009). When students disrupt the educational environment, they stop teaching from occurring, thereby preventing their own learning” (McIntosh, Horner, Chard, Dickey and Braun, 2008, p. 132). Much of what has been learned to improve first language literacy applies to building literacy in a second language (Daniel and Hoelting, 2008). Audio models provide a form of scaffolding that makes it possible for students to read material that is more difficult and to focus on meaning (Koskinen et al. 2000). Providing access to books and corresponding audio gives language learners an opportunity to simultaneously hear sounds and see the corresponding graphic representation (Drucker, 2003). A second language learner has to develop an ear for differentiating between the sounds of a language before he or she can comprehend (Daniel and Hoelting, 2008, p. 6). Developing effective listening skills is important to learning and creates a foundation for speaking, reading and writing (Glasser, 2008; Vygotsky, 1978). Audio models of fluent English in the home environment encourage more parent awareness of the student’s reading progress and provide a way for parents who do not speak English to participate as a partner/learner in their child’s home reading. English words “in the air” in student homes appear to capture the attention of others and to increase the social interaction related to books—important to progress in learning to read (Blum et al, 1995). Researchers have demonstrated that the use of technology exposes struggling readers to different types of literature and assists with vocabulary acquisition (Krashen, 2003; Stone-Harris 2008). From the above it can be seen that comprehensive reading is the pre-cursor for better academic achievement and also that providing lesson in the audio and video form not only helps the students but also motivates the parents of first generation English learners to get involved more fruitfully in their child’s academic development.



## CHAPTER – III

### DESIGN AND METHODOLOGY OF THE STUDY

#### 3.0 Introduction

Meticulous planning beforehand is a must to accomplish any endurance successfully. In a research pursuit it is necessary for the investigator to be aware of the constraints on the resources such as money, time, expertise, accessibility to needed material etc. available to him so that he can design his plan of action accordingly so as to achieve his set goals. Unlike scientific research, which deals mostly with laboratory situation, the researches in the area of social sciences and humanities are concerned with field situations. In social sciences and humanities, it is a Herculean task to study the untamed human behavior and report the same with objectivity. Though, it is a difficult task but not an impossible one if it is meticulously planned beforehand. Planning broadly includes method of research to be adopted, sample to be selected, tools to be considered for use, procedures and cautions to be followed for collection of data and statistical treatment to be given to data for its conversion into information. A research design is a systematically organized plan to carry out a study in a particular area. It is the structural framework within which the study is conducted. It is the research design that specifies the research approach to be followed and identifies the data gathering tools and techniques to be used for the study. It also specifies the procedure to be followed in collecting, tabulating and analyzing the data. It is a purposeful scheme of action proposed to be carried out in a sequence during the research process. “A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure” (Selltiz, 1962). The various aspects of the research design followed in the present study are explained in detail under different heads in the following pages.

#### 3.1 Importance of the Research Approach

Research methods are no more than the tools of the trade. Research methods refer to the methods, the researchers use in performing research operations. This is an unfortunate tendency to think that research begins and ends with methodology. This is just not so. It is important to be aware of the range of methods available and to

understand how they work appreciating their advantages and disadvantages. The essential thing is to be able to select the methods that are most likely to achieve the objectives of the research.

### **3.2 Experimental Research Design**

For the present research study the researcher has chosen experimental design. Since in the present research study an effort is made to find the impact of an intervention on the students it is called an experimental study. The experimental method is a systematic and scientific approach to research in which the researcher manipulates one or more variables, and controls and measures any change in other variables. There are many benefits of an experimental design. Some of the benefits include - i) experimental research is the most appropriate way for drawing causal conclusions, regarding interventions or treatments and establishing whether or not one or more factors causes a change in an outcome. This is largely due to the emphasis in controlling extraneous variables. If other variables are controlled, the researcher can say with confidence that manipulation independent variable caused a changed in the dependent variable; ii) it is a basic, straightforward, efficient type of research that can be applied across a variety of disciplines; iii) experimental research designs are repeatable and therefore, results can be checked and verified; iv) due to the controlled environment of experimental research, better results are often achieved; v) in the case of laboratory research, conditions not found in a natural setting can be created in an experimental setting that allows for greater control of extraneous variables. Conditions that may take longer to occur in a natural environment may occur more quickly in an experimental setting; and vi) there are many variations of experimental research and the researcher can tailor the experiment while still maintaining the validity of the design. Educational researchers in many disciplines are faced with the task of exploring how students learn and are correspondingly addressing the issue of how to best help students do so. Often, educational researchers are interested in determining the effectiveness of some technology or pedagogical technique for use in the classroom. Their ability to do so depends on the quality of the research design used to investigate these treatments.

### **3.3 Research Design**

The selection of a research approach and the specific design which is appropriate in investigating a research problem depends upon the nature of the problem and the kind of data that the problem entails. The present research work employs 'pre-test post-test control group design'. This type of design has two randomly assigned groups: an experimental group and a control group. Both groups are pretested for the independent variable. The experimental group receives the treatment and both groups are post-tested to examine the effects of manipulating the independent variable on the dependent variable. In the dependent variable is reading ability which is perceived in terms of pronunciation, fluency, vocabulary and spellings. The independent variable is the treatment i.e. the use of audio and video material.

### **3.4 Sample**

The target population consists of all the students studying in Class IV. For the present study students studying in both the sections of Class IV of Demonstration Multipurpose School, Bhopal in the academic year 2017-2018 were taken as the sample. Each section has 35 students each. Hence the total sample consisted of 70 students. One section from each section i.e. 35 students, formed the experimental group on whom the intervention was given and the other 35 students formed the control group who were taught through the traditional method.

### **3.5 Tools Employed in the Study**

Data collection in educational research is done to gather information that is then analyzed and interpreted. As such, data collection is a very important step in conducting research and can influence results significantly. In every research work, it is essential to collect factual material or data unknown or untapped so far. They can be obtained from many sources, direct or indirect. It is necessary to adopt a systematic procedure to collect essential data. Relevant data, adequate in quantity and quality should be collected. They should be sufficient, reliable and valid. For checking new, unknown data required for the study of any problem you may use various devices, instruments, apparatus and appliances. For each and every type of research we need certain instruments to gather new facts or to explore new fields. The instruments thus employed as means for collecting data are called tools. In order to collect the data in the present research work



rubrics have been utilized. In the present research work rubrics provided by CBSE to assess the reading skills of students from Class III to V is utilized.

### **3.6. Rubrics – Meaning**

Gronlund (1998) provided a basic definition of the term scoring rubric “a set of scoring guidelines that describes the characteristics of the different levels of performance used in scoring or judging a performance.” The word rubric comes from the Latin word for red. The online Merriam-Webster dictionary lists the first meaning of rubric as "an authoritative rule" and the fourth meaning as "a guide listing specific criteria for grading or scoring academic papers, projects, or tests. A rubric is a coherent set of criteria for students' work that includes descriptions of levels of performance quality on the criteria. Effective rubrics have appropriate criteria and well-written descriptions of performance. The main purpose of rubrics is to assess performances. For some performances, you observe the student in the process of doing something, like using an electric drill or discussing an issue. For other performances, you observe the product that is the result of the student's work, like a finished bookshelf or a written report. When the intended learning outcomes are best indicated by performances—things students would do, make, say, or write—then rubrics are the best way to assess them. Notice that the performances themselves are not learning outcomes. They are indicators of learning outcomes. Except in unusual cases, any one performance is just a sample of all the possible performances that would indicate an intended learning outcome. Rubrics give structure to observations. Matching your observations of a student's work to the descriptions in the rubric averts the rush to judgment that can occur in classroom evaluation situations. Instead of judging the performance, the rubric describes the performance. The resulting judgment of quality based on a rubric therefore also contains within it a description of performance that can be used for feedback and teaching. This is different from a judgment of quality from a score or a grade arrived at without a rubric.

### **3.7 Rubrics Provided by CBSE to Assess the Reading Skills of Students**

Under the assessment of language the aspect of reading skills is very important. The rubrics provided by CBSE to assess the reading skills of students aims at comprehensively assessing the students on various aspects of reading skill. In the rubrics the main aspect is reading skill. This skill further divided in to sub skills such as

pronunciation, fluency and comprehension. For each of the sub skills five grades namely A\*, A, B, C or D can be given to the students according to the performance of the students on that particular sub skill. According to the rubrics a student can be given A\* in pronunciation when a student can read short stories or articles or word on ones' own and use his or her phonetic skills to pronounce new words; the student can be given A grade in pronunciation when he or she can read short stories or articles on ones' own most of the time. In addition A grade can also be given when he or she uses for phonetic skills to pronounce new words most of the time; the student can be given B grade in pronunciation when a student can often breathe short stories with varying speed and guidance most of the time; the student will get C grade in pronunciation when he or she can read short stories with varying speed and guidance from the teachers most of the time; and lastly the student will be given D grade when he or she needs help and prompting by the teacher all the time. The next soft skill for which the rubrics have been prepared is fluency. According to the rubrics a student can be given A\* for fluency when he or she can read simple or complex passages fluently with proper speed, expression and pronunciation; a student can be given A grade for fluency when he or she can read simple or complex passages fluently with speed but needs occasional prompting; B grade in fluency can be given when a student can read simple passages but takes time to read each word, let fluency, speed and expression; when a student can read simple passages with guidance or prompting most of the time the student can be given C grade in fluency; D grade in fluency is given to students who fumble even while reading simple sentences and need help all the time. According to the rubrics in the aspect of reading the sub skill of comprehension is included. Here a student can be given A\* grade in comprehension when he or she can read and understand text and answer questions correctly; the student who can read and understand text and answers to most of the questions correctly can be given A grade: If the student can read and understand text and answer some of the questions correctly he or she can be given B grade. C grade can be given to a student who can read and understand text with the help of the teacher; and finally D grade is given to a student who cannot comprehend the text at all.

