CHAPTER II
LITERATURE REVIEW

This research aimed at studying the academic factors at school that influence reading outcomes in grades 1 and 2. The approach of the study was to first identify good practices in early grades language instruction based on existing research and theoretical formulations. This was supplemented with an in-depth analysis of good reading and language teaching practices from available documentation of effective reading programmes. Also, some researches in school effectiveness and studies that have specifically focused on identifying school variables that impact learning or reading achievements were studied to identify certain academic factors that influence student learning and reading. These identified good practices and school/classroom factors formed the reference points for studying the teaching-learning process and teachers’ perceptions and beliefs in the selected schools in the states of Assam and Rajasthan. The literature studied by the researcher for this study could be categorized as follows:

(i) Conceptual issues in early grades reading instruction, including different approaches to instruction and classroom practices
(ii) Studies that identify school factors that influence student learning, specifically reading achievements, including teacher professional development
(iii) Evaluation or documentation of effective reading programmes

The books and articles on reading research that were reviewed covered aspects like cognitive neuroscience, various approaches to teaching reading in the early years, components of effective reading instruction etc. Some of the documents that were reviewed are compilations of research and theoretical issues from
different researchers and descriptions of effective reading strategies. These include documents of agencies like UNESCO and International Reading Association. Programme descriptions and evaluations include reading programmes from India, Nepal, Bangladesh, Mali, Niger and Liberia. There are strong ideological and theoretical positions taken in the field of language learning. Instruction versus acquisition; phonics versus whole language approach; behaviorist versus constructivist approaches are examples of a few dimensions of the differing positions in literature related to reading and language learning. A concept like balanced literacy instruction is interpreted in very different ways by researchers and practitioners. Adequate care was taken to include differing perspectives on language teaching-learning in the literature that was studied.

The following sections present a brief review of some of the literature that was studied in preparation for this study:

2.1 CONCEPTUAL ISSUES IN EARLY GRADES READING INSTRUCTION

Abadzi (2008) argues for efficient reading instruction in deprived situations to ensure that children learn to read in the first two years of school. She quotes neuroscience research to emphasize the importance of attaining a good speed in word recognition in the early years. This becomes necessary on account of the limited capacity of the short term memory. A minimum reading speed of 45-60 words per minute by the end of grade 2 is necessary for comprehension. Fluent readers do not have to concentrate on decoding of words; therefore they can focus attention on meaning.

Some languages, including most Indian languages, have a very large number of visual patterns that causes problems for young children. The focus in grades 1 and 2 should be on effective decoding instruction and phonics instruction
should be a crucial part of learning to read. Extensive practice is crucial to reach automatic word recognition. In deprived situations, instructional time is low and there are not enough reading resources. Students do not get enough practice to automatize their reading. Reading goals in terms of words per minute should be fixed for the end of grade 2.

Applegate et al. (2009) examine the relationship between fluency and comprehension. Fluency is usually understood as accuracy and speed in reading connected text. The study examines if students with high rates of fluency have high comprehension of text at the literal and inferential levels.

Comprehension of the text being read is often not considered an essential part of fluency. The most influential view that has remained is that fluency is a predecessor for comprehension. The more automatic the decoding, the more attentional resources young readers will have available to direct toward comprehension. Therefore, developing automaticity in word recognition is a precursor to strong comprehension. Some theorists argue that fluency and comprehension are intertwined and should be developed simultaneously. Strategies for improving fluency should include a focus on comprehension.

This study finds that reading proficiency has often been construed only as reading with speed and accuracy without an emphasis on thoughtful comprehension. Even when reading strategies have included comprehension, this has mainly been literal, text-based superficial understanding, and not a deeper, inferential understanding of the text. Thus it seems that treating word recognition and fluency as skills that exist separate and distinct from comprehension may open the door for a great deal of confusion on the part of students and teachers alike.

The National Curriculum Framework (NCF) 2005 (NCERT, 2005) identifies some core principles for curriculum development. These include (a) connecting knowledge to life outside the school; (b) ensuring that learning
shifts away from rote methods; (c) enriching the curriculum so that it goes beyond textbooks; (d) making examinations more flexible and integrating them with classroom life; and (e) nurturing an overriding identity informed by caring concerns within the democratic polity of the country.

NCF 2005 advocates strongly for a constructivist approach to learning where the child is an active learner engaged in constructing knowledge. Chapter 3: Curricular Areas, School Stages and Assessment includes a section on teaching-learning of language. This section argues for a renewed emphasis on teaching in the child’s mother tongue as the medium of instruction. Multilingualism is a strong resource in our society and schools, and this should be strengthened. A sound pedagogy for teaching-learning of mother tongue is essential for developing skills in any other language. The emphasis in teaching should be on development of skills and not memorizing content. It makes out a case for promoting a child’s creativity. Emphasis on reading throughout the primary classes is necessary to give every child a solid foundation for school learning. The NCF identifies the following reasons for children not learning to read: (a) teachers lack basic pedagogic skills, (b) pre-service and in-service training do not provide inputs on reading pedagogy, (c) textbooks do not follow a coherent strategy of reading instruction, and (d) disadvantaged children are alienated by the teacher and textbook. NCF suggests the following for improving the situation for beginning reading, (a) classrooms should have a print-rich environment, (b) imaginative input of model reading, (c) writing down children’s narratives and getting them to read, and (d) reading of additional materials

