

**NEGOTIATING THE ENGLISH-VERNACULAR
DIVIDE: TEACHING LEARNING STRATEGIES IN
ENGLISH MEDIUM SCHOOLS**

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DOCTOR OF PHILOSOPHY

RASHIM PAL

Under the supervision of

PROF. MINATI PANDA

PROF. A. K. MOHANTY (RETD.)



Zakir Husain Centre for Educational Studies
School of Social Sciences – II
Jawaharlal Nehru University
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ZAKIR HUSAIN CENTRE FOR EDUCATIONAL STUDIES
UGC- CENTRE OF ADVANCED STUDY (CAS)
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067

Date: 5 Jan 2017

DECLARATION

I, Rashim Pal, hereby declare that this thesis entitled "Negotiating the English-Vernacular Divide: Teaching-Learning Strategies in English Medium Schools", submitted by me for the award of the degree of Doctor of Philosophy is a bonafide work. This thesis has not been submitted so far in part or in full, for any degree or diploma of any other university.

(Signature of the Candidate)

Name: RASHIM PAL

CERTIFICATE

It is hereby recommended that the thesis may be placed before the examiners for evaluation.

Prof. Saumen Chattopadhyay

Chairperson

Prof. Minati Panda

Supervisor

Prof. A.K. Mohanty

Co-Supervisor

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ABSTRACT

Indian multilingualism has an implicit linguistic hierarchy, where, English has established its supremacy over vernacular languages. In a globalized world, English language proficiency determines one's access to better economic and professional opportunities. This partly led to mushrooming of English medium schools in recent times in India. The preference for private English medium education is persistent among lower and upper-middle socio-economic people. Parents from low socio-economic status send their children to low cost English medium schools even if they themselves cannot converse or write in English. English according to them is the gatekeeper of vertical mobility in the society.

Indian researches suggest that the use of home language in low cost English medium schools is strictly prohibited by school authorities because the school authorities believe that the use of students' home language in school might interfere in or impede the development of academic proficiency in English. The present research titled 'Negotiating the English-Vernacular Divide: Teaching Learning Strategies in English Medium Schools' attempts to focus on the kind of negotiation that the teachers and the students in a low cost English medium school in Delhi do for making the classroom transactions mutually intelligible. Broadly, this study examines the teaching-learning strategies employed in low cost English medium schools and how the English-vernacular divide is negotiated in the classroom. The purpose of this research is to study 1) the manner in which socio-linguistic understanding and beliefs of educators about English as a language and as a medium of instruction and their impact on choice of teaching-learning strategies in the classrooms of a low cost English medium schools; 2) the extent to which these teaching learning strategies develop the academic language proficiency in English; 3) the extent

to which linguistic proficiency in English influence teaching and learning of other subjects, like mathematics and science, in a class where English is used as medium of instruction with no support at home; and 4) the ways in which the teachers negotiate the English–vernacular divide in the class.

The present research study uses qualitative research method, which is a method of enquiring about the human interaction within the complex network of micro context of a classroom and macro context of language-in-education policy. The sample of the study is drawn from a low cost private English Medium school in Delhi, where the students are first generation English learners. The data comprises of classroom observations, video and audio recordings of the teaching–learning practices, semi-structured interviews with the teachers and students, and the field notes taken. The data is analyzed using the techniques of content analysis and discourse analysis. The *linguistic interdependence* theory and *Basic Interpersonal Communicative Skills/ Cognitive Academic Language Proficiency* postulated by Cummins (1981a, 1981b & 1984a) provided theoretical framework to this study.

First research objective of this study aimed at examining the socio-linguistic understanding and beliefs of the educators about English as a subject and as a medium of instruction and their impact on the choice of teaching learning strategies in the class. The results showed that the socio-linguistic understanding and beliefs of educators in this low cost English medium school are based on separate underlying model of bilingual proficiency. Educators believed that skills and content learned through the primary language do not transfer to the second language, therefore, the inclusion of home language was deemed as unnecessary during academic discourse. The educators believed in the fact that the maximum exposure of English leads to

maximum learning in English, despite being aware of the fact that the linguistic background of the learners was predominantly Hindi. Principal, being the decision making authority, insisted on compulsory use of English for instructional and communication purpose in the school. However, English teacher was found silently resisting the school policy of ‘English only’ as the medium of instruction and made classroom spaces bilingual, so that the learners could comprehend the meaning of the content and participate actively. It was concluded that the English teacher and students tried to make negotiations at the individual level to accommodate the linguistic disadvantaged position of the learners, but they still could not challenge the institutional belief of “English Only” approach to teaching English and therefore were not able to negotiate with the English–vernacular divide at the collective level.

The second objective was to examine the nature of proficiency (conversational or academic) developed in English based on the teaching–learning strategies used in low cost English medium school. The findings of this study reveal that the English teacher resisted the school policy of using only English as the medium of instruction in the classroom and frequently included Hindi during teaching of English for the development of academic language proficiency. The teaching–learning strategies in English classroom was not aimed at developing decoding skills and semantic agility required for developing comprehension of text among learners. Classroom communication did not progress from context-embedded or cognitively-undemanding to context-reduced or cognitively demanding situations. As a result, the teaching–learning strategies employed in teaching English did not provide sufficient opportunities to engage the learners cognitively, thereby resulting in the development of limited conversational proficiency in English.

After examining the extent of language proficiency developed among the learners in low cost English medium school, this study attempted) the extent to which linguistic proficiency in English influence teaching and learning of other subjects, like mathematics and science, in a class where English is used as medium of instruction with no support at home. It was found that the language barrier posed by the development of limited conversational skills in English raised *double pedagogic challenges* for both, the teachers and the learners. These pedagogic challenges include a) understanding and communicating in English and b) understanding and communicating using subject specific registers of science or mathematics. These challenges were evident in both mathematics and science classrooms, where teacher had to explain the meaning of the text given in English as well as the underlying concept. Moreover, the assessment procedures constituted context-reduced and cognitively demanding communication with learner dependent only on the available linguistic cues. Learners were required to develop academic language proficiency in English for interpreting the linguistic cues independently and for performing during examination. It was found that the teaching–learning strategies employed in low cost English medium school subtracted the opportunities for developing the understanding of mathematical and science concepts, thereby restricting the process of meaning-making in the classroom.

Finally, this study attempted to address how the teaching–learning strategies employed in low cost English medium school shaped the negotiation of English–vernacular divide. The data analysis of different subjects in the classroom highlighted that code-switching between Hindi and English emerged as one of the most commonly used teaching–learning strategies, where both English and Hindi were used simultaneously to convey the meaning to the learner. The socio-linguistic understanding of educators revealed that educators had limited the understanding of

psycholinguistic processes underlying the second language acquisition. The notion of seeing languages as ‘pure’ entities resulted in making of the normal linguistic behavior, such as code-switching, in children as erroneous during classroom interactions. The teachers in order to make the classroom transactions mutually intelligible used code switching as a major strategy while they suppressed the same tendency among the students. There was a fear that if the learners are allowed to code-switch, they will never learn English well. Another compelling factor behind non-allowance of code-switching among the students was that the students had to write the class examinations in English only. The hegemonic position of the examination system determined the language use pattern among the students in the class.

Learners experienced variety of dissonance when they were denied both the linguistic and cultural incorporation of their home language and the knowledge systems. This often resulted in wide range of failure manifestations, such as disruptive behavior, withdrawal from active communication, absenteeism, low self concept etc. Research studies have provided enough evidences about the linguistic processes such as code-switching, diglossia and translation being part of normal linguistic behavior of bi/multilinguals. The present study therefore concludes with the suggestion that in primary classes, the classroom language use practices need to approximate to the efficient everyday communicative practices of children that include code-switching, translation, diglossic communication etc. and legitimize the use of these linguistic-communicative tools in the classrooms. Such an admission will create a legitimate demand for developing sophisticated pedagogic tools for teaching a second language using the multilingual communicative tools in schools where the second language gets far less linguistic scaffolds everyday world of the children.

List of Abbreviations

EM – English Medium

VM – Vernacular Medium

BICS - Basic Interpersonal Communication Skill

CALP- Cognitive Academic Language Proficiency

CUP – Common Underlying Proficiency

SUP Separate Underlying Proficiency

ELL – English Language Learners

MHRD – Ministry of Human Resource Development

MoI – Medium of Instruction

MT – Mother Tongue

NCERT – National Council of Educational Research and Training

NCF – National Curriculum Framework

ZPD- Zone of Proximal Development

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Chapter 1

Introduction

The power relation among different languages and their speakers in any society determine and perpetuate the position of different languages, thus resulting in linguistic hierarchy in the society. Languages such as English, French, Spanish, etc., have gained dominant position because of their perceived instrumental value by relegating the vernacular/indigenous/minority languages. Indian multilingualism is also found to have implicit linguistic hierarchy, which is connoted as '*multilingualism of unequals*' by Mohanty (2006; 2008). Indian studies (Mohanty, 2006; 2008; Ramanathan, 2005) show that Indian multilingualism has a two-tier *double divide*; an upper tier of divide between English and vernacular languages, and a lower tier between vernacular and indigenous tribal minority (ITM) languages.

English is perceived as ethnically and politically neutral language, so on the pretext of globalization and available opportunities, English is preferred over vernacular language(s). This preference of English over vernacular language(s) creates linguistic divide known as English–vernacular. This English-vernacular divide has perpetuated preference for English medium school over vernacular medium school in education. Thus 'English' to be the medium of instruction has emerged as one of the major determinants for the choice of private school over government school by parents. The preference for private English medium (EM) education is more persistent among lower and middle socio-economic class, who assume that EM education is necessary for vertical mobility in the society.

Based on the cost of schooling, there is a huge heterogeneity among these

private EM schools, which varies from elite residential private schools to low cost private schools (Mohanty, 2008). Subsequently, such difference in the cost leads to difference in the curriculum and pedagogic practices across these private EM schools. This study has tried to examine the extent to which teaching–learning strategies used in low cost EM schools facilitate academic language proficiency in English language among learners. For the present study, Academic language proficiency is defined as “*the ability to make complex meaning explicit in oral or written modalities by means of language itself rather than by means of contextual or paralinguistic cues (e.g., gestures, intonations etc.)*” (Cummins, 2001:70).

The purpose of this research is to study 1) the manner in which socio-linguistic understanding and beliefs of educators about English as a language and medium of instruction and their impact on choice of teaching–learning strategies in the class; 2) the extent to which teaching–learning strategies employed for teaching English develop the academic language proficiency in English; 3) the extent to which linguistic proficiency in English influences teaching and learning of other subjects like mathematics and science in a class where English is used as medium of instruction, but finds no support at home; 4) the ways in which these teaching–learning strategies shape the negotiation of English–vernacular divide.

The English-vernacular Divide for the present study is defined in term of the linguistic divide between the school language i.e., English and home language i.e., Hindi. With this purpose, we propose to conduct a qualitative research in grade V of a low cost EM school in Delhi, where learners are the first generation English learners and Hindi is their home language. The qualitative research includes 1) *classroom observation* with a focus on student–teacher interaction that occur during language

and subject teaching, 2) *interviews* with teachers and school administrator, 3) *site documents* such as the language-in-education policy, position papers, national curricular framework, textbooks, exam papers, etc. and 4) *audio-video recording* of classroom discourses and school events, such as school assembly, celebration of school functions etc. The *Linguistic Interdependence* (1981a) and *Basic Interpersonal Communication Skills/ Cognitive Academic Language Proficiency* (1984b) postulated by Cummins provided theoretical framework to this study.

This chapter is divided into six parts. The first part describes the nature of multilingualism in Indian context, which reveals that multiple languages exist and complement mutually in everyday life, but simultaneously shows that perceived instrumental value of different languages has led to emergence of linguistic hierarchy within Indian multilingualism. The second part is an attempt to define English-vernacular divide and explain the manner in which English established its instrumental value over vernacular languages. The third part explains the heterogeneity of EM schools as evident in India with explicit focus on the low cost private EM schools. The fourth part discusses the rights and recommendations provided by our constitution and National Curricular Framework (NCF) (2005) respectively with respect to the language(s)-in-education. This part has also discussed the presence of English and Hindi as language subject(s) and as medium of instruction in primary education to explain the emerging preference for English over Hindi in the education. The fifth part describes the theoretical framework of this study. The sixth part provides the review of literature, followed by the concluding part which comprised of rationale, research questions, and objectives of the study.

1.1. MULTILINGUALISM IN INDIA

Multilingualism refers to the use of number of languages (usually more than two) either by an individual speaker or by a community of speakers at any given place. It is a complex phenomenon because of the number of languages involved and their complex socio-political position in the society. India is placed on the ninth position in ‘the list of linguistic diversity of countries’ by the 16th Ethnologue (16th Online edition of Ethnologue from <http://www.ethnologue.com/>) with a total 445 living languages (which are used as first language), out of which 438 are indigenous languages and seven are immigrants languages. Huge diversity of India is evident from the census survey which are held once in a decade.

The 2001 Census Survey of India listed over 6,600 mother tongues (MT), which were further rationalized into 3592 MTs. The 3592 mother tongues were categorized into two groups; one constituted 1635 ‘listed mother tongues’ with more than 10,000 speakers for each language, and the other constituted 1957 ‘other (unlisted) mother tongues’, wherein each language has less than 10,000 speakers. The 2001 Census further classified these 1635 mother tongues into 122 major languages which also included the 22 official languages listed in the VIIIth schedule of the Constitution of India. The other 100 languages were not included in the VIIIth Schedule and thus called the Non-Scheduled languages. Hindi is the official language of the Union, while English is designated as the associate official language by the constitution of India. The nature of Indian multilingualism provides a contrasting picture; where a number of languages co-exist simultaneously in everyday life, but the instrumental value associated with each language determines its position in the linguistic hierarchy existing in the society.

1.1 Indian Multilingualism: A Natural Phenomenon and Positive Force

Indian multilingualism is a “natural phenomenon” (Bhatia & Richtie, 2004), which is complex and deeply rooted rather than just being the presence of many languages. In India, language has been one of the major determinants in formation of the twenty-nine states. Besides the presence of multiple mother tongues, each state has shortlisted number of languages, as official and associate official languages, to be used for administrative purposes. Thus, the choice about the selection of language(s) in personal and professional domain is determined by complex network of micro and macro level factors. Mohanty (2004) suggested some basic features of multilingualism, which included bilingualism at the grass-root level, maintenance norms, complementarities of languages, multiplicity of linguistic identities, bilingualism as a strategy for mother tongue maintenance, multilingualism as a positive force, and early socialization for multilingual functioning. He described that Indian multilingualism is characterized by grass-root multilingualism where multiple languages are maintained and promoted in everyday life. So, children are usually found to be aware of two or more languages when they enter school. For example, a five years old child from a Punjabi family usually has knowledge of Punjabi (his mother tongue), Hindi (as a language of communication, media, music, and movies), and English (as a language of school). Therefore, a number of languages co-exist and complement each other as per their functional allocation. This has resulted in maintenance of multiple languages as a norm in both personal and professional domain.

Language and identity are mutually connected, so learning of different languages also bring along change or adoption of identities associated with different

languages respectively. For example, a child being a speaker of Punjabi, Hindi, and English portrays his individual identity (representing Punjabi community), national identity (Hindi associated as Indian language), and student identity (English being the school language). Alongside these linguistic identities, a child begins to familiarize with the functional requirement associated with different languages. For example, a Hindi child who speaks Hindi at home, switch to English as soon as he/she enters the official boundaries of school, for formal greetings and communication with teachers and principal. However, the same child still prefers to use Hindi during personal communication with friends within the school. Characteristics such as early socialization in multiple language and pluralistic ethos seem to make *multilingualism a positive force* (Mohanty, 2006). Thus, Indian multilingualism becomes a positive phenomenon not only for individual but also for society, where large number of languages are accommodated, maintained, and nurtured simultaneously. However, the power and prestige associated with the functional allocation of different languages create conflicts within this multilingualism, which gradually leads to linguistic hierarchy as discussed in the next section.

1.1.2. Multilingualism of Unequal

Indian multilingualism also characterizes emerging linguistic hierarchy, where certain dominant languages are preferred over other languages that have lesser power and prestige. This emerging linguistic hierarchy in multilingual context of India, is referred as '*multilingualism of unequals*' by Mohanty (2008). There are languages preferred and promoted specifically in the powerful domain, such as administration,

school, technology etc., the power and prestige associated with that particular domain gradually shifts to the associated language. Languages such as English, French, Hindi or regional languages become dominant because they are associated and promoted in the administrative spaces at national and international level. Other languages including indigenous tribal and minority (ITM) languages) such as Maithali, Bhojpuri, Sambalpuri etc., are marginalized and lesser dominant because they are used in the limited personal domains such as home, neighborhood, market place, etc.

The process of gaining the dominance in linguistic hierarchy is a gradual process occurred over a longer duration and marked with complex and continuous interaction of political and social factors. Census survey of India is one such socio-political source which provide evidences for the manner in which particular languages has emerged as dominant languages over the other languages. This dominance is an end result of either increase in speaker that particular language or merging the speaker of different mother tongues with less population into the population of dominant language. For example, Jhingran (2009) pointed out *that 27 mother tongues were grouped under Hindi, each of which had more than one million speakers as per 2001 Census record. Of these, mother tongues such as Bhojpuri (33.1 million), Sadari/Sadri (15.7 million), Rajasthani (18.4 million), Chattisgarhi (13.3 million) and Magadhi/Magahi (14 million) had more than 10 million speakers. These mother tongues are so different from each other that their speakers have low mutual intelligibility because of which they find Hindi difficult to understand without learning* (p. 251). He further describes that the number of Hindi language speakers has increased from 123 million in 1961 to 154 million in 1971 as per the census report. These speakers claimed that proper Hindi is their mother tongue, although many of

them use clearly different but related varieties such as Pahari, Maithali, and Bhojpuri in their daily primary communication.

Khubchandani (1997) suggested that the two major reasons behind identifying one's mother tongue to be the language of the majority is the need for social affiliation and power. However, this need for social affiliation and power provides threat to one's own mother tongue. Mohanty (2008) stressed that the preference of one language over the other counters the maintenance of multilingualism as the norm because gradually the mother tongue is pushed aside and replaced by majority/regional/vernacular language even in personal domains. For example, a child from a Bhojpuri family immigrated to Delhi prefers to communicate in Hindi rather than Bhojpuri, at home. So, the child is more likely to become an adult Hindi speaker, unless his or her parents encourage them on the maintenance of Bhojpuri language by providing exposure to Bhojpuri literature, media and culture at home. This preference for languages with more power and prestige is the root cause of linguistic hierarchy, which further leads to lessening the power and prestige of the ITM languages.

While discussing about the impact of this linguistic hierarchy in education, research studies suggest that the marginalization and educational neglect of indigenous tribal minority (ITM) languages result in the vicious cycle of language disadvantage and poverty (Mohanty, 2008a; Mohanty, Mishra, Reddy and Ramesh 2009; Jhingran, 2009). The fact that ITM languages are considered to have lesser instrumental value relegates their use in education. When children from ITM community are educated in dominant languages, they find it difficult to fulfill the academic demand of classroom. These children are found to perform poorly in academics as compared to their counterparts, who are speakers of dominant language.

Absence of home language is found to be one of the major reasons for the higher drop-out rate of linguistically and socially marginalized children. Therefore, depriving children from their home language in the classroom is to deprive them from the opportunity to develop their academic potential.

Linguistic hierarchy is characterized as a two-tier '*double divide*', where the upper tier represents a divide between English and vernacular or regional languages; and the lower tier represents a divide between vernacular and indigenous tribal minority languages. The focus of this study is to study the manner in which English-vernacular divide is negotiated through teaching-learning strategies employed in the classroom of low cost EM school in Delhi. Thus, the following section attempts to define English-vernacular divide and explain the manner in which English established its instrumental value over vernacular language in Indian context.

1.2. ENGLISH–VERNACULAR DIVIDE

Oxford dictionary defines the term *Vernacular language* as *the language or dialect spoken by the ordinary people of a country or region*. It further mentions that the roots of this term can be traced back to the Latin term *vernaculus* of early 17th century which means *home-born slave*. During colonization, British ruler used the term *vernacular* to represent the local or regional languages spoken in India. For the present study, English–vernacular divide implies linguistic mismatch between the school language (English) and home language (Hindi) in the classroom.

1.2.1. Emergence of English over Vernacular languages

Advani (2009) provided three related assumptions underlying the introduction of English by the colonial state. The first assumption was the belief that the vernacular languages were seen as unfit and powerless to teach scientific rationality. The second assumption was that the British introduced education in English to gain socio-cultural control over the Indian, thereby teaching their culture and civilization. The third assumption was the demand based on practical and financial considerations made by local Indian elites and working class employed in British offices. English was promoted as language of science, reason and modernity, whereas vernacular was related to superstition and ignorance. However, the hidden agenda was to control and rule the Indian. Many of the Indian educated elites such as Rammohan Roy favored extensive Anglicization on the pretext of science and knowledge, whereas there was another class of Indian employed in British offices who preferred English language for commercial reasons. Studies on English language confirms that teaching of English was promoted to acculturate Indian into English values, morals and tastes for political interest of the rulers (Adas, 1990; Ghosh, 1995; Viswanathan, 1990).

It was this prevalence of the Anglicist view that led to the marginalization of indigenous languages by establishing a significant link between English and the propagation of modern and scientific knowledge which is subsequently carried in postcolonial India (Kachru, 1986; Phillipson, 1992; Pennycook, 1998). Although universities, medical college, and engineering college were established by 1856, but the medium of instruction was English. Only selected Indians had real access to such institutions because admission to them required knowledge of English, which was imparted in fee-paying schools that were generally restricted to elite and urban

families. Therefore, education through the medium of English resulted in selective higher education for our future scientist, technocrats, and administrators.

Phillipson (1994) argued that this legacy was not only been limited to India, rather it was a worldwide phenomenon for all the countries which were colonized by the British and where English was the language of power. He further listed few characteristic of colonial education, which were common throughout the colonies they ruled, mentioned as follows

- # *Local languages had low status, whether they were used in education or not.*
- # *Local traditions and educational practices were ignored.*
- # *Bookish and unsuitable education was offered with the aim of producing a class of complaint clerks and loyal elites.*
- # *Education played a central role in “civilizing the natives”.*
- # *The master language of empire (English) was attributed civilizing properties*

(p.12)

This shows that for the British ruler, English was a source to enslave the local people to maintain their hegemonic rule. Phillipson (1994) further argued the promotion of programs or activities related to English as Foreign Language (EFL) or underlying or as a Second Language (ESL) in the developing countries was in conjunction with the promotion of political, economic, and military interests. More importantly, it was explained that the increased awareness about the promise that English was supposed to fulfill and which through the aid of education was supposed to be facilitated, but this awareness has largely remained unredeemed. There is massive documentation of crisis in education in the Sub-Saharan education (e.g., Hawes & Coombe, 1986; World Bank, 1988; Craig, 1990; Psacharopoulos, 1990),

although the focus of World Bank reports is on the failures of implementation and planning, rather than on the radical reassessment of what education is attempting to achieve in such societies. There has been no real attempt to gauge the extent to which inappropriate language policies have contributed to the educational failure. This indicates that the modernization paradigm of the development aid that they predicted is fundamentally flawed. However, the aid programs are extremely functional in maintaining the dominant position of English in such countries.

Phillipson (1997) argued that such language spread policy can be analyzed as an expression of linguistic imperialism, where the key concept is linguicism. Linguicism is defined as *ideologies, structures and practices* which are used to legitimate, effectuate and reproduce an unequal division of power and resources (both material and immaterial) between groups which are defined on the basis of language. (Skutnabb, 1988). When vastly more resources and power are allocated to one language than other, for instance to English rather than regional languages, the strength of one language is structurally linked to the weakness of other languages.

English is often termed as a ‘Lingua Franca’, which generally implies that it is an ethnically neutral instrument for national and international communication between speakers who do not share a mother tongue. However, such an argument is often seen as a way out of conflicts emerging out of linguistic assertion by speakers of different languages. Phillipson (2009) explained the functioning of English language in relation to its position as project, process, product; and the way these three mutually reinforce each other. Education through the medium of English serves the project of elite formation (excluding the mass of the population). Local political and corporate elites are committed to a project in coordination with external commercial

and political forces. The local needs that the project serves are those of the urban elites, who are complicit with the forces of the global economy, which in turn means subordination to the US empire project. The processes involved entail the subtractive learning of English by distancing the learners from their ancestral languages and cultures, which are pushed out from the schools of most children, thereby, weakening the local language ecology through a harsh pecking order of languages. Dispossession of national languages takes place when resources are not allocated to validate, update, and use them in the modern economy, political domain, and education. The product is Anglo-American English in its core, even if there are major modifications of vocabulary, grammar, and in particular pronunciation, so the product adapts to the local needs and levels of intelligibility or formality.

Thus, in this context, it is highly probable that English is learnt through a subtractive process. The project of increasing the learning and use of English represents a threat to other cultural values unless education is organized in a manner to build on the languages and cultures that children bring with them to school, after which other languages can also be acquired. In addition, English has benefited from internal conflicts between competing linguistic claims. For example, the conflicts between Hindi and Tamil as well as other South Indian languages in India, and between the speakers of Sinhala and Tamil in Sri Lanka have facilitated the dominant role of English. With English as the language of power and privileges, majority/vernacular languages have been placed in a secondary position. This kind of situation is further perpetuated by the lack of clarity and ambiguities in educational policy documents like NCF (2005), Knowledge Commission Report (2009), RTE Act (2009), etc., where mother tongue gets only rhetorical support including the

Constitution of India (http://www.india.gov.in/govt/constitutions_of_india.php/)

1.2.2. English-Medium Schools in India

Studies of multilingual socialization in India (Bujorbarua, 2006; Mohanty, Panda & Mishra, 1999) show that children in India develop an early awareness of the double divide (including English–Vernacular divide) and the social norms of preference among the languages in the hierarchy. For example, in discussing the stages of multilingual socialization, Mohanty et al. (1999) showed that children between 7 to 9 years old in India have a clear awareness of the higher social status of English vis-à-vis their own mother tongues and further demonstrated that schools do contribute to the development of such early awareness. In a study of multilingual socialization of Assamese children, Bujorborua showed that children develop an early preference for English over Assamese, Hindi, and other languages due to the language socialization strategies practiced by parents. These studies indicate that the hierarchy of preference for different languages are socially constructed and legitimated through the processes of language socialization. In this process, dominant language(s) such as English gains popularity owing to its perceived instrumental value.

Schools in India can be broadly categorized into government schools and private schools. There are other numerous factors for further categorization of schools in India, such as government recognition, curriculum affiliation, being aided or unaided, level of schooling, infrastructure etc. Mohanty (2008a) categorized EM schools in India broadly into three levels based on the annual cost of schooling (to the parents)

- i. Very exclusive elitist EM residential schools (nearly 1,000,000 INR [Indian Rupees]);*
- ii. High-cost EM schools for the privileged class (100,000 to 300,000 INR);*
- iii. Low-cost EM schools for the less privileged social class (5,000 to 20,000R)*

Mohanty (2008a) suggested that the quality of the schools in different categories is approximately related to cost mentioned. Although, there are studies yet to be done to substantiate the correlation between cost and the categories, but the important aspect of this categorization is the social class.

Ramanathan (2005a, 2005b) in a longitudinal research study explained that the socio-political position of class and caste determines the relationship between English and local vernaculars in the post-colonial communities such as India, where vernacular literacy practices—including ways of teaching, learning, living, reasoning, and believing—are marginalized. These two tracks constructed an “English–Vernacular Divide” in education and literature practice. She further explained that EM and VM institutions follow divergent English literacy models, pedagogical practices, and tracking policies. She has elaborated the striking differences present in the English textbooks used for EM and VM students, as described in the table below.

Table 1.2a: Cultural model of English literacy in VM & EM (Ramanathan, 2005:59)

English literacy for VM students	English literacy for EM students
Survival English is adequate (more focus on grammar and writing skills)	English language needs to be well developed with comprehension and communicative skills
Local knowledge is adequate (reading concentrate on small, local contexts), limited reading by international authors	More cosmopolitan: Readings by American, British and Indian-English author with more global slant
Assumption that teachers themselves are not fluent in English	No such assumption in EM text
No emphasis on self-learning & composition	Emphasis on independent learning and building self confidence with self-learning exercises

It was observed in her study that English–vernacular divide is not only limited

to divergent English literacy practices, rather there are also divergent tracking policies, where the so called ‘prestigious subjects’ like science and mathematics are mostly preferred by EM students, whereas the ‘non-prestigious’ subjects like Arts, Literature, etc., are preferred by VM students. Thus, English–vernacular divide is deeply embedded in the structural division, in terms of class and caste present in our society. Ironically, English is seen as a way out to counter the existing structural differences by the disadvantaged social and economic class.