### 3.7.1 Administration

In order to score the students on the rubrics both for the pre-test and the post-test, the students were asked to read passages from the English textbook approved for Class IV i.e. Marigold – IV. The students were asked to read various passages both from the prose and poetry part and were marked on the rubrics according to their performance in various sub skills of reading skill. For assessing each sub skill different days were chosen. On the first day the students were assessed for pronunciation, the next day for fluency and the third day for comprehension. This was done to provide more objectivity to the scoring process. The students were called one by one to read the selected part from the textbook and were given grades individually. None of the students were provided opportunity to perform a second time both during the pre-test and the post-test.

### 3.7.2 Scoring

In order to get a score for the different sub skills i.e. pronunciation, fluency and comprehension, the grades were represented by marks. The distribution of marks to different grades is given in table 3.1

**Table 3.1 Descriptions of the Grades Obtained and Corresponding Score Obtained**

S. No	Grade Obtained	Score
1.	A*	5
2.	B	4
3.	C	3
4.	D	2
5.	E	1

From table 3.1 it can be seen that if a student gets A\* the corresponding score obtained is 5, the score for grade A, B, C and D are 4, 3, 2 and 1 respectively.

### 3.8 Spelling Test (Dictation)

In order to assess the understanding of the spellings of the students they were given dictation of 10 words from different parts of the prose and poetry given in the textbook.



For assessing the spelling of the students, they were asked to write down the correct spelling of the words the teacher dictated. The students were to write the correct spelling as they are being called out. For pronouncing the words of the selected for the dictation, the students were asked to write numbers from one to ten on a sheet of paper with space beside each number. Each selected word was called out three times before moving on to the next word. As the words are being called out the students had to write the correct spelling of the words alongside the number written earlier. At the end of the dictation when all the ten words have been called out, the teacher repeated all the words once again for the students to check them. After this all sheet on which the spellings have been written were collected by the teacher. In order to score the dictation, each correct word was given half mark. The score obtained by the students were rounded of to the next whole number. This procedure was followed for both the pre-test and the post-test. The reading ability of the students was calculated by combining the scores obtained under pronunciation, fluency, comprehension and dictation.

### **3.9 Academic Achievement of the Students**

In order to collect the details of the academic achievement of the students, the marks obtained by the students in the mid- term exams were collected by the investigator and the same were used for analysis and interpretation. The students are given marks out of 400 in this exam.

### **3.10 Preparation of the Audio-Visual Material**

For the present study various applications and software such as Adobe Photoshop, PDF Reader, Microsoft Office Word, WordTalk, Open Broadcasting Software, Mobile phone recorder, Windows Movie Maker and VLC Player to get the conversion of the NCERT Grade IV textbooks into audio video format. Later the same were provided to the concerned parents through WhatsApp, Hike, Bluetooth etc. First of all the NCERT Grade IV English textbook 'Marigold - IV' was scanned. The scanning was done of those pages which contained the prose and the poems. As the scanning of a book is not possible properly in proper alignment, these scanned pages were processed for giving them a proper shape with the help of an expert in designing. The lessons were now available in proper shape in digital format. These were now in the JPEG format. These had to be converted to word form. But it was not possible to convert the picture directly into word

format. They had to be first converted to Portable Document Format (PDF). For this again the help of an expert was sought. The researcher wanted that the text being read should be highlighted on the screen so that the students can understand which word is being pronounced from the text hence it was necessary that the text should look exactly the same as it is in the printed form, although many applications are found which read the text in the PDFs, no application could be found which highlights the text being read out in the PDFs but there are application which highlights the words being read out in Microsoft Office Word format. This was a specialized work. Here again the help of a professional with mastery over specialized software was sought. In order to get the text in word, the text of the lessons was deleted using Adobe Photoshop by the professional, later these were typed in the correct format using Microsoft Office Word by him. Then the professional, to highlight the text while being read, an add-in named WORDTALK which works on Microsoft Office Word was used by him. After this the onscreen activity of reading by the software at appropriate speed needed to be recorded. For this the professional used specialized software. The software being used by the professional read out the content. The investigator was of the view that the content can now be used for the experiment. But it was found that the accent being used by the software is foreign and it was not of much use to the students in the school as they were getting more confused. With the purpose of making the exercise more fruitful, all the lessons were read out by the researcher while the video is being played on VLC player at the appropriate pace with proper pronunciation, stress, pause and intonation and the same was recorded using the recorder in the smart phone or at RIE studio. Now these videos and audio formats were to be mixed so as to produce the optimum result. For this again the support of a professional was needed. The investigator approached the professional and got the mixing of the video and the audio done. These videos were now ready to be used in the classroom for developing the reading skills of the students. These videos of different lessons were played by the researcher at equal intervals and the students gained interest. A major drawback that our students suffer is the lack of ability of the parents to help them at home with English. It is seen that with the enhancement in technology most of the parents have access to smart phones. To overcome this inability of parents the researcher sent these videos on the mobiles of the parents to be used at home using applications such as WhatsApp, Hike, Bluetooth and as email attachments. It was made sure that the parents

use these video with the audio of the lessons regularly while teaching the lesson to the children.

### **3.11 Data Collection Procedure**

In the present PAC project an effort was made to provide students of the experimental group with English textbook to develop their reading skills and assess them in terms of their performance in pronunciation, fluency, vocabulary and spellings. It was an inbound research project where the students of Class IV of Demonstration Multipurpose School (DMS) were taken as the sample. The investigator shared the idea with the co-class teacher of conducting an experimental to improve the reading skills of the students. The co-class teacher agreed to cooperate in the process and assured complete support. The data was collected in different phases as mentioned below.

#### **Phase I: Conduct of the Pre-Test**

In the first phase a pre-test was conducted of both the classes by the investigator by using the rubrics provided by CBSE to assess the reading skills of students. The students of both the classes were asked to read same passages and poems from Marigold-IV and their performance was recorded as scores of the pre-test.

#### **Phase II: Intervention**

After the conduct of the pre-test, the students of the experimental group were taught reading using the audio-video materials prepared by the investigator. The intervention was given for four months in the classroom using ICT equipments such as laptop, LCD projector, speaker, mobile etc. The prepared audio-video materials were also transferred to the parents of the students of the experimental group and were urged to use the same in case they are making their children read the lessons. In the mean time the control group was taught using the traditional method. The teacher in the control group used to read the text herself and then asked the students to read the same one by one, this was done a few times in the class to develop the reading skills of the students.

#### **Phase III: Conduct of the Post-test**

After the intervention was carried out for four months, a post test was conducted on both the control and experimental group. For this purpose the same rubrics provided by CBSE to assess the reading skills of students was used. The students of both the classes were



asked to read same passages and poems from Marigold-IV and their performance was recorded as scores of the post-test.

#### **Phase IV: Collection of the marks of the mid-term**

After the conduct of the mid-term examinations the total marks obtained by the students in the examination was collected by the investigator with the help of the co-class teacher for further analysis and interpretation.

#### **3.12 Scoring, Tabulation and Analysis of the Data**

On the completion of the data collection, the data was classified class wise and then student wise. The scores were tabulated on the basis of the answers received. The pre-test and post-test score obtained were tabulated in Microsoft Excel for further analysis and calculations. The analysis was done using SPSS package 20. The data was analysed using both quantitative techniques with thick description.

#### **3.13 Statistical Techniques/Procedures/Methods**

- arithmetic mean and standard deviation was computed to know the nature of distribution.
- t-test was used to find the effect of intervention on the experimental group.

#### **3.14 Conclusion**

The present chapter discusses the design and methodology of the present study in detail. This chapter includes details about the research approach, research design, population, sample, the description of the tools employed, its characteristics, procedure of administration and scoring, the method of preparing the audio-video material, the data collection procedure and the statistical techniques to be utilized. In the next chapter the analysis and interpretation of data is presented objective-wise.

## CHAPTER 4

### ANALYSIS AND INTERPRETATION OF RESULTS

#### 4.0 Introduction

The first chapter deals with the introduction, background, need and justification, objectives and hypothesis of the study. Reviews of related literature are present in the second chapter. In the third chapter, the methodology, sample, tools, procedure of data collection and the statistical techniques to be employed for the analysis of the data are presented. The analysis of results and its interpretations are presented under different headings in this chapter.

#### 4.1 Analysis of data, interpretation of results and discussion

The analysis of data, its interpretation and the discussions based on the results are presented here. In order to answer the research questions the investigator has utilized percentage analysis of the collected data. In the case of the hypothesis, the researcher has adopted both 0.05 and 0.01 level of significance to test significance of the obtained results. The researcher analyzed the data in the computer using Microsoft Excel 2007 and SPSS 20 software packages. In the lines that follow the analysis and interpretation of the collected data is presented objective-wise. As two different classes i.e. Class VI and Class VIII has been taken for the study, the analysis and interpretation is done in two sections.

#### 4.2 Effectiveness of Audio-Video Material in Terms of Pronunciation

This section relates to analysis and interpretation of data pertaining to the first objective of the study that reads 'To study the effectiveness of audio-video material in terms of pronunciation of the students' and to test the hypothesis namely 'there is no significant effect on pronunciation of the students before and after the treatment'. The data to analyse the effectiveness of audio-video material on improving pronunciation was collected by administering the rubrics provided by CBSE to assess the reading skills of students. The scores were obtained by following the procedure for conversion of grades into marks. With the aim of testing the effectiveness of audio-video material on improving pronunciation of Class IV students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the pronunciation were computed before and after the

experiment and subjected to analysis. Before starting the experiment, the mean score in pronunciation of Class IV students in control group was compared with the mean score in pronunciation of Class IV students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of audio video material, the subjects were administered the post-test. In the post test too the mean score in pronunciation of Class IV students in the control group were compared with the mean score in pronunciation of Class IV students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.1.