Apnan Banu (2009) provides an overview of the problems and issues in literacy curriculum and instruction in Bangladesh. While the focus is on practices in Bangladesh, the issues and recommendations are applicable to the Indian situation as well. The study followed a largely naturalistic method while working on the development of a language project over a period of four years.
The author identifies the following concerns in the literacy curriculum and instruction in Bangladesh—a focus on content instead of skills; focus on correctness and accuracy instead of meaning and communication; lack of emphasis on comprehension, reflection and creativity; lack of participatory processes in the classroom; an almost exclusive focus on textbook; an authoritarian instructional culture; assessment methods; teacher training curriculum and methods etc. She argues for a cultural shift from the view that the textbook is the only source of learning. Another issue that alienates rural and disadvantaged populations is the difference between the home language and the standard language used in school. The teaching-learning process follows a routine of skill-drill, demonstration and lecture with little scope for innovation and creativity or conversation and discussion. Meaning-making and comprehending is not emphasized in the classroom. This has its origins in the methodology for pre-service and in-service training where there is no scope for a dialogue or discussion.

The author talks about the policy-practice fragmentation in different aspects of education. The curriculum has good intentions, but these get lost by the time it is translated into school level action. The focus has to be on ‘what is the child learning’ instead of ‘what is the teacher teaching’. Training and regular academic support to teachers is the core issue to be addressed for improving learning outcomes.

**Pressley (2002)** addresses the debate about ‘whole language’ and ‘skill focused’ reading instruction. This is also called the Bottom-up versus Top-down approach to teaching of reading. He offers a good perspective on the issues with each of these approaches.

A whole language approach has just one focus—read, read and read. Skills instruction is under-emphasized in this approach. The emphasis is on reading predictable texts and decoding does not get the necessary attention. A pure
whole language approach is not useful for students from deprived socioeconomic situations. A good reader is able to decode unfamiliar words even without semantic clues. Also, building speed of recognizing letter combinations and word recognition is important. This can happen when decoding (bottom-up) has a prime place in reading instruction.

Skilled reading is a coordination of higher-order processes (e.g., comprehension) and lower-order processes (e.g., decoding). Skilled readers are proficient at word level processing and do not depend on meaning cues to decode words. An excessive emphasis on skills is, however, not appropriate. Young children must be exposed to authentic literature to motivate them to read.

**Tyner (2004)** emphasizes the role of small group instruction in the teaching of reading. The author explains the development of, and need for, a small-group differentiated reading model. Then, she provides a detailed explanation of the model and its components. The model is differentiated by the five stages new readers pass through – emergent, beginning, fledgling, transitional, and independent; and by instructional strategies –reading for fluency, word study, writing, and reading new texts.

She identifies several beneficial aspects of small group differentiated instruction for early reading. Each group can be given tasks that are appropriate and at their instructional level. In this method, assessment is ongoing and directly linked to instruction. Students are regularly assessed on fluency, instructional reading, and word study levels. Students are constantly evaluated, shuffled, and reshuffled in flexible groups to best meet instructional needs. Differentiated reading takes into consideration the individual characteristics of the children, capitalizes on the strengths they have, and expands and challenges their abilities. This model allows for the interactive development of reading, word study, vocabulary, and comprehension. The author identifies four major
strategies for reading instruction—teacher modeling, shared work, small group instruction and independent work by individual students. These strategies can be used for different components of reading instruction all through the year.

Rose (2005) describes a methodology—Learning to Read: Reading to Learn—for teaching reading and writing that has been developed through an action research project with teachers in Australia. The author advocates for an equitable approach to classroom processes. Some students who come from literate and strong socioeconomic backgrounds are able to benefit from the teaching-learning process much more than those who come from more deprived backgrounds. This results in inequality in the classroom.

The solution, according to the author, is to teach all children using the same activities/tasks, rather than engaging in differentiated instruction on a regular basis. He opposes ‘ability’ grouping of learners. In so-called ‘learner-centred’ models, learning is considered individualistic and some students who are not able to keep pace are deemed to require remediation. To this end, the model draws on three theoretical traditions: a Vygotskian model of learning as social process, a Hallidayan model of language as text in social context, and a Bernsteinian model of education as pedagogic discourse. The author does not agree with the phonics based ‘brick-and-mortar’ models and also the pure ‘whole language’ approaches. He advocates for a Hallidayan language model where the Reading to Learn approach has six stages: (a) Preparation before Reading, (b) Detailed Reading, (c) Preparation before Writing, (d) Joint Reconstruction, (e) Individual Reconstruction, and (f) Independent Writing. This model operationalizes Vygotsky’s social model of learning.

Some practical implications for grades 1 and 2 include—the importance of teacher-child and child-child interaction in the learning process; providing scaffolding to all children when they are learning new tasks; greater support to the weaker children; adequate time to revise and consolidate; scope for
adequate practice by children. The *Learning to Read* approach takes meaning as the starting point for teaching all components of reading skills.

Wren (2001) drew up a framework for SEDL (Southwest Educational Development Laboratory) called *The Cognitive Foundations of Learning to Read*. This framework draws from scientific research conducted in a variety of disciplines such as education, linguistics, cognitive science and psychology and collaboration with primary school teachers in the United States. It focuses on the component elements of the learning to read process. The framework supports the ‘Simple View’ of reading comprehension as a product of a person’s ‘ability to decode’ text and that person’s ‘ability to comprehend spoken language’. The framework then identifies various components of each of these two foundations of reading comprehension. The ability to decode text depends on some fundamental cognitive elements including concepts of print; phoneme awareness; letter knowledge; and alphabetic principle. These result in the ability to decipher words. Linguistic knowledge depends on the synthesis of three elements—phonology, syntax and semantics.