1.2.3. Low cost private EM School

Low cost private EM schools are also referred as ‘*budget*’ or ‘*Low-Fee Private (LFP) schools*’. Nambissan (2012) argued that often the low cost EM schools are projected as “*responding to the growing demand of poor families for ‘good quality’ private English medium schools*” (84). However, the perceived extent of this ‘*ood quality*’ expected by parents is the main concern raised and explored in number of psychological and sociological research studies (Ramanathan, 2005; Mohanty, 2008; 2010; Baird, 2009; Nambissan, 2012; Srivasatava, 2007; Harma, 2011; De, Noronha & Samson; 2002; Hill, Samson & Dasgupta, 2011). The presence of huge economic disparity further provides heterogeneity in private EM school, but the common feature among this evident heterogeneity is medium of instruction. It has been established by number of studies that English as a medium of instruction is one of the major determinant of school choice among parents, especially the lower socio-economic strata who has the limited the notion of ‘good financial prospect’ to ‘English’. Since the focus of present research is low cost EM schools, it is pertinent to briefly describe

the culture, curriculum, pedagogic practices, etc., followed in these schools observed in different studies.

a.# Perceived Anglicized School Culture

While discussing the heterogeneity in EM schools, Mohanty, Panda & Pal (2010) emphasized that the low cost EM school provides cosmetic anglicized school culture with focus on the western style of school dress, display material, and behavioral routines, thereby creating mere perception of look-alike culture of high cost EM school. It is argued that *the low-cost (or Doom School) EM schools insist on cosmetic anglicization with western school uniform (usually with a tie and shoes) and behavioral routines (such as saying daily school prayers in English, greetings with 'good morning' etc.)*. The cosmetic anglicization doesn't go beyond mere meaningless practices and rituals followed by children on the pretext of discipline, mannerism, English culture etc. The focus of perceived anglicized culture is to maximize the exposure of English in the form of instruction, text, display, practices, etc., because it happens in elite or high cost EM school. The inadequate exposure of English at home and prohibition on the use of home language in the low cost EM school restricts the children from developing a meaningful attitude through the anglicized practices. It is found in the aforementioned studies that children engage in such anglicized practices in the low cost EM school in mechanical and monotonous manner, which results in lack of interest and motivation in learning.

b.# Textbook Learning

Kumar (1986) asserted that *textbook* refers to *a distinct commodity whose practical and symbolic function will be shaped by the socio-economic and cultural*

milieu in which it will be used (pp.1309). In Indian context, he argued that, *textbook dominates the curriculum and is used for class routines like loud reading, silent reading, comprehension exercises, recapitulation, homework and tests* (pp.1310). Mohanty et al. (2010) confirmed about the strong presence of this ‘*textbook culture*’ in the low cost EM schools. However, in comparison to high cost EM schools, the textbooks in low cost EM schools are usually found to be *cheap and easy, with big font size, introduction of the grade-appropriate content with more illustrations and less explanations, and content based direct exercises with lesser emphasis on activities* (10-11). Schools prescribe such textbooks keeping in mind the students’ social strata, where parent can neither afford more expensive books nor can they help their children with complex text and activities. Another reason for preference of textbook is that these textbooks provide space for practice of written work and explanation, so children can read from the textbook and memorize the given content easily.

c.# Teaching–learning strategies

Teaching–learning strategies such as *translation* of English to Hindi or Gujarati or *code mixing* between English and Hindi/Gujrati has turned out to be a compulsory element of learning process. Ramanthan (2005) found that *classroom language transactions are much more nativized and hybridized, as languages other than English are used even while teaching English* (pp.113-115). In the context of low cost EM school, teachers translate the English text or explain the details of the main topic in Hindi by frequently mixing the main content words in English with Hindi (Mohanty et al., 2010). Code-mixing (using two languages interchangeably) or even switching to majority regional language is a common phenomenon used by teacher in

low cost EM schools, although the formal medium of instruction is English (Mohanty et al., 2010). Teachers feel necessary to use such strategies to facilitate understanding and comprehension of the teaching content for the students. Classroom practices in such school include elaborate translation of text into majority regional language through emphasis on covering the given syllabus, choral repetitions of the information taught, recapitulation of the taught content by one-word questions, etc.

Ramanathan (1999: 221; 2005:71,101) also noted similar teaching practices in language classrooms in which the teachers use translation method and elicited choral responses from students in the women's college (WC) Ahmadabad, Gujarat. Teachers from both the low cost primary EM schools in Delhi and the Women's College in Gujarat are reported to use a lot of choral routines. While the teachers in Women's College justify their choral responses from students by referring to the Katha (chant-like oral discourse) tradition in India (Ramanathan, 2005: 71), the classroom choral routines in the Delhi low cost EM schools are rationalized because students are required to memorize the correct answers for better performance in the exams in which they have to write in English as one of the teachers in this kind of school explains (Mohanty et al., 2010).

We have to get the children to repeat the correct answer several times in the classroom, so that they remember how to write an answer correctly in English. They do not study much in their homes. They cannot write correctly in English even if they understand. Their parents cannot teach them. So, we have to do this in the classroom.

Studies have shown that teachers in low cost EM institutions act as mediators who use different kinds of practices and strategies to help the children with their limited English proficiency and lack of any support at home or from parents (Ramanathan, 2005; Mohanty et al., 2010).

d.# Assessment

In the low cost EM school, classroom practices are not limited only to teaching–learning practices; rather it is extended to the procedure of assessment that is done in English. In assessment, emphasis is more on multiple-choice questions, in which the students have to select correct answer out of the given choices. Subjective questions usually require short answers (Mohanty et al., 2010). Both multiple choice and subjective questions are given directly from the exercise of the chapter whose answers the teacher usually writes on the blackboard during classroom teaching. Therefore, students have to memorize those question–answers given in the exercise of their textbook and write it during examination; comprehension of the text or the subject matter is generally less emphasized.

1.4. LANGUAGE-IN-EDUCATION IN CONSTITUTION AND NATIONAL CURRICULAR FRAMEWORK

1.4.1 Constitutional Provisions

After independence, no language was given the status of *national language* because none of the regional languages had uncontested presence throughout the country. However, Hindi was given a prominent place in the constitution by declaring it as the *official language of the union* in article 343 of the constitution.

Article 343(1): *Hindi, in Devanagri script, shall be the official language of the union with the international form of Indian numerical.*

Article 343 (2): English, along with Hindi, was allowed to be used as *associate official language of the union* for a period of fifteen years, thereafter being subjected to the recommendations made by parliamentary commission to revise the status of English.

Several special directives are provided for the promotion of Hindi: “*to promote the spread of Hindi language, to develop it so that it may serve as the medium of expression for all the elements of the composite culture of India*” (Article 351).

The absence of a national language seemed to comprise the regional languages, however, granting Hindi the status of *official language of the union*, celebrating ‘Hindi Diwas’ on 14th September every year throughout the nation, etc., and many more similar practices have maintained the hegemony of Hindi over other regional languages. Question of making Hindi a national language was strongly resisted by southern states during 1960s, when English completed fifteen years of associate official language and during the developing of national Education policy 1986, where an attempt was made to promote Hindi as a link language. In the field of education, constitution provided the following provision with respect to language-in-education.

Article 350 A: Facilities for instruction in mother tongue at the primary stage: “*It shall be the endeavor of every state and of every local authority within the state to provide adequate facilities for instruction in the mother tongue at the primary stage of education to children belonging to linguistic minority groups*”.

Article 45: Provision for Early Childhood Care and Education to Children below the age of six years: “*The State shall endeavor to provide early childhood care and education for all children until they complete the age of six years*” (Eighty-Sixth Amendment Act, 2002).

Article 21 A & 29(2) (f): Right To Education Act (2009): Most recently, Right to Education bill passed by the Indian Parliament, known as Right of

Children to Free and Compulsory Education Act 2009, *provides education for children from 6 to 14 years old as a right*. However, it fails to guarantee education in mother tongue as Article 29 (2) (f) of the Act says that “*medium of instruction shall, as far as practicable, be in child’s mother tongue*”.

The above mentioned constitutional provisions emphasize the importance and presence of mother tongue in education, but it is yet to be implemented in practice (Jhingran, 2009:259; Mohanty, 2008:4; Mohanty et al., 2010:4). In fact, Right to Education Act (2009) contradicts article 350A. Article 350A emphasizes on providing the adequate facilities for instruction in the mother tongue at the primary stage of education, whereas Right to Education Act (2009) emphasizes that “medium of instruction shall, as far as practicable, be in child’s mother tongue”. This provides legitimate excuses to the state and local authorities for promoting the regional languages or languages other than the mother tongue by creating linguistic disadvantage for the children (especially the indigenous tribal minority (ITM) group).

1.4.2. Three Language Formula (TLF)

The *three language formula* (TLF) was initially proposed in 1957 as a recommendation for language(s)-in-education, which was again modified in 1964. In this modified TLF, three languages are to be studied as the school subject in the following manner:

- (i)# mother tongue or regional language,
- (ii)# Hindi or English, and
- (iii)# One Modern Indian language or foreign language not covered under and not used as medium of instruction.

The intention was *to accommodate the interests of group identity (mother tongues and regional languages), national pride and unity (Hindi), and administrative efficiency and technological progress (English)* (Sridhar,1989; Position Paper on Teaching of Indian Languages, NCERT, 2006:12).

TLF has not moved beyond *merely being a recommendation* because there is ambiguity between the *regional language* and the *mother tongue*, where regional language of the state often replaces the mother tongue of the child. Moreover, this formula has been designed for government schools and is not mandatory for private schools (Mohanty, 2006). Private schools have their own discretion to choose any language as a medium of instruction, which is usually English. Private school introduces English as a medium of instruction as well as a subject and also include another Indian language (usually the regional language) in the study syllabus from as early as grade I. TLF has been implemented differently in different states with regional language as the first language, English as the most preferred second language, and Hindi or Sanskrit has been relegated to the position of third language (Mohanty, 2008). Despite the fact that TLF has been implemented variedly in North and South India, English is one common subject which has been able to maintain its permanent position in language(s)-in-education.

1.4.3. National Curricular Framework (NCF)

National Curricular Framework (NCF) prepared by National Council of Educational Research and Training (NCERT) is an educational document, which provides revisions and recommendations in the school curriculum. NCF envisions

language not only as an important tool for construction of knowledge, but also as a tool that connects the thought and identity of an individual. It considers multilingualism as an important resource for the development of child as has been pointed out rightly in the following words:

“Multilingualism, which is constitutive of the identity of the child and a typical feature of the Indian linguistic landscape, must be used as a resource, classroom strategy and a goal by a creative language teacher. This is not only the best use of a resource readily available, but also a way of ensuring that every child feels secure and accepted, and that no one is left behind on the account of his/her linguistic background” (NCERT 2005:36).

NCF (NCERT, 2005) makes a strong plea for mother tongue based education of child as mentioned below

- # *Home language or mother tongue, which is defined as language(s) that a child acquires naturally from her/his home and social environment, should be the medium of learning in schools.*

- # *If a school doesn't have provision for teaching in child's home language at the higher level, primary school education must, still be, covered through the home language. It is imperative to honour the child's home language.*

NCF strongly recommends that in primary grades teaching must be imparted through mother tongue, but it contradicts itself with the recommendation of early introduction of English. Considering English as a *matter of political response to people's aspiration* (p.3), NCF provides evidences of underlying preference for English without considering the psycholinguistic implication of home language/mother tongue on academic learning. A study conducted by NCERT showed that English is introduced in class I or class III in 26 states or union territories out of 35. Only seven territories introduce English in Class IV or Class V (Khan, 2005 as quoted in NCF, 2005). The widespread preference for EM education (mostly private school) has relegated Hindi and other regional and constitutional language to an

insignificant position in education (Kurien, 2004). Thus, the discourse of mother tongue based multilingual education seems to have been marginalized while recommending mother tongue as a medium of instruction with an altogether different grass-root reality. A closer look at the statistical figures on the practice of language-in-education would further reflect on the above discussion.

1.4.4. Practice of Language(s)-in-education

In order to assess the situation of language(s)-in-education in practice, the statistical data from All India Educational Survey is analyzed. All India Educational Survey is conducted by NCERT with the gap of a decade usually. To begin with, it is important to know the status of the total number of languages, as medium of instruction or as subjects, in school. By comparing all the surveys done till 1998, it is observed that there is a sharp decline in the total number of languages as presented in Table 1.4.4a. The total number of languages has reduced to mere 41 languages in 1998 as compared to 81 languages in 1970.

Table 1.4.4a: Total Number of Languages as Medium of Instruction or Subjects (NCERT, 1999; Mohanty, 2006: 275; 2010:5)

Year	1970	1976	1978	1990	1998
No. of languages as MI / Subject	81	67	58	44	41

Similar kind of picture emerges from a look at the total number of languages as medium of instruction in different grades over the gap of two surveys. The last two surveys, i.e., Fifth and Sixth All India Survey conducted by NCERT show that there has been decrease in the number of languages used as medium of instruction which is

presented in Table 1.4.4b. In fact, this decrease is more evident in the primary grades, i.e., from 43 languages in 1990 to 33 languages in 1998, as compare to other grades.

Table 1.4.4b: Total Number of Languages as Medium of Instruction in different grades (NCERT, 1999; Mohanty, 2006: 275; 2010:5)

Survey and Year	Grade & Total No. of Languages used as Medium of Instruction			
	Primary	Upper Primary	Secondary	Higher Secondary
Fifth (1990)	43	31	22	20
Sixth (1998)	33	25	21	18

As focus of this research study is English–Hindi divide, so it is essential to make an analysis of the status of these two languages—as medium of instruction and as First language—in different grades on all India basis. It may be noted that these figures are only for the Government-run or aided schools.

Table 1.4.4c: Percentage of schools with English as Medium of Instruction in different grades

Survey and Year	Percentage of schools with English as Medium of Instruction in different grades			
	Primary	Upper Primary	Secondary	Higher Secondary
Fifth (1990)	1.28%	3.56%	8.17%	14.91%
Sixth (1998)	4.99%	15.91%	18.37%	28.09%
Seventh(2001)	12.98%	18.25%	25.84%	33.59%

Table 1.4.4d: Percentage of schools with Hindi as Medium of Instruction in different grades

Survey and Year	Percentage of schools with Hindi as Medium of Instruction in different grades			
	Primary	Upper Primary	Secondary	Higher Secondary
Fifth (1990)	41.35%	38.60%	31.34%	48.09%

Sixth (1998)	42.26%	40.93%	33.94%	45.37%
Seventh(2001)	46.79%	47.41%	41.32%	48.11%

Tables 1.4.4 (c) & (d) demonstrate an increase in the percentage of schools where the medium of instruction for all grades is English and Hindi, respectively. However, within the last three decades, the percentage of increase in schools with English as the medium of instruction, as shown in 1.4.4.d) is more than that of schools with Hindi as medium of instruction. Similar kind of trend emerges from the table given below for the number of schools where English and Hindi are taught as First language. Here also the data shows that the increase in number of schools where English is taught as first language is more than that of schools with Hindi as the first language in different grades.

Table 1.4.4e: Percentage of schools with English as First language in different grades

Survey and Year	Percentage of schools with English as First Language in different grades		
	Primary	Upper Primary	Secondary
Fifth (1990)	1.02%	2.47%	5.58%
Sixth (1998)	2.09%	4.25%	6.57%
Seventh(2001)	NA	9.89%	13.26%

Table 1.4.4f: Percentage of schools with Hindi as First language in different grades

Survey and Year	Percentage of schools with Hindi as First Language in different grades		
	Primary	Upper Primary	Secondary
Fifth (1990)	41.31%	38.97%	31.75%
Sixth (1998)	40.49%	35.97%	28.50%
Seventh(2001)	46.79%	39.92%	33.08%

The Table 1.4.4e compares the difference in the number of schools in both rural and urban areas with English as the first language over a gap of almost one decade. A separate analysis for rural and urban area, where English is taught as first

language, shows that there is marked increase in the number of schools with English as First language in rural areas, where its presence was negligible as shown in the following Table 1.4.4.g

Table 1.4.4g: Percentage of schools with English as First language in different grades

Survey and Year	Percentage of schools in rural and urban area with English as First Language in different grades					
	Primary		Upper Primary		Secondary	
	Rural	Urban	Rural	Urban	Rural	Urban
Fifth (1990)	0.56%	4.25%	1.14%	6.42%	2.84%	9.89%
Sixth (1998)	.66%	4.75%	2.91%	8.25%	4.06%	11.42%

From the above tables, it is concluded that:

- # There is constant decrease in the total number of languages used as medium of instruction or as subjects in education.
- # Increase in the percentage of schools with English as *medium of instruction* as well as *first language* is sharper than that of schools with Hindi as *medium of instruction* as well as *first language* by providing an inclination towards English language as well as English medium education.
- # Increase in the number of schools with English as first language is more in rural areas than in urban areas, which clearly shows the increasing change in the preference of rural areas for English over other languages.

This confirms that there is not only an increase in the presence of English at different levels of education, but this presence is increasing especially in primary grades (Mohanty, 2010a: 143). Extending this to double divide, it is found out that the presence of tribal languages in such a scenario is negligible (Mohanty, 2008b), with only 3 to 4—out of over 100—tribal languages that are regularly used for imparting

education (Jhingran, 2005). Only 1% of the tribal languages are used as medium of instruction in mother tongue education (Mohanty, 2010a). The linguistic gap between home and school language with restriction on the use of mother tongue or home language during the early years of schooling not only causes subtractive language learning experience, but also perpetuates failure and high push-out rates, especially among the minority and indigenous children.

From the above discussion in this section, it is understood that though educational policies have repeatedly emphasized on the importance of mother tongue based education, they have failed to provide it in practice leading to huge differences between language-in-education policies and practice. Moreover, the preference for EM schools owing to numerous socio-political reasons is increasing strikingly, but the difference in *quality* due to the difference in cost of schooling needs to be explored.

1.5 THEORETICAL FRAMEWORK FOR THE PRESENT STUDY

1.5.1. Linguistic Interdependence Principle

Linguistic Interdependence Principle (Cummins, 1981a) provides a framework that explains the interdependence among first and second language for successful outcome of bi/multilingual programs. This framework implies that the academic proficiency in L2 depends on the extent to which academic proficiency in L1 has been developed. Linguistic Interdependence principle is described as follows:

“To the extent that instruction in L_x is effective in promoting proficiency in L_x transfer of this proficiency to L_y will occur provided there is adequate

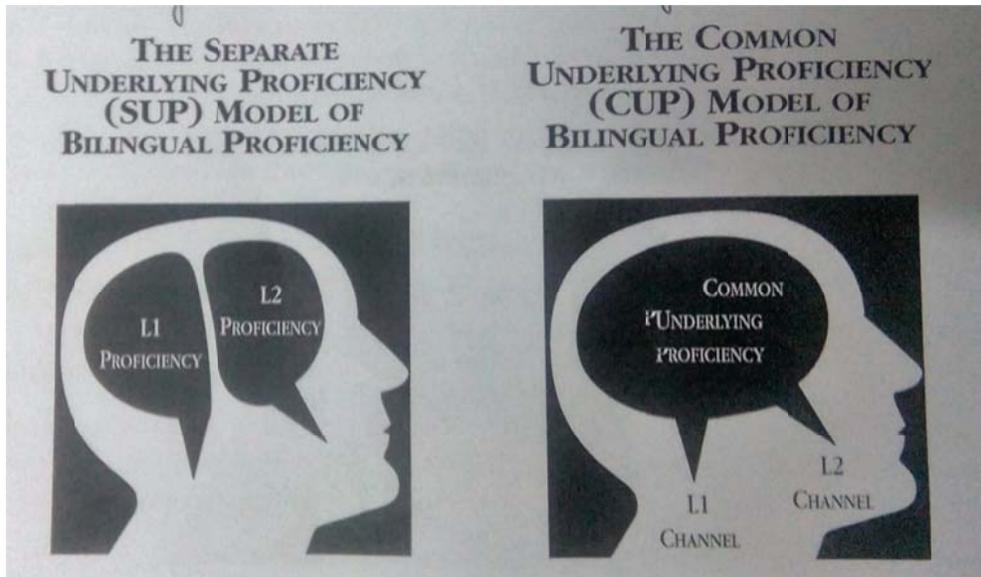
exposure to Ly (either in school or environment) and adequate motivation to learn Ly (p.29)”.

Cummins (1980a, 1981a) further suggested that it is necessary to understand that the proficiency in two or more languages are interdependent at the underlying level known as Common Underlying Proficiency (CUP)

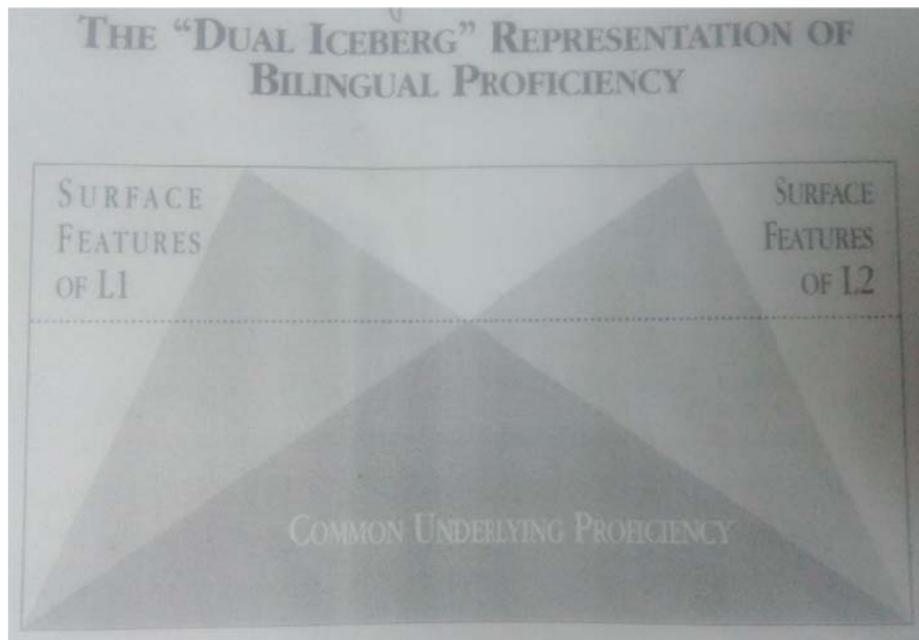
The SUP and CUP Models of Bilingual Proficiency

Opponent of bilingual education claims that there is Separate Underlying Proficiency (SUP) for the development of proficiency in different languages among bilinguals. SUP claims that *the proficiency in L1 is different from the proficiency in English (or additional languages) and that there is a direct relationship between exposure of a language (in home or school) and achievement in that language* (Cummins, 2001:170). SUP further implies that learning of the concepts and skills in L1 cannot be transferred to L2, hence, the concepts and skills associated with L2 needs to be learnt separately. For example, the concept of ‘Food’ taught in Hindi, needs to be taught again in English. In the education system, it is implied that school must not waste time on the development of proficiency in mother tongue/home language of learner; rather, the curriculum and pedagogic practices should focus on *early introduction and maximum exposure of a student to school language/target language*, as the student is required to complete his schooling in this language.

The SUP model was refuted by Common Underlying Proficiency (CUP), which states that *literacy-related aspects of bilingual proficiency in L1 and L2 are seen as common or interdependent across languages* (Cummins, 2001:171: 1980a; 1981a; Baker, 1993). The CUP model of bilingual proficiency is presented in two different manners as the following:



The picture above represents the CUP model which demonstrates *that experience with either language can promote development of the proficiency underlying both the languages, if adequate motivation and exposure is given to both in school or in the wider environment* (Cummins, 2001:171-172). Another manner of representing SUP and CUP is in the form of dual iceberg as given below.



In the above figure, bilingual proficiency is represented in the form of ‘dual iceberg’ in which common *cross-lingual proficiencies underlie the obviously different surface manifestation of each language* (Cummins, 2001: 172). This implies that learning the process of photosynthesis in Hindi will strengthen the conceptual understanding at the underlying cognitive level. A child does not need to be taught the concept of photosynthesis again in English because he will gradually develop different linguistic aspect (such as lexical, semantic etc.) related to the photosynthesis during the process of acquiring academic proficiency in English. Considering CUP, Cummins (1981a) distinguished the conversational proficiency from that of academic proficiency of language. Conversational proficiency and academic proficiency was originally termed as Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) (Cummins, 2001; 1981a; 1984a; Baker, 1993).

1.5.2. Different Dimensions of Language Proficiency

Cummins (2001) provided three different dimensions of language proficiency.

a)# Conversational Fluency: This refers to *the ability of carrying on a conversation in familiar face-to-face situation, which involves high frequency words and simple grammatical construction* (Cummins, 2001: 65). Here the speaker uses lots of linguistic and interpersonal cues to communicate more meaningfully. It is believed to be developed within a year or two with an exposure to the language either at home or school or in the surrounding environment.

b. Discrete language skills: This is recently (2001) added and it refers to *the specific phonological, literacy, and grammatical knowledge that a student acquires as a result of direct instruction and through both formal and informal practices* (Cummins, 2001: 65). It is argued that this skill is developed simultaneously along with the development of conversational proficiency, where a learner focuses more on phonological and decoding aspects of language such as sounds, letters, alphabets, and decoding words into appropriate sounds.

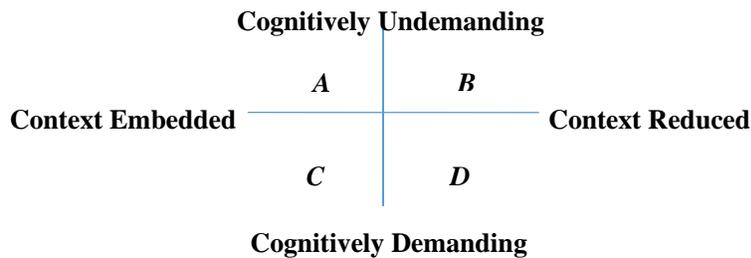
c. Academic language proficiency: This refers to *the ability to interpret and produce complex written (and oral) language, which comprise of low frequency words, complex structure, and abstract expressions* (Cummins, 2001: 65). For example, the language of content such as literature, social science, science, etc., is linguistically and conceptually demanding. Learner needs to interpret such a content area and produce his or her own expression in a relatively conceptual and coherent way.

It is argued that there is overlap of these three aspects of language proficiency. However, an explicit distinction can be made using a framework that distinguishes contextual and cognitive demands required for a particular form of language and communication.

1.5.3. Contextual Support and Cognitive Demands of Language Proficiency

In any learning situation, students are required to meet the cognitive and linguistic demands required by their social and educational environment. *These demands are conceptualized within a framework made up of the intersection of two*

continua; one is related to the range of contextual support available for expressing or receiving meaning, and the other is related to the amount of information that must be processed simultaneously or in close succession with the students in order to carry out any activity (Cummins, 2001: 66; Cummins, 1981b, 1983b & 1984b; Baker 1993). The intersection of contextual support and cognitive is represented in the following manner.



Range of Contextual support and Degree of Cognitive involvement in Language tasks and Activities (Source: Cummins, 2001: 66; 1981b; also see Baker, 1993)

Contextual Support

Contextual support comprises of external and internal dimensions. External dimension refers to *aspects of input that facilitate or impede comprehension* (Cummins, 2001). Linguistic input that is spoken clearly contains a considerable amount of syntactic and semantic redundancy which makes it easier to understand. For example, the term photosynthesis can be taught by extracting its syntactic and semantic aspects—*photo* means *light* and *synthesis* means *to combine the constituent elements of separate material into single or unified entity*—will make the concept of *photosynthesis a process in which plant use sunlight for producing their food by using water and carbon-dioxide present in the air*. Internal support refers to the characteristics of an individual who makes learning more familiar or easier in some respect, such as prior experience, motivation, cultural relevance, interest, etc. In any

learning situation, both external and internal support needs to be developed appropriately in relation to the concept being taught.

The continuum of contextual support varies from *context embedded* to *context reduced communication*. *Context embedded* means that *a participant can negotiate the meaning (through feedback, rephrasing, clarification, etc., for comprehension of the message), where language has the support of meaningful interpersonal and situational cues* (Cummins, 2000). In a learning situation, for example, a teacher uses different tones and intonation for providing corrective feedback to facilitate participation of a learner. *Context-reduced* refers to *a situation where communication primarily relies on linguistic cues to the meaning* (Cummins, 2001). In other words, communication proceeds by reducing and accessing the contextual meaning of words. In academic context, the interpretation of words or sentences carries conceptual knowledge, which needs understanding and interpretation in a particular context. Thus, 'context-reduced communication' comprises of *few clues to the meaning that is being transmitted* (Baker 1993:139).

Cognitive Demand

The continuum of cognitive demand varies from *cognitively undemanding* to *cognitively demanding*. *Cognitively undemanding communication* refers to the *"communication tasks and activities in which linguistic tools have largely become automatized and thus require a little active cognitive involvement for appropriate performance"* (Cummins, 2001:67). For example, drill exercises, copying from blackboard or textbook, rote memorization, choral recitation, etc. *Cognitively demanding* refers to *the tasks and activities in which linguistic tools have not yet been*

automatized and thus require more active cognitive involvement for appropriate performance. For example, participating in an academic discourse in classroom, writing an answer in examination, etc. These situations require quick processing of information, which include indepth conceptual knowledge and critical analysis, to meet the challenges of the situation.

This contextual support and cognitive demand framework provides four quadrants (or communications).

Quadrant A: Cognitively Undemanding + Context Embedded
(e.g., casual conversation in classroom)

Quadrant B: Cognitively Demanding + Context Embedded
(e.g., writing an essay, defending an argument)

Quadrant C: Context Reduced + Cognitively Undemanding
(e.g., copying notes filling worksheet). Cummins (2001) explained that many discrete language skills have become automatized which get reflected in this category.

Quadrant D: Context Reduced + Cognitively Demanding (e.g., calculating solution of mathematical or scientific calculation, writing an answer in examination).

Although a conversation in a street, cash counter, etc., can be as cognitively challenging as a conversation in the classroom, the combination of contextual support and cognitive demand provided by this framework explicitly brings out the difference between *everyday discourse*—where a learner can negotiate the meaning of his or her message through lots of linguistic or interpersonal cues—and *academic discourse*—where a learner is required to reduce the meaning to the necessary context through the

availability of limited linguistic cues.

Moving from Conversational Fluency to Academic Language Proficiency in Classroom

Using the *contextual support and cognitive demand* framework, Cummins (2001) argued that the task or activities in the classroom should ideally move from quadrant A (cognitively undemanding + context embedded) to quadrant B (cognitively demanding and context embedded) and finally to quadrant D (cognitively demanding + context reduced). But quadrant C is very useful for reinforcement or practice of the task or activities that strengthen successful learning. It is argued that even though cognitive challenge is essential for academic growth, the enmeshing of contextual support (both internal and external) to the activities is equally important for developing academic language proficiency in the classroom. Therefore, it is emphasized that communication in an academic context should move from quadrant A to quadrant B and finally to quadrant D for developing academic language proficiency successfully. Teaching-learning strategies in low cost EM school will be assessed to understand whether classroom communication is confined to any one quadrant or whether it moves in-between various quadrants discussed above.