**Table 4.1 Mean scores, standard deviation and t values of the pre-test and post-test of groups for pronunciation**

Variable	Group	N	Mean	SD	df	t value
Pre-test Score	Control	35	3.06	0.873	68	1.345 <sup>#</sup>
	Experimental	35	2.80	0.719		
Post-test Score	Control	35	2.94	0.802		4.633 <sup>**</sup>
	Experimental	35	3.77	0.690		

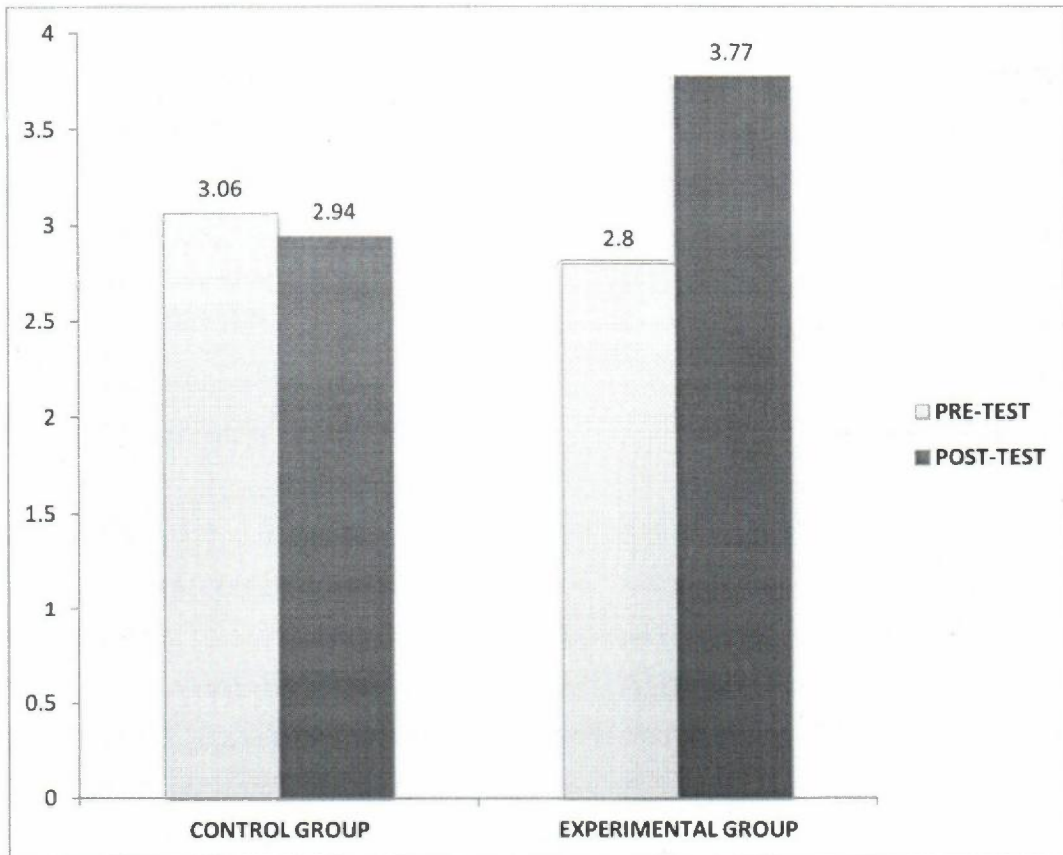
# not significant at 0.05 level

\*\* significant at 0.01 level

Table 4.1 shows the value of 't' test applied to the pre-test scores obtained by the Class IV students of the Control (N=35) and Experimental (N=35) groups for pronunciation. Since the calculated t value (1.345) is less than the table value (2.00) at 0.05 level with df as 68, the difference between the mean score of control group (3.06) and that of the experimental group (2.80) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having almost equal competence in pronunciation before the intervention was given. This clearly confirms that the Class IV students of the control and experimental groups are of equal ability with reference to their understanding of pronunciation.



Further table 4.1 also show the value of 't' test applied to the post-test scores obtained by the Class IV students of the control and experimental groups for pronunciation. In this case since the calculated value of t (4.633) was greater than table value (2.65) at 0.01 level with df as 68, the difference between the mean score of control group (2.94) and that of the experimental group (3.77) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "there is no significant effect on pronunciation of the students before and after the treatment" is rejected in this case. It implies that the experimental group of Class IV students performed better in the post-test compared to the control group of Class IV students. The finding indicates that the utilization of audio video material leads to gain in scores of pronunciation.



**Figure 4.1 showing the mean pre-test and post-test scores of grammar obtained by the control and experimental group**

On analyzing figure 4.1 it is found that the mean pre-test scores of control group is 3.06 and that of the experimental group is 2.8, while the post-test scores of control group is 2.94 and that of the experimental group is 3.77. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in pronunciation of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this it can be inferred that the improvement is due to the intervention provided i.e. the use of audio video material in teaching pronunciation. This may be the result of the intervention provided in the form of textbooks in the audio-video format. The exposure to correct pronunciation may have given the students better understanding of the words in the lesson and hence might have helped them to pronounce them correctly.

#### **4.3 Effectiveness of Audio-Video Material in Terms of Comprehension**

This section relates to analysis and interpretation of data pertaining to the second objective of the study that reads 'To study the effectiveness of audio-video material in terms of comprehension of the students' and to test the hypothesis namely 'there is no significant effect on comprehension of the students before and after the treatment'. The data to analyse the effectiveness of audio-video material on improving comprehension was collected by administering the rubrics provided by CBSE to assess the reading skills of students. The scores were obtained by following the procedure for conversion of grades into marks. With the aim of testing the effectiveness of audio-video material on improving comprehension of Class IV students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the comprehension were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in comprehension of Class IV students in control group was compared with the mean score in comprehension of Class IV students in the experimental group. This was done by testing significance of difference between pre-test scores of control and experimental groups. Later, to find out the effectiveness of audio video material, the subjects were administered the post-test. In the post test too the mean score in comprehension of Class IV students in the control group were compared with the mean score in comprehension of

Class IV students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.2.

**Table 4.2 Mean scores, standard deviation and t values of the pre-test and post-test of groups for comprehension**

Variable	Group	N	Mean	SD	df	t value
Pre-test Score	Control	35	2.11	0.963	68	0.825 <sup>#</sup>
	Experimental	35	1.94	0.765		
Post-test Score	Control	35	2.00	0.970		4.089 <sup>**</sup>
	Experimental	35	2.86	0.772		

# not significant at 0.05 level

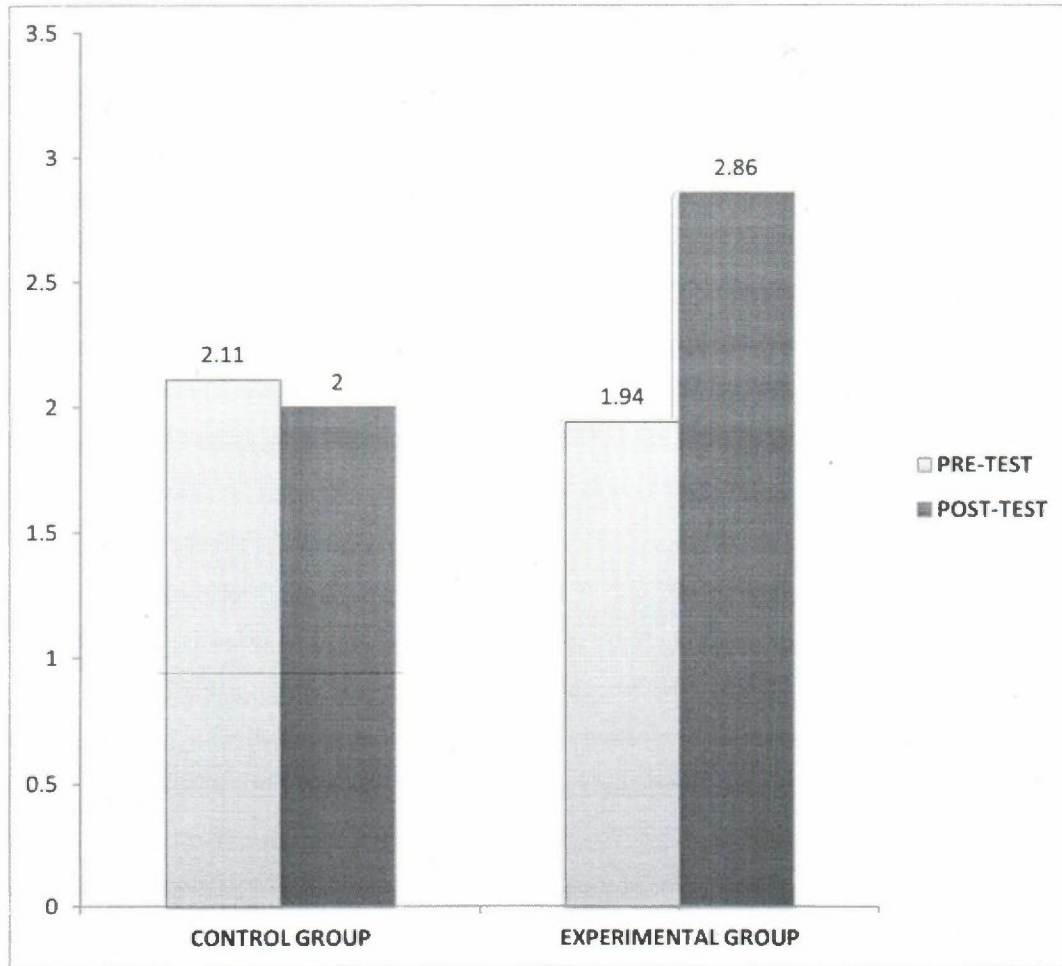
\*\* significant at 0.01 level

Table 4.2 shows the value of 't' test applied to the pre-test scores obtained by the Class IV students of the Control (N=35) and Experimental (N=35) groups for comprehension. Since the calculated t value (0.825) is less than the table value (2.00) at 0.05 level with df as 68, the difference between the mean score of control group (2.11) and that of the experimental group (1.94) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having almost equal competence in comprehension before the intervention was given. This clearly confirms that the Class IV students of the control and experimental groups are of equal ability with reference to their understanding of comprehension.