Language comprehension skills can be at different levels. The most simple type is ‘explicit comprehension’-the listener or reader only understands the meaning superficially. At a higher level a reader adds on inferential understanding. Background knowledge is crucial for language comprehension.

The framework emphasizes the crucial role of developing the child’s oral language in early primary grades. It also emphasizes systematic decoding instruction. Fluent and automatic decoding helps a child focus full attention on comprehending the text. The framework also includes tips for instruction and assessment of different skills.
Smith (2004) in this seminal book addresses the nature and process of reading. He argues that children become readers when they are engaged in situations where print is being meaningfully used. This is similar to the manner in which children acquire the spoken language from their association with people around them who use speech in meaningful ways. He opposes the efforts to programme reading instruction. Teachers must be guided by the nature of the reading process. Often, textbooks and examinations emphasize memorization and create anxiety around reading. This makes effective reading difficult. He argues that children learn to read only through reading. A teacher’s role is, therefore, to make reading easy for every child. He argues that children learn to read only through materials and activities that make sense to them and they can relate to what they already know or want to know. Anything that children cannot relate to what they already know will not make sense to them. Expecting children to learn to read through things that do not make any sense to them is the easiest way of making learning to read impossible.

According to Smith, training teachers that requires them to follow a programmed instructional design is not appropriate. Such training programmes do not encourage teachers to make their own decisions. They tell teachers what they should do rather than what they should know. He argues that there are many theories about teaching reading. These methods achieve some success with some children. Teachers need to choose methods and materials based on their understanding of the process of reading and the children they are teaching. He outlines two basic prerequisites for learning to read, viz. the availability of interesting materials that make sense to the learner, and an understanding and more experienced reader as a guide. He disputes the position that reading is not learnt naturally like speaking and argues that all children without a specific learning disability can easily learn to read, provided things are not made difficult for them. Skilled reading depends a lot on what we already know. Memorization of what we read constrains comprehension. Reading is not a passive activity, but involves complex intellectual processes. So, teaching of
reading cannot focus on just ‘decoding to sound’ and memorizing phonic rules. Reading comprehension is not merely passive understanding of the text, but involves active meaning making, drawing of inferences and prediction. Reading directly for meaning is the best strategy for reading. Making meaning should not be a consequence of reading words and letters.

Vagh (2009) provides an academic analysis of the concept of fluency. She argues that fluency, which is speed and accuracy when decoding words in connected text, is strongly correlated with comprehension. Most of the research in fluency has been conducted for English language. English has an irregular orthography while Indian languages are orthographically regular. While Indian languages have a more regular orthography, they also have a much larger size of symbol inventory, viz. letters, vowel signs, conjunct letters, CV (consonant-vowel) units etc. There has been little research on fluency in Indian languages.

Oral reading fluency is a good measure for monitoring progress of children in reading connected text. Sometimes fluency is also assessed at letter, letter combinations and word levels. A big constraint for Indian languages is that there are no benchmarks or norms around fluency rates. Nor do we have standardized texts for different grades to help measure fluency rates. She analyzes some of the fluency assessment tests being used in India. She cautions about issues of reliability and validity in fluency assessment and availability of multiple grade-level passages for testing. She argues for more research in Indian languages on these issues.

Rasinki (2006), in this article, emphasizes the importance of developing fluency to free up mind’s attention and resources to making meaning of what is being read. Fluency, according to the author, is in a sense, a bridge between phonics and word decoding on one hand, and vocabulary (word meaning) and comprehension (passage meaning) on the other. The author outlines a methodology for measuring oral reading accuracy and rate. He also outlines a
strategy for fluency instruction called MAP. This includes—Modeling of fluent reading by the teacher; providing assistance to students while they are reading; and providing opportunities to students to practice reading repeatedly.

Teacher coaching and monitoring is core to fluency instruction. Using appropriate texts is crucial for the reading practice sessions. Oral Reading Fluency is measured by assessing the words read correctly per minute. Reading accuracy is measured by assessing the number of words read correctly as a proportion of total words read.

Pang et al. (2006) in this booklet ‘Teaching Reading’ define reading and the constituent processes of word recognition and comprehension. Learning to read, unlike speaking, does not come naturally to a child. There is need for systematic instruction. Reading is about understanding written texts. The authors present twelve principles of learning to read. These include: Oral language development; phonological and phonemic awareness; fluency-reading with accuracy, ease and understanding; vocabulary as a crucial input to comprehension; prior knowledge for understanding texts; comprehension as an active process in construction of meaning; motivation and purpose for reading; integrated reading and writing to reinforce the connection between the two; texts of the right difficulty and interest level; assessment for measuring progress and getting feedback; cultural factors that affect reading comprehension; and opportunities for reading practice.

This booklet is based on research carried out primarily in economically advanced countries and for English and other alphabetic languages. The authors argue that these principles and practices are universal and would be applicable even in developing countries. The authors argue for a balanced approach in reading instruction. Instruction to develop reading skills and strategies is important. Also, learners should get an opportunity to read
authentic texts to develop an interest in reading and expand their knowledge base.