Empirical Evidences for conversational fluency and academic proficiency

The BICS/CALP distinction was maintained within this elaboration and related to the theoretical distinctions of several other theorists (e.g., Bruner's [1975] communicative and analytic competence, Donaldson's [1978] embedded and dis-

embedded language, and Olson's [1977] utterance and text). The terms used by different investigators vary, but the essential distinction refers to the extent to which the meaning being communicated is strongly supported by contextual or interpersonal cues (such as gestures, facial expressions, and intonation present in face-to-face interaction) or supported primarily by linguistic cues. The term "context-reduced" was used rather than "decontextualized" based on the fact that all language and literacy practices are contextualized; however, the range of support to the meaning in many academic contexts (e.g. textbook reading) is reduced in comparison to the contextual support available in the face-to-face contexts.

In later accounts of the framework (Cummins, 2000, 2001), the distinction between conversational fluency and academic language proficiency is related to the work of several other theorists. For example, Gibbons' (1991) distinguished between *playground language* and *classroom language* and highlighted particularly the linguistic challenges of classroom language demands. She noted that playground language includes the language which "enables children to make friends, join in games and take part in a variety of day-to-day activities that develop and maintain social contacts" (p. 3). Moreover, she observed that this language typically occurs in face-to-face situations and is highly dependent on the physical and visual context as well as on gesture and body language. However, classroom language is very different from playground language.

The playground situation does not normally offer children the opportunity to use such language as: if we increase the angle by 5 degrees, we could cut the circumference into equal parts. Nor does it normally require the language associated with the higher order thinking skills, such as hypothesizing, evaluating, inferring, generalizing, predicting or classifying. Yet these are the language functions which are related to learning and the development of cognition; they occur in all areas of the curriculum, and

without them a child's potential in academic areas cannot be realized. (1991, p. 3)

The research of Biber (1986) and Corson (1995) also provided evidence of the linguistic reality of the distinction. Corson highlighted the enormous lexical differences between the typical conversational interactions in English and the academic or literacy-related uses of English. The high-frequency everyday lexicon of English conversation derives predominantly from Anglo-Saxon sources, while the relatively lower frequency academic vocabulary is primarily of Graeco-Latin origin (see also Coxhead, 2000).

Similarly, Biber's (1986) factor analysis of more than one million words of English speech and written text from a wide variety of genres revealed the underlying dimensions that are consistent with the distinction between conversational and academic aspects of language proficiency. For example, when factor scores were calculated for the different text types on each factor, telephone and face-to-face conversation were at the opposite extremes from the official documents and academic prose on Textual Dimensions 1 and 2 (Interactive vs. Edited Text, and Abstract vs. Situated Content).

Conversational and academic language registers were further related to Gee's (1990) distinction between *primary* and *secondary* discourses (Cummins, 2001). Primary discourses are acquired through face-to-face interactions at home and the discourses represent the language of initial socialization. Secondary discourses are acquired in social institutions beyond the family (e.g., school, business, religious, and cultural contexts) and involve acquisition of specialized vocabulary and functions of language appropriate to those settings. Secondary discourses can be oral or written and are equally central to the social life of non-literate and literate cultures. The

examples of secondary discourse that are common in many non-literate cultures are the conventions of story-telling or the language of marriage or burial rituals, which are passed down through oral tradition from one generation to the next.

Within this conception, academic language proficiency represents an individual's access to and command over the specialized vocabulary and functions of language that are characteristic of the social institution of schooling. The secondary discourses of schooling are no different in principle than the secondary discourse of other spheres of human endeavour. For example, avid amateur gardeners and professional horticulturalists generally acquire vocabulary related to plants and flowers far beyond the knowledge of those not involved in this sphere of activity. The acquisition of the secondary discourses associated with schooling is crucial, however, the life chances of individuals are directly determined by the degree of expertise they acquire in understanding and using this language.

1.5.4. Academic Language Proficiency

Cummins (2001) asserted that the linguistic difference between conversational and academic proficiency can be described in term of *Register*. In the context of language learning, Cummins (2001) defined academic language proficiency as “*the extent to which an individual has an access to and command of the oral and written academic registers of schooling*” (pp.69). He further asserts that the essential aspect of academic language proficiency is “*the ability to make complex meaning explicit in oral or written modalities by means of language itself rather than by means of contextual or paralinguistic cues (e.g., gestures, intonations etc.)*” (pp.70). Thus, in

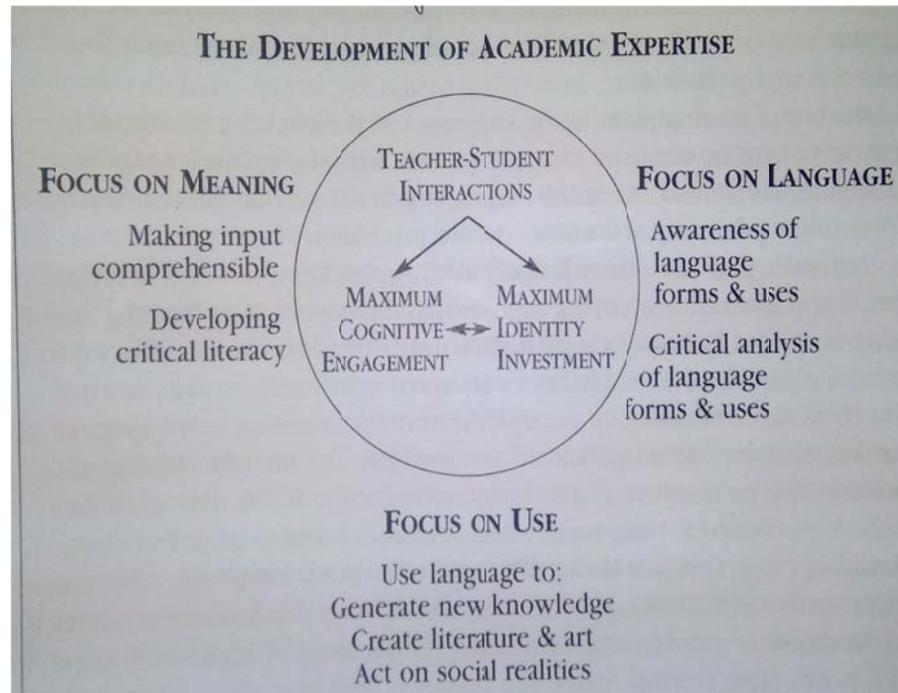
order to develop academic language proficiency in any language, the teaching–learning strategies should focus on inculcating a habit of *accessing to and developing command of the oral and written academic register*.

1.5.5. Role of Instruction in the Development of Academic Language Learning in Language Class

It is discussed as to how communication in classroom should move from conversational fluency to the development of academic language proficiency through the fulfillment of the required contextual and cognitive support. *Instruction* is an important element which aids in facilitating varying contextual and cognitive demand of academic language proficiency during classroom communication. Cummins (2001) strongly argued that *school must develop policies to reorient their instruction with respect to culturally and linguistically diverse students* (pp.122). From this perspective, Cummins (2001) provided *Instructional Framework*, for which he draws analogy with Vygotsky’s (1962, 1978) *zone of proximal development*, where social interaction play a vital role in learning. Cummins (2001) provided instructional framework by highlighting three focus areas for instruction in the development of academic language proficiency:

Instruction must incorporate a focus on meaning or message (comprehensible input), it must aim to demystify how academic language works and develop a critical language awareness among students, and finally it must provide ample opportunities and encouragement for students to express themselves- their developing identities- through varied forms of creative oral and written language use (122). This

framework for academic language learning is presented in following manner:



Source: Cummins (2001:123)

a.# Focus on Meaning

‘Focus on meaning’ implies that instruction should aim at explicitly providing number of opportunities to student for processing meaningful language and concept. Cummins (2001) argued that prior knowledge has crucial role in the interpretation of new knowledge because “*students may not explicitly realize what they know about a particular topic or issue; consequently their prior knowledge may not facilitate learning unless it is brought to consciousness*” (pp.125). Thus, a teacher needs to initiate classroom interaction by accessing the prior knowledge of learner and consciously establishing the socio-cultural context between the learner and the content to be taught for outlining the implicit meaning or message. By establishing the socio-cultural connection between the content and prior knowledge of the learner, it would

enhance his or her motivation, interest and readiness to engross oneself in the process of learning.

The activation of prior knowledge assists a teacher to determine the level of previous understanding or knowledge of the learner and the level of *comprehensible input* to be delivered during the learning process. In the context of academic language proficiency, Cummins (2001) argued that the “*depth of understanding of concepts and vocabulary, as well as critical literacy, are intrinsic to notion of comprehensible input*” and effective instruction must focus explicitly on activating the prior knowledge for outlining the meaning or the messages of the text. Therefore, activating the prior knowledge should have two targets; one is establishing a connection between the learner and the content; and the other is development of critical inquiry skills among learner, where he or she could question his or her previous knowledge for establishing new knowledge.

b.# Focus on Language

According to Cummins (2001), *teacher student interaction should focus on language awareness, which includes not just a focus on formal aspect of the language but also the development of critical language awareness which encompasses exploration of the relationships between language and power* (135). He further argued that for effective learning focus on language must be linked to extensive input in the target language (e.g., through reading) and to extensive opportunities for written and oral usage of the language. This implies that in a language classroom, comprehensible input should go beyond the formal aspects of language (viz., grammar, forms, synonyms, function, etc.) and develop awareness among learners about the operation of language in different social contexts.

c.# *Focus on Language Use*

Cummins (2001) outlined ‘focus on use’ as the third most essential component of student–teacher interaction (along with ‘focus on meaning’ and ‘focus on language), which needs to be addressed appropriately for the development of academic language. He emphasized that “*the ‘focus on use’ component is based on the notion that L2 acquisition will remain abstract and classroom bound unless students have the opportunity to express themselves-their identities and their intelligence through that language*” (pp.142). This implies that it is essential to provide opportunity to learners to express themselves in L2, which would further strengthen their personal and linguistic affiliation with the language.

It is advocated that the focused instruction during teacher–student will enhance cognitive engagement and identity investment among learners. However, Cummins warned that “*in context of cultural, linguistic, or economic diversity where social inequality inevitably exists, these interactions are never neutral: they either challenge the operation of coercive relations of power in the wider society or they reinforce these power relations*” (pp.124). Furthermore, he asserts that cognitive engagement and identity investment have reciprocal relationship, which emphasizes on the need for affirming the identity of learner for his or her cognitive participation during the learning process.

1.5.7. How Long does it take to Develop Academic Language Proficiency in L2

Opponents of bilingual education program believed that maximum and early exposure of the target language will facilitate academic language proficiency among

learner. However, Cummins explained that it often takes one or two years for a child to acquire the context-embedded second language fluency, i.e., conversational fluency (BICS) (1981a). This is illustrated in Fig. 1.5.7a.

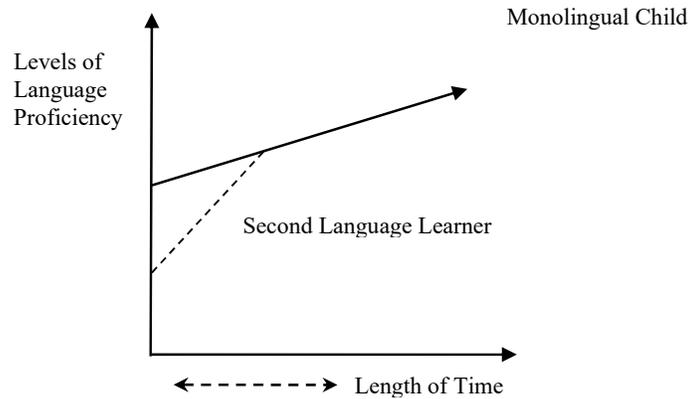


Fig. 1.5.7a: Length of time needed to achieve age-appropriate levels of Context-embedded language proficiency (Cummins, 1981b) (Source: Bakers 1993 pp.140)

For the development of academic language proficiency (CALP), Cummins (1981b) suggested that it often takes five to seven years or more for a child to acquire the context-reduced fluency as shown in Fig.1.5.7b below.

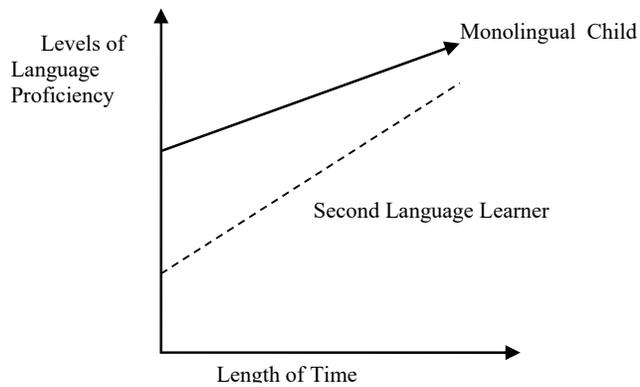


Fig.1.5.7b: Length of Time needed to achieve age-appropriate levels of context reduced language proficiency (Cummins, 1981b) (Source: Bakers

Considering both the native and non-native English language learners, it is observed in many research studies that the immigrant students can gain considerable

conversational fluency, i.e., BICS, in the dominant language. But, generally it takes a minimum of about five years or more to gain academic proficiency—i.e., CALP—similar to that of native speaker if adequate exposure to the dominant language is provided to the immigrants in their surrounding environment and at the school (Collier, 1987; Cummins, 1981b; Hakuta, Butler & Witt, 2000.; Kleisner, 1994).

Moreover, Cummins advocated that conversational fluency in L2 develops more independently compared to that of conversational fluency in L1. However, the *context reduced, cognitively demanding communication develops interdependently and can be promoted by either languages or by both languages in an interactive way.* But this does not mean that the introduction of L2 must be withheld till the development of academic proficiency in L1. Cummins (2000) advocated that “*a bilingual program should be fully bilingual with strong English language arts (reading and writing) program together with a strong L1 (e.g. Spanish) language art program. There is no set formula as to when, how much and for how long each language should be used at particular grade levels*” (pp.25). But it is *adequate exposure of L2 at school or environment along with adequate motivation to learn it is necessary for the development of academic language proficiency in L2.*

1.6. REVIEW OF LITERATURE

a.# Low Cost Private EM School

Low cost private EM schools have been studied widely by psychologist, sociologist, and educationalist. The huge economic disparity has resulted in

heterogeneity among the private EM educational institutions (both school and higher education) (Ramanathan, 2005; Mohanty, 2006; Mohanty et. al., 2010; Hill, Samson & Dasgupta, 2011). Furthermore, the difference in the cost of schooling brings the difference in infrastructure, pedagogic, and cultural practices of school. Mohanty (2008) categorized EM schools into elite residential, high cost, and low cost schools. He has provided detailed description of the differences in pedagogic and cultural practices as is prevalent in the high cost and low cost schools. Low cost EM schools are also known as '*budget schools*', '*low-fee paying school*' etc., which are projected as "*responding to the growing demand of poor families for 'good quality' private English medium schools*" (Nambissan, 2012:84). However, the perceived extent of this '*good quality*' expected by parents is the main concern raised and explored in the number of psychological and sociological research studies (Ramanathan, 2005; Mohanty, 2008; 2010; Baird, 2009; Nambissan, 2012; Srivasatava, 2007; Harma, 2011; De, Noronha & Samson; 2002; Hill, Samson & Dasgupta, 2011).

Various research studies show that English as a medium of instruction has turned out to be one of the prominent factors for the choice of school among parents (Srivastava, 2007; Harma, 2011; Lall, 2000; Baird, 2009). One of the significant findings of the study conducted in Hyderabad and Mumbai by Baird (2009) is that *private schooling in the developing world is demand-driven*, which is believed to be better fitting than the government schools. Thus, the review suggests that the lack of accountability, regional medium education, and poor infrastructure of government schools pave the way for private EM school. Advocating English as the medium of instruction puts forth the instrumental value and social status that is associated with English as the legitimized reasons for this preference.

Series of study conducted by Tooley and Dixon (2003) projected the low cost EM school as pro-poor, which is refuted by Nambissan (2012), who showed the interlinkages between prevalence of such school and market forces. Reflecting on studies conducted in low cost unregulated private schools, Nambissan in India Infrastructure Report (2012) concluded that “*advocacy for low cost EM schools as cost-efficient, high quality and equitable solution to the education of the poor is actually driven by powerful financial and political (pro-market) interests. Such interests are linked together through transnational networks, and are couched within neoliberal discourse of school of school markets for the poor through school choice and voucher program*” (91). Thus, sociological review provides the linkages among market forces and promotion of low cost EM schools in a developing country such as India.

The market forces are not limited to financial profits; rather the market forces (which are dominated by socio-political elites) also determine the reproduction of particular political and social interest of elites of the society. It is affirmed in the words of Tsui and Tollefson (2003), who stated that *there are political, social and economic agendas behind the inclusion and exclusion of particular language in the educational policies that seem to be of interest to certain political and social groups* (p.3). While establishing the link between macro-interaction and micro-interaction in the context of bilingual education, Cummins (2001) argued that the “*relations of power in the wider society (macro-interactions), ranging from coercive to collaborative in varying degrees, influence both the ways in which educators define their roles and the type of structure that are established in the educational system*” (pp. 44). But the problem being associated with the financial and political interest

seriously ignores the fact that the exclusion of one's own language or home language or L1 and the use of dominant language as the medium of instruction impede individual and academic development of the learner. Furthermore, such advocacy often results in *maximum exposure and early introduction* of dominant language, putting aside the home language or L1 of learner. In the next section, review is carried out on the impact of *linguistic mismatch* in academic learning.

a.# Impact of first language and second language on Learning

A child from the very beginning familiarizes and uses different languages as per their functional requirement and develops a hierarchy of preferences in the patterns of language use. This multilingualism is an asset for bi/multilingual children (schooled as well as unschooled) providing them a distinct edge over their monolingual counterparts in terms of their cognitive and intellectual skills (Mohanty, 1982a, 1982b, 1990; Mohanty & Babu, 1983; Mohanty & Das, 1987; Mohanty, 1994, 2003; Mohanty & Perregaux, 1997). Cross-cultural studies on bilingualism, including research in the Indian context (Mohanty & Perregaux, 1997), have supported the positive psychological and social role of multilingualism.

A series of studies over a period of two decades (Mohanty 1982a, 1982b, 1990a, 1990b; Mohanty and Babu 1983; Mohanty and Das 1987; cited in Mohanty 1994, 2003) have examined the cognitive and academic consequences of contact bilingualism among the Kond tribal people of Kandhamala district of Orissa, India. These studies compared Kui-Oriya bilingual and Oriya monolingual Kond children (in the age range of 6 to 16) based on a number of cognitive, metalinguistic, and academic measures. The studies showed that Kui-Oriya bilingual children have a clear

cognitive advantage over their Oriya monolingual counterparts in those areas where the Kui language lost as a result of language shift. Further, bi/multilingual development and communicative challenging of complex linguistic environment together was found to exert positive influence on children's cognitive, metalinguistic, and metacognitive skills which in turn will have positive impact on their intellectual and academic performance. Dawe (1983) examined bilingual Punjabi, Mirpuri, Italian and Jamaican children aged from 11 to 13. He administered the students' capabilities by testing their deductive mathematical reasoning and found evidence for both the lower and higher thresholds. The results showed that with increase in competency in two languages, the students' deductive reasoning skills in mathematics also increased. Negative cognitive outcomes were observed in the case of limited competencies in the two languages.

Bialystok (1988) conducted another study by examining the two aspects of metalinguistic awareness in six to seven years old monolingual, partial bilingual, and fluent bilingual (French-English) children. The two aspects of metalinguistic awareness were analysis of linguistic knowledge and control of linguistic processing. The outcome of 30 studies showed a positive relation between the level of competence and metalinguistic development. Ramirez, Yuen, and Ramey (1991) began a longitudinal study of bilingual education programme in US which took eight years for completion. Three models of education were compared—English immersion, early exit, and late exit. The study involved 2352 Latino elementary school children in 51 schools and 554 classrooms. The academic progress of children was compared. The results showed that though the mathematics, language and English skills did not differ markedly amongst the students till grade III, however, by

the time the students reached grade VI, the students studying in late-exit transitional programmes were performing better in all the three academic domains. So, if *time-on-task or maximum exposure* was valid, then the performance should have been progressive among English immersion students. This implies that there is no direct relationship between the instructional time spent in considering a language as the medium of instruction and the academic achievement in that language.

Another famous longitudinal study was conducted by Thomas and Collier (1997) over a period of five years, i.e., from 1982 to 1996, for analyzing the influence of school program and instructional variable related to the long term academic achievement of English language learners (ELLs/LEPs) in U.S. The core analysis was conducted on 42,317 students who attended the school for at least four years. The findings of this research study demonstrate the amount of formal schooling in L1 that students have received is the strongest predictor of their speed in developing academic proficiency in L2. Student's formal schooling in L1 is found to be a stronger predictor than the socio-economic status or the extent to which parents may or may not speak English. Thus, the study refutes the maximum exposure principle and supports bilingual education which aims at linguistic incorporation of L2 without replacing L1 of the learner, thereby, expanding the socio-cultural context of both the minority and the majority inside the classroom discourse.

Verhoeven (1991a, 1991b, 1994) conducted a number of studies in Netherlands, which focused on the two experimental programs in transitional L1 literacy instruction with Turkish background students. He found that stronger emphasis on instruction in L1 leads to better literacy results in L1 with no retardation of literacy results in L2. Verhoeven (1994) also reported about the stronger cross-

lingual relationship for literacy and pragmatic skills and not for lexical knowledge. Further, it was found that phonology was significantly related across languages, which was interpreted as the influence of metalinguistic factors on the phonological performance in both languages.

A series of Basque-Spanish bilingual programs in the Basque country of Spain showed minimal relationship between instructional time spent through the medium of Spanish and academic achievement in Spanish (Gabina et al., 1986; Sierra and Olaziregi, 1989;1991). The findings of the studies showed that the instructional time can be focused on developing bilingual students' literacy skills in their first language without any adverse effects on the development of their literacy in their majority language.

Panda, Mohanty, Nag, and Biswabandan (2011) reported the findings of a longitudinal study undertaken by National Multilingual Resource Consortium (NMRC) to study the effects of mother-tongue language education in Andhra Pradesh and Odisha. The findings showed the students studying in MLE schools to be performing better in the curricular domains of language, environmental studies, and mathematics. Further, the study also showed that the levels of participation among students were seen to be higher in the mother-tongue language education schools.

Review of literature showed that private schooling is demand driven, often informed by market forces and these schools trap parents who prefer teaching in EM over VM. Thus, English as a medium is emerged as most influential factor in the parental choice for schooling of their children. Especially the lower economic strata believe that English can get their children job opportunities and better financial

opportunities. It is found from the review on literature that the inclusion of L1 or home language tends to have cognitive and additive benefits for learning L2.

1.7. RATIONALE OF THE STUDY

Review of literature showed that learning of L1 provides cognitive and metalinguistic benefits and facilitates the learning of L2. This implies that L1 should be adequately developed for the learning of L2. Cummins's linguistic interdependence principle strongly advocates that L1 and L2 are interrelated at the underlying cognitive level, therefore, academic proficiency achieved in L1 can be transferred to L2, provided there is adequate exposure (at school or environment) and motivation to learn L2. For development of academic language proficiency in English, *Instruction* during teacher–student interaction in the classroom should move from context-embedded/cognitively undemanding communication (conversational fluency) to context-reduced/cognitively demanding communication (academic proficiency).

Cummins (1976; 1981a) strongly suggested that the level of proficiency attained by bilingual students in both the languages exert vital influence on their cognitive and academic development. He showed that interpersonal communication skills employed in personal communication at a street, home, or informal setting differs from the cognitive and linguistic skills required in an academic setting. A child will usually take five to seven years to develop native like proficiency in L2. But this doesn't mean to hold either teaching number of languages simultaneously or using L1/L2 as a medium of instruction during the primary years of schooling. However, it

is very important that any number of language(s) taught as a language subject(s) or used as medium of instruction must mutually enrich each other and should result in additive language learning. This brings forth the concept of Common Underlying Proficiency (CUP), that refers to *the cognitive/academic knowledge and abilities that underlie academic performance in both the languages* (pp.171). It is advocated that this underlying proficiency allows the transfer of cognitive/academic or literacy-related skills from one language to another, which is advocated through the linguistic interdependence principle (Cummins, 1981a).

In School LC English is simultaneously taught as subject and used as a medium of instruction for teaching of other subject. Hindi, which is also the home language of majority of the learners, is also taught as language subject from grade I, but school policies strictly restricts the use of Hindi outside the Hindi classroom. This raises the fundamental question for the present study: How does the teaching learning strategies in low cost EM school develop academic proficiency in English, without including their home language. Furthermore, questions are raised over the extent to which academic content of other subject such as science and mathematics could be delivered in the classroom, where English is used as a medium of instruction but finds no support at home. The present study aims to address examine the extent to which teaching-learning strategies practiced in low cost EM school succeed in the development of academic proficiency in English, which is the medium of instruction for teaching of other subjects.

1.8. RESEARCH QUESTION AND OBJECTIVES OF PRESENT STUDY

Therefore, the present study seeks to examine the following research questions:

- 1.# How does the socio-linguistic understanding and beliefs of educators about English as a language subject and as the medium of instruction inform their choice of teaching learning strategies?
- 2.# What kind of proficiency (conversational or academic) is developed in English as a result of teaching-learning strategies used in low cost EM school?
- 3.# How does linguistic proficiency in English influence teaching and learning of other subjects, like mathematics and science, in a class where English is used as medium of instruction?
- 4.# How the teaching-learning strategies employed in low cost EM school shape the negotiation of English-vernacular divide.

The present study has the following objectives:

- # To examine the socio-linguistic understanding and belief of educators about English as a language and as medium of instruction and their impact on choice of teaching-learning strategies in the classrooms.
- # To examine the extent to which these teaching learning strategies develop the academic language proficiency in English.
- # To examine the extent to which linguistic proficiency in English influence teaching and learning of other subjects, like mathematics and science, in a class where English is used as medium of instruction.
- # To examine the extent to which teaching-learning strategies shape the negotiation of English-vernacular divide in classroom of low cost EM school.

CHAPTER-2

METHOD

The purpose of this research study was to understand the impact of teaching–learning strategies employed in low cost EM school for the development of academic proficiency in English and the manner in which it shaped the negotiation of English-vernacular divide. This chapter brings forth the research design, sample of the study, method and procedure for data collection, and method of data analysis. The first part of this chapter describes the rationale behind the selection of *qualitative research design* as a research method for the present study. The study is conducted in low cost EM school located in Delhi, so the second part provides brief demographic description of Delhi and detailed description of the research sample. The third part explains the sources of data and methods of data collection. The fourth part discusses the detailed procedure of data collection, and in the fifth part, the method of analysis is described. This chapter is concluded with the last part on validity and reliability and ethical consideration for the present research study.

2.1 RESEARCH METHOD

Qualitative research was found to be an appropriate method for the present study. It is necessary to mention here that the selection of qualitative research design is not based only on personal preference of researcher; rather the research agenda demands a method of inquiry for studying human interaction within the complex network of micro and macro social structure. Readers are provided an opportunity to

understand the rationale for the selection of qualitative research method as an appropriate way of conducting a research inquiry for the present study.

Creswell (1994) defined qualitative research as a process of inquiry for understanding a social or human problem based on building a complex, holistic picture, which is conducted in a natural context and included multiple perspectives. He further emphasized that qualitative methods require the researcher to interact with a personal voice and inductive processes that are context-bound, often times value-laden and biased, as well as accurate and reliable through verification. Owen (1982) used the term *naturalistic approaches* for describing educational research in terms of qualitative method to enquire about the educational problems. According to Owen, naturalistic inquiry includes two sets of concepts; ecological and phenomenological, which together provide a strong method. An ecological concept claims that human behaviour and context significantly influence each other. A phenomenological concept is one that requires an understanding of the ways in which individuals interpret their environment through an understanding of their thoughts, feelings, values, judgments, and perceptions within the context.

There is endless debate on the inclusion and exclusion of *qualitative research*, however, the focal agenda of qualitative research—*studying the social interaction in natural setting*—will assist the researcher in gaining an in-depth understanding of language learning processes occurring in a natural classroom and school setting. Researcher was interested in gaining an understanding about *what happens* during teacher–student interaction in a classroom and *how* it influences the nature of linguistic proficiency to be developed. It was found that ‘*what*’ and ‘*how*’ aimed in the present study can be best captured by qualitative research approach. Specifically

in the Indian context, it was found that there are enormous quantitative research studies that focus on academic performance and language learning, but there are few studies which look into processes of language learning using the qualitative research approach.

2.2 SAMPLE

It is discussed in the first chapter that a child is exposed and socialized into multiple languages at the grass-root level before he or she enters school. The study is conducted in a grade V of low cost private EM school of Delhi, thus, it is necessary to give a brief demographic description of Delhi in this section.

a. Linguistic Demography of Delhi

Delhi is the capital of India with a population of 16.75million on 1st March 2011 (Economic survey of Delhi, 2014-15), surrounded on three sides (north, south and west) by Haryana and on the east is Uttar Pradesh. As per 2001 Census, a good number of population migrated to Delhi (0.62lakh as per census 2001), among which majority of the migrated population was from the neighboring states. In relation to the total migrated population, Uttar Pradesh, Bihar, and Haryana ranked first, second, and third, respectively, among all the states. It is pertinent to mention here that all these three states are Hindi dominant states, thus contributing to Hindi speaking population of Delhi. Of the total language wise-population distribution of Delhi, 80.94% population (approximately 11 million) speaks Hindi, 7.14% (approximately 10 lakhs) speaks Punjabi, 6.33% (approximately 9 lakhs) speaks Urdu (Economic Survey of

Delhi, 2014-15:32). It was reported that only 3622 people in Delhi mentioned English as their mother tongue in 1991 Census (Bose; 1998 as mentioned in Vaish 2008). However, English definitely has vast presence than the aforementioned number.