Further table 4.2 also show the value of 't' test applied to the post-test scores obtained by the Class IV students of the control and experimental groups for comprehension. In this case since the calculated value of t (4.089) was greater than table value (2.65) at 0.01 level with df as 68, the difference between the mean score of control group (2.00) and that of the experimental group (2.86) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "there is no significant effect on comprehension of the students before and after the treatment" is



rejected in this case. It implies that the experimental group of Class IV students performed better in the post-test compared to the control group of Class IV students. The finding indicates that the utilization of audio video material leads to gain in scores of comprehension.



**Figure 4.2 showing the mean pre-test and post-test scores of grammar obtained by the control and experimental group**

On analyzing figure 4.2 it is found that the mean pre-test scores of control group is 2.11 and that of the experimental group is 1.94, while the post-test scores of control group is 2.00 and that of the experimental group is 2.86. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be

said that the performance in comprehension of the experimental group has shown improvement. Further from table 4.2 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this it can be inferred that the improvement is due to the intervention provided i.e. the use of audio video material in teaching comprehension. This may be due to providing the meaning of the text in Hindi too in the audio format. As the most of the students belong to the Hindi belt and are first generation English learners, there is lack of support from the home front. The exposure to video provides the students better understanding of the text being read by them.

#### **4.4 Effectiveness of Audio-Video Material in Terms of Fluency**

This section relates to analysis and interpretation of data pertaining to the third objective of the study that reads 'To study the effectiveness of audio-video material in terms of fluency of the students' and to test the hypothesis namely 'there is no significant effect on fluency of the students before and after the treatment'. The data to analyse the effectiveness of audio-video material on improving fluency was collected by administering the rubrics provided by CBSE to assess the reading skills of students. The scores were obtained by following the procedure for conversion of grades into marks. With the aim of testing the effectiveness of audio-video material on improving fluency of Class IV students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the fluency were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in fluency of Class IV students in control group was compared with the mean score in fluency of Class IV students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of audio video material, the subjects were administered the post-test. In the post test too the mean score in fluency of Class IV students in the control group were compared with the mean score in fluency of Class IV students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.3.

**Table 4.3 Mean scores, standard deviation and t values of the pre-test and post-test of groups for fluency**

Variable	Group	N	Mean	SD	df	t value
Pre-test Score	Control	35	3.06	0.802	68	0.814 <sup>#</sup>
	Experimental	35	2.91	0.658		
Post-test Score	Control	35	2.94	0.802		4.964 <sup>**</sup>
	Experimental	35	3.80	0.632		

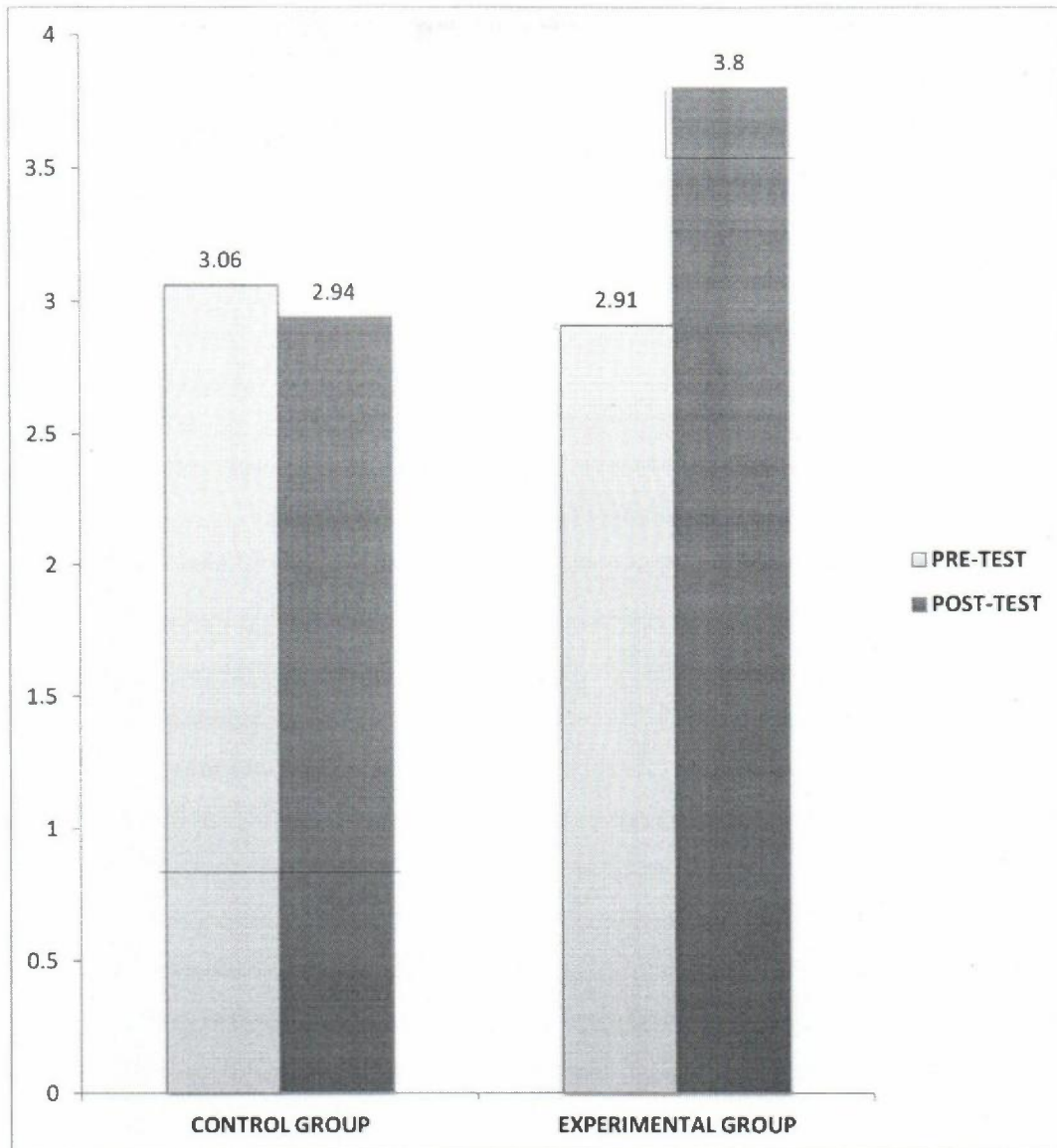
# not significant at 0.05 level

\*\* significant at 0.01 level

Table 4.3 shows the value of 't' test applied to the pre-test scores obtained by the Class IV students of the Control (N=35) and Experimental (N=35) groups for fluency. Since the calculated t value (0.814) is less than the table value (2.00) at 0.05 level with df as 68, the difference between the mean score of control group (3.06) and that of the experimental group (2.91) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having almost equal competence in fluency before the intervention was given. This clearly confirms that the Class IV students of the control and experimental groups are of equal ability with reference to their understanding of fluency.

Further table 4.3 also show the value of 't' test applied to the post-test scores obtained by the Class IV students of the control and experimental groups for fluency. In this case since the calculated value of t (4.964) was greater than table value (2.65) at 0.01 level with df as 68, the difference between the mean score of control group (2.94) and that of the experimental group (3.80) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "there is no significant effect on fluency of the students before and after the treatment" is rejected in this case. It implies that the experimental group of Class IV students performed better in the post-test compared to the control group of Class IV students. The finding indicates that the utilization of audio video material leads to gain in scores of fluency.





**Figure 4.3 showing the mean pre-test and post-test scores of grammar obtained by the control and experimental group**

On analyzing figure 4.3 it is found that the mean pre-test scores of control group is 3.06 and that of the experimental group is 2.91, while the post-test scores of control group is 2.94 and that of the experimental group is 3.80. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in fluency of the experimental group has shown improvement.

Further from table 4.3 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this it can be inferred that the improvement is due to the intervention provided i.e. the use of audio video material in teaching fluency. This may be because of the fact that when the students are provided both audio and video of the text the students are familiar with the words due to repeated exposure and hence they might be able to say the otherwise difficult words fluently while reading the text.