**Roskos et al. (2009)** have developed a toolkit for policymakers and education programme developers for developing effective early grade reading programmes. While this toolkit is based on research in reading and teaching of reading conducted in advanced countries, the document also identifies certain conditions in developing countries that must be taken into account for developing effective reading programmes. These include language diversity, limited resources, large class sizes, equity in educational opportunity, access for special needs learners, and limitations of teacher education.

The document identifies stages of reading development with indicators for each stage. For this research, the relevant stages are called—Emergent literacy; Decoding and Confirmation and Fluency. Certain milestones have been identified for each stage which are useful in concretizing the expected outcomes for reading/literacy. Eight principles for effective early grade reading programmes have been identified. These are:

- Oral language is the foundation of learning to read and write
- Books and texts are varied in genre and form; they are plentiful
- The learning environment contains abundant print of many kinds
- An evidence-based curriculum guides reading instruction
- Teachers are prepared to teach the reading programs well
- An assessment system is in place
- Family involvement is an integral part of an early grades reading programme.
- Evaluation is a tool for change

The document includes a First Principles Guide to observe classrooms to understand the situation with respect to the identified first principles. It is accompanied by an active teaching rubric to aid classroom observation along
dimensions like: teacher enthusiasm, creation of a positive learning environment, presenting challenging learning tasks to learners, use of a variety of instructional methods etc.

Pressley et al (1996) conducted a survey of instructional practices of primary teachers nominated as affective in promoting literacy in the United States. 83 teachers of kindergarten, grade 1 and 2 were nominated by their supervisors to be effective in teaching of reading and writing. Based on their responses on 3 questionnaires, common practices of these effective teachers were analyzed. Most practices were similar across these 3 grades, though there were shifts reported between kindergarten and grade 2. As reported by the teachers, the following practices seemed to be common among them: (a) qualitatively similar instruction to all students irrespective of abilities, and greater support to weaker readers, (b) classroom environments that promoted literacy, (c) modelling and teaching of both lower-order (e.g. decoding) skills and higher order (e.g. comprehension) skills, (d) extensive and diverse reading by students, (e) teaching students to plan, draft, and revise as a part of their writing work, (f) literacy instruction activities that motivated students, and (g) regular monitoring of students’ literacy progress.

The teachers stated that they taught skills which were a prerequisite for reading, e.g. concepts of print, phonological awareness etc. These teachers model different aspects of reading for students. This includes reading aloud, retelling and other strategies for comprehension, modeling for writing etc. They taught basic (lower-order) skills like decoding in the context of actual reading and writing. They also reported activities for development of vocabulary. Even at grade 1 and 2 level, almost all teachers claimed to teach critical thinking strategies through brainstorming, categorizing etc. A variety of books were read in class through strategies like reading aloud, choral reading, shared reading, silent reading etc. A wide variety of books were read including (mostly) storybooks, but also basal readers with controlled vocabulary, poems,
and picture books. Writing included writing of stories, journal writing in groups and individually.

**Overview:** The researches and other publications reviewed in this section reflect varied views on the theoretical approaches to the teaching of reading in early grades. However, there are certain common themes. Reading is considered a complex process and includes several constituent sub-skills. Early grades reading instruction should follow a balanced approach; the balance being between phonics and drill type activities **and** meaning-based activities. Teaching of decoding must be done systematically with a lot of revision and practice to ensure automaticity in word recognition. In developing countries, the language teachers focus mainly on the content rather than skill development and encourage memorization. There is very limited focus on comprehension in early grades language classrooms in most of the developing world. Some researchers have emphasized the importance of early acquisition of reading fluency by students in the early grades and the strong correlation of fluency with comprehension. Some research and evaluations suggest the usefulness of scaffolding and small group differentiated teaching. Reading a variety of simple and interesting books helps develop reading skills.

### 2.2 STUDIES THAT IDENTIFY SCHOOL FACTORS THAT INFLUENCE LEARNING AND READING ACHIEVEMENTS

A large number of studies and research publications that identified school factors that influence student learning were reviewed for this study. An overview of these studies is presented here. Each study has, however, not been outlined here in detail.

**Geske and Ozola (2007)** analyzed data from PIRLS (Progress in International Reading Literacy Study) to identify factors that influence reading literacy at the primary school level in Latvia. The authors selected two groups of students-
10% of all students with the highest reading levels and 10% with the lowest reading levels. Factors that had the maximum impact on reading achievements were explored by analyzing coefficients of multiple regressions. The study concludes that the socioeconomic situation of the family, parents’ education and reading aloud to the child at the preschool stage have a great impact on students’ reading achievements. Students who do well in reading tests like to read for enjoyment and belong to families where parents spend a lot of time on reading.

Connor (2007) explores, through a review of other researches and studies, the influence of learning environments on children’s literacy acquisition. The study analyzes the influence of home and community environment and school and classroom factors on children’s literacy development. Another focus of the study is on ‘child-by-instruction’ to understand implications for individualized instruction. The study concludes that the home learning environment is crucial for emergent literacy skills and the difference in SES almost determines the achievement gap throughout the school cycle. Early preschool interventions (pre-kindergarten) and high quality preschool programmes can make a strong difference. Positive social and emotional support and the amount and type of literacy instruction predicts literacy achievements. A combination of methods that include both ‘code-focussed’ strategies and more holistic ‘meaning-focussed’ strategies that are implemented in a sustained and intensive manner help in literacy growth. The actual methods do not matter as much.