Four languages namely, Hindi, Punjabi, English and Urdu, have dominant presence in Delhi. Till 2000, Hindi was the official language of Delhi, but Punjabi and Urdu gained the position of additional official language as the Delhi Official Language Bill, 2000 was approved. The presence of the aforementioned languages is widely evident from the signboard of government offices as well as from road names depicted on road side signboard. Road signs are usually written in four scripts: Devanagari, Gurmukhi, Roman, and Arabic. Vaish (2008) asserted that semiotic symbol shows the presence of linguistic hierarchy in Delhi, with Hindi as the *most powerful language of Delhi, followed by the large Punjabi community and Muslim minority is marginalized at the very bottom. The fact that the Hindi word 'Marg' meaning 'road' appears even in the Roman or English line is indicative of how English has been hybridized or 'tandoorified' in the linguistic spaces of India* (pp.2). Therefore, linguistic demography shows that there is presence of multiple languages with Hindi emerging as a dominant language. School system in Delhi can be broadly categorized into government schools and private schools. The medium of instruction in government schools is Hindi, whereas, the medium of instruction in private schools is English.

There are a total number of 1187 schools listed under private recognized and unaided schools as mentioned in the official website of Delhi government. As per the Economic survey of Delhi (2014-15), there has been a consistent and noticeable increase in the share of private school education in Delhi since the last three decades.

Trends show more growth in private primary and middle school as compared to the secondary school. The share of primary and middle private school to the total number of school showed an increase of 2.54%, that is, from 35.80% in 2011-12 to 38.34% in 2014-15. At the secondary and senior secondary level, this increase was marginal from 26.60% in 2011-12 to 27.30% in 2014-15. The increase in share of private school to total school showed consistency in the demand of private school, which usually follow English as the medium of instruction from grade I.

b. School LC

It was discussed previously that there is huge heterogeneity in private EM schools in India. Initially, researcher planned to conduct a comparative study between low cost private EM schools and high cost EM schools. With this aim, researcher approached around 30 private EM senior secondary schools with different fee structure, which are government recognized and CBSE affiliated, so that we can receive permission to conduct the present study. However, all the renowned or high cost school refused from cooperating with us for conducting this research study. Only principals of two schools, namely LC and RJ (Pseudo names) out of the 30 schools gave time for a brief meeting. Among these two schools, the principal of School LC discussed the proposal of study and allowed to conduct audio-video recording for the purpose of research. This is also one of the limitations of the study because the choice was limited as researcher was dependent on the sole discretion of school authority. However, the sample school, School LC, fits our research criteria because it is recognized, CBSE affiliated, and private EM senior secondary school. Researcher obtained the details of the school, teachers profile, learner and their linguistic background during our first field visit (See Appendix).

School LC was a senior secondary private EM school with the fee structure of Rs.1000 per month. The annual cost of school is approximately Rs.20000/-, including other expenses taken throughout the year. This school is located near a semi-urban area at south Delhi and usually gets student population from nearby semi-rural areas. An initial screening using the 'school profile' and 'Learner profile' (see Appendix) indicated that majority of students are first generation English learner with limited exposure to English in comparison to Hindi which is spoken at home.

Learners at School LC

Grade IV was taken as sample of the study, which was also consecutively studied in the next academic year, i.e., when the same group reached grade V. There were 36 learners in grade V, with 12 girls and 24 boys in total. Majority of the learner belonged to nearby semi-rural areas, which comprised of population with Haryanvi Hindi (dialect of Hindi spoken in Haryana) as their home language. Haryanvi Hindi is different from standardized Hindi in the spoken form. The learners have exposure to Harayanvi Hindi in home and standardized Hindi in their neighborhood, market place, and school. People in the locality were found to frequently use Haryanvi Hindi with those who are affiliated to them, but they use Hindi with strangers. The presence of English was evident on signboards, nameplates, and product name in the market place. There was the presence of English around the learner at home in the form of media like T.V, Radio, market place, magazine, etc. Learners' profile showed that they are first generation English learner, and most of their parents are educated in government schools. It was observed that learner communicated fluently in Hindi with their classmates in the school premises and did not use English for communication unless they were told.

Teachers at School LC

There were total six teachers who taught different subjects to grade V students. There were two teachers for teaching English and one teacher each for teaching Hindi, science, mathematics, and social science, respectively. All the teachers were serving as permanent teachers in the school. All the teachers reside within five kilometres of the school, and many of them also provide tuition to children from other schools as well as of their school. School authorities have warned all the teachers against providing tuitions to the children from this school, but teachers have reported that they take up tuitions on the insistence of parents. The educational qualification, mode of teacher training, language(s) known and work experience of teachers of grade V was recorded using teacher's profile. Teacher's profile showed that almost all teachers completed their post-graduation and teacher training through distance learning mode. All the teachers, except the mathematics teacher, have Hindi as their home language and use Hindi for communicating with learners and fellow teachers. Mathematics teacher is a South Indian, so her home language was Tamil. All teachers use English only in the presence of principal, as they speak in English in official meetings and school activities such as school assembly, etc.

2.3 METHOD OF DATA COLLECTION

The objectives of research endeavor require deep insights into teaching-learning strategies and school practices for developing academic proficiency in English among the learners in School LC. In order to understand the processes and consequences of the adjustments made in the teaching-learning strategies to negotiate

the mismatch between home language and school language, the voices of learner have been equally emphasized during data collection. The sources of data are given below in detail.

2.3.1 Data Sources

Considering the objectives of research study, we identified both the primary and secondary data sources as discussed below:

Primary Data Source

- # Observing and taking still photography of material displayed on the classroom display-boards, notice boards, wall charts, etc.
- # Making audio-video recording of classroom teaching and school practices such as school assembly, festival celebration, school function, etc.
- # Interviewing the educators include principal and all subject teachers.
- # Completing the school profile, educator profile, and learner profile.
- # Giving mathematics assignment to learners of grade V.
- # Collecting copy of print material such as book chapter from different subject textbook, question paper, assignment sheets, worksheet completed by the learners.

Secondary Data Source

- # Archiving documents related to language learning, school education, language-in-education
- # Accessing various surveys and census on language-in-education, school education, such as linguistic census of Delhi, educational survey of India
- # Getting online and offline access of various research paper, book chapters, etc.

2.3.2. Methods of data Collection

Mason (1996) asserted that *qualitative research is grounded in 'interpretivist' philosophical position aiming at 'how the social world is interpreted, understood, experienced or produced'* (p.4). It is based on the method of data generation, which is flexible and sensitive to the social context of the data. The aim is to produce holistic form of analysis and explanation based on rich, contextual, and detailed data. This implies that experiences and interaction with people is necessary for developing contextual understanding. For example, classroom is a data source with a repository of contextual and detailed evidences in the form of experiences and activities of teacher and student.

In order to understand and retain these activities and experiences as data, various research methods need to be applied. The research methods are the techniques and strategies, which are used to generate data. The term 'generate data' does not mean that data is 'out there' in stock, which simply needs to be collected and interpreted by researcher; rather 'generating data' implies that researcher is not a 'neutral being', instead the researcher is actively involved in constructing knowledge about the world according to certain principles and using certain methods that are derived from their epistemological position (Mason, 1996). We being the researcher have decided to use observation, interview, and focused group discussion as the methods of data collection for the present study. Each of these methods is discussed briefly.

a. #Observation

In order to understand the dynamics underlying the language use and

participation of student, it becomes essential to observe the classroom interactions and school practices ‘as it is and where it is’. Observation implies to a method *where a researcher immerse herself or himself in a setting, interactions, relationships, actions, events and so on* (Mason, 1996). The extent to which researcher can participate during observation varies from complete non-participative observer to complete participative observer; but it is a matter of debate and discussion (Burgess, 1982; 1984; Hammersley and Atkinson, 1995; Mason, 1996). For the present study, researcher took a non-participative observer role with the task of observing the situation ‘as it is’ and ‘where it is’ and gathered the field notes for analyzing the data. However, it is quite possible that certain points are missed while taking notes during observation, so audio-video recording has been done simultaneously. A researcher has to observe and understand the meaning regarding the arrangements, display work, teacher-student interaction, verbal and non-verbal cues for generating the data. Hence, a checklist was prepared beforehand to target the objectives during observation (For Checklist, See Appendix).

b.# Interview

Interview is another qualitative research method for generating data. It is a thematic, topic-centered conversation, which may vary from semi-structured to loosely structured, based on the assumption that data are generated via interaction (Mason, 1996). Observation of classroom and school practices provides researcher the evidences regarding the manner in which language and power structure operates within school. However, being a non-participant observer, researcher also faces many doubts, questions regarding the existing practices, the rationale behind such practices, etc. Interview provides researcher with an opportunity to interact with people,

concerned authorities, etc., wherein they can get their doubts clarified by receiving interpretations for the concerned doubts and question from the authorities. For an interview, a researcher usually initiates loosely structured questionnaire as well as reflects on the experiences and position of interviewee simultaneously during the interaction and decides *content and sequence of interview as it progress* (Mason, 1996). Therefore, for initiating the process of interview, we developed a loose structure of interview questionnaire (See Appendix). Interviews were taken in the last two field visits, and by then researcher had already developed a rapport with all the concerned teachers. However, before starting the interview, teachers were briefed about the purpose of interview. Teachers were ensured that the researcher has no intention of judging the existing school practices or the teaching strategies; instead she was interested in seeking clarity on certain issues related to language, teaching-learning strategies, etc., for contextual and in-depth understanding.

c.# Field Notes

Field notes are the notes taken by the researcher during the field visit in his or her field journal. At times even audio-video recording of observation fails to capture the nuances of the field; these nuances are then covered by writing of field notes. Researcher scribbles down the details of his observation of people, interaction, and activities occurring in the field. Along with the detailed account of field observation, researcher also simultaneously writes down about his or her reflection or themes emerging from the field. The SAGE Dictionary of Qualitative Inquiry (2015) defines field notes aptly as, “*notes created by the researcher during the act of qualitative fieldwork to remember and record the behavior, activities, events and other features of an observation. Field notes are intended to be read by the researcher as evidence*

to produce meaning and an understanding of the culture, social situation or phenomenon being studied' (2015).

There is not any rigid or set pattern to take down the field notes. Besides taking down details like time, date, and overall picture of the field, researcher also scribbles down the non-verbal cues and gestures that could reflect on research objectives. Thus, field notes content has both the description of the field as well as the reflection of the researcher on the observed details. During writing of field notes, researcher usually use short forms, diagrams, maps, etc., but these are rewritten in detailed manner as soon as the researcher gets the time on field or of the field. Field notes is an important method of inquiry because it helps in simultaneously noting down researcher's reflection (which is not at times possible in audio-video recording), it also helps in confirming the reliability and validity of the finding that emerged from the other method of data collection.

2.4. PROCEDURE OF DATA COLLECTION

This study was conducted in two parts at School LC over a period of two academic sessions. The study was planned in a manner to observe the same batch of students over two consecutive academic years. In the first part of the study, we visited students of grade IV for three weeks and in the second part of study, we followed the same batch of students in grade V for about forty five days. The detailed account of these visits is discussed below.

a. Visit I

After receiving confirmation for conducting the study in School LC, we developed a tentative plan for visiting grade IV in the first week. On the first day, the principle introduced us to class teacher and respective subject teachers of grade IV. Subsequent to this, the principle took us to the students of grade IV and gave a formal introduction about us. She instructed the learners to maintain discipline during our presence and to focus on their studies. On the first day, researcher tried to form rapport with learners gradually over the day. She requested the class teacher to give one free period so that she could interact with the learners as it would reduce their hesitation and participate willingly in the study.

During the free period, researcher interacted with learners and informed them that she would regularly visit their classroom to observe and do the audio-video recording of classroom teaching process. Researcher had previously served as an elementary school teacher, which helped in quickly developing rapport with learners in School LC. She also responded to number of queries posed by learners, who were curious and eager to know us as an individual and as a professional, as well as to know the purpose of visiting their classroom and conducting audio-video recording. Simultaneously, researcher did a personal meeting with all the subject teachers during their free period to give a brief introduction about us and our study. They were also informed that the focus of this study was to understand the processes involved during language learning and not to judge the teaching process utilized by the teachers or their teaching skills used in the classroom. So in the first few days, researcher simply went and observed the teaching process in the classroom.

This was followed by regular visit to school and conducting the audio-video recording of classroom and school practices for one more week. It was observed that teachers felt very hesitant in presence of researcher and the learners seemed to be excessively disciplined as warned by the school principle. Thus, the recording of classroom observation conducted during this time was not been included in the data presentation or analysis because the teachers and learners acted very superficially. Researcher just sat alongside the learners, and at times we discussed with the teachers in staff room, or accompanied the student to morning assembly, co-curricular activities room etc. Alongside recording the classroom observation, researcher also wrote and maintained the field notes regarding everyday experience of classroom.

Gradually by the end of second week, teachers, and learners, got easy in the presence of researcher. Teacher used to follow her teaching practices without any hesitation and learners were no more worried about the discipline. During this visit, researcher also recorded the school assembly and special assembly for Dusshera celebration and focused on classroom teaching of different subjects in grade IV. Still photography was also done to cover the display boards, notice-boards, walls of the school, etc. Interviews of teachers were also conducted during the free period or activity period only after taking their consent. This visit provided rich data on the common teaching-learning strategies practiced in different subjects, including language subject. In grade IV, English and Hindi shared similar kind of curriculum with focus on literature and grammar. The principal informed that the English language curriculum is taught differently in grade V, where English is further categorized into six sub-categories, namely, literature, grammar, reading, poetry, composition, and cursive writing. Thus, the researcher decided to focus specifically

on language curriculum during her next visit to grade V.

b.# Visit II

The aim of this visit was to address two issues; first, to observe the teaching–learning strategies employed in English language class in the consecutive academic year, i.e., grade V with the same batch of students observed in grade IV during the first visit. There were some significant changes in the structure of English language curriculum. Moreover, during this visit, we planned interview to address the issues emerged during the first visit. We were very particular and specific about the terminologies used during the interviews with educators. As the learners and teacher were accustomed to our presence as well as that of camera, the recording of classroom observation started from day one without any hesitation. This time researcher did the audio-video recording of learners, their work-sheets, etc., and tried to cover the classroom to capture classroom teaching from closer view. Learners got so used to camera that they did not get distracted even if researcher took the camcorder to their desk and recorded the task/activities they were conducting. Interview with English language teacher was conducted with focus on the changes made in English language curriculum and its implication for the development of linguistic proficiency among learners.

During the first week of visit I, the recordings made were excluded from the data because the distractive effect of camera on teachers and learners during classroom interaction was easily evident. Gradually, the presence of camera became negligible for both teacher and learner resulting in recording of the classroom practices in the natural classroom setting. The recorded video was transcribed

simultaneously every day. Although researcher transcribed the videos herself, there is still need to briefly explain the process of transcribing the videos.

Transcribing the videos

A notebook was maintained for transcription of the videos. Details like date, time, day, subject, file name of the video etc., were noted down on the top of the page before beginning the process. Teacher, student, and student in chorus were represented by different notations T, S, and S(c), respectively. The classroom was bilingual, so green pen was used to note down the comments in Hindi. Researcher transcribed all the videos very carefully and added our brief observation, comments or questions along the margin of the notebook. Carrying out the scene-by-scene transcription of the video, she further added the comments in the end regarding the observations made by her. In the similar manner, researcher also transcribed interviews conducted with the teachers.

2.5. ANALYSIS OF DATA

This research study has examined the language learning process and related literacy events as occurring in natural classroom setting. Therefore, it required qualitative method of data analysis, which tries to capture the lived experiences of people in the social realities. The present research study has used the following method of data analysis.

a.# Content Analysis

Content analysis is used to analyze the classroom observation and the

interviews of educators. The audio-video recording of classroom teaching and interviews were transcribed, which served as the primary source of data for content analysis. Hsieh and Shannon (2005) defined content analysis as the “*research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns*” (p.1278). Patton (2002) highlighted that the emerging consistencies and meaning is central to content analysis by saying “*any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings*” (p.453). These definitions provide that content analysis aims to capture the integrated view of speech or text and their contextual realities. Researcher needs to move beyond the literal meaning evident in the text and examine the meaning and patterns implicitly located in the text.

When transcribing interviews, it was ensured that a) all the questions of the interviewer are transcribed; b) all the verbalizations must be transcribed literally; and c) all observations during the interview (e.g., sounds, pauses, and other audible behaviours) were transcribed in detail. The transcription of video recording was thoroughly read and the emerging theme was marked. An instance of a theme might be expressed in a single word, a phrase, a sentence, a paragraph, or an entire document. When using theme as the coding unit, we looked primarily for the expressions of an idea (Minichiello, Aroni, Timewell, & Alexander 1990). The emerged themes were further categorized and revised for bringing out a consistency in the themes. Coding sample text, checking coding consistency, and revising coding rules are part of an iterative process and should continue until sufficient coding consistency is achieved (Weber, 1990). The themes emerged from the content

analysis were described and discussed in relation to the theoretical framework of the present study.

b. Discourse Analysis

Classroom videos were transcribed and analyzed using the method of discourse analysis. Bloome, Carter, Christian, Otto, and Shuart–Faris (2004) defined *microthnographic approach* as a method of discourse analysis of classroom language and literacy events. Bloome et al., (2005) argued that the discourse analysis approach combines attention “*to how people use language and other systems of communication in constructing language and literacy events in classroom with attention to social, cultural and political processes*” (pp.15). The present research endeavours to examine the nature of academic language proficiency developed through various teaching–learning strategies in School LC, which further shapes the negotiation of English–vernacular divide.

Discourse analysis seemed to be an appropriate method to bring out the tensions emerging in classrooms as well as to address the tensions emerged from the conflicting interest of institutions and larger social structure. The method of data analysis involves back and forth movement between transcribed text and the guiding questions of research objectives. Transcribed data was examined by focussing on common teaching–learning strategies emerged in the classroom, the pattern of turn taking by teacher and student, focus of contextual cues during teacher–student interaction, focus of linguistic task or activities, number of language(s) used during academic discourse, role of teacher (interpreter or mediator), nature of student participation (active or submissive) and the relationship between teacher–student

(hierarchical or linear). We analysed the data, compared it with the themes emerged from content analysis, looked for consistency, and drew the conclusion.

2.6. RESEARCH RIGOR AND ETHICAL CONSIDERATION

a. Research Rigor

Qualitative research method is frequently questioned for reliability and validity of data sources, data collection and its analysis. Bernard (2000) defined *Validity* as the “*accuracy and trustworthiness of instruments, data, and findings in research*” (p. 47). Maxwell (1992) asserted that validity is “*the relationship between an account and something outside of that account, whether this something is construed objective reality, the constructions of actors, or a variety of other possible interpretations*” (p. 283). Maxwell (1992) made a distinction between descriptive validity, interpretive validity, theoretical validity, generalizability and evaluative validity.

Descriptive validity is concerned with the factual accuracy of the account (observation, interviews, etc.) made by the researcher (Maxwell, 1992). Researcher tried to ensure the descriptive validity by audio-video of the classroom observations and the interviews with the educators. Audio-video recording bore stronger evidences of accuracy in the data as compared to the filed notes. It was ensured to include and transcribe all the evident cues, gestures, intonation, pauses, etc., along with the teacher–student interaction pattern.

Interpretive validity is concerned with a common understanding of the

language used in the interpretation of data so that the account is grounded in the language of the participant “and rely as much as possible on their own words and concepts”, that is, the interpretation of the data is based on the participants’ perspective rather on the researcher’s perspective (Maxwell, 1992, p. 289). Interpretive validity was ensured through accurate and exact transcription of the audio-video recording. Moreover, the meaning emerging from the transcribed text was discussed with participant to ensure consistency in the meaning derived by us. *Theoretical validity* is referred to as the validity of the concepts (for example, academic language proficiency) because this theory is applied to the phenomenon under study and the validity of the relationships between these concepts (Maxwell, 1992). Hence, theoretical validity refers to the extent to which the operational definitions of variables reflect the actual theoretical meanings of the concepts. The first chapter has provided detailed description of theoretical framework and located the variables of the present study in the theoretical framework. Therefore, we ensured to maintain the rigor and quality in the present research study.

b. Ethics of Research

Following ethical consideration were made for the present research study.

1.# Prior consent was obtained from school principal for visiting school and conducting audio-video recording of classroom and school events.

2.# Consent from teachers of grade V was also obtained and they were assured of anonymity.

3.# Name of the school, teachers, and learners were represented either with pseudo-names or acronyms during the presentation of data to maintain their confidentiality.

4.# The teachers were assured that the purpose of study was limited to academic research in the field of language learning and therefore was not an evaluative exercise for the teachers or students. Hence, they should continue their classroom interaction without any hesitation or fear of being evaluated.

5.# Identification marks related to the school, teachers or students evident in photographs or data presented were blurred to maintain the confidentiality.

6.# Detailed description of the specific locality of sample school was intentionally ignored to maintain the confidentiality.

CHAPTER-3

ACADEMIC PROFICIENCY IN ENGLISH IN SCHOOL LC

Teacher (reads the text in a plain tone): “Ajay was angry and said to Tariq, his friend, ‘Come to my room... this robot pokes its nose in everything’.

Robot said, ‘correction sir, I do not have a nose’

Tariq laughed but Ajay was angry’.

T: *Ajay gussa tha aur apne dost Tariq ko apne kamre m bulaata hai aur btata h ki yeh robot har baat m apni naak ghusaata h. Robot bolta hai ki uski naak nhi h. Tariq hasta h lekin Ajay gussa tha. Kaun gusa tha?*

(Ajay was angry and called his friend Tariq to his room and told him that this robot pokes his nose in everything. Robot said that he doesn’t have a nose. Tariq laughs, but Ajay was angry. Who was Angry?)

S (chorus): Ajay

The teacher continued reading and translated the text in Hindi. Students listened silently and their eyes were ritualistically following the lines teacher was reading. Some of them were using finger to keep track of the words and sentences. Some of them occasionally looked at the teacher while those sitting beside window were looking outside.

[English literature class (Grade V) at low cost EM school, Field notes dated 19/04/2011]

This is an excerpt from a fifth grade English literature classroom, where the teacher was reading a story from a literature textbook. The text depicts a conversation between the two characters of the story—a boy named Ajay and his domestic robot Manku. Ajay was not able to understand the behavior of his domestic robot because of the differences in linguistic repertoire of human beings and robots. Importantly, the humor discussed above went unnoticed by the learners despite the translation of English text in Hindi during classroom discourse.

This is not an uncommon situation in an English language classroom of any

low cost EM school. The learners in a typical low cost EM school are the first generation English learners with a different home language. They have inadequate exposure and facilities at home for learning English. The EM schools impose exclusive and compulsory use of English in the curriculum and exclude the use of home language for giving instruction during classroom discourses. In response to the difficulties encountered by learners, the teachers quietly resist the school policies of compulsory use of English only. This raises issue on the extent to which such teaching-learning strategies succeed in academic language proficiency in English, which is both, a subject and a medium of instruction in EM schools. The present study conducted in one such low cost EM school described above, tends to explore the following research questions in this chapter:

- 1.# How does the socio-linguistic understanding and beliefs of educators about English as a language and as a subject inform their choice of teaching-learning strategies?
- 2.# What kind of proficiency (conversational or academic) is developed in English as a result of teaching-learning strategies used in low cost English medium school?

OUTLINE OF THE CHAPTER

This chapter is arranged in three parts: First part deals with the socio-linguistic knowledge of the educators—principal and English teacher— about their students and what mediates their choice of strategies for teaching English in School LC. The second part of this chapter focuses on the nature of contextual support and the cognitive demands that mediate selection of the teaching-learning strategies in

English language classroom. This part discusses the development of academic language proficiency among learners in English class in low cost EM school. The third part discusses the findings using the theoretical framework of the study.

3.1 SOCIO-LINGUISTIC UNDERSTANDING AND BELIEFS OF EDUCATORS AND CHOICE OF TEACHING–LEARNING STRATEGIES FOR TEACHING OF ENGLISH

This part will focus on the socio-linguistic understanding of educators, where ‘*Educators*’ include principal and English language teacher. Before looking into the nature of proficiency developed in the classroom of School LC, the socio-linguistic understanding of educators about English as a language and as a subject were necessarily examined to the manner in which these attitude and beliefs of educators influence the pedagogic demands of language classroom. These attitudes and beliefs tend to inform the choice of teaching–learning strategies that are required to be employed for teaching English by educators. The reason for including both principal and English language teacher under the category of *educators* was to also understand the influence of power relation between the authority and practitioner about the choice of their respective pedagogical resources.

First subsection provides the description of the socio-linguistic understanding of the principal regarding pedagogy of English. This has helped us to understand the reason behind the subsequent choice of curriculum and activities specifically planned for the development of English proficiency by principal. Second subsection describes the linguistic understanding of English teacher regarding teaching and learning of

English. This section elaborates on the manner in which teacher selects the teaching-learning strategies to be used in the classroom.

3.1.1. ATTITUDES AND BELIEFS OF SCHOOL PRINCIPAL

Researcher met the principal of School LC in her office, where the prizes, medals or trophies won by the school are displayed in huge mirror cabinet. The principal Ms. M. is a post-graduate in English literature. Ms. M shared her school experiences and told researcher that she reads English literature during free time. Students and teachers addressed the principal by her surname, i.e., “Ms. M”. During an informal interaction with researcher, Ms. M also recalled her school days and praised the English culture which included school choir, particularly the mannerisms, sense of dressing, and proficient communication skills. Researcher inquired her understanding regarding English as a language during our first meeting.

a.# English has instrumental value and superior social status in the society

When researcher asked about her opinion regarding English and the importance of learning English, she replied:

*Definitely, **English is in demand** and required **economic mobility**. Every job requires fluency in spoken and written English. If you are fluent in English, you can actually aspire for **a good salary** and **higher position** in your job. **It has instrumental value**, and I can see that clearly when parents want their children to be fluent in English, which further raises their hope of **better economic settlement**. As far as other languages are concerned, they remain **limited to home or surroundings**. Though they are equally important, they are largely not used in **professional field**, except for teaching, where they are taught as language subjects.*

Excerpt 3.1.1a: Introduction session with principal

The principal of the school seemed to be well aware of the home environment of the students and reported that parents approach the school with aspiration of EM education as is evident from her response during a formal interview.

*It is our duty to teach children **good English** as parents are paying for EM education, and the **emphasis is always on the use and learning of English**, besides other subjects. I meet all the parents during admission time and can see clearly that parent approach our school because they couldn't complete their studies for some or other reason, and thus **aspire for good EM education** for their children. **They feel very proud seeing their children speaking in English** and aspires that children will **earn well**.*

Excerpt 3.1.1b Introduction session with principal

Data Analysis

Above two excerpts provided evidences about the principal's understanding of English as a language. She believed that English has instrumental value and superior social status. Her tone was loud and clear, which show that she felt proud while speaking about her school and parents' aspirations. Associating English language with *demand, economic mobility, a good salary, higher job position, better economic settlement and earn well* showed that principal believed in the instrumental value of English. The presence of English in professional domain and confining other languages to lesser powerful domains such as *home and surrounding* showed the existence of linguistic hierarchy in the society. The aforementioned economic benefits also seemed to enhance their social status because with *fluency in English* one tends to get *higher position in job and feel proud* not only among English speaking people but also among their family members. The perceived instrumental value and superior status of English resulted in the preference for EM schools, where English is taught as a subject and is used as the medium of instruction from grade I. The principal's own understanding about English and the aspiration of parents influenced her about

developing the teaching–learning strategies which emphasized on the *maximum use and exposure of English*.

b.# Learning of English requires Early Immersion and Exposure of English

Researcher asked the principal about her opinion on teaching of English and development of linguistic skills among learners.

It is compulsory for all, staff, teachers, and students, to speak in English in the school; it happens in elite school. It is necessary for teachers to be the role model for the students. Children observe their teachers and get to be motivated for speaking in English. Teacher should correct students when they make any mistake on the spot and thus promotes proficiency in English. If children will not start interaction at this stage, they will not be able to communicate proficiently at the later stage. They will learn quickly when they will be corrected by teachers on the spot.”

Excerpt 3.1.1c: An introduction session with researcher

Data Analysis

It was observed that the foremost consideration of principal was that everyone in school (including Hindi, Sanskrit, sports and co-curricular activities teachers) must speak only in English as is evident from the above excerpt. Even the Hindi language teacher is also instructed to interact with children in English, as *it happens in elite school*. This showed that the planning of norms and activities is based on of the working process of elite schools, not on any theoretical understanding of language acquisition. Principal corrected anybody, teacher or student, on the spot for any pronunciation or grammatical mistake in spoken English. While introducing us to the students of grade IV and V during our first visit, principal corrected some students who were using the ‘V’ sound in uttering the word ‘What’. Principal asked the

learners to focus on her lip movement as she pronounced ‘W’ and imitate her in the same manner for correct pronunciation of the word *what*. She explained how the sound of ‘W’ differs from the sound of ‘V’ in English language.