#### **4.5 Effectiveness of Audio-Video Material in Terms of Spelling**

This section relates to analysis and interpretation of data pertaining to the fourth objective of the study that reads 'To study the effectiveness of audio-video material in terms of spelling of the students' and to test the hypothesis namely 'there is no significant effect on spelling of the students before and after the treatment'. The data to analyse the effectiveness of audio-video material on improving spelling was collected by administering the rubrics provided by CBSE to assess the reading skills of students. The scores were obtained by following the procedure for conversion of grades into marks. With the aim of testing the effectiveness of audio-video material on improving spelling of Class IV students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the spelling were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in spelling of Class IV students in control group was compared with the mean score in spelling of Class IV students in the experimental group. This was done by testing significance of difference between pre-test scores of control and experimental groups. Later, to find out the effectiveness of audio video material, the subjects were administered the post-test. In the post test too the mean score in spelling of Class IV students in the control group were compared with the mean score in spelling of Class IV students in the experimental group. This was done by testing significance of difference between post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.4.

**Table 4.4 Mean scores, standard deviation and t values of the pre-test and post-test of groups for spelling**

Variable	Group	N	Mean	SD	df	t value
Pre-test Score	Control	35	2.26	0.701	68	0.180 <sup>#</sup>
	Experimental	35	2.29	0.622		
Post-test Score	Control	35	2.26	0.657		0.284 <sup>#</sup>
	Experimental	35	2.31	0.993		

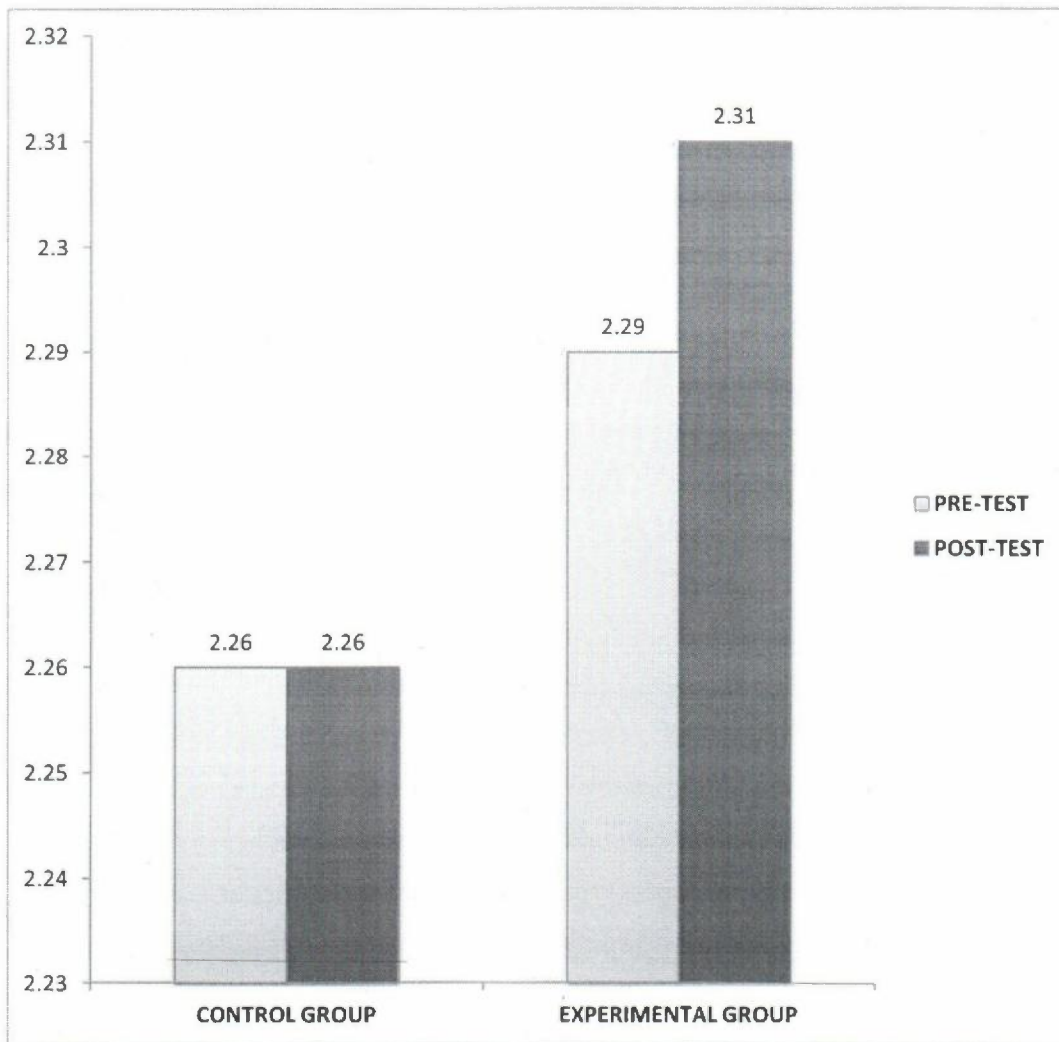
# not significant at 0.05 level

Table 4.4 shows the value of 't' test applied to the pre-test scores obtained by the Class IV students of the Control (N=35) and Experimental (N=35) groups for spelling. Since the calculated t value (0.180) is less than the table value (2.00) at 0.05 level with df as 68, the difference between the mean score of control group (2.26) and that of the experimental group (2.29) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having almost equal competence in spelling before the intervention was given. This clearly confirms that the Class IV students of the control and experimental groups are of equal ability with reference to their understanding of spelling.

Further table 4.4 also show the value of 't' test applied to the post-test scores obtained by the Class IV students of the control and experimental groups for spelling. In this case since the calculated value of t (0.284) was less than table value (2.00) at 0.05 level with df as 68, the difference between the mean score of control group (2.26) and that of the experimental group (2.31) on post-test is not statistically significant. Since the value is not significant hence the hypothesis namely "there is no significant effect on spelling of the students before and after the treatment" is accepted in this case. It implies that the experimental group of Class IV students did not performed better in the post-test compared to the control group of Class IV students. The finding indicates that the



utilization of audio video material leads to no gain in the scores of spelling of the experimental group.



**Figure 4.4 showing the mean pre-test and post-test scores of grammar obtained by the control and experimental group**

On analyzing figure 4.4 it is found that the mean pre-test scores of control group is 2.26 and that of the experimental group is 2.29, while the post-test scores of control group is 2.26 and that of the experimental group is 2.31. There is only a slight improvement in the scores of the experimental group in spelling. The same improvement can be seen in the spelling score of the control group. Since there is not much difference in the the mean

scores of post-test of the experimental group and the control group, it can be not be said that the performance in spelling of the experimental group has shown improvement. Further from table 4.4 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is not significant. From this is can be inferred that there is no improvement in spelling of the students of Class IV and that audio video material is not so useful in improving the spelling of the students of Class IV.

This may be because of the fact that as the words are being read out the children may have not paid much attention to the spelling part. They might have only concentrated on the structure of the word and how to pronounce them properly.

#### **4.6 Effectiveness of Audio-Video Material Developing the Reading Ability**

This section relates to analysis and interpretation of data pertaining to the fifth objective of the study that reads 'to study the effectiveness of audio-video material in terms of students' reading ability' and to test the hypothesis namely 'there is no significant effect on the students reading ability before and after the treatment'. The data to analyse the effectiveness of audio-video material on improving reading ability was collected by administering the rubrics provided by CBSE to assess the reading skills of students. The scores were obtained by following the procedure for conversion of grades into marks. With the aim of testing the effectiveness of audio-video material on improving reading ability of Class IV students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the reading ability were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in reading ability of Class IV students in control group was compared with the mean score in reading ability of Class IV students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of audio video material, the subjects were administered the post-test. In the post test too the mean score in reading ability of Class IV students in the control group were compared with the mean score in reading ability of Class IV students in the experimental group. This was done by testing significance of difference between of post-

test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.5.

**Table 4.5 Mean scores, standard deviation and t values of the pre-test and post-test of groups for reading ability**

Variable	Group	N	Mean	SD	df	t value
Pre-test Score	Control	35	9.91	2.639	68	0.639 <sup>#</sup>
	Experimental	35	9.51	2.280		
Post-test Score	Control	35	9.57	2.367		4.463 <sup>**</sup>
	Experimental	35	12.34	2.400		