The author, based on an experiment for individualizing literacy instruction in the first grade in 10 schools, concludes that individualized instruction has a significant positive effect on reading achievements. Teacher-managed, code-focussed instruction that emphasizes basic skills is more useful for students who had weak word recognition skills. More child-managed meaning-focussed instruction would be appropriate for students with stronger vocabulary skills.
Leslie and Allen (1999) report the results of studies conducted to examine the effectiveness of an early literacy intervention for at-risk children in grades 1-4. The intervention included small-group literacy instruction after school, and parents’ involvement through reading events and reading to children at home. The time spent on reading connected text was found to be strongly associated with reading growth. This included independent reading at school and home. Recreational reading was found to be positively associated with reading gains as it helped increase student motivation to read. Parental involvement in supporting home reading of children had a positive impact on reading growth. An assessment based, rigorously designed small group tutoring strategy works effectively in improving reading levels.

Lilly and Green (2003) list Cambourne’s eight enabling conditions for early literacy development at home and school. These include

- **Immersion**: High quality children’s books and other print to be available all around children. An active literacy environment should be created by reading aloud, playing word games, storytelling etc.
- **Demonstration**: Adults to model reading and writing
- **Engagement**: Children to be encouraged to read and write, allowing them to experiment with language and literacy
- **Expectation**: Setting realistic expectations in accordance with the different developmental stages of literacy
- **Responsibility**: Children to take responsibility for selecting books that are made easily accessible
- **Approximation**: Encourage children when they try, even if they make mistakes; accuracy can follow
- **Use**: Encourage use of oral and written language
- **Response**: Listening and responding to children’s use of language

Snow et al. (1995) conducted a longitudinal research project for over thirteen years for a group of racially diverse children from low income families in
Boston called ‘The Home-School Study of Language and Literacy Development’. Home support for literacy and kindergarten classroom quality explain a significant proportion of the variance in scores in reading achievements. Home factors contribute more strongly, on average, than school factors.

Rowe (1995) has reported on a longitudinal study in 100 schools in the state of Victoria in Australia about factors affecting students’ literacy development. Certain factors at student level, teacher level and school level were hypothesized to influence students’ achievement and progress in reading. The study has used both quantitative and qualitative methods to identify the key factors. The factors included in the hypothesis were: student level (home background effects, attitude towards reading, and attentiveness in the classroom), teacher level (professional development and teacher affect), and at school level (school organization, climate or school ethos). The major conclusions of the study included:

- Instead of using SES as the home background indicator, it is much more useful to use ‘Reading Activity at Home’ as this had more significant impact on reading achievements
- Reading activity at home results in positive transference of related skills to classroom, enhancing attentiveness and attitude to reading in class
- Reading programmes should include a strong component of working with parents to support children’s reading skills at home
- Teachers’ participation in in-service professional development programmes had a positive effect on their self perceptions, which, in turn, had strong positive influence on students’ attitudes towards reading
- A large part of the variation in students’ reading achievements was explained by between-class/teacher differences
- School level factors seem to be less significant than student home background and teacher level factors. Some qualitative analysis showed that schools that
had well established procedures for early detection of non-readers, had quality teachers who had regularly participated in in-service training programmes, strong focus on teaching and learning, well developed school-community relationships and orderly school environments, had higher level of students’ reading achievements.

**Fuller (1987)** focuses on the question-Does school as an institution influence students’ achievement levels after controlling for family background? Compared with developed countries, school factors explained more significant portion of variance in achievement in developing countries. He examines 60 multivariate empirical studies that report on effect of school factors. The various school factors included are

- School expenditures
- Specific material inputs (class size, school size, textbooks and reading materials, desks, school building quality, library size and activity, nutrition and feeding programmes)
- Teacher quality (years of schooling/tertiary education, in-service training, length of experience, social class, punctuality and absenteeism)
- Teaching practices and classroom organization (instructional programme, homework frequency, active student learning, teachers’ expectations of student performance, teacher time for preparation
- School management (quality of principal, multiple shifts, grade repetition)

Based on the number of studies investigating a particular set of indicators and the number that report a hypothesized relationship, the author draws up a list of factors that seem to be influencing achievements. Availability of textbooks and reading materials, library size and activity, nutrition and feeding programmes, years of tertiary education and pre-service training, in-service training, teacher’s social class background, length of instructional programme, frequency of giving homework, teacher’s expectation of students’ performance, teacher’s time on class preparation and quality of principal have been identified
as factors that most studies (that looked at these factors) reported as influencing student achievements.

Postlethwaite and Ross (1992) conducted a study of a sample of schools from 26 countries (mostly developed countries) by conducting literacy tests of students in grades where most 9 year olds were to be found and collecting background data from students, their teachers and their school principals. The aim of the study was to identify which school indicators are most important for distinguishing between more effective and less effective schools. The indicators identified were categorized into the following heads with several indicators under each category:

- Student activity at home
- School characteristics (type of school, student-teacher ratio, school size, hours of instructional time etc.)
- School resources related to library and reading
- School initiatives (reading events, reading instruction programmes or other special programmes)
- School management and development
- Teacher characteristics (percent female teachers, time teaching a particular class, teaching experience etc.)
- Class characteristics (class size, classroom library, multigrade class, other class materials etc.).