Teachers are considered as role models for the learners. Therefore, teachers weren’t even not spared from being corrected publically if they made any such mistake. However, correcting such mistakes publically could hamper the self-esteem of the speaker as well as foster a sense of inferiority and guilt. Furthermore, this also reflected the authoritarian attitude of principal towards teachers and learners. It was observed that teachers either remained silent in front of principal or usually replied back in monolingual responses or single sentences. Even during interview with all the teachers, we observed that except the mathematics teacher who was a south Indian and could not speak Hindi, all other teachers either spoke using mixed Hindi and English or switched to Hindi while responding to the question. A commonly perceived relation between language learning and age of learning further emerged from the interaction with the principal. According to the principal, early immersion of learner in developing interactions in English would proficiently enhance their communication skills. So, the principal advocated in *starting the interaction at the early stage so that the students learn to communicate proficiently at the later stage*. This was also evident in the planning and implementation of norms and activities in the School LC.

c.#English Carols Routinely Practiced during School Assembly for Learning of English

It was evident from the above discussion that the principal advocated early

immersion and maximum exposure for the development of proficiency in English. It was discussed above that the principal believed to have duty of teaching learner good English to fulfill the aspirations of their parents (See excerpt no.3.1.1a on p.80). Principal informed the researcher that she planned the practice of English carols during morning assembly to compliment learning of English. This section describes and discusses about the practice of English carols during school assembly in detail. There is a book, with collection of songs, which children had to carry along during school assembly. They read from the book and repeat every sentence after the school choir.

- 215.# Principal (P): (gave instruction to all teachers)**
216.# (in stern and loud voice) Teachers, please come in front
(Those teachers who were standing at rear of the queue of their class, immediately moved to the front of the queue)
217.# P (with a smile on her face and in loud voice): Ok children, as you know we are all at the *stage of learning English.*
As I told you that we are going to learn and speak English through English songs.
218.# This way, you will learn pronunciation,
219.# you will learn grammar,
220.# you will learn how to construct the sentences and speak grammatically correct,
221.# you get to know vocabulary.
222.# just focus on how school choir sings it
223.# So, today we are going to practice two new songs and some of you already have been practicing in your music classes and some of you have not, however, you all will be able to sing because it's quite easy.
Please open page no.92, rolled away, rolled away.
224.# S: "Rolled away, Rolled away, Rolled away,
Every burden of my heart rolled away.....a
ll the sin have to go.....Rolled away....".

Excerpt 3.1.1e: English Carols being practiced during school assembly

Data Analysis

It was observed that learners were inattentive while the principal made these

announcements in the school assembly. Learners standing in the queues seemed to be least interested in participating in this school activity. Some learners were looking and talking with each other, some were yawning while others were standing simply with the books in their hands. Majority of the learners held the book in their hand, followed each sentence and read loudly after the school choir but without any rhythm. Some learner were just standing idly and looking around without uttering a single word, while few were found trying to catch up the wordings of the song. As stated by the principal that some learners had been practicing this song during school assembly as well as in their music classes, so some learners seemed to be singing the song.

Above described behavioral observation of learner and teachers during ‘English Carols’ questioned the claims made by the principal (see line no. 217-220) about *learning pronunciation, grammar, and sentence formation*. The video recording of school assembly did not provide even one instance where any of the teachers corrected any learner for incorrect pronunciation. Teachers were simply standing or taking round occasionally in between the queues of school assembly. Teachers checked school dress, nails, and hair-cut of students of their respective classes and warned the defaulters. When researcher asked the principal about her rationale for practicing English carols during school assembly, she replied in the following manner:

I know that children in our school come from lesser educated families, where they had lesser exposure and facilities for English development. Usually, these children take tuition to support the school education. However, in school we have to make extra effort for teaching English to children because parents can't communicate in English and don't have much exposure except the media such as television or newspaper.

Excerpt 3.1.1d: An introductory interaction with researcher

The principal was aware about the availability of limited resources for learning of English at home of the learners, as explained in the above excerpt through terms such as *lesser educated families, lesser exposure and facilities for English development, parent can't communicate in English and don't have much exposure*. Learner tried to compensate their limited resources for learning of English at home with the help of home tuitions. So, the principal also made an attempt to support learning of English by planning English carols to be practiced during school assembly through the activity was based on the principle of observational learning (see line no. 221). For successful learning through observation, the activity should constitute the process of attention, retention, and production along with motivation to complete the learning task. English song activity could not hold the attention of learner for long and there was no method to assess their learning.

Instruction, interpersonal, and linguistic cues, etc., could not extend the 'English song activity' to an academic activity because this activity was too tedious and monotonous to bring out the active participation among learner. This reduced the school activity to context-reduced and cognitively-undemanding communication (Quadrant C), which is ideally more useful for practicing and strengthening already acquired linguistic skills. After returning to classroom from school assembly, when researcher asked the learners randomly to explain what they understood from the songs practiced during school assembly; none of the learners could provide any explanation although few managed to repeat the song again. It was observed that learner had been practicing these carols in their music class, so many of them repeated the carols. Thus it was found that learners had rote memorized these carols, but they were not aware of their meaning. Singing carols didn't seem to make any difference

in their existing knowledge of English.

d.# School Norms focused on practicing the language skills through written work

As discussed in the previous themes that it was compulsory to speak in English for teachers and students; attempts such as English carols during school assembly were made, so that learners could enhance their linguistic skills in English. Another attempt to enhance the linguistic skills was made through focusing on the writing skills of the learners. This was done with an understanding that a child would not only learn English through perceiving the words and spellings, but he or she would also be able to develop meta-linguistic awareness. There was a school rule to be followed compulsory till grade V, which was communicated verbally and not in written terms. According to this rule, learners must maintain three notebooks of each subject, viz., class work, home work and rough work notebook. They were supposed to write down the work done in class in their rough notebook and then re-write the same work in their class work notebook next day, but without the help of teacher or fellow learner. The aim is to strengthen the written skills through practice as learners would be writing and re-writing the same content at least twice. Principal told the researcher that

*I make sure that our **children get maximum exposure of English**, so we have **planned the daily routines and curriculum accordingly**. During morning assembly, English carols are sung and practiced with school choir, where, we aim to teach children few new words, their pronunciation. etc. We have **categorized English language into six subcategories**, i.e., English literature, Reading, Poetry, Cursive writing, Composition, Grammar, so that children will **develop mastery in different skills of language**. Besides this, it's a routine that children will write the work done in classroom in their rough*

notebooks, learn it at home, and then re-write it in their fair notebook in the classroom. This way, they will learn to do writing independently.

Excerpt 3.1.1e: Interview of Principal

However, in routine practices, it has been found that learners write the work in their rough notebook and then re-write in their class work notebook by copying from the rough notebook or fellow student. During informal discussion, different teachers hesitantly accepted that this kind of written and re-written work actually increased the extra work load on teachers and students, but they have no choice except following the curriculum.

*Actually the idea behind this is that first child will write in his or her rough notebook, and then after memorizing it, they would write the same work in the class work notebook next day. **Focus is on learning the text and re-writing it without copying it from anywhere.** However, **not all children do it this way.** Actually, it is **not feasible** to do such kind of written work in all the subjects everyday because it would **create burden on the child.** Had it been one subject, it would have been much easier and possible to follow such school practice. **In regular practice, children actually just copy the text from rough notebook to classnotebook without grasping its meaning or learning anything.***

Excerpt 3.1.1f: Interview of English teacher

The excerpt no.3.1.1f described above showed that teachers felt such activity was not of academic use, because usually learners end up copying the text from one notebook to other notebook. Moreover, this is time consuming and increases work load for learner and teachers. Many a times, researcher observed that learners were completing their work by copying from the notebook of their friends. Such school rules were made with an aim of strengthening written skills of learner, however, it was found that such act were confined to an act of copying without even reviewing the correctness of content. Teachers was aware of the process, but they didn't try to inform the principal, who was decision making authority. The above excerpt showed

that even the *English teacher was aware about the difference between the imposed norm and its practice; however, she didn't seem to challenge the status quo of decision making authority.* Next section focuses on the understanding of English teacher about language and teaching of language.

3.1.2. ATTITUDES AND BELIEFS OF ENGLISH TEACHER

The profile of English teacher for grade V showed that the teacher have completed post-graduation in English and also studied B.Ed through distance education. She have almost 16 years of teaching experience prior to joining this school as English teacher for grade IV and VI. Presently, she is also the class teacher of the grade V. This section will describe and analyze the interview and our personal interaction with the English teacher for understanding the language, language pedagogy, and teaching–learning practices in school LC.

a.# Children have limited exposure of English and facilities for supporting English literacy at home.

English language teachers were examined for their understanding of the socio-linguistic background of the learner at home.

*I know that children in our school are from Jatt or Gujjar families, who use a different dialect of Hindi, so they speak **more rural and Haryanvi variety of Hindi** at home. Usually, they are **first generation English learners** in their families and their parents have admitted them in this school to learn English.*

Excerpt No. 3.1.2a: Interview of English teacher

Data Analysis

It came out very clearly that English language teachers of grade V were well aware of the fact that learners in School LC have a different home language, i.e., *Haryanavi Hindi*, which is different from the standardized Hindi taught formally in the school. It is clearly mentioned that *Haryanavi Hindi* is the home language of learners. Simultaneously, the facts mentioned such as *first generation English learner*, *their parents do not speak English*, etc., showed limited presence of English in the everyday life of learners. The teachers and learners profile also revealed similar observation, where English is limited to the professional domain and Hindi is dominant in everyday communication at home, neighborhood, print and visual media, etc. Learning of English and learning in English is assumed to be achieved through *taking tuitions at home* or *through maximizing the exposure of English in school*. Teachers was aware of the fact that learners had more exposure of and are more proficient in Hindi as compare to English, but simultaneously they believed that maximum exposure of English would enable the learner to develop academic proficiency in English by undermining the advantage of home language in the process of learning as discussed in the next section.

b.#Early immersion and maximum exposure emerged as a commonsensical strategy instead of theoretically informed strategy

English teacher of grade V had been teaching in School LC for approximately last 15 years in the elementary grades. As an English teacher, she witnessed certain changes with respect to demand of English over the years.

When I joined this school, it was at the beginner stage. So, there has been lot of changes over the years in the syllabus and method of teaching. Earlier there were less number of books, no compartmentalization of skills and focus was much on grammatical skills. However, with the time, the number of books has increased in English, but not in Hindi. There has been more focus on developing fluency in English.

Excerpt 3.1.2b: Interview of English teacher

The above excerpt outlined the fact that the preference of English over Hindi has increased over the years as is evident from the changes made in English and not in Hindi pedagogy. Further, researcher tried to question the appropriate level of introduction of English and asked the English teacher about her opinion regarding the introduction of English to which she said:

I feel if it's introduced from the beginning, it should not be a problem. Rather introducing English at a later stage would definitely create additional problem like one may not be interested in learning English.

Excerpt 3.1.2b: Interview of English teacher

Hearing her reply, researcher wanted to know the reason behind the lack of interest among students in learning English in spite of it being instrumental to socioeconomic growth. The teacher replied:

Actually, these children don't speak and communicate in English at home and their surroundings. Hindi is a language in which they are more comfortable. At the introductory level, these children can learn English easily because they simply grasp whatever is feed at this age. They learn sooner because their mind is young which could be molded as required. Gradually, they will learn it despite English being difficult for them.

Excerpt 3.1.2c: Interview of English teacher

English teacher accepted that children were more comfortable in Hindi because it was their home language. She further told us that English should be introduced as early as grade I, however, the argument given for this early start

suggested that instead of theoretical knowledge; her assumption was based on pragmatic knowledge such as *simply grasp whatever is fed at this age, young mind who could be molded as required, etc.* Researcher subsequently asked about her method of teaching English, to which she replied:

*First of all, before every chapter, I explain them what is there in the chapter. Then I read and explain the chapter. Sometimes, we **switch to Hindi to explain the meaning of difficult terms**; otherwise I prefer to teach them in English because it's an English medium school. Teaching them **more in English would provide them time to read, listen, and learn in English.***

Excerpt 3.1.2d: Interview of English teacher

It was evident from the above excerpt that English teacher relied more on anecdotal wisdom and daily experiences rather than pedagogical evidence as evident in the common arguments including that ‘*one may not be interested in learning English*’, ‘*these children can learn English easily because they simply grasp whatever is fed at this age*’, ‘*they learn sooner because they are young minds who could be molded as required*’, ‘*teaching them more in English would provide them time to read, listen, and learn in English*’. In excerpt no. 3.1.2d, it was accepted by the teacher that they usually switch to Hindi, so that the learners could comprehend meaning of difficult terms in the text. There seemed to be a contradiction regarding the awareness of teacher on the linguistic background of the learners and the teaching–learning strategies she adopted in the classroom for teaching English. The English teacher was aware of the limited availability of resources to support the learning of English at home of the learner, yet classroom transactions were insisted in English. These assumptions were seemed to be informed by common sense, rather than theoretical understanding, as Auerbach (1993) argued that *exclusive use of English in teaching English is typically seen as a natural and commonsense practice*

with minimal pedagogical evidences. Language teachers usually ended up relying more on commonsense rather than applying pedagogical principles during the teaching of language in School LC.

c.# Teachers resisted school mandated use of English and included Hindi frequently in the teaching-learning strategies employed during the teaching of English.

Previous section showed that English teacher was found to be dependent more on commonsensical knowledge; researcher examined the opinion of principal and English language teacher on the different teaching-learning strategies used for teaching English language to understand mutual compatibility between their approaches of teaching.

*I believe that language development occurs only when we are exposed to it. So, English should be taught using English and Hindi should be taught using Hindi only. I strictly instruct all my teachers not to communicate with children in Hindi in school and English language classroom. It's an EM school, so the use of Hindi might interfere with the learning of English. I also **personally supervise and make sure children must be taught in English.** (Principal)*

We are strictly instructed to use English only during teaching and communicating with students and fellow teacher in school. I try my level best to restrict to English while giving instruction in the classroom. However, many a times, I switch to Hindi to explain the meaning of difficult terms or a paragraph. I understand that teaching in English would provide students with more exposure of English, but the problem is that these students have limited exposure of English at home, which makes it difficult for them to comprehend and respond in English fluently. (English Teacher)

Excerpt no 3.1.2e. Opinion on the use of various teaching-learning strategies for teaching of English language

Principal and English teacher were interviewed to know their opinion about

the school norms imposed for teaching of English and its practice in reality. From the verbatim of principal, it was evident that principal believed in providing maximum exposure for learning of language, therefore, she emphasized on the compulsory use of English for developing proficiency in the language. It was discussed in the previous themes that these learners were *first generation English learners* with *limited exposure of English at home* and Hindi was their home language. Teachers understood that children need support of home language, i.e., Hindi during academic discourse and silently resisted the school policy of mandated use of English only in school. Researcher further investigated about the teaching–learning strategies used for teaching of English as a subject by the English teacher.

*I understand our principal's **emphasis on mandatory use of English** per interpersonal and academic communication with learners and fellow teachers in the school. **Idea is to provide maximum exposure to children** so that they learn when and how to speak in English in different situation. But I find it **difficult to follow compulsory use of English in classroom because these children simply do not understand if we speak in English**. So many a times, I translate English text to Hindi, explain various key words in Hindi, use Hindi and English, simultaneously, etc., for teaching English in my classroom. This is the problem with all the children studying in EM school. My children also study in an EM school, so I use similar strategies for teaching them at home. But the problem I encounter as a teacher and as a mother is that **children understand the content taught to them using Hindi, but children find it difficult to answer in English during exam**. I don't know how to use two languages in a manner that children develop proficiency in English.*

Excerpt 3.1.2f: Interview of teacher

It was evident from the response of teacher that Hindi was frequently used in the teaching–learning strategies such as for translation, code-switching, elaboration, explanation during teaching of English because learners couldn't comprehend English independently. However, English teacher showed disappointment even with the use of such teaching learning strategies, because they were useful only for transacting the

meaning in Hindi, but could not help much in the development of proficiency in English among learners. As a result, learners understand the content taught in classroom, but they could not perform well in examination because of their limited proficiency in English. English teacher mentioned previously that English was one of the two teaching subjects during teacher's training program, and the interaction among languages was never taught to them. Thus, language teacher used Hindi for translation, code-switching, etc., during teaching of English, but still she was not aware of the manner in which the interaction between Hindi and English could be used for developing the proficiency in English.

3.2. NATURE AND LEVEL OF PROFICEINCY (CONVERSATIONAL OR ACADEMIC) IN ENGLISH

This section focuses on the extent to which different teaching–learning strategies succeed in developing academic language proficiency in English among the learners in School LC. Academic language proficiency is defined as “*the ability to make complex meaning explicit in oral or written modalities by means of language itself rather than by means of contextual or paralinguistic cues (e.g., gestures, intonations etc.)*” (Cummins, 2001:70). Furthermore, he outlined three key areas—focus on meaning, focus on language, and focus on use—that need to be explicitly emphasized to access oral or written modalities during teacher–student interaction for the development of academic proficiency. ‘Focus on meaning’ implies that the instruction should explicitly *provide ample opportunities for student to process meaningful language and concept* (p.131). ‘Focus on Language’ implies that instruction should

explicitly provide ample opportunities for students to develop “*not just a focus on formal aspect of language but also the development of critical language awareness that encompasses exploration of the relationship between language and power*” (p.135). ‘Focus on use’ refers to “*provide ample opportunities for students to use their languages in powerful ways to connect with other people and make a difference in the world*” (p.131). Thus, teacher needs to create collaborative learning spaces by focusing on meaning, language, and language use, with more linguistic cues and active participation of learner for the development of academic language proficiency in English.

3.2.1. FOCUS ON MEANING

‘Focus on meaning’ implies that instruction should aim at explicitly providing *number of opportunities* to student for processing the meaning which is embedded in the content to be taught during teaching of English language. Thus, teacher–student interaction should provide ample chances to learner for participating in classroom discourse to access and understand the academic content successfully. To begin with, Cummins (2001) argued that prior knowledge has crucial role in the interpretation of new knowledge because “*students may not explicitly realize what they know about a particular topic or issue; consequently their prior knowledge may not facilitate learning unless it is brought to consciousness*” (125). Thus, a teacher needs to initiate classroom interaction by accessing the prior knowledge of learner and consciously establishing the socio-cultural context between the learner and the content to be taught for outlining the implicit meaning or message. The socio-cultural connection between

the content and prior knowledge of the learner would enhance his or her motivation, interest and readiness to engross oneself in the process of learning.

In the context of academic language proficiency, Cummins (2001) argued that the “*depth of understanding of concepts and vocabulary, as well as critical literacy, are intrinsic to notion of comprehensible input*” and effective instruction must focus explicitly on activating the prior knowledge for outlining the meaning or the messages of the text. Socio-cultural learning theories emphasize on providing comprehensible input, which has to be advanced than the existing knowledge of the learners to engage them cognitively (Krashen, 1991; Cummins, 2001). This section which look into the extent to which teaching–learning strategies employed for the development of academic proficiency in English provides various opportunities to a learner for accessing the implicit meaning in the content taught.

a.#Teacher constricted the concept of prior knowledge to recalling the content taught in previous class

Before exploring the extent to which teacher activate the prior knowledge of learner through instruction in classroom, it is necessary to reflect on the conceptual understanding of teacher regarding the prior knowledge and its role in language learning. Therefore, this section looks into the manner in which teacher addressed the prior knowledge and the engagement of learner in the activities meant for prior knowledge.

Classroom description

This was an English literature classroom, which held classes thrice a week.

There was one textbook for teaching English literature. There are a number of stories, poems, and biographical accounts in the literature book. The story presented here, ‘Robot Don’t Lie’, was taught to the students of grade V. The story had two main characters; a boy named ‘Ajay,’ and his domestic robot named, ‘Manku’. Classroom was filled with the noise of students who were busy in discussing anything unusual or important which has taken place at home during the previous day, checking homework and classwork with each other, teasing other student, etc., but all these discussions were in Hindi. Teacher entered with English textbook along with a student holding the checked notebooks. She gave a stern look and all students moved to their respective sitting desks. All the students stood together and greeted the teacher saying ‘Good Morning Ma’am’. Teacher greeted back the students and told them to ‘sit and open their books’.

Teacher flipped pages of the textbook and waited for students to take out page number 24. The chapter had an introductory activity for children to assess their previous knowledge and extend their imagination of working with a robot. The activity was as follows

“Work with a partner. Imagine that you could have a robot of your own. What would you want it to do? Write in two lines.”

Excerpt 3.2.1a: Activity given in introduction of the chapter

Teacher skipped the activity and started reading the chapter directly without giving any preface for the story.

Data Analysis

The activity discussed above was taken from a literature class where teacher was teaching a story about a boy, Ajay, his domestic robot, Manku. This story was in the

form of conversation between a boy and a robot. During conversation, Ajay interacted with the robot based on the understanding of a human being, hence, meaning of the words varied with the given context, whereas, a robot was computerized with fixed and limited semantic and syntactic language structure. Story had a number of incidents where misunderstanding occurred between Ajay and Manku due to the differences in their linguistic repertoire and successive interpretations, which further created a number of humorous accounts. The activity given above was to create a context and extend the imagination of the learner regarding what a robot could possibly do, which could have further assisted the learner in understanding the linguistic repertoire of robot in the story. But teacher simply skipped and did not read it because of shortage of time as is evident from her response during the formal interview.

*‘Usually, there is **shortage of time** to complete such activities. All children cannot do such activities in the classroom, not many can do or participate actively in such activities in English.’*

Excerpt 3.2.1b: Interview of English teacher

Teacher in School LC considered conducting such group activities as ‘time consuming’ and also showed distrust in the capability of learners about performing such activities. Researcher inquired the teacher about her understanding of the concept of ‘prior knowledge’ to which she replied that,

*‘Checking previous knowledge is essential, so that we can **understand the existing level of knowledge** of children. We check it usually in all the classes by asking questions such as **What was done in the last class?** How much children remember from the work done in the previous class? So, we **summarizes the work done in the previous class before moving on the topic.***

Excerpt 3.2.1c: Interview of English teacher

The above verbatim shows that teacher's concept of 'previous knowledge' is merely a process of recalling the facts known or available to the learner. The teachers are not interested in establishing any connection between the socio-cultural backgrounds of the learner and the similarities and dissimilarities in the socio-cultural background of the text. This causes the prior knowledge to remain confined to a surface level, which further impedes generating motivation among learners to participate in classroom discourse. Rather, teacher simply restricted the prior knowledge for quick synthesis of factual information through the definition of keywords, monolingual replies, repetition, etc. Moreover, activating prior knowledge provides an opportunity to learner to critically analyze their existing knowledge and to raise questions for any discrepancy or produce new discoveries in this process. Recalling of factual information neither elicit any interest and motivation among learners to move beyond the literal meaning of the text, nor raise any critical queries necessary for the engagement of learner in the metacognitive processes.

b.# Absence of activating prior knowledge has refrained the development of social context required for initiating an academic dialogue in the classroom

It was evident in the previous section that teacher usually skipped the activity meant for activating prior knowledge due to shortage of time. This theme will explore the extent to which the teacher engage the learner with the text and manage to create social context of learning, without accessing the prior knowledge of the learner.

Classroom description

The following excerpt is from reading classroom, where a small novel 'Pinnochio' was taught to the learner. The opening lines of the chapter were as follows:

- i.# Once upon a time, there was a ...
- ii.# 'A king', my little readers will instantly exclaim.
- iii.# Dear children you are wrong. Once upon a time there was a piece of wood.
- iv.# This wood was not valuable it was a common log like those that are burnt in winters in stoves and fireplaces to make a cheerful flame and warm the room.
- v.# I cannot say how it came....

Excerpt 3.2.1d: Introductory lines of the chapter from the novel, Pinnochio

Teacher entered the class and instructed the monitor to take out reading book from the cupboard. Monitor took out the books and put them on the teacher's table, who distributed them among children by reading out their names. While the children were still adjusting in their seats after taking their books, the teacher started reading the text. These were the opening lines of the chapter which were simply read by the teacher without making any attempt to elicit few questions and to raise interest and motivation among the learners but explanation of these lines were required for developing a socio-cultural engagement with the text.

Data Analysis

The reading classroom did not provide any evidence for social interactions because the English teacher simply reads the opening lines of the chapter in a monotone without establishing any interaction between the text and the learners, between the learners and the teacher, and among the learners. In the above excerpt, we saw that the author of the text tried to capture the interest of the students by building suspense

through an incomplete sentence number (i). The phrase in the first sentence is commonly found in children's story books and the author used it to complete the second sentence, in manner easily predicted by children. However, the third sentence reveals that the predicted outcome in the second sentence was not true. In the first two sentences, the author highlighted that the story of 'Pinochio' was not a regular story of 'a King', which children would be able to guess after hearing the sentence 'Once upon a time...'. Author tried to arouse curiosity among the children by highlighting the change in the leading character of the story; the leading character became 'a piece of wood' from 'A King'. Each following sentence in the story raised few questions in an implicit manner, which was to be raised by teacher for the enrichment of language as well as for the expansion of existing knowledge of children. For example, Why 'little readers' would complete the sentence by the term 'King' only? How a piece of valuable wood differs from a common wooden log? Teacher raised didn't such questions and summarized the text in a monotonous way.

The opening lines of the story had context for 'reading a story' and 'reading pinochio'. This was to be highlighted by the teacher for engaging the learners in academic discourse. It was discussed earlier in this section that comprehensible input has to be advanced to engage the learner cognitively and to develop critical inquiry skills of the students. However, excerpt from reading classroom showed that reading is an act of forceful isolation and individualism, where the focus was more on routine teaching practices and maintenance of the discipline. This was a routine practice observed in other classes of literature, poetry, grammar, etc., where at times the teacher simply read the opening lines or activity given in the chapter without using it as a tool to establish the social context for learning that is required for initiation of an academic dialogue.

c.# Comprehensible Input did not provide opportunity to learner to go beyond the literal comprehension and to access the implicit meaning in the text

Cummins (2001) argued that the construct of comprehensible input must go beyond just literal comprehension. “*This implies a process whereby a student relate textual and instructional meaning to their own experience and prior knowledge, critically analyze the information in the text*” (pp.131) and further use this analysis in language production. The English language classes were scrutinized to understand the nature of comprehensible input (i.e. the instruction by teacher) available to learners.

Classroom description

This excerpt was from literature classroom where the teacher was teaching a story titled ‘Robot’s Don’t Lie’. Students opened their story books looking curiously at the photos, especially the photo of the Robot. Few were looking around the classroom and observing others, while few others were waiting for the teacher to start the lecture. Teacher skipped the activity given before the opening lines of the chapter and directly started reading the chapter.

636. T (in plain tone read from textbook): *Robot is a machine.
Do they talk like real man, a human being?*

637. (all students were quite, so teacher repeated this question in Hindi)

638. *hamare jaise hote h kya robot?*

639. S1 (in a low and hesitant tone): *No ma’am*

640. T (affirms and explains in soft tone): *No, it is an electronic machine,
641. whatever we feed in it, it repeats.*

642. (Read the question given at the introduction of the chapter)

643. *What relation does Ajay share with his robot, Manku?*

644. *In this story, the name of the robot is Manku (short pause)*
645. **Ss (repeats after T):** *Manku*
646. **T:** *And Ajay is the boy.*
647. *What relation is between Manku and the boy?*
- (Nobody replied, some of the students started looking into the book, while few others tried to evade the gaze from the teacher)
648. (in a loud voice, looking at the children, the teacher repeated the question in Hindi): *Relation kya hota h?(short pause)*
649. **S1 (replied in Hindi):** *Ma'am rishtedar*
- 650.# **T:** *Whether they like each other or not?*
- 651.# *Whether the boy likes the robot Manku or not?*
- 652.# *Why he doesn't like him or why he likes him?*
- 653.# *Theek h?*
- 654.# *read this interesting story to find this (continued reading)*
- Excerpt no 3.2.1e: English literature classroom**

The above excerpt showed that classroom interaction was bilingual. The teacher read the chapter mostly in English but used Hindi to convey the meaning and to interrogate with the children. Teacher skipped the introductory activity given in the chapter, which could have activated the prior knowledge of the learners, viz., their knowledge and understanding about robots, personal experience of the learners with robot or any robotic machine.

Data Analysis

As observed in the above excerpt, learners could not comprehend English and replied either by repeating after the teacher or when the teacher *translated the questions in Hindi*, as is evident in the lines numbered 638, 648, 649, and 653. With the intention of allowing the learners to reflect on the question, the teacher used *short pauses* (line nos. 644, 648), but these pauses were not useful; and usually there were

two to three regular learners who raised their hands for giving answer. Other students either kept looking into the textbook or looked with a blank face towards the blackboard where the teacher was standing. Although teacher intervened in Hindi (see line 638), she did not initiate any further discussion to expand on the similarities and differences among a human being and a robot. For example, What is a robot? How robots differs from other machines? Are robots also present in other fields, viz., medicine, defense, technology, space, etc.?

The above excerpt was the opening lines of the chapter that outlined the message implicit in the story. On the surface level, the story argued that robots do not lie. However, the implicit aim of the story was to develop critical thinking among learners regarding speaking lies, the reasons for not telling lies and the repercussion of lying. A commonly imparted moral among children of this age is that they should not speak lie because it is a wrong act. This story went beyond the argument of 'right or wrong' and explored the process of speaking lies, and its effect on personal relations. The story had critical elements where children were to understand who was actually speaking lies. The story started with a question, wherein there is an explicit enquiry, i.e., '*What relation does Ajay share with his robot Manku?*' (See line no. 643). Although the teacher tried to explore the key term 'relation' and establish the contextual connection with the main character of the story, the essence of the question was lost during interpretation and elaboration of the term. The teacher did not give any feedback on the repetition of key terms or on the response given by students. She also did not delve deeper into the lexical and semantic difference between 'relation' and 'relative' (line nos. 647-650), where 'relation' is a noun and 'relative' is an adjective. Learners were not given any chance where they could narrate any personal

experience of speaking lies or dealing with someone who lied to them. Thus, although the teacher tried to explain the meaning of the text, it remained confined to literal phase, where she passed on the information contained in the text to the learner. The focus on the literal meaning was also evident from the underlying teaching assumptions of the teacher, as she said:

'Literature has stories which students enjoy to listen, learn about its character, and understand the moral given in the text. In fact, students perform well in literature because it needs memorization of a set of question-answers. My focus is always on teaching them the story in an elaborate manner.'