# not significant at 0.05 level

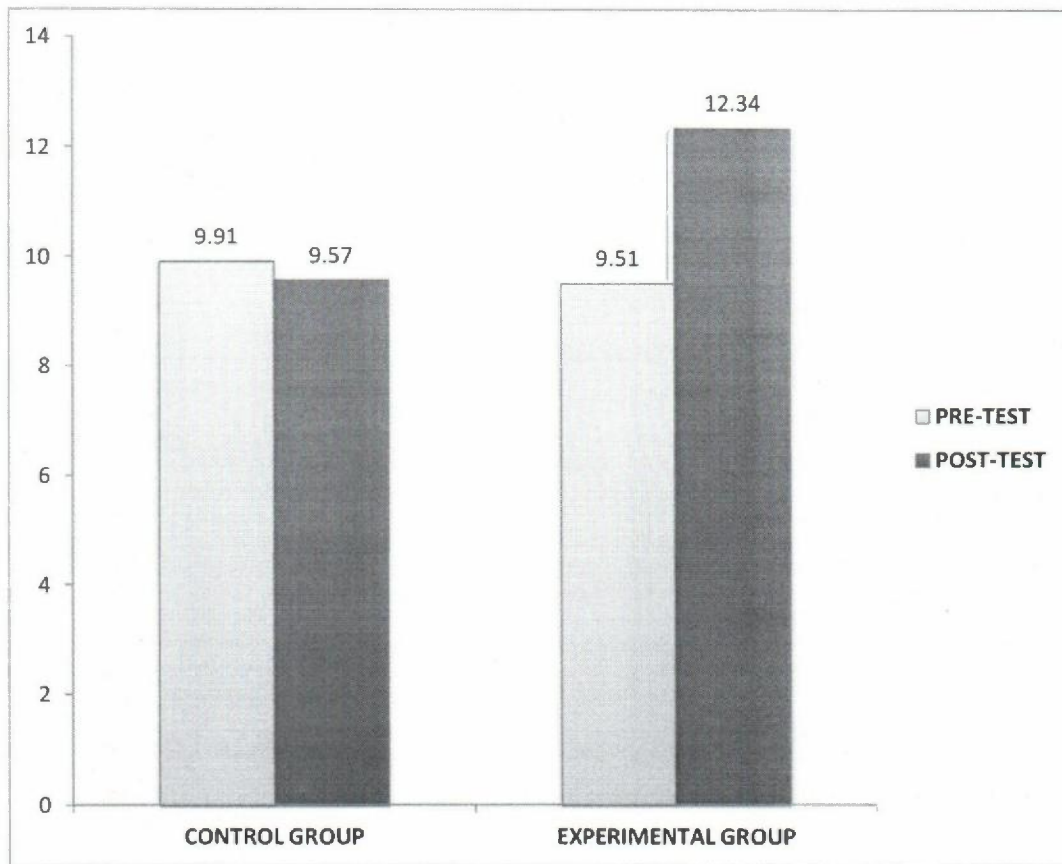
\*\* significant at 0.01 level

Table 4.5 shows the value of 't' test applied to the pre-test scores obtained by the Class IV students of the Control (N=35) and Experimental (N=35) groups for reading ability. Since the calculated t value (0.639) is less than the table value (2.00) at 0.05 level with df as 68, the difference between the mean score of control group (9.91) and that of the experimental group (9.51) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having almost equal competence in reading ability before the intervention was given. This clearly confirms that the Class IV students of the control and experimental groups are of equal ability with reference to their reading.

Further table 4.5 also show the value of 't' test applied to the post-test scores obtained by the Class IV students of the control and experimental groups for reading ability. In this case since the calculated value of t (4.463) is more than table value (2.65) at 0.01 level with df as 68, the difference between the mean score of control group (9.57) and that of the experimental group (12.34) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "there is no significant effect on the students' reading ability before and after the treatment" is rejected in this case. It implies that the experimental group of Class IV students performed better in the post-test compared to the control group of Class IV students. The finding indicates that the



utilization of audio video material leads to improvement in the scores of reading ability of the experimental group.



**Figure 4.5 showing the mean pre-test and post-test scores of grammar obtained by the control and experimental group**

On analyzing figure 4.5 it is found that the mean pre-test scores of control group is 9.91 and that of the experimental group is 9.57, while the post-test scores of control group is 9.51 and that of the experimental group is 12.34. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in reading ability of the experimental group has shown improvement. Further from table 4.5 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this it can be inferred that the improvement is due to the intervention provided i.e.

the used of audio video material in teaching reading ability. This is may be because the content may have motivated the students to help themselves read better and with access to correct and fluent model of reading, the parents may have also helped their children as now they too have access to proper reading.

#### 4.7 Effectiveness of Audio-Video Material in Terms Of Students' Overall Achievement

This section relates to analysis and interpretation of data pertaining to the sixth objective of the study that reads 'to study the effectiveness of audio-video material in terms of students' overall achievement' and to test the hypothesis namely 'there is no significant effect of treatment on the students' overall achievement'. The data to analyse the effectiveness of audio-video material on the overall achievement was collected by the investigator by noting down the marks obtained by the students of both the sections of Class IV. The maximum marks that can be obtained by the students was 400. In order to find the effect of the audio video material on the overall achievement, the composite marks obtained by the students in the mid-term examination were analysed with the help of 't' test. The results are presented in Table 4.6.

**Table 4.6 Mean scores, standard deviation and t values of the groups for overall achievement**

Group	N	Mean	SD	df	t value
Control	35	264.40	74.742	68	4.173 <sup>#</sup>
Experimental	35	327.69	49.635		

Table 4.6 shows the values of means, SD and t test among the control and the experimental group. Further it can be seen that since value of t-test (4.173) applied to the scores of academic achievement obtained by the students in the experimental group (N=35) and the students in the control group (N=35) is more that the table value (2.65) at 0.01 level with df as 68, the difference is significant. Since the value is significant, the

hypothesis namely 'there is no significant effect of treatment on academic achievement of the students' is not accepted. It can be further seen that the mean score in academic achievement of students in the experimental group (M=264.40) is more than that of the students in the control group (M=327.69). Hence it can be inferred that the academic achievement of the students in the experimental group is better than the students in the control group. This improvement in the experimental group may be because of the fact that reading skills have improved the students may be motivated for self study and understand the text in different subjects better than before. Moreover with the development of reading ability the student may have helped students to better comprehend the question being asked in the examination and give proper answers and hence score better marks.

#### **4.8 Conclusion**

In this chapter the analysis, interpretation and discussions were reported objective wise. The analysis and interpretation were aided with graphs, tables and statistical procedures. In the next chapter the summary and recommendations are logically presented.



## CHAPTER - 5

### FINDINGS, CONCLUSIONS AND SUGGESTIONS

#### 5.0 Introduction

Demonstration Multipurpose School (DMS), Bhopal serves as a laboratory of Regional Institute of Education, Bhopal for the identification and analysis of major problems of school education. It enables prospective teachers practice, learn and develop various innovative teaching strategies that contribute to the curriculum development. Reading is the one of the most integral part of the whole learning process as it leads to comprehension. Comprehension is the ability to actively listen to, read, and understand language. To comprehend a text, one's decoding skills must allow for fluent reading (reading that is as smooth and full of expression as when we talk), thus allowing a reader's cognitive energy to be used to draw connections, ask questions and make predictions. Research suggests a tested approach to improve reading comprehension levels significantly by using audio formats of the text books. The use of these audio formats can improve reading and academic performance of the learners. The components involved in reading are pronunciation, fluency, comprehension and spelling recognition, It is necessary to develop the reading skills of Grade IV students as this is the penultimate year in primary where the foundation for the future is laid. The next academic year will be their last year in the primary and hence it should be ensured that the students have developed optimum reading skills. In DMS Bhopal, a number of students come from the economically weaker sections of the society, moreover most of them are first generation English learners, hence they, literally get no support from the parents and other members of the family with regards to learning of English. The present study aims to find the effectiveness of the audio-video formats in improving the reading ability of the students and ultimately its influence on the overall academic performance of the students.

#### 5.1 Findings

The findings from the present study are given in the following lines.

1. Both the control and the experimental groups were found to be having almost equal competence in pronunciation before the intervention was given. There is significant effect on pronunciation of the students after the treatment.

2. The students of the control group and experimental group performed similarly in the pre-test for comprehension. There is significant effect on comprehension of the students after the treatment.
3. The pre-test scores in fluency of students of the control and the experimental group were similar. There is significant effect on fluency of the students after the treatment.
4. The performance in spelling of the students of the control and experimental group was almost equal when the pre-test was taken. There is no significant effect on spelling of the students after the treatment.
5. The reading ability of the students of the control group and experimental group was almost similar. There is significant effect on the students' reading ability after the treatment.
6. There is significant effect of treatment on academic achievement of the students.

## **5.2 Conclusions**

Based on the findings the following conclusions have been drawn from the study.

1. There is a marked improvement in the pronunciation of the students who were exposed to textbooks in the audio and video format.
2. The comprehension of the students who use textbooks in audio video form is better than the students who use the textbook in the print form.
3. Using textbooks in audio video form improves the fluency of the students in reading. The students who use the books in print form are deprived of this benefit.
4. The audio video form of the textbooks plays no significant role in improving the spellings of the students.
5. By providing textbooks in audio video form the reading ability of the students can be improved. The use of textbooks in audio video form helps in developing the reading skills of the students.
6. Providing textbooks in audio and video form helps students in having better academic achievement.

## **5.3 Recommendations**

1. As providing textbooks in the audio and video format leads to better academic achievement and enhanced reading ability, more of such content needs to be created in all the subjects.

2. As the exposure to the words in the audio and video format has aided marked improvement in the pronunciation and fluency of words, more texts using different and varied words should be provided in such formats.
3. Since the translation of the text into the mother tongue has lead to better comprehension among the students, the teachers should provide the meaning of the text in mother tongue so that learning of the students can be enhanced.
4. Since lessons in audio and video format does not show any improvement in the spelling of the words, other strategies need to be employed to improve the spellings of the students.
5. As the use of ICT tools has lead to providing the lessons in the audio and video format and in getting positive results, the teachers need to be exposed to more tools and should be given more specialized training in this emerging aid of learning.
6. Since the present innovative technique is useful in improving the leaning of the students, teachers can use eclectic approach of teaching. Eclectic approach suggests that a teacher should develop his/her own technique for teaching effectively.
7. Computer based learning, such as e- learning should be encouraged in the schools.

#### **5.4 Suggestions for further Research**

Keeping in view the observations made, inferences drawn and the utility seen in this investigation many similar researches can be undertaken to examine the effect of ICT on different aspects of teaching and learning. On the basis of the findings the researcher has suggested for further research. The suggestions are given below:

- The sample for the present study was made in limited area but the same study can be also done at a large area.
- The same study may be conducted on other government and private schools.
- The study may be undertaken with other dependent variables that have direct impact on the development of the reading skills of the students.
- Study may be conducted to develop strategies that can bring about a positive change in the academic development of the children coming from families having a particular characteristic.
- The rural and urban variation may be investigated in other geographical areas.