The indicators relate to the educational environment in schools. The home environment, though important for educational achievement, has not been considered for this study since the focus was on arriving at suggestions for educational planners. The findings are presented in Table 2.1. Those indicators that are not relevant to primary stage or our context have been left out.
**Table 2.1: Indicators for school effectiveness**

<table>
<thead>
<tr>
<th>Question or Indicator for effectiveness of schools</th>
<th>What makes a school more effective?</th>
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<td></td>
<td>Impact: Greater extent</td>
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<tr>
<td>What reading resources should be available?</td>
<td>Well stocked library</td>
</tr>
<tr>
<td>What type of teacher?</td>
<td>More female teachers</td>
</tr>
<tr>
<td>School size and type</td>
<td>Larger schools better than smaller ones</td>
</tr>
<tr>
<td>Special initiatives to improve reading</td>
<td>Instructional programme for improving reading</td>
</tr>
<tr>
<td>What teacher activities should be encouraged?</td>
<td>Teachers encourage students reading in class</td>
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<tr>
<td></td>
<td>Encourage library visits</td>
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<tr>
<td>What teaching methods should be adopted for reading?</td>
<td>Teachers emphasize understanding of what is read</td>
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<tr>
<td></td>
<td>Regular assessment</td>
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<td></td>
<td>Emphasis on systematic phonics</td>
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<tr>
<td>What out-of-school activities should be encouraged?</td>
<td>Students read a lot in leisure time</td>
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<tr>
<td></td>
<td>Students borrow books frequently from library</td>
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**Taylor and Pearson (2004)** reviewed research done at the Center for Improvement of Early Reading Achievement (CIERA) that investigated the effects of home, community, school and teacher factors on students’ reading achievements. The research identifies some *school practices* that help improve school effectiveness in improving reading outcomes—strong links to parents, systematic assessment of pupil progress and collaboration among school staff and an appropriate reading instruction framework.
The study further identifies classroom practices that make some schools more effective in achieving results. Some of these are—small group instruction, time spent on independent reading, frequent coaching by teachers during teaching of word recognition, and asking higher-level comprehension questions. The study also identified practices used by more accomplished teachers. The study makes out a case for introducing school level reform to improve reading instruction. Teachers need to be supported to understand and learn good research based reading practices. Teacher support should be in an active learning environment with appropriate scaffolding, just as is needed for the classrooms.

Felsenthal (1978) reviews literature to understand common characteristics of schools with effective reading programmes. She addresses two research questions that are relevant to the present study: (a) What works in teaching of reading in grades K-3 and 4-6? (b) How can reading comprehension be improved? Some factors that are identified from different studies include: strong commitment by school (especially administrators) to give high priority to improved reading; high expectations by teachers and administrators; policy and support for reading from all levels of the system; well-trained and highly motivated teachers and administrators; identification of reading objectives which are clearly written and understood by all; use of appropriate assessment practices; a structured, well-organized instructional programme; availability of a variety of reading materials; support and involvement of parents; systematic phonics instruction and systematic comprehension instruction. The author quotes from different researches that support the importance of these factors. Certain suggestions are also included to improve the situation with respect to these factors.

Berliner (1990) in this paper outlines concepts that are related to the concept of instructional time including—allocated time, engaged time, time-on-task, academic learning time, waiting time, transition time, perseverance and aptitude. At a basic level, instruction time could be assessed by finding out the
raw number of minutes for instruction for a particular subject or topic. This can also be used to understand the time spent on different strategies of teaching. At another level, the real time for which children are academically engaged can be identified by accounting for waiting time, transition time, opportunity to learn and academic engagement. Allocated time is a weak predictor of student achievements. While instructional time can be used to measure just the time for which instruction takes place, there are ways in which it can be adapted to measure ‘quality instruction’ time. Time spent on different strategies will give a clear idea of the teaching approach. ‘Academic Learning Time’ is one such variable that is useful to understand time in the classroom for learning on identified objectives. The author quotes several studies that indicate the importance of quantity of instructional time (actual teaching time) in determining student achievement. Of course, the quality of instruction is really crucial.

**Learning First Alliance (2000)** is a supplementary publication to an earlier volume—Every Child Reading: An Action Plan. The Learning First Alliance is composed of several organizations of American elementary and secondary school teachers, principals, administrators, curriculum developers and Colleges of Teacher Education. The paper emphasizes the crucial role of teacher professional development in improving reading instruction in primary grades. It argues that the teaching of reading will improve when all the dimensions of curriculum, textbooks, instructional programmes, materials and assessment are closely aligned.

It argues that professional development must be a long term process where, apart from structured training programmes, teachers get access to expertise of colleagues, mentors and outside experts regularly. A variety of professional development activities will meet individual needs better than a ‘one-size-fits-all’ approach. It identifies some important content for the professional development of teachers. We should aim for continuous improvement in
practical skills of every teacher on every component of reading instruction. It is a lifelong exercise that requires mentoring, observation, follow-up evaluation and problem solving with peers. We should maximize opportunities for teacher development within the school itself.

Cooper (2010) has reviewed literature on teacher professional development. The document outlines the importance of professional development in any learning improvement programme. He argues that a new understanding of teachers’ professional development is emerging with characteristics like---being based on constructivism; ongoing and long term; related to daily activities of teachers and learners; informed by teacher inputs and linked to wider school-reform.