Excerpt no. 3.2.1f: formal interview with English teacher dated

The above verbatim showed that teaching of literature was narrowly confined to as 'easy', 'stories', 'listen to enjoy', 'moral given in the text', 'rote memorization of question-answers' and 'teaching in elaborated manner'. Thus, the underlying attitude and beliefs of English teacher showed that her focus was on conveying the meaning of story, without contextualizing the terms from language learning perspective. She aimed at *teaching the story in an elaborated manner*, where such elaboration were usually marked by translation, codes-switching, choral recitations etc. However, such teaching learning strategies could not facilitate teaching of English to move from the literal surface level comprehension to the meaning implicit in the text, thereby developing critical literacy among the learners.

d.#Lack of understanding about the implicit meaning or message limited the academic activity merely to a mechanical ritual.

Previously discussed theme no. 3.2.1c provided the evidences about the input

provided by the teacher to the learners did not go beyond the literal meaning and access the implicit meaning of the text. This was not just a routine practice in literature class, rather similar behavior was observed in other classes of English. Researcher further tried to examine the consequences of instructional input provided in other classes such as cursive writing.

Classroom description

Cursive writing was introduced in grade III at school; however, it wasn't a separate sub-section under language teaching. In Grade V, two periods per week were allocated for cursive writing to enhance handwriting. The purpose of cursive writing is usually related to the enhancement of neatness and speed of handwriting of learner. The main emphasis on cursive writing is related to writing the words by connecting the alphabets in italicized pattern, which gradually increases the speed of writing. Teacher entered the classroom and instructed learner to take out their rough English notebooks. Some of the learners opened English rough notebooks, while others, who did not bring rough notebooks, tore pages from other notebooks. Teacher wrote 'cursive writing' in the center of the blackboard, followed by two sentences in italicized pattern.

401.# (silently wrote two sentences on the blackboard)

402.# *Mani and Vijay are excited.*

403.# *I wish we had a mystery.*

404.# *(In a stern voice) Write one sentence on one page and the second sentence on the next page.*

405.#S3: *Mam, y ek page par aur next page par karna h?*

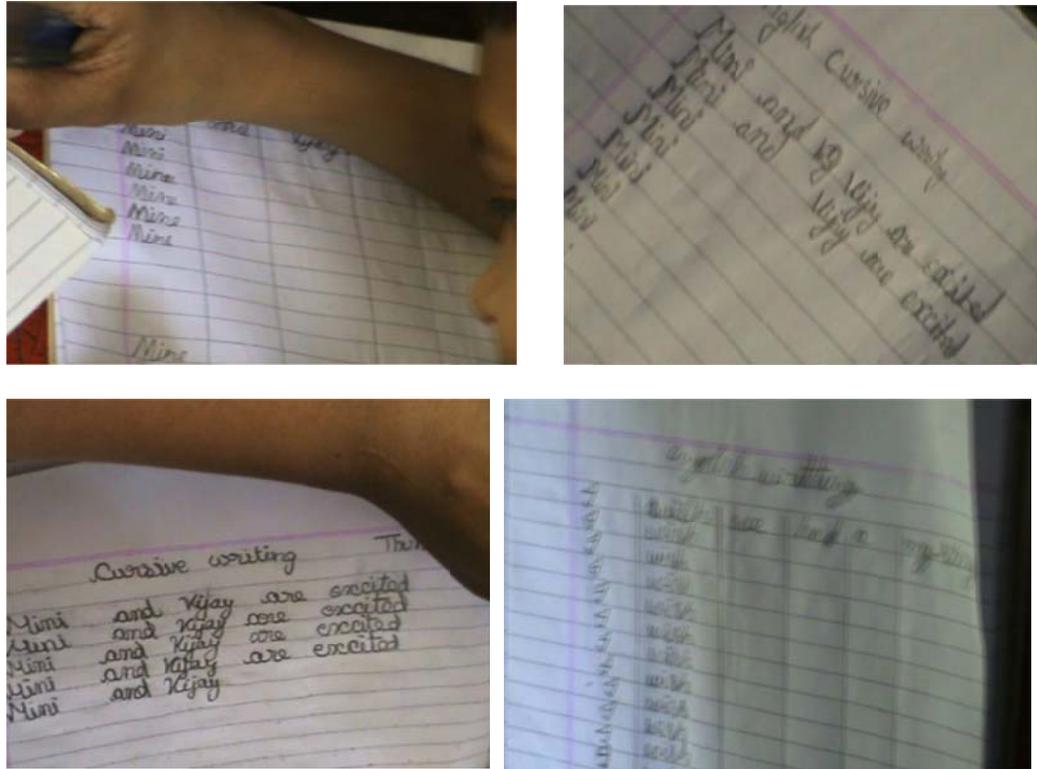
406.# T(loud and strict tone): *Don't you understand what I said? (Two three students discussed with each other and informed S3 that they have to write both sentences on separate pages)*

Excerpt 3.2.1g: Classroom instruction during cursive writing class

After writing sentences on the blackboard, teacher started taking rounds of the classroom to check if learners were writing or not. However, as observed she did not interrupted any learner regarding the writing behavior. Few learners, who finished their work, brought their notebook to the teacher who signed it without any comments. Bell rang and the teacher left the classroom. Some of the learners closed their notebooks immediately, while others continued writing till the next teacher entered the classroom and instructed to stop cursive writing.

Data Analysis

Above excerpt was taken from cursive writing class. The rules of cursive writing categorize all alphabets into various sub-categories, viz., rocking round letters (a, d, g, q, c), climb and slide letters (i, u, w, t), loopy letters (e, l, h, k, b, f, j), lumpy letters (n, m, v, x), and mix n match letters (p, r, s, o, y, z). These categories are based on the similarity in the size of the alphabets or the cursive writing pattern (For detailed discussion, refer to <http://www.kidzone.ws/cursive/>). The basic assumption behind these patterns is to write the words without lifting the pencil, which will enhance neatness and the writing speed. In cursive writing class of School LC, where teacher did not give any instruction about the aforementioned rules of cursive writing to students. She entered the classroom, wrote the two sentences on the blackboard (see line 402, 403) and instructed students to practice writing these sentences in two different pages. A look into the pictures taken from notebook of learner who were practicing cursive writing in the class was provided in the following pictures.



Pic. 3.2a : Pictures showing the notebooks of cursive writing of grade five.

During cursive writing class, the teacher simply instructed children to copy the sentence written on the blackboard in italicized pattern and did not pay any attention to the manner in which the children were doing the written task. Teacher neither emphasized on connecting the alphabets while writing nor on any time limit to complete the task. Many children continued writing and completed cursive handwriting in the next free period. For learner, it was simply a task to complete two-page in beautiful handwriting but the focus on beautiful handwriting was not followed during home work or class -work of other subject. Students followed the easier way of completing writing task as evident from the above pictures. Some of them drew lines between words while others completed a column with one word and then started the next column with the next word. Except a few students, all other students were

writing in the manner shown above in the pictures.

It was also observed that although learners wrote in cursive pattern without lifting their pencils, which is expected to increase the writing speed, most of the learner could not finish the given task in one period. In the absence of explicit instruction on the rules of cursive writing about increasing the writing speed; researcher did not experience any improvement in the writing speed of children. Rather, the learners focused on writing as neatly as possible for which they drew lines between the words and wrote very slowly. This implied that cursive became a mechanical task for children. Observation done during other subject classes like, science, social science etc., showed that learner did not follow cursive handwriting for written work in these subject, thereby implying that the task of writing in cursive pattern remained confined to the cursive writing period only.

3.2.2 FOCUS ON LANGUAGE

According to Cummins (2001), *teacher–student interaction should focus on language awareness, which includes not just the focus on formal aspect of the language but also the development of critical language awareness that encompasses the exploration of the relationships between language and power* (135). He further argued that for effective learning, it is crucial that the focus on language must be linked to extensive input in the target language (e.g., through reading), and opportunities of making extensive use of the language either in the form of writing or oral usage. This implied that in a language classroom, comprehensible input should go beyond the formal aspects of language (viz., grammar, forms, synonyms, function

etc.) and develop awareness among learners as about the operation of language in different social contexts. Therefore, this section will look into different classes of English for examining the extent to which the instruction focuses on developing the formal aspects of language and critical language awareness.

a. Instruction did not aim at developing the decoding skills and semantic agility required for developing comprehension of text among learners.

Research study provides evidence that the exposure of meaningful text must be accompanied by explicit instruction that would help the learner in developing word decoding skills for the facilitation of comprehension among learner. Every single word has a number of varied meanings and this poses challenge for the learner to use it appropriately in the appropriate context. Therefore, a teacher needs to provide number of opportunities for a learner to develop semantic agility. McWilliam (1998) defines *semantic agility* as *the opportunity to explore metaphorical usage in the written or oral English and further use these metaphorical language in their own writing*. The development of word decoding skills among learner provides an understanding that a learner has to look beyond the literal meaning of the word and interlink the connection given in the text. Moving beyond the literal meaning of the text is necessary for in-depth comprehension as well as for developing critical understanding among learners. This section has explored the English literature classroom for examining the extent to which the instruction explicitly focuses on developing the word decoding skills of learners.

Classroom description

For reading, a small novel titled ‘Pinnocchio’ was included in the curriculum of

grade V. These books were not allowed to be taken home and were kept in the locked cupboard of classroom for preventing them from being spoiled by children. This part of curriculum was to promote reading as a habit in the children, so it was not part of assessment. Teacher entered the class and instructed the monitor to take out the reading books from the cupboard. The classroom was filled with noises made by students who were discussing the work done in the previous class, the pending homework, reading the story, etc. Monitor took out the books and put them on the teacher's table, who distributed them among the students by reading out their names. While the children were still adjusting in their seats after taking their books, the teacher started reading the text.

256.# (Teacher started reading from the book): *Story is about walking and talking puppet. So, the story is about walking and talking...*

(Pauses for children's reply)

258.#S(c): *Puppet*

(Teacher continued reading from the book while children listened silently)

259.# T: *Pinnocio had long nose, which grows longer and longer when he does any mischief. What is mischief?*

260.# (There was silence for a moment, then two students responded in Hindi.)

261.#S8: *Mam Galti*

(Teacher looked at him and immediately heard voice from the other corner.)

262.#S2: *Shaitani*

263.# T (agreed and continued reading): *Haa. He runs away... eventually the conscience of a talking cricket.*

264.# Do you know what a grasshopper is?

(Initially children were silent. Teacher repeated the question and four to five of them replied, while many others were silent)

265.#S (c): *Yes, mam.*

266.#T: *You know grass hopper? Grasshopper is a*

267.# (pauses for students to respond)

268.#S4: *cricket*

269.#T (without giving any feedback to S4): *you know cricket is...*

- 270.# (pauses for students to respond)
- 271.#S3 (low pitch voice): *grasshopper*
- 272.#S6: *Cricket.*
- 273.#T: *Cricket is an insect like grasshopper.*
- 274.# (continued reading) and *Pinnocchio's guardian fairy restore him to good behavior, obedience, and care for others.*
- 275.# (explained and summarized in English)
- 276.# *So, he changed to a good puppet. Who?*
- 277.# *Pinnpochio.*
- 278.# *How was he before?*
- 279.# *Very mischievious*
- 280.# *He changed to a good obedient puppet.*
- (All children were sitting silently. Finding no reply from children)
- 281.# T (instructed them in a stern tone): *Listen to the story carefully. I am not going to explain again. You have to understand it yourself.*
- 282.# *As you read it, you will understand the story.*

(Teacher continued reading the text in similar manner)

Excerpt no. 3.2.2a: Classroom interaction during English reading class

Data Analysis

This interactive session was dominated by the teacher with more of self-talk to herself, where she was asking question and herself giving their replies as is evident in line numbers 273–282. These patterns of monolingual replies, self-talk of teacher, and summarization of the text continued throughout the rest of the reading class. Out of the 26 interactive turns discussed above, children only responded in six instances, which were routine monolingual replies. Out of these six monolingual replies of children (as evident in instance nos. 258, 261, 265, 268, 271 and 272), only twice two children replied to the questions asked by teacher but in Hindi (turn nos. 261-262). In the remaining five instances, children simply completed the sentence left incomplete by the teacher after reading it from the book or after listening to fellow student's reply. When S8 replied to the meaning of mischief in Hindi as 'galti', which means mistake; the teacher did not (See turn nos. 260-264) correct the student though she

agreed to the answer of S2, who stated in Hindi that ‘mischief’ means ‘shaitani’. However, she neither elaborated on the semantic difference between ‘galti’ or ‘shaitani’, nor did she intrude further to explain the meaning of the term ‘mischief’ to other children who were sitting silently. Further, she did not try to explore the reason for silence or lack of participation of other students.

While explaining the meaning of ‘conscience of talking cricket’, teacher gave ‘grasshopper’ as a hint for the students to imagine and understand the meaning of ‘cricket’. The teacher succeeded in establishing the link between ‘grasshopper’ and ‘cricket’ by providing the similarities in their physical appearance (see turn nos. 265-273), but she did not further extend the meaning of ‘conscience of a cricket’ and the reason for the contextual use of ‘cricket’ rather than ‘grasshopper’. Scientifically, both ‘cricket’ and ‘grasshopper’ belongs to the same family of species, but ‘cricket’ has a longer antenna than a ‘grasshopper’. This makes ‘cricket’ an appropriate example in the present context of the story because symbolically ‘antenna’ was represented as ‘conscience’ of ‘cricket, which easily catches the mischief of Pinocchio. Such elaboration would have assisted the learner to expand their semantic storage and its contextual usage. The teacher made no effort in establishing this symbolic pattern between the nature and the text and continued reading the text.

The text also had certain idiomatic expressions such as ‘guardian fairy’ which were not explained explicitly by the teacher. The elaborations on symbolic and idiomatic expressions in the text are necessary for expansion of vocabulary and for developing the decoding skills among learners. Cummins (2001) argued that the development of decoding skills would further help the learners in developing the metacognitive strategies for recognizing words and for improving their reading abilities. However,

teachers at School LC did not explicitly emphasize on developing such decoding skills because her focus was on elaborating and summarizing the story.

b.#Teaching-learning strategies did not focus on academic and conceptual understanding of formal aspects of language

Prerequisite of any language classroom is that the classroom interaction should initially focus on strengthening the formal aspects of language followed by the understanding of the power relation underlying the oral or written language. Therefore, teaching of grammar is considered as necessary for developing spoken and written linguistic proficiency in School LC. Although there has been a constant debate on the suitability of traditional approach (which focus on grammar teaching) and functional approach (which focus on functional use of language) to language teaching, for successful language learning both the approaches aim to achieve the development of academic proficiency in language. School LC follows the traditional approach for the development of academic proficiency in English. Therefore, this section will look into the extent to which grammar classroom targets proficiency in English language.

Classroom Description

In the grammar class, the teacher was demonstrating ways of converting a sentence into a question. She started with giving examples. Students looked at the blackboard with their notebook lying open on their desk and eagerly awaited to start copying from the blackboard in their notebook. Many of them start copying whatever the teacher wrote on the blackboard. Teacher observed this and warned everybody to stop writing and to just listen to whatever she says.

- 105.# T: *Now how to make question from a sentence?*
- 106.# "Nikhil is going to school", *Is this a question?*
- 107.# Ss: No mam.
- 108.# T: *This is answer. This is a statement.*
- 109.# *Nikhil is going to school.*
- 110.# *Now how to make a question?*
- 111.# Ss: **(Few students raised their hands)** *Mam, Mam.*
- 112.# S2: *Is Nikhil going to school?*
- 113.# T: *Is it right?*
- 114.# *Is Nikhil going to school? Is it right?*
(All the students seemed to be very confused. They were looking at each other, few were looking and searching it in book, and few other students were looking at the blackboard and reading the sentences written over there)
- 115.# S3 **(in a low pitched tone and with hesitation):** *hmm*
- 116.# **(a long pause)** *yes*
- 117.# T **(without confirming about the answer given by S3):** *Is Nikhil going to school?*
- 118.# *Or you can also say where is Nikhil going?*
- 119.# *Ok, so where is Nikhil going?*
The answer is Nikhil is going to school
(repeated this sentence twice).
- 120.# *So, if I question you, 'Is Nikhil going to school?'*
- 121.# *Your answer will be 'yes, Nikhil is* **(two minutes pause)**
- 122.# Ss **(completed the sentence):** *going to school*
- 123.# T: *I have told you earlier also that you have option of what, why, where, when.*
- 124.# *You ask question using can, are, aren't, was wasn't etc.*
- 125.# *Now Swati has gone to school.*
- 126.# *Can you tell me how you are going to put this into question?*
- 127.# *Swati has gone to school.*
- 128.# *What is the verb in this?*
- 129.# Ss: *ma'm gone.*
- 130.# T : *What is the verb in this?*
- 131.# S4: *Ma'm* **(paused for a minute)**
- 132.# T: *Yes, I told you have, has, is, are, have all these are supporting or helping verbs* **(students listened silently to teacher).**
- 133.# *I told you in the previous class about the usage of helping verb to start a question.*
- 134.# **(while pointing towards S5)** *S5, can you try?*
- 135.# *'Swati has gone to school' make a question.*
- 136.# *Start with helping verb* **(pause for 2 min).**
- 137.# **(after finding no response from S5, teacher again instructed)**
Start with has.

**138.# S5: (stood silently for one minute, looked at the blackboard and then spoke in a low pitched hesitant voice): Has Swati gone?
(and then stood silently looking towards blackboard and teacher)**

139.# T: While making a question, remember first to find out the helping verb in the sentence.

140.# *What are helping verbs?*

141.# *Is, are, was, were, had, have, etc.,- all these are helping verb.*

(Ss repeated the helping verb loudly and teacher continued).

Excerpt 3.2.2b: Classroom interaction during English Grammar class

Data Analysis

The above excerpt showed that teacher initiated interaction by providing an example of the ways of rephrasing a sentence into a question. Line numbers 105-130 revealed that although S2 responded correctly (line no.112), the teacher did not provide any feedback on his response. Instead the teacher interrogated the response of S2 from the class, which seemed to confuse the learner. The silence, looking at each other for confirmation, low pitch, and hesitation marked lack of confidence and confusion among the learners for even the correct response. Furthermore, while explaining the formation of same question in different pattern (see line no.117-122), the teacher did not differentiate between a simple question (i.e., where is Nikhil going?) and a complex question (i.e., Is Nikhil going to school?) and their contextual usage. Depending on the present scenario of the class, when she tried to assess children by giving them a sentence to make question in the line numbers 134-137, nobody could give any response. This was followed by lot of rephrasing and hint-giving drills by teacher as is evident in the line numbers 132-141, before finally making S5 to respond. Finally, the teacher again reminded the students about the use

of auxiliary verb in making questions. However, the teacher did not provide any explicit differentiation between the context of formation of simple question (using interrogative pronouns and adverbs such as, what, why, where, when, how etc.) and complex question (using helping and auxiliary verbs such as has, have, is, were, are, can, could, will, would, etc.). Therefore, the instructions and feedback provided in grammar classroom are vague, as there is no cognitive engagement of the learners. Learners participated only when they were provided with more situational cues to facilitate the learning process.

Although this helps the learner to memorize the given format for performing in examination, it does not make the learner independent and proficient in language usage. The evidence from the above excerpts showed that the teacher focused on providing shortcuts rather than developing in-depth conceptual understanding of grammar. Given the fact that the teaching of formal aspects of grammar is conducted in such a superficial manner, the development of metalinguistic awareness remains a distant dream in such language learning classrooms.

c.# Translation was a tool for the interpretation of the information given in the text rather than a pedagogic tool to scaffold language learning.

Majority of learners in School LC had Hindi as their first language. They used it extensively at home and personal communication with friends and teachers in school. As observed both inside and outside the classroom, the learners frequently and fluently communicate in Hindi as compare to English. Spoken English of learner was usually marked with low pitch, hesitant voice, pauses and struggles to find the

appropriate English word or verb for completion of sentence. Teaching of English in grammar, composition, cursive writing, poetry, etc., was exclusively done in English with occasional code-switching etc. However, it was observed that the teacher frequently used translation in the literature and occasionally in reading classroom. Teacher frequently translated the English text in Hindi to explain the meaning of the text to learners. These two excerpts were randomly selected from the literature class to see the kind of pattern that emerges from the translation. Further, the translation of English text in Hindi was used as a pedagogic tool to scaffold the learning process and develop critical literacy skills among learner.

Classroom Description

The following two excerpts were taken from literature classroom where a story about a boy and his robot was being taught. The teacher read from the textbook and translated the text in Hindi. Children sat quietly and listened to the story. Some of the children listened to the story being half asleep, while two-three children sitting in the last row of benches were completing mathematics work while listening to the teacher.

- 678.# **T: (reads from the book)** *Correction, correction, you are in error.*
 679.# *Do you know the meaning of error? (short pause)*
 680.# ***error kya hota h?***
 681.# *S3: wrong*
 682.# **T (confirms answer given by S3):** ***Ha, mistakes, galat***
 683.# *Who is giving this information?*
 684.# **S2 (while searching at book):** *Manku*
 685.# **T: Robot (reads the passage)** *correction, correction! You are in error. You are misinforming your father. The work has not been done. Your computer has not been used. Error! Error! The robot's voice was metallic.*
 686.# *Robot was telling the mistake.*
 687.# ***Galat galat, aap apne father ko galat information de rhe ho.***
 688.# *Who is giving the wrong information?*

- 689.# S3: Ajay
 690.# T: *Ajay apne father ko wrong information de rha h.*
 (in questioning tone to students)
 691.# *Apko pta h ki robot jhoot nhi bolta?*
 (without waiting for any response from children)
 692.# *To robot kya bolta h 'galat galat, aap apne father*
 693.# *ko jhoot bol rhe ho .aapne to computer khoola hi nhi,*
kisne nhi khoola computer?
 694.# S2: *Ma'am ajay ne*
 695.# T: *Ajay ne*
 696.# (reads the passage) *Oh! Do stop it Manku.*
 697.# *Now Ajay ko bahut gussa aa gaya.*
 698.# *Kyo?Kyo aya gussa?*
 699.# S5: *hmm... he tells lies.*
 700.# T: *Who is telling lies?*
 701.# S5: *Ajay*
 702.# T (nods her head in Yes): *Ajay is telling lie, but kisliye?*
 703.# *Robot kya bol rha h?*
 704.# *Usey father ko sahi sahi bolna chahiye, y jhoot bol rha*
h.(in questioning tone to student) isliye Ajay ko gussa
ayega ki nahi ayaega?
 705.# *Isliye ajay said* (reads the passage), "Oh! Do stop it
 Manku. Ajay said angrily".

Excerpt 3.2.2c: Classroom interaction during English literature class

- 734.# T: (reads from passage) *The doorbell rang again and Manku*
began to move towards the door to open it.
 735.# (explains) *One of his works was to open the door.*
 736.# (translates in Hindi) *Ek kaam yeh bhi tha n uska?*
 737.# *To open the* (pauses for student's answer)
 738.# (reads the passage) *...till Manku could get rid of the*
unwanted visitor.
 739.# (asks students) *What is unwanted visitor?*
 740.# *Jisko aap nhi chahte, ki y hamare ghar m aaye.*
 741.# *Ajay also did the same thing.*
 742.# *He did not want Dinesh to come to his house, so he*
asked Manku to please tell Dinesh that I am not at home.
 743.# *He switched off his computer and went off to his room*
 744.# (reads the passage) *however, instead of going to the door,*
Manku turned back and came towards Ajay
 745.# *Ab darwaaze k paas jaane ki bajaye, Manku vapis aaya*
 746.# *kiske paas vapis aaya?*
 747.# S3: *Ajay*
 748.# T: *Ajay*

- 749.# (reads the passage) *A red light flashes on its instruction panel*
- 750.# *Aur red light jalne lagti h, kyo?*
- 751.# S3: *Mam, because (pauses)*
- 752.# T: *Kyonki usko galat (pauses) galat kya mila tha ?*
- 753.# S3 : *information*
- 754.# T : *Kyonki usko galat instrcution mili thi*
- 755.# *Galat instruction mili thi ?*
- 756.# *Jhoot bolne ko bola tha, kya jhoot bolne ko bola tha ? ki*
- 757.# Ss : *I am not home, ki not home*
- 758.# T: *Kyo bataya usko*
- 759.# *Kyonki vo bar bar usko kya kar rha tha?*
- 760.# *Vo bar bar usko pareshaan kar rha tha.*
- 761.# *Ajay jo chahta tha vo nhi kar rha tha*
- 762.# T: (read from the book): *Oh! really, Ajay muttered, going to the door, 'You make me feel sick, Manku.*
- 763.# *'Sick sir, Manku said, following Ajay, shall I call the doctor?'*...
- 764.# *To ajay manku se kya kehta hai ki tum mujhe pareshaan kar rahe ho...*
- 765.# *Sick means pareshaan karna.. kya main doctor ko bulau...*
- 766.# *Kya kar raha hai Robot Manku?*
- 767.#S: (chorus): *Ajay ko pareshaan*
- 768.#T: *Aur kis ko bulane k liye puch rha h?*
- 769.#S: *Doctor ko*
- 770.#T: *Kyo bulana chahta h doctor ko??*
- 771.# (sitting silently and gave no response)
- 772.# *Because Robot thought that Ajay is sick... kya h Ajay???*
- 773.#S: *Sick*
- 774.# T (continued reading): *Ajay stopped with a groan. Do not call a doctor. Open the Front door.*
- 775.# (explained in Hindi): *To Ajay Manku ko bolta h ki doctor ko mat bualo aur ja kar darwaza kholo*

Excerpt 3.2.2d: Classroom interaction during English literature class

Data Analysis

The emerging pattern from the above two excerpts and observation done in other literature classroom showed that the teacher read, translated, and elaborated the meaning of the English text in Hindi. Excerpt no. 3.2.2c provided evidence that teacher did not explicitly focused on the description of the linguistic repertoire of robot in the story. Line 685 carried the message that '*the robot's voice was metallic*', but the teacher did not elaborate on the word 'metallic' neither did she explained the

reason behind the metallic voice of the robot voice was metallic. In line number 685, the robot said 'Correction, correction, you are in error' which was interpreted by the teacher as *Galat galat, aap apne father ko galat information de rahe ho* in line number 687. This showed that even the translation done in Hindi to explain the text was not appropriate. Word '*correction*' implied 'the need to correct oneself', because Ajay made the mistake. This did not make any difference in the narrative of the story, but the learner could not establish semantic connection independently. The classroom interaction showed that teacher neither highlighted the interrogative part in the text nor created curiosity in the classroom environment regarding the ways through which the robot found out the error. This implied that the teacher translated the text from English to Hindi for explaining the meaning to learner, but it did not help the learners to expand their lexical or semantic knowledge of language. She continued reading and explaining the story in similar manner.

Similarly, in except no. 3.2.2d, the teacher was busy in reading and explaining the text, but she did not highlight the humor hidden in the text (see line number 762-765). She translated the meaning of English words in Hindi, but she did not make any effort to contextualize the key terms like, '*make me feel sick*', '*groan*' etc., and relate it to everyday experience of the learner. In line 770-772, the teacher asked the students about the reason for calling a doctor, but nobody replied. She did not wait to enquire about it further from the students, but gave the response and continued with the text. The manner in which the text was translated in Hindi showed that translation was a tool to pass on the information given in the text to the learners. Teacher could not expand the translation as a pedagogic tool to engage learners cognitively and scaffold language learning.

3.2.3 FOCUS ON LANGUAGE USE

This section will look into the extent to which instruction and feedback provided by teacher during classroom interaction could facilitate language use among learners. Cummins (2001) outlined the ‘focus on use’ as the third most essential component of student–teacher interaction (along with ‘focus on meaning’ and ‘focus on language’), which needs to be addressed appropriately for the development of academic language. He further emphasized that *the ‘focus on use’ component is based on the notion that L2 acquisition will remain abstract and classroom bound unless students have the opportunity to express themselves, their identities and their intelligence through that language* (pp.142). This implies that it is essential to provide opportunity to learners to express themselves in L2, which would further strengthen their personal and linguistic affiliation with the language. Therefore, this section will look into the opportunities and the kind of feedback provided by the teachers to learners during classroom interaction for independent and creative use of language

a. Restricting teaching-learning strategies to English only could not develop functional usage in English among learners.

The excerpt discussed below was taken from grammar classroom because it is a classroom where teacher simultaneously checks the production skills after his or her teaching. In this class, teacher was teaching the process of ‘question formation from simple sentences’. Teacher entered the classroom, wrote few sentences on the blackboard and explained few examples of how to make sentences using the hints given by her. Subsequently, she gave five sentences for which the learners had to make questions.

- 180.# T: *I am writing five sentences, make question of these.*
(Ss opened their notebook and started copying from the blackboard).
- 181.# T (to S8): *I am eleven years old.*
(S8 stood silently, finding no response from S8 and other students, teacher wrote the hint word within bracket along each sentence written on the blackboard)
- 182.# *Ok I've given you hint, now try.*
- 183.# **(with the hint, many of the Ss responded)**
- 184.# S1: *How eleven? (paused for a minute)*
- 185.# *How eleven old are?*
- 186.# S2: *How years old?*
- 187.# S3: *How old are you?*
- 188.# T: *Yes, very good.*
- 189.# *How old are you?*
- 190.# *Old means what?*
- 191.# *You are asking about age.*
- 192.# *How old are you means, what is your age?*

Excerpt 3.2.3a: Classroom interaction during English Grammar class

Data Analysis

Learner in school LC liberally used Hindi for communicating with other fellow students and teachers. Haryanvi Hindi (a dialect of Hindi usually spoken in the state of Haryana in north India) was the home language of majority of the students. As informed by teacher during informal conversation, the learners usually speak Haryanvi Hindi in the pre-primary classes and gradually shifts to standardized Hindi as taught in school. Thus, learners speak in Hindi fluently both inside and outside the classroom while interacting with their fellow students and teachers. There were instances during interaction in non-language class, where the learners usually asked teacher if they could speak in Hindi. Their enthusiasm and active participation in Hindi class provided evidences for being well versed in Hindi language. However, English is a second language for these learners and communication in English was usually comprised of responding in yes or no, in short phrases and repetition after

teacher.