- Longitudinal/developmental studies may be undertaken to study the long term effect of providing books in audio video form over a period of time in Indian context.
- Studies may be conducted to find the teacher's perspective of providing books in audio video form in Indian context.
- Studies can be conducted to find the activities that are most useful in developing reading skills among students.
- Experiment and analysis of audio visual aids to improve listening and speaking skills at primary, secondary school and higher secondary school level can be done.
- Tryout of visual aids to teach English text in secondary and higher secondary schools can be performed.
- Tryout of ICT to improve English grammar among students can be done.

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**Appendix – 1**

**RUBRICS PREPARED BY CENTRAL BOARD OF SECONDARY EDUCATION (C.B.S.E.) FOR ASSESSING THE  
READING SKILLS OF STUDENTS FROM CLASS III TO V**

<b>Aspects</b>	<b>Sub-Skills</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Reading Skills</b>	<b>Pronunciation</b>	Can read short stories/ articles/ words on ones' own and uses his phonetic skills to pronounce new words.	Can read short stories or articles on ones' own most of the time. Uses for phonetic skills to pronounce new words most of the time	Can often read short stories with varying speed and guidance most of the time	Can read short stories with varying speed and guidance from the teachers most of the time	Needs help and prom king by the teacher all the time.
	<b>Fluency</b>	Can read simple/complex passages fluently with proper speed expression and pronunciation.	Can read simple or complex passages fluently with speed but needs occasional prompting	Can read simple passages but takes time to read each word, let fluency, speed and expression	Can read simple passages with guidance or prompting most of the time.	Fumbles even while reading simple sentences and need help all the time.
	<b>Comprehension</b>	Can read and understand text and answer questions correctly.	Can read and understand text and answers to most of the questions correctly	Can read and understand text and answer some of the questions correctly	Can read and understand text with the help of the teacher	Cannot comprehend the text at all.

## Appendix 2

### DICTIONATION WORDS

#### Dictation Words Given for Pre-Test

- 1) Carpenter
- 2) Ground
- 3) Galore
- 4) Delicious
- 5) Beavers
- 6) whipped
- 7) mire
- 8) whiskers
- 9) amazement
- 10) funniest

#### Dictation Words Given for Post-Test

- 1) Queer
- 2) Naughty
- 3) Shelves
- 4) Surprised
- 5) reindeer
- 6) wrestler
- 7) cease
- 8) meadow
- 9) triumphantly
- 10) tiniest



**Appendix – 3**

**PROPOSAL**

**EFFECTIVENESS OF AUDIO-VIDEO MATERIALS FOR DEVELOPING  
READING SKILLS OF FOURTH GRADE STUDENTS OF  
DEMONSTRATION MULTIPURPOSE SCHOOL, BHOPAL.**

**A Proposal**

**Submitted for**

**Conducting Small Research Project at  
Demonstration Multipurpose School, Bhopal**

**Programme Coordinator**

**Dr. JOSE J. KURISUNKAL**

## **1. Title of the Study/Project**

Effectiveness of Audio-Video Materials for Developing Reading Skills of Fourth Grade Students of Demonstration Multipurpose School, Bhopal.

## **2. Introduction**

Demonstration Multipurpose School (DMS), Bhopal serves as a laboratory of Regional Institute of Education, Bhopal for the identification and analysis of major problems of school education. It enables prospective teachers practice, learn and develop various innovative teaching strategies that contribute to the curriculum development. Reading is the one of the most integral part of the whole learning process as it leads to comprehension. Comprehension is the ability to actively listen to, read, and understand language. To comprehend a text, one's decoding skills must allow for fluent reading (reading that is as smooth and full of expression as when we talk), thus allowing a reader's cognitive energy to be used to draw connections, ask questions and make predictions. Research suggests a tested approach to improve reading comprehension levels significantly by using audio formats of the text books. The use of these audio formats can improve reading and academic performance of the learners. The components involved in reading are pronunciation, fluency, comprehension and spelling recognition, It is necessary to develop the reading skills of Grade IV students as this is the penultimate year in primary where the foundation for the future is laid. The next academic year will be their last year in the primary and hence it should be ensured that the students have developed optimum reading skills. In DMS, Bhopal a number of students come from the economically weaker sections of the society, moreover most of them are first generation English learners, hence they, literally get no support from the parents and other members of the family with regards to learning of English. The present study aims to find the effectiveness of the audio-video formats in improving the reading ability of the students and ultimately its influence on the overall academic performance of the students.

### **2.1 Need and Justification of the Study**

The mastery of any language depends on mastery of listening, speaking, reading and writing. While listening and speaking comes naturally to the students, reading is specialized skill that needs concentrated efforts both on the part of the teacher and the

taught so that this skill is acquired in such a manner that motivates the student to learn further. Reading requires one to identify and understand strings of words in a fluid manner. It is a detailed process that includes phonemic awareness, phonics, word recognition (vocabulary), comprehension, and fluency. Reading is the first step towards understanding and comprehending the content by decoding the symbols in the form of letters. It has been seen that just by reading the lesson once or twice in the class the students do not develop proper reading skills especially pronunciation. As most of the students in DMS are first generation English learners they get very less support from home. They later resolve to tuitions which is just a waste of precious time and money as these people are money driven and do not care about the proper development of the students. Moreover tutors just emphasis on the reproduction of the answers in the written form. Thus reading, which is one of the important aspect which drives future urge to learn gets seriously hampered and thus the academic achievement of the students is also affected. Providing the lessons, especially the NCERT primary level books in an audio and video format will help the students to have an alternative to the model reading by the teachers. Further these audios and vidoes of the poems and the prose ones recorded can be used again and again to improve the reading skills of the students. In today's age of technology, all possess a smart phone and these audio-video files can also be provided to the mobiles of the parents of the students so that they can access them at ease and whenever they feel to do so. Taking these points and the implications it carries the researcher has taken up the present project and is sure that with these efforts there will be marked improvement in the reading skills of the students and ultimately in the academic performance of the students. NCERT is nodal agency in suggesting improvements in school education and its textbooks are used throughout the country. The researcher further is of the view that just providing the audio formats of the book is of less value; hence efforts are made to provide the video of the read material as well where the words being spoken are being highlighted when being read. No such efforts have been made in the near past where the text has been provided both in the audio and video format. Converting and providing the audio and video formats of the text book will not only benefit the students of DMS but will be useful for the teachers and students throughout the country as the researcher is going to upload the prepared resource on WHATSAPP,



NROER, YOUTUBE and other free to access sources. Hence the researcher aims to experiment and provide empirical data in support of the thought.

## **2.2 Statement of the Problem**

Effectiveness of Audio-Video Materials for Developing Reading Skills of Fourth Grade Students of Demonstration Multipurpose School, Bhopal.

### **3. Objectives of the Study/Project:**

The objectives of the present study are as follows:

1. To study the effectiveness of audio-video material in terms of pronunciation of the students.
2. To study the effectiveness of audio-video material in terms of comprehension of the students.
3. To study the effectiveness of audio-video material in terms of fluency of the students.
4. To study the effectiveness of audio-video material in terms of spellings of the students.
5. To study the effectiveness of audio-video material in terms of students' reading ability.
6. To study the effectiveness of audio-video material in terms of students' overall achievement.

### **4. Overview of Related Research Literature:**

Research proves that while most students enter school with an enthusiasm for learning to read, many become progressively less motivated to read (Carbo, 1983). It is also found that low-income and first language English language learners generally struggle in reading (Preciado, Horner, and Baker, 2009). It is also found that students reading significantly below grade level have trouble keeping up with academic requirements expected of seventh and eighth-grade students. Students who struggle academically are more likely to develop problem behaviors designed to escape and avoid academic demands (McIntosh, Flannery, Sugai, Braun, and Cochrane, 2008; Moore, Anderson, and Kumar, 2005; Morgan, Farkas, Tufis, and Sperling, 2008; Preciado et al., 2009). Students who are unable to read and understand academic textbooks often become frustrated when

trying to complete assignments in the classroom. When the majority of students in a classroom are significantly challenged by grade-level academic expectations, they are also less likely to engage effectively in cooperative or independent learning activities and are more likely to engage in off-task behavior (Preciado et al., 2009). When students disrupt the educational environment, they stop teaching from occurring, thereby preventing their own learning” (McIntosh, Horner, Chard, Dickey and Braun, 2008, p. 132). Much of what has been learned to improve first language literacy applies to building literacy in a second language (Daniel and Hoelting, 2008). Audio models provide a form of scaffolding that makes it possible for students to read material that is more difficult and to focus on meaning (Koskinen et al. 2000). Providing access to books and corresponding audio gives language learners an opportunity to simultaneously hear sounds and see the corresponding graphic representation (Drucker, 2003). A second language learner has to develop an ear for differentiating between the sounds of a language before he or she can comprehend (Daniel and Hoelting, 2008, p. 6). Developing effective listening skills is important to learning and creates a foundation for speaking, reading and writing (Glasser, 2008; Author, 2009b, Vygotsky, 1978). Audio models of fluent English in the home environment encourage more parent awareness of the student’s reading progress and provide a way for parents who do not speak English to participate as a partner/learner in their child’s home reading. English words “in the air” in student homes appear to capture the attention of others and to increase the social interaction related to books—important to progress in learning to read (Blum et al, 1995). Researchers have demonstrated that the use of technology exposes struggling readers to different types of literature and assists with vocabulary acquisition (Marchionda 2001; Stone-Harris 2008). From the above it can be seen that comprehensive reading is the precursor for better academic achievement and also that providing lesson in the audio and video form not only helps the students but also motivates the parents of first generation English learners to get involved more fruitfully in their child’s academic development.