The document outlines different models of teacher professional development including training of teachers (cascade model), teachers’ networks, workshops, seminars and short duration courses, coaching and mentoring, observations of excellent practice, cooperative or collegial development, distance education, action research and teachers’ narratives. The most effective teacher development incorporates a combination of models that meets the needs and context of the participating teachers and schools. Certain success factors help determine effective teacher professional development—culture of support, stage of development of the school system, time available, financial resources available and the quality of teacher educators, trainers and facilitators.

Moats (1999) is a paper prepared by the author for the American Federation of Teachers. The paper makes out a strong case for quality teacher professional development to build competence on reading instruction. Preventing reading failure is a top priority for education and good reading instruction strategies with appropriate materials can help improve reading performance. The difficulty of teaching reading has been underestimated. Teaching reading is rocket science, according to the author. The paper outlines the different
The author outlines the different dimensions of teacher professional development as: (a) understanding psychology of reading and reading development, (b) understanding the knowledge of language structure and its applications, (c) understanding practical skills in a comprehensive reading programme strategy, and (d) understanding assessment of classroom reading and writing skills.

**Overview:** The researches outlined above identify several factors as influencing student learning and reading achievements. Some of these factors are – numbers of hours of instruction; strategies for teaching reading; importance given by the curriculum and the school to reading; school resources like library; regular assessment; organization of reading activities or events; varied opportunities for teacher professional learning; dedicated time for reading; school management, and quality of teachers. Regarding quality of teachers there is inadequate evidence to show that number of years of experience or qualification influence student learning. Other characteristics that are less easy to measure, e.g. teachers’ enthusiasm for teaching, expectation of students and commitment to equitable learning may be more crucial than mere experience and qualification. Several studies highlight the crucial role of early home support including reading aloud to children, encouragement for reading for enjoyment, print availability at home etc. Teacher professional development for early grades language teaching needs to be prioritized by including mentoring, coaching, exchange of ideas etc. apart from formal training.
2.3 EVALUATION OR DOCUMENTATION OF EFFECTIVE READING PROGRAMMES

It was difficult to find systematic documentation and rigorous evaluations of effective reading programmes being implemented in India. Such documentation is also not available for programmes in other South Asian countries. There are some documents prepared by the organizations that implement these programmes. However, these are mostly programme descriptions, without an external evaluation. During the review, documents from the following programmes were studied: (a) Reading Guarantee Programme, SSA Assam, (b) Literacy Instruction Programme, Room to Read in Rajasthan and Uttarakhand, (c) Read India Campaign, Pratham in Assam and Rajasthan, and (d) Sopan Programme, Plan Bangladesh. These documents have not been reviewed here.

Gove and Cvelich (2010) is a report that includes contributions from a large number of professionals working in the area of early grades reading programmes and research. The report highlights the dire need for improving reading outcomes of students in early primary grades in developing, low-income countries.

The report analyzes reading assessment data from many developing countries to demonstrate the low levels of reading achievements. It discusses the major issues that plague the school system and result in low learning levels. These include low instructional time, lack of training and support to teachers, poorly equipped schools with few books for children and language of instruction policies, and practices that do not meet children’s learning needs. It argues that inexpensive, yet fairly rigorous assessments have been able to highlight the learning deficits in early primary grades and are a good way of drawing attention of governments and civil society to this problem. The EGRA (Early Grades Reading Assessments) tools have been used in 41 countries in 71 languages. The report argues for social mobilization around issues of quality
and learning, and that measurement against learning goals can help in mobilization. It quotes examples from case studies of effective reading programmes in several developing countries.

The report puts forth several convincing arguments about the importance of ensuring that children learn to read early and well since reading is a foundational skill for all future learning. It suggests a comprehensive strategy for improving student reading skills including generating demand for improved learning, training of teachers on reading instruction, implementation of improved language policies and support for mother tongue based instruction in early years, providing books and materials and their use, regular reading assessments, maximizing instructional time in the classroom, and community participation and capacity building of key stakeholders.

Jayaram (2008) describes theoretical principles and strategies for the Early Literacy Project (ELP) that was implemented in a few Municipal Corporation schools in Delhi. Children in a classroom belong to diverse social, cultural and linguistic backgrounds. She describes strategies for phonological processing and meaning making for diverse classrooms. She outlines the conflict between the new NCERT textbooks that focus on meaning making and teachers’ familiarity with traditional methods that focus on repetitive drills for learning letters. The need is to implement a programme that is based on sound theoretical principles of reading. The following principles guide the work of ELP: (a) creation of an active learning environment for children, (b) using classrooms as authentic social settings for learning, (c) print rich environments at home and in the classroom, and (d) classroom interaction to draw upon children’s life experiences. The strategies distinguish between activities for beginning readers (grades 1 and early grade 2) and transitional readers gaining fluency in grades 2 and 3. She also emphasizes use of inclusive classroom pedagogies that can help students who are less well prepared and positioned to take advantage of learning opportunities at school.
Educational Initiatives (2011) is a report that provides achievement results for grade 1 and 2 students as the baseline for programme evaluation for the Room to Read’s literacy pilot in India. This pilot is being implemented since 2008 in 150 schools in Uttaranchal, Rajasthan and Delhi. The assessment instruments were designed by NFER (National Foundation for Educational Research, UK). The test items include listening comprehension, letter reading, CV and familiar word reading, reading a passage with oral and written comprehension questions and dictation. The test items are arranged in an ascending order of difficulty. The test was administered in July 2010 on 4432 students in 240 Room to Read intervention and control schools. Multilevel modelling has been used to compare results for treatment and control schools.