In face-to-face communication with learners, it was observed that that the students could respond fluently in Hindi, but if they are asked to answer the same question in English, they usually responded with silence or yes/no. Some learners tried to respond in unstructured English sentences, usually missing or misplacing the verb in the sentence. During language production, initially the information is processed at metacognitive level in a language in which the person is proficient. Because children enter the classroom with the lexical and grammatical knowledge of their home language resulting in their conversational skills. Development of conversational skills in English requires the basic lexical and grammatical knowledge of English, which should be developed using L1 of the learners.

183. S1: *How eleven?* (original sentence spoken by S1)

kitne ghayarah (Hindi translation of sentence spoken by S1)

184.# *How eleven old are?* (original sentence spoken by S1)

kitne ghyarah saal hain? (Hindi translation of sentence spoken by S1)

185.# S2: *How years old?* (original sentence spoken by S1)

kitne saal hain (Hindi translation of sentence spoken by S)

If translated in grammatically correct Hindi, then the question would be

‘tum (S) kitne (av) saal(O) ke ho(V)’

The correct response for the question posed by the teacher was

how (av) old (O) are (V) you (S)

By analyzing the words in the responses provided by S1 and S2, it was evident that they missed the Subject, i.e., ‘you’ in their responses. This confusion arose due to differences in the word order in Hindi (Where Subject comes before object and verb) and English (where usually subject comes after or in-between the Object and Verb).

the students initially operated at lexical level while communicating in English in the classroom. When they were coaxed to speak in sentential form, they brought in the action words without arranging them in SVO order. This could have been fixed by helping students hear enough English sentences along with Hindi sentences so that the students easily crack the SVO order of English and notice the difference between Hindi and English syntax. The data shows a delay in cracking the syntax of English partly because the teachers never took the advantage of a good bilingual pedagogy in the class. Speaking in Hindi in English class was always seen as a weakness, a temporary solution to the linguistic context of the students in the school LC. This led to failure of generating enough metalinguistic resources for the students to quickly notice the difference in the syntactic structure of the two languages. The role of home language is very important in expanding the innate linguistic capacities of the learner to continue the dialogue and also get an opportunity to acquire the second language with a good level of proficiency. With the lack of conceptual understanding, the learners were found to be more involved in guess-work and developing sentence structure in English. Although the learners would usually engage in guess work and discover the structural aspect of language in comparison to each other, however in the academic context, pedagogic interventions are required to scaffold such meta-cognitive processes to facilitate and strengthen language learning.

Many times, the learners were found requesting teacher to allow them to speak in Hindi, which were usually ignored by teacher. Teacher opted for 'giving hints' to learner, so that they could easily make question for the given sentences.

'use of Hindi would prevent learner to achieve proficiency in English, so use of English was insisted exclusively, especially in grammar class

where learner learns the rule and produce grammatically correct sentences'

Excerpt no. 3.2.3b: Informal Interaction with English teacher

Teacher, thus, needs to understand that the code-switching, code-mixing, etc., are common phenomena that are experienced by any learner and they could use such process to scaffold language learning in class by explicitly highlighting the syntactic and semantic differences in both languages.

b.#Lack of corrective feedback and compulsion to use the format taught by teacher discourages active and authentic participation of learner

Cummins (2001) argued for two way communication and authentic audience, which must be provided with corrective feedback by teacher. Authenticity of audience establishes with the corrective feedback by teacher that helps to build language awareness and conceptual understanding regarding language use among the learners. Therefore, ascertaining the responses during academic discourse and providing corrective feedback to learner is essential for developing academic and authentic language use. This section will discuss two incidents from composition and grammar classes for examining the nature of feedback provided by the teacher and its implication on language use among the learners. Although each class could provide a number of opportunities for language use among learner, the composition and grammar class explicitly and simultaneously focus on language learning and language use. So, a grammar teacher provides examples to clarify grammar rules and would provide number of opportunities to the learners to check the conceptual

understanding. The composition class aimed at developing independent composition skills that require critical language awareness and language use among learners.

Classroom Description

Grammar class

Teacher taught how to make question of a given sentences and then gave the students few sentences to form questions. Finding that none of the learners could initiate and engage in classroom interaction, the teacher gave hints to answers within bracket for learner. The learners were supposed to use one of the correct options given in the bracket and form questions for the given sentence.

184.# T: "*I am fine*", make a question of this.

185.# S3: *Am I...am...am (stood silently)*

186.# S7: *Are you fine?*

187.# T (gave hint): *I ask you first thing in the morning.*

188.# *How (paused and looked at Ss)*

189.# S4: *How are you?*

190.# T: *How are you? Ok.*

(T wrote this on blackboard and Ss started copying in their notebook)

191.# **(read the next sentence):** *My b'day is in November. (what/when) S7*

192.# S7: **stood silently**

193.# T: *All these questions are asked when you were in class I or II.*

194.# S3: *When is your b'day?*

195.# T (to S3): *Very good*

196.# S5 (Suddenly and very enthusiastically raised her hand and said): *In which month is your b'day?*

197.# T (in stern voice and with annoying expressions to S5) : *Don't make it complex, Keep it simple*

198.# T (while looking at all Ss): *So the question will be "When is your b'day?"*

199.# *And your answer will be "My b'day is in November".*

Excerpt 3.2.3c: Classroom interaction during English Grammar class

Composition class

The aim of teaching grammar was to make the students independent writers, who could compose sentences on their own with minimum assistance of the teacher. A separate period for composition was allocated to grade V in School LC to develop composition skills among the learners. Entering the classroom, the teacher wrote 'Earth Day' in the center of the blackboard. Earth day was recently celebrated in the school and student participated in the various activities and program held during the celebration. Children were busy in taking out their notebooks, when suddenly the teacher spoke out in loud and stern voice.

1.# T: *How did you celebrate Earth Day?*

2.# S1 (raised his hand enthusiasm): *Ma'am, Ma'am*

3.# T: *Yes. Tell us how did you celebrate Earth Day?*

4.# S1: *Ma'am, Ma'am*

(S1 struggled hard to translate his ideas or thoughts from Hindi to English as well as to speak in English. He stood quietly with a smile on his face. It was evident from his expression that he wanted to share his experience, but was not able to speak in English)

5.# :*Ma'am Hindi m bta du*

6.# (S1 requested to be allowed to speak in Hindi)

7.# T: *Try in English. Ok. What is Chipko movement?*

(All Ss were sitting silently and listening to the teacher)

8.# *On this day, to protect trees from cutting, all the people clump the tree and didn't allow the men to cut trees.*

9.# *They said you cut us but not our trees.*

10.# *They protest in similar manner for days and at last the men agreed not to cut trees.*

11.# *Therefore, Earth day is celebrated on 22nd May every year.*

12.# *So, now you have to write how you celebrated earth day in your school.*

13.# T: *First of all, you have to write when it is celebrated internationally every year.*

14.# S1: *Uttaranchal*

15.# T (with stern looks and strict tone): *I asked, when it is celebrated all over the world?*

16.# S3: *22nd April*

17.# T: *So, you write about when you celebrate the earth day?*

18.# *How you celebrated it?*

- 19.# *So, how you celebrated it?*
- 20.# S2: *We make posters or slogans.*
- 21.# T: *Yes*
(T simultaneously wrote the points on the blackboard)
- 22.# S1: *We make different material.*
- 23.# S3: *Ma'am lagaane ko kya kehte hain?*
(S3 asked in Hindi - what do we call to plant)
- 24.# T: *Planted trees (wrote it on the blackboard)*
- 25.# *Speech was given.*
- 26.# S6: *We take pledge to protect our Earth.*
- 27.# T: *Yes, very good*
- 28.# *So, these are the points you have to keep in mind and write a paragraph on Earth day*
- 29.# *First thing you are going to write is when is it celebrated all over the world.*
- 30.# *And how you celebrated it?*
(Ss were carefully looking at the blackboard and copied the points in their notebooks.)
- When it is celebrated all over the world?
 - How you celebrated?
 - Planned different activities
 - Wrote poem
 - Planted trees, gave speech
 - Took pledge
- 31.# *Ok, so start writing a paragraph on Earth Day in English rough notebook.*

Excerpt 3.2.3d: Classroom interaction during English Composition class

Data Analysis

Excerpt no 3.2.3c showed that children mustered courage to move beyond a routine responses during classroom interaction, but their English teacher discouraged and instructed them to follow a set pattern. Teacher in the first part of excerpt asked the students to form question with the phrase 'I am Fine'. S7 in line number 185 made the question 'Are you fine?'. Teacher ignored his response in spite of the fact that S7's response was grammatically correct. Instead, the teacher prompted the class about the

first thing she asked them every morning, i.e., '*How are you?*' and legitimized that as a correct response. The second instance (as evident in line nos.190-196) showed that S5 tried to respond differently by formulating question in a different manner, i.e., '*In which month is your birthday?*'. S5 responded with full enthusiasm and a big smile, which faded immediately with the response of teacher who told her to 'not make a complex question and keep it simple' in line number197.

This implied that the grammar classroom did not move beyond context-embedded or cognitively undemanding language, which was supported by extra-linguistic cues, repetition, and rephrasing for providing hints to the learners to produce grammatically correct utterances. The teacher did not provide any opportunity to the learners for evolving their own understanding about the concept taught in class. There was preference for English in instructional process, despite the strong evidences for the presence of home language at meta-cognitive level, which could have been used as a pedagogical tool to scaffold learning of English. Pedagogical outcomes of grammar classroom revealed that the teacher had her established teaching and set pattern of response as legitimate, and did not provide any collaborative learning spaces for the learners.

Similarly, excerpt no.3.2.3d from the composition class showed that the teacher provided an introduction to Earth day, i.e., when and how it is celebrated nationally and internationally. Teacher opened the discussion with some basic questions, but line numbers 4-6 reveals helplessness of S1 who could not articulate his ideas in English. Teacher completely ignored the request of S1 for speaking in Hindi and continued her briefing on 'Chipko movement and the celebration of Earth Day'. Furthermore, the discrepancy between the question framed by the teacher and response given by S1 in

line numbers 13-14 confirmed that the students could not comprehend the instruction in English. Similar kind of evidence was observed in line number 23, where S3 requested assistance from teacher to translate in English. Gradually, few children participated and spoke out their ideas while others were busy in copying the content from blackboard to their notebooks. Class ended with the teacher providing the children with a format and main points written on the blackboard, which were copied by the students. When we asked the teacher if the students get same topics or an unknown topic for composition in examination, the teacher said,

‘They get topic for composition from whatever topics are done in their notebook during composition class. They cannot write a paragraph independently on their own. So selected and shortlisted topics were told them for examination, from which they get any topic for composition in the examination.’

Excerpt 3.2.3e: Informal interaction with English teacher, field notes

The grammar and composition classroom discussed above provided evidence that feedback by teacher during academic discourse was meant for making task easier for the learners rather than encouraging them to be an independent composer. The learners in classroom seemed to be enthusiastic for participation and could articulate their ideas in Hindi appropriately, but lack of proficiency in English hinders their active participation in the classroom discourse. The teacher simply provided the learners with details and explanation to be included in a composition, which were copied by the learner in their notebook. Thus, initially the teacher seemed to be a mediator who encouraged the students to engage cognitively and share their ideas. However, feedback provided by the teacher did not encourage the learners to reflect on their mistakes and to strengthen their conceptual understanding regarding the use of English language. Such feedback ultimately discourages the learners from active

and spurious participation and is usually based on a set format or hints for answers provided by the teacher. The restricted and narrow language use among learners would further impede their linguistic growth, cognitive development, and affirmation of identity.

3.3. INTERPRETATION AND DISCUSSION

As discussed in the introduction section, NCF (2005) mentioned two main goals of second language pedagogy: 1) achieving the basic proficiency, and 2) development of abstraction. Basic proficiency refers to *spontaneous and appropriate use of language for at least everyday purpose* (NCF, 2005), where a child could communicate in English in a street, market place, or neighborhood as fluently as he/she communicates in his/her home language. For second language such as English, child has to start from learning and internalizing this basic proficiency in English. Position Paper on Teaching of English (2005) argued that *within the eight years of education guaranteed to every child, it should be possible in a span of about four years to ensure Basic English language proficiency, which would include basic literacy skills of reading and writing* (5). This chapter focused on teaching of English in low cost EM school, where learners were first generation English learner with inadequate support for learning English at home. Number of excerpts from English classroom were described and were analyzed to examine the teaching of English and language proficiency attained by learners in the School LC. The description and analysis of classroom discourses were divided into two sections based on the following objectives-

1.# To examine the socio-linguistic understanding and beliefs of educators about English as a language and as a subject inform their choice of teaching–learning strategies.

2.# To examine the kind of proficiency (conversational or academic) developed in English as a result of teaching–learning strategies used by School LC.

In the first part 3.1, socio-linguistic understanding and beliefs of educators were described and analyzed to understand their perspective on the English language and its teaching. This part also described the impact of their understanding on the choice of teaching-learning strategies used in School LC. Second part 3.2, focused on the teacher-student interaction to examine the nature of academic proficiency developed in the English classroom. The second section analyzed the extent to which instruction in the English classroom explicitly focused on meaning, language, and language use, as required for the development of academic proficiency.

1.# Teachers addressed the teaching learning strategies at individual level, but could not challenge the ongoing practices at the collective level.

The socio-linguistic understanding of educators of English and the manner in which it informed their choice of teaching–learning strategies was examined. This was necessary to understand the extent of coherence between their understanding of English as a language and the respective methods adopted for the development of academic proficiency in English. It also reflected on the tensions emerged as a result of the difference between the linguistic understanding of educator and the practical demands of English language classroom, where majority of the learners were Hindi speakers. It was found that educators considered that English has instrumental value

and superior status in the society. In the opinion of the educators, the instrumental value of English emerged due to the associated economic benefits such as *international language, good salary, white collars jobs*, etc. The classroom of School LC was found to be diglossic because of the presence of English and Hindi, however, the position of these two languages kept shifting during the negotiation of teaching–learning strategies that were followed by the educators. The understanding of principal on English language informs us that she focuses on the prioritization of English and exclusion of Hindi from the norms and activities planned and implemented in School LC. Thus, at the macro level, the preference of English in the school curriculum and activities positioned it as high variety language and relegated Hindi to the low variety of language in this diglossic context of School LC. At micro level, despite Hindi being frequently included in the interaction between student–teacher in the classroom, Hindi tends to be positioned under low variety of language because it is confined to interpersonal communication and is not used for academic discourse. This further reinforces hegemonic position of English in the linguistic hierarchy existing in the society.

Linguistic understanding of educators about English and teaching of language is found to be consistent with Separate Underlying Proficiency (SUP) model of bilingual proficiency. The principal of school LC, who has authority over school curriculum, believed that the inclusion of home language would interfere with the learning of English. Although she was aware that the learners had limited facilities to support learning of English at home, still she insisted on imposing ‘English’ as the only medium of instruction in school. She assumed it to be a direct link between the amount of exposure to English in school and academic achievement in English,

because she did not see any mutual engagement or interaction among different languages during the learning process. Separate underlying proficiency (SUP) assumed that skills and content learned through the primary language do not transfer to the second language (Diaz-Rico & Weed, 2010). However, academic advocates of bilingual education have consistently argued for the *enrichment (or two way) of bilingual programs that promote biliteracy for all children, regardless of language background* (Collier, 1995; Fishman, 1976; Lambert, 1975; Swain, 1979; Cummins, 2001), which is supported by Common Underlying principle (CUP).

It was found that English teacher also believed that the maximum exposure of English leads to maximum learning in English, despite knowing the linguistic background of the learners, which was primarily Hindi. The learners were fluent in spoken Hindi, but the school did not allow Hindi to be used or included during classroom teaching. Contrary to this, the learners had limited exposure of English at home and thus, had difficulty in understanding the basic spoken English, but the school imposed compulsory use of English for classroom teaching. Knowing that Hindi is the home language of majority of the learners, English teacher frequently included Hindi during classroom interaction to deal with the tensions emerged because of the language-disadvantaged position of the learners. She used ‘English only’ instruction only during supervision checks of classroom teaching conducted by the head of the department or principal of the school. It was also observed that English teacher adhered to English for communication in the presence of an authority.

One of the main problems faced by English teacher, even after frequent use of Hindi during classroom teaching, was that she could not facilitate conversational fluency among the learners. It was found that she successfully delivered the message

or meaning of the content taught in English classroom, but she could not use Hindi as a pedagogic resource to facilitate an academic discourse. We found that there was lack of theoretical understanding about the second language acquisition processes among teachers. The linguistic understanding of educators for the development of academic language proficiency in English was based on the SUP model of bilingual proficiency. Instead of linguistic and pedagogical principles, the teaching–learning strategies employed by the English teacher were based on the practical demands of the language classroom to deal with the language-disadvantaged position of the learners. As a result, English language teacher was not able to use home language for scaffolding the process of language learning and for developing the academic language proficiency in English. Teacher could not move beyond meaning of the content given in the text, making an English language classroom not very different from a non-language subject classroom. To conclude, the English teacher tried to make negotiations at individual level to accommodate the linguistic disadvantaged position of the learners, but she did not challenge the status quo of the institution at the collective level. Next finding provides the detailed discussion on the nature of proficiency (conversational or academic) developed through use of different teaching–learning strategies, which predominantly include Hindi for comprehension.

2.# Learner developed limited conversational skills in English because classroom communication was dominated by interpersonal and situational cues, instead of language itself.

Cummins (2001) suggested that communication during *any academic task should ideally progress from context-embedded to context-reduced*. He further argued that

cognitive challenge is essential for academic growth but internal and external contextual support necessary for bilingual student to meet that challenge must also be built into activities (pp.71). This implies that a teacher must consider and provide both internal and external contextual support for development of language.

Internal contextual support refers to the attributes of the individual that makes a task more familiar or easier in some respect (e.g., prior experience, cultural relevance, motivation, interests, etc.). Cummins argued that *prior knowledge represents one central aspect of what student brings to the learning situation that makes input more context-embedded and comprehensible. It is important to activate student's prior knowledge because students may not explicitly realize what they know about a particular topic or issue; consequently, their prior knowledge may not facilitate learning unless it is brought to consciousness* (2001:125). Thus, activating prior knowledge was necessary to develop conscious awareness about '*what to learn*', which further determine the interest and motivation of learner. Analysis of English classroom provided number of evidences that teacher either ignored activating the previous knowledge or did it in a very superficial manner. As a consequence, majority of children remained aloof from '*what to learn or what they were learning*'. This 'aloofness' from 'what to learn/learning' was discussed in the theme 3.2.1b which revealed that the social context of learning remained unexplored resulting in passive participation of learners.

This 'aloofness' regarding 'what to learn/learning' was also evident in other classes of English such as grammar, composition, poetry etc. However, reading class was described and discussed because research studies provide strong reciprocal relationship between prior knowledge and reading comprehensibility. Pearson (1994)

suggests that *the more one already knows, the more one comprehends; and the more one comprehends, the more one learns new knowledge to enable comprehension of even greater array of topics and texts* (p.62). Reading in School L was confined to routine story narration where teaching learning strategies did not focus on meaning/message implicit in the text. Reading session could not create a collaborative learning context because teacher did not provide any opportunity for children to connect with the text, share their experiences, and participate in the meaning making process. In order to expand reading to a cultural activity, one needs to infer similarities and differences between one's own culture and the culture of the text implicit in the vocabulary and context of the reading material.

In the absence of any connection between the text and prior knowledge of learner, academic activity could not be expanded to a cultural activity in the English classroom at School L. Moreover, teacher and children were well aware of the fact that these reading classes were not evaluative, which limited their interest and motivation to extend the reading period beyond a story narration session. Various research studies further provide the support for the activation of prior knowledge and academic progress (Spires & Donley, 1998; Chamot, 1998). While explaining the importance of reading for language and language learning, NCF also (2005) emphasized that *'opportunities for individualized reading needs to be built at all stages in order to promote a culture of reading, and teacher must set the example of being member of such a culture'* (pp.41). Research studies show that *individualized reading* was constituted to develop interest, enhance reading skills, promotes self-selection of book, check students' progress orally, maintaining their records of deficiencies and development (Bett, 1973; Taylor, 1974; Evans 1962).

Cursive writing classroom also provided the evidences that classroom activity was narrowed down to a mechanical task of merely copying and practice writing in their notebooks. Although cursive writing was introduced in grade III, there was no change in instructional goals over the grades. Pedagogic practices in composition class revealed lack of *primary knowledge of language* (Position paper on teaching of English, 2005:11) among learners who struggled helplessly for comprehension and composing sentences in the composition class. The absence of prior knowledge and cultural relevance of the content deteriorated the motivation and interest among learners, providing inadequate internal contextual support for language learning.

External contextual support refers to the aspects of the input that facilitate or impede the comprehension. During language learning, the instructional input should necessarily be precise and focus on considerable amount of syntactic and semantic features. As discussed in theme 3.2.1(c) in detail, input provided during teaching of English at School L did not provide opportunities to go beyond the literal comprehension and access the implicit meaning/ message. Research provides strong evidence that extensive reading in the second language can be highly effective in promoting second language proficiency (Elley, 1991; Krashen, 1993; Cummins, 2001) but the input provided during reading plays very crucial role. Krashen (1981) argued for *comprehensible input*, which comprised of '*little beyond what learner already knows*'. Contrary to this, Input provided by teacher does not help the learner to access or move beyond the existing vocabulary, lexical, and semantic knowledge of the learner. Instructional input did not highlight idiomatic expression, cultural context, key words, and theme of the existing story.

English classrooms were found to be more teacher dominant and interpersonal

cues such as pauses, changes in tone, voice or loudness etc., focused on retaining the attention of learner towards facts or details provided in the text. These interpersonal and situational cues did not attempt to focus on the semantic, phonology, syntactic and lexical aspects of language. For example, in literature or reading class, text was simply read aloud and explained by teacher in English, making it difficult for children to comprehend and participate actively in reading session. Bolos (2012) warns *against simply reading the text to the students because they are learning to read* and argues for an instructional plan that could comprise of reading strategies, fluent reading, and careful comprehension (p.15). Research suggested that the teacher needs to make predetermined stops throughout reading, which further provides the comprehension checks for learner (Bolos, 2012; Chen & Mora-Florres, 2006; Freeman & Freeman, 2006).

Similarly, the cursive writing classroom discussed in theme 3.2.1(d), did not provide any evidence of explicit instruction given by teacher regarding the purpose and process of cursive writing to children. Research studies showed that there has to be a balance of explicit skills instruction and a strong meaningful language-learning environment for literacy acquisition (Adams 1990; Snow, Burns and Griffin 1998; Stanovich 2000). Instructions provided by teacher in the cursive writing classroom were found to lack a focus on the general and specific goals, making it no different from everyday discourse.

The teaching learning strategies employed in teaching of English were found to lack the internal and external contextual support for learning of English. Learner showed lack of motivation and interest for learning of English because teaching learning strategies did not established any socio-cultural connection between learner

and language content. The external contextual support, which largely constitutes comprehensible input, did not focus on linguistic aspects, making it inadequate for language learning. The inputs provided by teacher, in the form of instruction or feedback, did not help the learner to move beyond the literal comprehension of the taught content. *Considering the classroom discourse did not have required internal and external contextual support for language learning, teaching of English as a language subject in school LC was found to be more context-embedded.*

Cognitively demanding- cognitively undemanding is the second continuum of academic language proficiency. Cummins (2001) emphasized that *mastery of academic functions of language is a formidable task, which requires high levels of cognitive involvement for successful completion of the task.* Cognitive engagement for the development of academic language proficiency requires moving beyond merely comprehending and producing grammatically correct oral and written utterances, which was traditional approach of language teaching. Teaching of English at School LC showed that it follows traditional approach of language teaching where English curriculum was further categorized in six different sub-sections, namely literature, poetry, grammar, writing, composition, and reading, and each of the sub-section was taught separately without drawing any linguistic linkage among them.

It was evident from theme 3.2.2(a) that the instruction by teacher did not aim at developing decoding skills and semantic agility required for developing comprehension of text among learners. The instruction by teacher during the classroom discourse did not go beyond the literal meaning of oral or written utterances, it did not facilitate the meaningful engagement of the learners. Research

evidence suggests that the development of comprehension is best promoted by a broadly based program that combines *extensive exposure to meaningful and varied texts with instruction that encourages students to develop effective learning strategies for both decoding and comprehending text (metacognitive and metalinguistic awareness)* (Cunningham, 1990;; Iverson & Tuner, 1993; Miniz-Swicegood, 1994; Tunmer & Chapman, 1999). The impermeable boundaries of sub-categories of English confined the classroom interaction to mere elaboration, summarization, and delivery of the information required for passing the examination.

There was also evidence that teacher legitimizes her interpretation or the interpretation given in the text as legitimate and forces the learner to follow the given format. Such findings are not attuned to the principles of teaching and learning outlined by whole language theory, which emphasize meaning centered and student centered curriculum and instruction. Meaning centered curriculum and instruction argues that oral and written language should be purposeful, functional, and real (Rigg, 1991). Student centered means building the curriculum with and for the students (Numan, 1988). A look into English language classroom in school LC shows that both instruction and curriculum was educator dominant where educator (which also involves principle) decides the textbooks and academic activities and learners had to follow it silently. Reading, poetry, and cursive writing classes in School LC were not evaluated and it did not provide any space to learner to engage with the curriculum in meaningful and real way. It was found that without explicit instruction to learners for developing decoding and comprehension skills, the teaching remain confined to the mechanical and ritualized academic activity.

Cummins (2001) argued that *from the perspective of cognition, active*

language use and the social interaction through language use is crucial for intellectual development both in home and school. Cognitive and linguistic growth are seriously impeded when students are confined to passive roles within the classroom (143). As evident in the theme 3.2.1a, teacher did not bother to establish the link between the prior knowledge of the learner and the language content being taught. The learner could neither ascertain the academic relevance nor could s/he understand the meaning implicit in the text that was taught. In addition, the home language of learner was kept away and English was strictly imposed upon learner for communication during academic discourse. The cumulative effect of the imposed instruction and curriculum results in passive participation of learner, where linguistic tools of the learner largely become automatized and monotonous, and which require little active cognitive involvement for appropriate performance. *The teaching learning strategies employed in teaching of English did not provide sufficient opportunities to engage learner cognitively, resulting in inadequate academic proficiency of English.*

Cummins (2001) defined academic language proficiency as “*the ability to make complex meaning explicit in oral or written modalities by means of language itself rather than by means of contextual or paralinguistic cues (e.g., gestures, intonations etc.)*” (p70). Above discussion revealed that interpersonal cues such as facial gestures, shifts in intonation, volume and tone, pauses etc., were found to be used by teacher to facilitate the meaning of the content during teaching of English in School LC. This resulted in development of limited grammar and phonological aspects among learners. Cummins (2001) referred this kind of language proficiency as *discrete skills*, which is argued to be developed simultaneously along with the development of conversational proficiency, where a learner focuses more on

phonological and decoding aspects of language such as sounds, letters, alphabets, and decoding words into appropriate sounds. Therefore, it was concluded that teaching of English developed limited conversational proficiency among learners because of classroom communication was dominated by interpersonal and situational cues, instead of language itself.

3. Perceived illegitimacy of code-switching as a strategy for teaching English and development of poor conversational proficiency in English

Learners in school LC were the first generation English learners with limited exposure and facilities for learning of English at home. Learners were the residents of semi-urban locality of Delhi, which largely comprised of population from Haryana, hence, home language of majority of the students, was Haryanvi Hindi. Learners entered the school with Haryanvi Hindi as their inherited language but gradually shifted to standard Hindi taught at school. English in School LC was introduced as a subject as well as the medium of instruction from grade I. Inadequacy of support and exposure for ‘learning English’ or ‘learning through English’ is usually compensated by private tuition at home. As evident from learner’s profile, these private tuitions were usually taken for English, mathematics, and science. This section will look into the manner in which the teaching–learning strategies or linguistic behavior (such as linguistic interference, code-switching, translation etc.,) succeed in the development of academic language proficiency in English.

The analysis of the linguistic understanding of educators (which includes principal and teachers) provided evidence that educators strongly believed in the

instrumental value of English and promoted ‘early and maximum exposure’ for learning of English. Such assumptions emerged from the underlying misconception that there is no significant difference in learning L1 and L2. For educators, learning English did not differ significantly from learning Hindi. It is necessary to understand that when the learners were exposed to English as language from primary grades, they require at least two years for developing conversational proficiency and at least five to seven years for developing academic proficiency (Cummins, 1986; 2001). Educators at School LC ignored that English language learners would require sufficient time to acquire and demonstrate academic literacy, as Cruz (2004) asserted that “*English language learner needs extra time to negotiate the task embedded in an argument and their thinking in English. Recognizing that English language learner may not demonstrate competency today but is in the process of acquiring proficiency is the key*” (pp.15).