## **5. Conceptual Framework**

In the present study ICT Tools will be used to convert NCERT Grade IV English Textbook into audio-video format to enhance the reading ability of the students. ICT has emerged as an indispensable part of education today. Evolved through the era of audio

visual aids, educational technology and information technology, technology in education has now manifested into the concept of Information and communication technology, popularly known as ICT in Education. Its origin lies in to the philosophy that the creation of information is not just sufficient; the information created should be communicated too, to the learner so that the teaching learning process is more effective.

Through the use of ICT in education, the facilitator can be in touch for better interaction irrespective of annual calendar, school and period timings; irrespective of school building and classroom space, irrespective of gender, caste, social norms; irrespective of chances available to each for expressing ideas, and aids in providing a less threatening virtual learning environment, ubiquitously. This not only enhances the reach of the content but also provides quality with more flexibility and multi-tasking opportunities.

Primary level is the foundation of the whole education process. Children at this level should be made strong in the basics of education, especially reading, writing and numeracy skills. Although a lot of content is available on the internet for aiding aural and verbal language development, but not much is available when it comes to teaching reading. Reading is a one of the most important aspect in not only language learning but also in all the other subjects as well. A child may be good in the oral skills but reading is a specified skill which cannot be acquired naturally without intended efforts. The primary grades mark a time of tremendous growth in literacy skills, making reading activities a crucial part of the school day. Students typically learn to read in kindergarten and continue developing fluency and comprehension in first grade and beyond. Reading activities that address all reading skills help young students develop a well-rounded approach to literacy.

Reading includes the important aspects of pronunciation, fluency, comprehension and spellings which makes the activity a meaningful and useful. Pronunciation includes the correct articulation of the words with proper stress, intonation and pause. Fluency is the ability to read as well as we speak and to make sense of the text without having to stop and decode each word. Comprehension is the complex cognitive process readers use to understand what they have read. Vocabulary development and instruction play a critical role in comprehension. The knowledge of spelling includes phonemic awareness and



phonics instruction and aids proper reading. Regular repetition and practice goes a long way in developing perfect readers.

From the earlier times, research has proved that teaching sight words are a wonderful means of making the students learn language. Maria Montessori too used sight words to develop the vocabulary of the students. It has been found that if the students are exposed to a word along with its sound, the word becomes a part of their life.

NCERT English textbooks have been made with utmost care to enhance the language skill of the students. But many a times lack of proper training and background of the teachers and the parents hinder the transaction of correct understanding of the books to the students. With the use of ICT this limitation can be overcome to a large extent. The ICT tools available today help teacher and parents have access to make the learning of their children correct and permanent. The use of ICT in Education has opened a world of avenues for the teacher to make teaching more effective.

Taking the concept of sight words a bit further in the present study an effort is being made to converting the NCERT Textbook in audio and video format using various ICT tools and providing them to the students and their parents so that they can use them at their own convenience and interval.

## **6. Hypothesis**

- a) There is no significant effect of treatment on pronunciation of the students.
- b) There is no significant effect of treatment on comprehension of the students.
- c) There is no significant effect of treatment on fluency of the students.
- d) There is no significant effect of treatment on spellings of the students.
- e) There is no significant effect of treatment on the students reading ability.
- f) There is no significant effect of treatment on the students' overall achievement.

## **7. Educational Implications**

Researchers have proved that providing educational inputs in a variety of ways has always brought about better results in the achievement of the students. They have further found that the use of ICT has positive and lasting effect on the performance of the students. The study will be useful as it aims to create reading material for the students

using latest ICT tools and in providing additional support to the students. The study will be useful to teachers who themselves do not know the correct pronunciation of the words and hence teach wrong pronunciation to the students due to their lack of knowledge. The study will be useful to the parents who are themselves first generation English learners and struggle to teach proper reading to their children. The study will motivate other similar content developers to convert the desired text into audio and video format to help others. The study will be useful to the school management and administrators who themselves can either procure or develop similar material to aid the reading of the students.

## **8. Design and Plan of the Study**

The present study is an experimental study. Post-test Control Group Design will be employed for the study.

### **8.1 Sample**

Seventy students of Class-IV for the session 2016-17 will comprise the sample. The sample is divided into two groups of 35 students each. One group will act as the control group and the other will be the experimental group.

### **8.2 Units of Observation**

In the present study the achievement and reading ability of the students will be evaluated. Reading ability of the students will be measured on the rubrics provided by CBSE for assessing reading ability.

### **8.3 Tool**

There will be one tool which will be used to evaluate the students. The tool includes the rubrics provided by CBSE to evaluate the reading ability of the students based on their performance in the aspects of Pronunciation, Fluency, Comprehension and Spelling.

### **8.4 Procedure of Data Collection**

The experiment will be conducted in the academic year 2016-2017. One of the section i.e the control group will be taught through the tradition method while the other section i.e the experimental group will be taught the lesson using the audio video content prepared

by the researcher. The lesson will be repeatedly shown to the experimental group as and when there is convenience. After each unit an evaluation will be done based on the rubrics provided by CBSE. Grades will be provided in each case. Later these grades will be converted in to marks such as A\*=5, A=4, B=3, C=2 and D=1. The total marks received by the students in the year will be collected. The average of all the scores will be taken and the difference in the scores of the students of both the groups will be analysed. To gauge the academic achievement of the students the marks obtained by them in the final exams will be collected from the class teachers. The data collected through the tools will be tabulated and scored using Microsoft Excel and will be analysed using SPSS. The scores obtained from both the tools will be entered separately for each student. Mean, standard deviation, t-test will be employed for the analysis of data.

#### 9. Time Budgeting:

S. No	Stage	Duration
1.	Identification of topic and preparation of lesson plans	2 days
2.	Preparation of the lessons in audio and video format	1 week
4.	Transaction of the material	15 days
5.	Assessment through rubrics	1 week
6.	Data processing and analysis	15 days
7.	Preparation of report	15 days

#### 10. Organizational Framework:

The present study will be an experimental study where the two sections of the IV will be taken as the sample; one section will act as the experimental group and the other as the control group. For the present study, all the ten unit of the IV Grade NCERT English textbook 'Marigold – 4' will be recorded as they are being read out with proper pronunciation, stress, pause and intonation. The translation of the same in Hindi will also be recorded. These audio-videos will be repeated a number of times in the classroom and later the students will be asked to do independent reading to access the usefulness of the created content. The procedure for creating the content is mentioned in the following lines.



For the present study the researcher will use various easily available, popular and Free and Open Source application such as Adobe Photoshop, PDF Reader, Microsoft Office Word, WordTalk, Open Broadcasting Software, Mobile phone recorder, Windows Movie Maker and VLC Player to convert the NCERT Grade IV textbooks into audio video format. Later the same will be provided to the concerned parents through WhatsApp, Hike, Bluetooth etc. Further the same will be made available to people at large by uploading the same at Facebook, You tube, NROER etc. First of all the NCERT Grade IV English textbook 'Marigold - IV' will be downloaded in digital format from the internet. It is available only in Portable Document Format (PDF). The researcher wants that the text being read should be highlighted on the screen so that the students can understand which word is being pronounced from the text hence it will be necessary that the text should look exactly the same as it is in the printed form, although many applications are found which read the text in the PDFs, no application could be found which highlights the text being read out in the PDFs but there are application which highlights the words being read out in Microsoft Office Word format. Hence to get the text in word, the text of the lessons will be deleted using Adobe Photoshop, later these will typed in the correct format using Microsoft Office Word. Then to highlight the text while being read, an add-in named WORDTALK will installed into Microsoft Office Word. After this the onscreen activity of reading by the software at appropriate speed will be recorded using the Open Broadcasting Software. It has been found that the accent being used by the software is foreign and it is not of much use to the students in the school as they will getting more confused. Hence all the lessons will be read out by the researcher while the video is being played on VLC player at the appropriate pace with proper pronunciation, stress, pause and intonation and the same will be recorded using the recorder in the smart phone or at RIE studio. Initially the activity worked and students started enjoying listening and watching the videos. It was again found that as all the lesson were recorded in the same voice the students felt a sense monotony hence the researcher identified a few good readers and all the lessons were recorded again using the same procedure as above. Now these videos and audio formats were combined on the Windows Movie Maker software and the same was again recorded using the Open Broadcasting Software. These videos of different lessons were played by the researcher at

equal intervals and the students gained interest. A major drawback that our students suffer is the lack of ability of the parents to help them at home with English. It was seen by the researcher that with the enhancement in technology most of the parents had access to smart phones. To overcome the lack of parents the researcher sent these videos on the mobiles of the parents to be used at home using applications such as WhatsApp and Bluetooth.

#### 11. Cost Estimation

The cost of the project is to be estimated in terms of total duration of the project and facilities needed. It may contain the following items:

S. No	Particulars	Amount
1	Junior Project Fellow	Nil
2	Travel expenses (TA/DA)of P I and J P F	Nil
3	Purchase of Tools (ICT based tools such as CDs, DVDs-both content based and blank)	Nil
4	Development/Adaptation of Research Tools and materials	Nil
5	Photocopying, printing of tools and correspondence etc.	Rs 3000
6	Hiring charges	Rs 5,000
7	Data Processing (Computer)	Rs.5,000
8	Report writing, photocopying, binding etc.	Rs. 4,000
9	Contingency (stationery, postage, etc.)	Rs. 4,000
10	Overhead charge up to 5% of total cost admissible on production of certificate from the Institution other than NCERT	Rs 1,500
Total		Rs. 22,500

Signature of the Head of Department  
Mr. Harish Praasid

Signature of the Programme Coordinator  
Dr. Jose J. Kurisunkal