The findings indicate low levels of reading competence on almost all skills. Students in grade 2 have not acquired basic decoding skills. There is also a serious multilevel situation in grade 2 with some students who cannot recognize all the letters, some who can read simple words and only a few who can read and understand a simple passage. The report presents a methodology for calculating total literacy scores through the process of scaling which has been adapted for this study. The results in this report which included Rajasthan corroborate the findings from the researcher’s work in Assam and Rajasthan where the situation was similar: low means and high variance.

International Reading Association (2009) is a report of a symposium organized in March 2009 on the issues of early grades literacy programmes. It includes papers presented by six practitioners representing different reading programmes and summary of discussions during the plenary and break-out sessions. The document discusses many issues including language and literacy instruction, oral language development, assessment for reading skills, teacher professional development, teacher competence in reading instruction, availability of books etc. It discusses some good reading programmes like the Early Grade Reading Project in Mali and Niger, Book Flood Project in Zambia,
Early Grades Reading Assessments (EGRA) in several countries etc. The consensus of the symposium was that the most crucial outcome from primary schooling is that children should learn to read.

One of the papers emphasizes the role of assessment in identifying good reading instruction strategies. The discussions bring out the problems in trying to develop comprehension in children who have not acquired basic literacy skills. There is some tension between those who consider word recognition and comprehension to be sequential, and others who emphasize that comprehension should be the focus at all times. Another paper emphasizes the importance of a print rich environment in the classrooms. For teacher professional development, training is not enough. School visits, peer coaching and other strategies need to be used. Overall, a case is made out to (a) improve assessments, (b) increase instructional time for reading, (c) improve methods for teaching reading, (d) more advocacy needed around reading, and (e) provide adequate and appropriate storybooks for children and parents.

**Overview:** Some evaluations of successful reading programmes have indicated the importance of the following factors or strategies- regular assessments that inform teaching practice; active learning environment in classrooms; advocacy and mobilization for reading; providing books in school; classroom print-rich environment and improved methods of teaching language. Most evaluations also indicate the really low levels of reading skills of students in early grades in most developing countries. Some programmes have argued for strong advocacy and mobilization for improved reading instruction strategies, based on sharing of results of large scale assessments.

**2.4 CONCLUSION**
Most of the research on the teaching of reading or early grades literacy is based on studies conducted in the Western context. Similarly, the studies on academic factors that influence student learning have mostly been conducted in
developed countries. It has been difficult to find researches or even rigorous evaluations of programmes in the Indian or South Asian context. Some research in reading in India and South Asia is related to language issues, and the problems faced by children whose home language is very different from the language of instruction at school. These resources have not been included in this review because this study does not include an enquiry into this aspect of language teaching-learning. However, during the study of the literature, it became clear that the core set of issues and factors that influence reading outcomes are similar across many different developing country contexts. Also, some basic components of good language instruction are fairly universal.

The literature review formed the basis for deciding on the desirable practices and behaviours to be included in the tools of the study, e.g. classroom observation schedule, time-on-task record, teacher interviews, teacher survey and student assessment as described in Chapter III. This was a difficult exercise. Western literature on reading instruction sets very different standards for classroom processes. For example, Pressley et al. (1996), and Postlethwaite and Ross (1992) describe practices of effective teachers for teaching reading and writing that cannot be expected in our classrooms. Reading is given the highest priority in the first three grades in most developed countries. Parents read aloud regularly to their children even before they join school. There is a lot of print material available at home. Children attend at least two years of preschool before grade 1 and the foundation of reading begins much before grade 1. At preschool there is a lot of work for oral language development, concepts of print, phonological awareness, visual pattern discrimination etc. Because most children have a lot of exposure to print, ‘reading’ of texts can begin much earlier. Reading of storybooks is included even when systematic instruction in phonics is being carried out. Thus, children get a lot of opportunity to read a variety of graded texts and develop their reading skills through reading. The classrooms are resource rich and contain a variety of children’s literature including basal readers, trade books, picture books, big
books etc. Children are taught to compose simple sentences through shared writing, pair- writing and independent writing. The focus is on creative composition with steps like drafting, revising, editing, finalizing etc. Systematic vocabulary development and comprehension instruction is quite common. Retelling, summarizing, webbing are commonly used practices to promote higher order comprehension. There is a balance between lower order skill instruction and higher order comprehension and writing instruction. Teachers receive specialized training in the teaching of reading and use a variety of strategies for whole class and differentiated instruction. Reading recovery programmes are in place for those students who are struggling to read and write.

The situation in India is quite different for several reasons. These include lack of quality early childhood education, unsatisfactory quality of pre-service training including lack of emphasis on teaching of reading to young children, lack of focus on good reading strategies during in-service training, inadequate availability of classroom resources, lack of accountability for student learning and achievement etc. Therefore, great care was taken to see that the expectations of desirable practices were not unrealistic or irrelevant to Indian conditions. Following the study of literature, this researcher has depended on the following processes to formulate the conceptual grounding for this study and contextualize the concepts and practices studied during the literature review to the Indian government primary school context:

- Detailed interactions with key staff of reading enhancement programmes being implemented in India
- Preliminary classroom observations to understand the situation in identified blocks
- Researcher’s own experience of almost two decades of research and practice in understanding classroom processes in the area of language teaching-learning