Research studies (Krashen, 1985; Long, 1985b; Snow, 1977; Vygotsky, 1978) argued that the acquisition of L1 and L2 appeared to be developmental in nature, but input and interaction, which were the central components for language acquisition, needed to be meaningful for the learner and his or her learning context. Curriculum of English was categorized and taught under six different sub-categories, namely, literature, grammar, composition, poetry, reading, and cursive writing, to provide maximum exposure for the enhancement of learning English. However, the analysis of these sub-categorized classrooms showed that the mere exposure of English from the earliest possible stage did not facilitate language acquisition because language acquisition required meaningful comprehensible input and interaction. Teachers in School LC did not focus on the prior knowledge of the learners. Therefore, the

embedded meaning in the text remained limited to the literal phase of language learning, where the meaning or information underlying content was delivered but could not move beyond academic discourse to develop critical literacy skills among learners. Van Patten (1990, 1993) argued that English language learner often required conscious attention to grammatical, morphological, and phonological aspects as well as to the relationship between the forms and the function of the target language. Evidences for the absence of this kind of conscious attention towards the various aspects of language during academic discourse were analyzed and discussed in the data analysis section

Additionally, educators restricted the learner from using home language during academic discourse. This narrowed down the participation of learner to passive mode because learners had limited proficiency in English. Harper & Jong (2004) asserted that “*exposure and interaction are simply not enough. ELL need explicit opportunities to practice using the new language to negotiate meaning in interactive session*” (pp.48). This implied that the learners must be provided with explicit opportunities for language use. However, the restricted use of home language and compulsion to speak in English only confines the ‘opportunity for language use’ to ‘ritualized and mechanical task’. Educators at the School LC assumed that the use of home language would hamper the learning of English, although teachers occasionally used translation of English text to Hindi for explanation and comprehension of the learners. The teacher did not provide corrective feedback and misinterpreted the use of code-switching by learners as ‘errors’ during language use because of their limited understanding of language pedagogy. A number of research studies reported that there was a common mistake in learning L2. Linguistic processes such as interlanguage

(Selinker, 1972), developmental progressions (Harper & Jong, 2004), code-switching (Richie & Bhatia, 2004) etc., are normal course of learning L2, however, such linguistic processes are usually considered as linguistic error by the monolingual speakers. Harper & Jong (2004) further asserted that the failure to understand the learner's error happens because of the limited knowledge of the structure of English and teacher's own experiences of L2 learning.

Two major findings regarding this issue from the School LC were that 1) imposed the set format for responding in class by discouraging the learners from active participation; and 2) the predominant use of Hindi as a tool to deliver the information underlying the content, rather than as a pedagogic tool for facilitating learning of English. In addition to this, the teacher herself switch to translation, use of home language, code-switching or mixing in a secretive manner by hiding it from higher authorities of the school, but restricts the learners from adopting such strategies.

Some of the previous Indian studies in similar context show that school policies impose use of English during academic discourse for teachers and students, but teachers resist such policies and negotiate the linguistic mismatch between home language and school language (Ramanathan, 2005; Mohanty, Panda & Pal, 2010). However, this study went a step further and looked into everyday pedagogic negotiations from academic perspective. It was concluded that such negotiations help the learner to achieve limited conversational proficiency in English, which is required for passing of an examination, but could not develop critical literacy or meta-cognitive skills. Usually, this limited proficiency is mistaken for academic proficiency in English. It was argued that the social language (Harper & Jong, 2004) or

conversational language (Cummins, 1981a) quickly adopted by English language learners is often misconstrued for the proficiency in academic language, as is evident in the case of School LC.

Summary of the Chapter

This chapter provided excerpts from English language classroom to examine the nature of language proficiency (conversational or academic) developed in School LC. This chapter is divided into three parts. First part 3.1, described the socio-linguistic understanding and belief of educators about English as a subject and its impact on choice of teaching–learning used during teaching of English. It was found that educators shared similar kind of socio-linguistic understanding about English language. It was believed that English has instrumental value and early immersion and maximum exposure was a preferred way of developing academic language proficiency in English. However, English teacher was occasionally found to resist the mandated use of English and include Hindi for teaching of English. English teacher decided to use translation, code-switching, and explanation in Hindi while teaching English knowing the linguistic background of the learners.

Second part 3.2 focused on development of Academic language proficiency in English in grade V. This part was further divided into three sub-parts i.e., focus on meaning, focus on language and focus on language use. In part no. 3.2a, Instances from literature and poetry classroom were discussed, which provides evidence about the fact that the teachers usually skipped the checking prior knowledge on the pretext of shortage of time. . Teacher showed lack of importance towards prior knowledge as

according to their prior knowledge constituted recalling the facts known about the text by the learner. Input provided by the teacher was confined to providing the information given in the text, which is not facilitated by the development of critical literacy. Similar patterns were observed in the teaching of grammar and composition.

Second sub-part 3.2b, focus on language examined the extent to which the classroom interaction explicitly focused on language and development of critical language awareness among learners. Excerpts from literature, grammar, and poetry classrooms were discussed which provided evidence about the classroom interactions that could not move beyond the literal meaning of the text. Classroom interactions were full of repetition after teacher, monolingual replies, elaborated translation of the text, etc. However, these interactions did not focus on developing formal aspect of language such as decoding skills, vocabulary expansion, idiomatic expressions, etc. The nature of instruction and feedback provided by the teacher to the learners did not engage the learners cognitively and remain confined to the context embedded communication. Furthermore, teacher used translation in teaching of English literature, so that children could understand the text and learn the language. However, the manner in which the translation of English text to Hindi was done implied that the translation was meant as a tool to explain and summarize the meaning to learners. It was not used as a pedagogic tool for explaining and elaborating the meaning, thereby, scaffolding language learning. Therefore, the evidence discussed in this section outlined that teacher interaction did not move beyond the literal meaning and limited formal aspect of language, which was necessary for performing the examination.

Third sub-part 3.2c, we discussed the extent to which classroom interaction explicitly focused on language use and provided opportunity to learners for

interpreting and producing oral and written utterances independently, which would further strengthen their personal and linguistic affiliation with the language. Excerpts from only composition and grammar classes were discussed because these were meant specifically for developing the language production skills among learners. Restriction for the learners to speak in ‘English Only’ by the teacher resulted in single-word, collective responses by the learners during classroom participation. Furthermore, the teacher did not provide appropriate corrective feedback to the learners and forced them to use the format taught by her for language production. This held back the active and authentic participation of learners in classroom discourse.

Part 3.3 discussed the finding from the theoretical perspective of this research to conclude the nature of academic proficiency achieved by the learners in English. It was concluded that a) teachers addressed the teaching learning strategies at individual level, but could not challenge the ongoing practices at the collective level, b) learner developed limited conversational skills in English because classroom communication was dominated by interpersonal and situational cues, instead of language itself, c) Perceived illegitimacy of code-switching as a strategy for teaching English and development of poor conversational proficiency in English

CHAPTER 4

ENGLISH AS MEDIUM OF INSTRUCTION IN SCHOOL LC

In the previous chapter, teaching of English as a subject in School LC was analyzed. It was evident that English language teachers resisted the school mandated use of English language as a medium of instruction at an informal level and frequently used home language—Hindi—for making linguistic input comprehensible for the learners in the class. One of the key findings was the inclusion of home language could not facilitate adequately either the development of basic interpersonal skill in English nor of the academic proficiency in English. Because the teachers had limited understanding of the psycholinguistic processes underlying second language acquisition in a multilingual class where learners had limited support for the second language at home. English teachers frequently used code-switching or translation of English text in Hindi during classroom interaction for basic interpersonal communication and for explanation of a phenomenon. They could not optimize the use of children's home language as a pedagogic resource for the development of cognitive and academic linguistic proficiency among students in English.

In formal spaces, code-switching and translation was considered as linguistic error rather than as normal linguistic behavior among bi/multilingual children. The teachers therefore felt little diffident in admitting use of Hindi in English language class. As shown by the analysis of classroom conversations, the students initially operated at lexical level while communicating in English in the classroom. When they were coaxed to speak in sentential form, they brought in the action words without arranging them in SVO order. This could have been fixed by helping students hear

enough English sentences along with Hindi sentences so that the students easily crack the SVO order of English and notice the difference between Hindi and English syntax. The data shows a delay in cracking the syntax of English partly because the teachers never took the advantage of a good bilingual pedagogy in the class. Speaking in Hindi in English class was always seen as a weakness, a temporary solution to the linguistic context of the students in the school LC. This led to failure of generating enough metalinguistic resources for the students to quickly notice the difference in the syntactic structure of the two languages. The role of home language is very important in expanding the innate linguistic capacities of the learner to continue the dialogue and also get an opportunity to acquire the second language with a good level of proficiency. The inability to use children's home language as an opportunity and as a pedagogical tool leads to poor development of English language proficiency.

The focus of the present chapter is to understand the manner in which language is negotiated in the mathematics and science class where many semiotic resources other than English are as mediational tools. This chapter aims to address the following research questions:

- 1.# How does the socio-linguistic understanding of students and the disciplines by the teachers inform their language use policies in Science and mathematics class?
- 2.# How does the linguistic proficiency in English influence teaching and learning of other subjects, like mathematics and science, in a class where English is used as medium of instruction?

OUTLINE OF THE CHAPTER

This chapter is arranged in three sections: First part develops an analytical account of the socio-linguistic understanding of the educators—principal and subject teachers—and examines their choice of language medium of instruction and strategies for teaching of science and mathematics in School LC. The second part describes mathematics and science classrooms in School LC and discusses the extent to which the development of academic language proficiency in English is critical for teaching and learning of mathematics and science in School LC. The third part interprets and discusses the findings of this study in light of the theoretical framework adopted for this study.

4.1 SOCIO-LINGUISTIC UNDERSTANDING OF THE EDUCATORS AND THEIR CHOICE OF MEDIUM OF INSTRUCTION IN MATHEMATICS AND SCIENCE CLASS WITH LIMITED CONVERSATIONAL SKILLS AMONG STUDENTS IN ENGLISH

This part will focus on the socio-linguistic understanding of educators—both the principal and the respective subject teachers—about *English as a medium of instruction* for teaching science and mathematics. An attempt is made to examine the influence of socio-linguistic understanding of educators about their choice of teaching–learning strategies for teaching mathematics and science in School LC. More importantly, it was necessary to examine the ways in which teachers dealt with limited conversational proficiency developed in learners, as has been described and discussed in the previous chapter.

a.# English was a preferred medium of instruction because of its instrumental value

Mathematics and Science involves decontextualized, scientific, and technical registers in comparison to language and social sciences. Certain extent of linguistic proficiency is must in the language which is used as the medium of instruction for teaching these subjects. This section, therefore, will examine the understanding of educators with regard to the ‘medium of instruction’. The interview of principal, science, and mathematics teachers was conducted separately, which is presented here in the excerpt form. We asked the educators about their opinion on preferred medium of instruction in school and the reason behind their preference.

P: I think, definitely, it should be English because ***it’s in demand and is necessary for higher education and well paid jobs.*** It is a language which is also required if you want to ***study or work abroad.*** ***English medium education is what parents aspire for their children in the today’s world.***

S: English because if you go anywhere, ***everyone talks in English.*** If you will not speak in English, then you will ***not be confident.*** So, one has to be proficient in spoken English at least, ***but personally, I feel that we are much more comfortable and proficient while communicating in Hindi as compare to English.***

M: I think the medium of instruction should be ***a language in which a child is comfortable and fluent.*** However, I feel English is more preferred as the medium of instruction because it a ***common language*** and essentially ***required for higher education.*** Moreover, we are not giving any personal preference to any one

Indian language over other Indian languages.

Excerpt 4.1a: Interview of Educators about the preferred Medium of Instruction

Data Analysis

From the above excerpt, it was evident that educators considered English as the medium of instruction for a number of reasons such as ‘*higher demand for*

English, *'English global language'(if you go anywhere)*, *'common language'*, *'well paid jobs'*, etc., which further confirmed the instrumental value and hegemony of English, which was discussed in the previous chapter. There were three important findings that are evident from the above excerpts. First, both science and mathematics teachers admitted that the ideal medium of instruction is the one in which the *child is more comfortable and proficient*. Thus, logically the medium of instruction for learners at School LC should have been Hindi because Hindi was their home language, in which they could communicate proficiently. Second, there seemed to be contradictions between ideal medium of instruction and preferred medium of instruction. The ideal medium of instruction was based on integrative demand, whereas the preferred medium of instruction was based on instrumental demand. Third, the opinion of both the teachers revealed interconnectedness between their own personal experience and their preferred choice of medium of instruction. Science teacher admitted that personally she preferred Hindi as the language of communication because she is comfortable and proficient in Hindi. A deeper interrogation of the personal and classroom interaction revealed the lack of proficiency of science teacher in English language. Home language and language of communication of science teacher was Hindi, therefore, she personally felt that Hindi could be used as the medium of instruction. However, the home language of mathematics teacher is Tamil, and English is her language of communication within the community, therefore, she said that *'English is more preferred as the medium of instruction because it a common language'*. The personal preference of science and mathematics teachers about English and Hindi also showed a reflection of linguistic assertion happened in various historical debates and movement across north and south India.

b.#Educators were aware of the difference between the linguistic background of learner and the linguistic demand of the curriculum.

Researcher inquired the educators regarding the linguistic background of learners to examine the extent to which they were aware about the exposure of English and Hindi at the home of learners.

P: *I know that children to our school come from **lesser educated** families where they had **lesser exposure and facilities** for academic development. Usually, these **children take tuition** to support the school education. However, in school, we have to **make extra effort for teaching English** to children because **parents can't communicate in English***

S: *Children are from **Hindi medium background**. Ask them about the name of newspapers; it will be a Hindi newspaper. They watch **Hindi debut version of Hollywood movies and cartoons**. So, they know all the characters, but would narrate the storyline fluently in Hindi.*

M: *Children have **limited support for learning English** and other subjects at home because their parents are not educated. Parents of these children either own small grocery shops or are employed in meagre jobs with limited salaries. They all come from **Hindi speaking families**, where **nobody speaks English at home**. Parents look for **good tutors for teaching English language**.*

Excerpt 4.1b: Interview of Teachers about Linguistic Background of Learners

Data Analysis

From the above table, it was evident that the educators were aware about the extent of exposure and availability of English and Hindi in the home of learners. It was reported that learners had limited exposure of English at home such as *lesser exposure and facilities, parents can't communicate in English, limited support for learning English, nobody speaks English at home*. It was also confirmed that the learners in School LC were from *Hindi speaking families*, who predominantly relied on *good tutors or tuitions* for learning of English. Moreover, the

availability of cable or internet has extended the facilities of Hollywood movies or cartoons, but the learners watch the Hindi version because they could not comprehend English. Despite the well-known linguistic variability of the learner at home, the school strictly imposed use of English as the medium of instruction.

Exposure is definitely an integral part of learning, however, the exposure of input has to be meaningful and motivational enough for the learner. It was evident from the discussion in the previous chapter that teaching of English in School LC could develop limited conversational proficiency in English among the learners despite enormous exposure of English in different ways. Because the input provided to learner, in written or oral form, was neither comprehensible (both at syntactic and semantic level) nor motivational enough for the learners to invest their energy in learning English. The learning of English as an imposed language with little socio-cognitive involvement of the learner raises pedagogical concerns for using such ‘imposed and inadequately learned English’ as the medium of instruction to teach science and mathematics. Some of the problems in learning of science and mathematics due to the use of English as the medium of instruction were explicitly explained by teachers of both the subjects, respectively in the following excerpts. We further asked the mathematics and science teachers about the linguistic requirement of the curriculum, they reported that

S: *It is purely English. It's an English medium school, so school imposed strict use of English only instruction in classroom. Their textbooks are in English and most important is that they have to give examination in English.*

M: *Earlier we used to teach in English and Hindi, but now we are strictly instructed to teach in English only. Principal do supervision checks and make sure that teachers do not speak in Hindi. So, everyone speaks in*

English in her presence.

Excerpt no. 4.1.c: Mathematics and Science teacher on language demand of curriculum

It was found from the above excerpts that English is the official medium of instruction. School authorities impose strict use of *English as the medium instruction*. It was also reported that the principal supervise the classroom teaching to check the ways in which teachers were communicating with learner in School LC. It was observed that teachers were often found to be complaining about the strict use of English as the medium of instruction for the learners, who could not understand, speak or write English independently. However, teachers felt helpless at times because even if they use Hindi for the development of comprehending abilities among the learners during academic discourse, the learners were to write their examination in English. Teachers encounter tensions because of the difference between the linguistic background of the learners, who were proficient in Hindi and the linguistic demand of curriculum, which required language proficiency in English. Next theme will elaborate on the manner in which teachers dealt with the aforementioned tensions during academic discourse.

c.# Teachers used Hindi to negotiate the linguistic mismatch between the home language and school language.

Educators were inquired about the various problem encountered by teachers during classroom teaching to understand the impact of *English only* as the medium of instruction for learners.

Q. Do you encounter any problems while using English as the medium of instruction during classroom teaching? Please elaborate.

M: *Children do find it **difficult to ask questions in English**, but we motivate them to speak in English without bothering about grammatical mistakes. Gradually, children get confident about speaking in English. See, their home environment is different from school, at home some of them speak Haryanavi Hindi only, so they find it difficult to speak in English.*

*During teaching, we **speak in English, their books are in English**, so they have to learn in English. But there are times when we **have to use Hindi**, especially when we have to **explain them the minute details or differences in the concept**. For example, I have to explain them the difference between 'each' and 'all' in Hindi.*

S: *Sometimes inability to speak in English cut down the questioning ability of the children, however, that also depends on the teacher. If teachers cooperate and patiently work with children, they will gradually learn English.*

Excerpt 4.1d: Interview of mathematics and science teachers

The analysis of the above excerpt showed that English posed learning difficulties for the students in some subjects mainly science and mathematics because the learners were not proficient enough in English to comprehend and respond independently. As discussed in the previous theme, the curriculum demands development of academic language proficiency in English, whereas, learners were found to have developed conversational fluency in Hindi. Therefore, it is crucial to understand the different kinds of learning difficulties that are faced by learner in the learning of mathematical and scientific concepts and the ways in which the subject teachers tackle those learning difficulties. As mentioned explicitly by teacher in the excerpt given below that '*its language that creates problem*', it was evident that the teacher of science and mathematics had to deal with teaching learning difficulties when English was used as the medium of instruction. Such problems in the learning of scientific and mathematical concepts were negotiated by the teacher in the following manner:

Q. How do you explain a mathematical concept to children, when they do not understand in English?

M: *Definitely mathematics is numerical, so doesn't need interpretation. In sentence form, they get confused and sometimes don't get the meaning, although they can interpret the meaning by guessing the key terms. For example, if I ask how much left? So the term 'left' signifies 'balance'. Similarly, when a question says 'each' child, so the term 'each' means 'one'. Thus, in similar manner, children learn to pick the main terms and remember their meaning. Actually, they identify certain terms for all the mathematical concepts. For example, for addition, they look for the terms like 'total', 'sum', 'together'; for subtraction, they look for terms like 'left', 'how much', 'difference' and for multiplication, they look for terms like 'product' are used. In multiplication questions, we say what is the product? So children know that they have to do multiplication. Division involves dividend, quotient, and divisor, so these terms imply that the problem needs to be solved through the concept of division. They can do easily if questions are given in direct form like addition, subtraction, multiplication, etc. However, in sentence form, they find it difficult to understand in English. So, it's the language that creates problem for them.*

Q. How do you explain a scientific concept to children, when they do not understand in English?

I often face such situation where children do not understand if communicated in English. Then I speak in Hindi, dheere sheere expain kijiye Hindi m, then use English for the same. So, I use both English and Hindi simultaneously to show the connection between the meaning of keywords in English and Hindi, so that children understand the meaning of those terms. Then definitely they will be able to understand and fir dheere dheere karke samjhaa denge, after sometime they will be able to understand.

Excerpt 4.1e: Interview of mathematics and science teachers

In the above excerpt, science and mathematics teachers explained their instructional strategies to tackle the academic challenges occurring due to limited conversational proficiency in English among the learners. One common strategy is to use Hindi to explain the key terms in their respective subjects. Mathematics constituted numerical, formula and calculation, which could be managed with the teaching strategy explained by the teacher where she explained the key terms and minute details in Hindi. Mathematics teacher also provided maximum possible synonyms in Hindi for the key terms, so that the learners would recognize the key terms and solve the problem as per the associated mathematical operation. The

learners managed to solve the problem by making questions based on simple sentence locating the key terms in the question. However, the same was not possible in science which constituted of scientific explanation to be written in descriptive and elaborated manner. Science was taught using Hindi during code-switching or translation, which proved helpful enough to explain the scientific concept using everyday language of the learner. However, assignments and examinations were conducted in English, so the learners usually memorize the content for passing an examination. It was observed that teacher understood the linguistic requirement of learners and used Hindi to pull off an academic discourse in the classroom, but it could not help the learners because they were to write examination in English.

d.# Use of models and visual artefacts compensating for face-to-face communication for Science and Mathematics Teaching

The physical spaces of any institute represent the underlying ideologies and the assumed targets to be achieved. Crang and Thrift (1999) asserted that school spaces are not inert containers or backdrop to curriculum processes, they are active processes that are understood and experienced in multiple ways (p.3). Judson further argued that school spaces—as diverse as spatial experience itself—are processes of social construction that are actively formed from the interaction between individuals and their environments. This section will examine the institutional spaces for examining whether all subjects, including English and Hindi, were given adequate space in the institution or whether there was any preference for particular subject(s). Principal of the School LC told the researcher,

We believe that all the subjects are important equally and require equal attention. We have science lab and very good science teacher. Besides this, for primary classes, we have mathematic lab, so that children learn the mathematical concepts in an innovative and easier manner through various activities. Their mathematics teacher is very enthusiastic and ardent teacher, who focuses on the in-depth understanding of mathematical concepts.

Excerpt 4.1f: Interview of Principal

However, when we looked around the school premises, we found striking differences between the principal opinion on *equal importance of all subjects*. Following images related to the display of concepts were captured inside the school premises.





Picture 4.1: Different location in School LC decorated with mathematical concepts

These photographs showed that different mathematical concepts were found to be painted throughout school. Stairs were marked with ascending and descending counting, corner of the doors were painted with angels and mathematical quizzes, diagrams, etc., were painted on the wall as shown in the pictures. There was mathematical game, named as ‘Magical number’ painted on the wall, which showed that addition of the number in the boxes in any direction would result in same number. As far as science was concerned, there was not a single diagram or material found to be on display inside the school premises. School LC has Physics, Chemistry, and Biology Lab, but that was accessible to students from class IXth onwards, who were to conduct practical as compulsory part of the science curriculum. There was no room for science activity for primary classes.

The access of display of mathematical concepts as compare to other subjects clearly marked the underlying preference for mathematics as compare to other

subjects. The mathematics teacher spoke English fluently, but her Hindi was weak, hence, she spoke with limited accent and vocabulary. She had been teaching mathematics to elementary grade in School LC for last ten years and seemed to share rapport of ‘*a good and lenient teacher*’ among the learners. She felt pride in explaining about the mathematics lab, as she spoke about the working in the mathematical laboratory with a huge smile on her face:

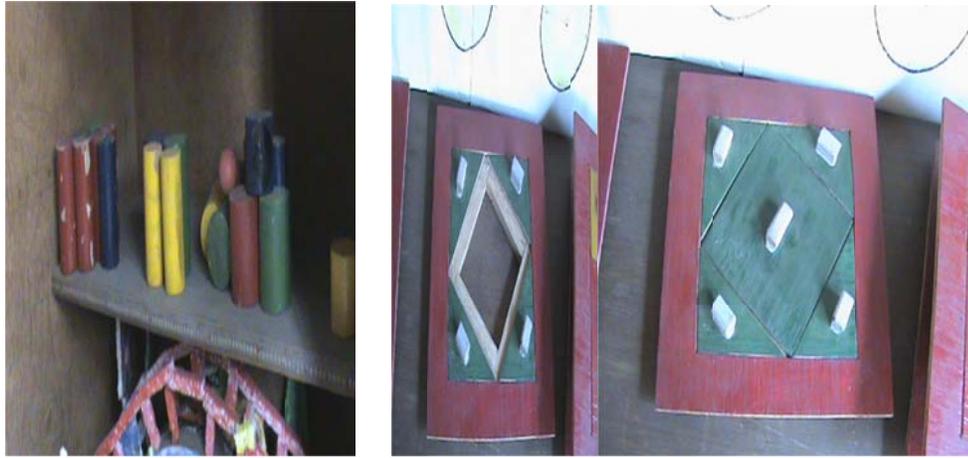
We have mathematical lab in our school. We have to take children to mathematics lab regularly. So, I divide the class into two groups and take one group to lab at one time. The other group waits in the classroom. We do a lot of mathematical activities in the lab. Children enjoy visiting mathematics lab and participate in the activities planned.

Excerpt 4.1g: Interview of mathematics teacher

We visited and captured images of mathematics lab, few of which are presented below:



Picture 4.2b: Overview of mathematics lab



Picture 4.2c: Teaching aids available in mathematics lab

Picture 4.2(b) shown above presents an overview of the mathematics lab in School LC. The organization of the mathematics lab was not found to be activity oriented, as the furniture was stalked along with the wall with linear sitting arrangement, where the learners would sit with their back towards the teacher and face towards the wall. This kind of set up contradicts the interactive spaces required for activity, where the participants would sit facing each other in a circle for maintaining the attention and pursuing a continuous interaction.

A closer look into picture 4.2(a) and (b) revealed that all materials displayed in the mathematics lab were prepared by elementary grade learners as a part of their mathematic assignments or projects. The material prepared by the learners was copied from the textbooks of mathematics, so it was not found to be innovative or interesting enough to trigger or expand the existing mathematical registers of the learners. Secondly, the picture 4.2(b) showed that mathematics lab has few colored object of different shapes and sizes, lying in dust inside the shelves. The dust and poorly maintained conditions of these objects provided evidence that they had not been used

since a long time. It was observed that the activities in mathematics lab were also conducted in very monotonous manner, although the learners enjoyed visiting the lab because it means change of location and getting away from their classroom. We suggested the English teacher to develop a language lab to make learning of English language more creative and interesting, but she denied any such requirement. She said,

'What would we do in a language lab? We do grammar extensively in class and students have workbook to practice grammar. Also school has divided English curriculum into six-subsections to enhance their communication skills.'

Excerpt 4.1.h: Interview of English teacher

The spaces observed outside the classroom showed that both the languages—Hindi and English—were not considered to be as important as mathematics, or other science subjects, hence, there was no requirement for developing a laboratory or wall picture for language leaning. Comment by teacher implied that language teaching is still confined to traditional method that emphasizes on grammar centric teaching. It was concluded that institutional spaces showed the difference in the understanding of teacher about the approach for teaching mathematics and English language. It was found that the activity was presumed to be an integral part for learning of mathematics but not for learning languages.

This section focused on the linguistic understanding of educator about their opinions on the medium of instruction, languages to be used in classroom, problems resulting for considering English as the medium of instruction, etc. It was found that English is the preferred medium of instruction because of its instrumental value. Educators were aware of the linguistic background of the learners being

predominantly Hindi speakers, but the linguistic demand of curriculum is English. Owing to this, teachers often encounter tension between the linguistic demand of curriculum (English language) and the linguistic proficiency of learners (Hindi language). Teachers, often, felt helpless because using Hindi to develop conceptual understanding among the learners would bring limited benefits for them because the assessment was conducted in English. It was found that languages did not get the same presence as that of mathematics which is evident from the institutional spaces.

4.2. ENGLISH AS A CRITICAL FACTOR IN TEACHING OF MATHEMATICS AND SCIENCE

The extent of language proficiency achieved by learners in School LC was described and discussed in the previous chapter. It was found that teachers resisted the policy of school and used teaching learning strategies, such as code-switching and translation with frequent use of Hindi. As a result, the learners developed limited conversational fluency in English, which helped the learners to pass their examination. This section will describe and analyze mathematics and science classroom for examining the extent of English proficiency as a critical factor in teaching and learning of other subjects.

Cummins (2001) argued that prior knowledge has crucial role in the interpretation of new knowledge because *students may not explicitly realize what they know about a particular topic or issue; consequently, their prior knowledge may not facilitate learning unless it is brought to consciousness* (125). Thus, a teacher needs to initiate classroom interaction by accessing the prior knowledge of learner and by

consciously establishing the socio-cultural context between the learner and the content to be taught for outlining the implicit meaning or message. Establishing the socio-cultural connection between the content and prior knowledge of the learners would enhance his or her motivation, interest, and readiness to engross oneself in the process of learning. For a teacher, activating prior knowledge determines the level of previous understanding or knowledge of the learners and the level of comprehensible input to be delivered during the learning process.

a.#Discipline and control over the learner was more important for initiating an academic discourse

In the previous chapter, English language teaching was analyzed, and it was found that teacher's access to previous knowledge was restricted to mere recalling of information. It is further necessary to reflect on the understanding about prior knowledge of the teachers, who are teaching science and mathematics because prior knowledge would facilitate the readiness as well as curiosity among the learners, which further helped in strengthening the conceptual understanding. This section will describe one excerpt each from mathematics and science classes to observe the manner in which mathematics and science teachers initiated the teaching-learning session.

Mathematics class was held once every day. Besides the regular mathematics class, two periods were held twice for mathematics lab in which the students focused more on learning of mathematical tables and calculation using charts, diagrams, and models. One textbook was used for teaching mathematics. Teacher was teaching

‘unlike fraction’ in the excerpts discussed below. Teacher entered the classroom with some notebooks in her hand. All students stood up immediately and wished her ‘good afternoon ma’am’. She instructed them to sit down and take out their notebook. She then distributed the notebook to the students by calling their names.

- 32.# S (c): *Ma’am kya karna h aaj?*
33.# T: *Wait, Wait... I am writing on the blackboard, see this Fraction,*
34.# *today, we’ll do addition of unlike fraction.*
(in between this, she stopped for a minute to check notebook of a student and then she resumed her teaching)
35.# *Now, today we’ll do additions of unlike fractions.*
36.# *additions of (pauses for student to repeat after her)*
37.# S(c) : *unlike fraction*
38.# T: *unlike fraction, additions of unlike fraction*
(Students repeat ‘addition of unlike fraction’ after the teacher)
39.# *that means denominator will be different*
40.#S(c): *Yes ma’am*
41.#T: *so denominator will be different.*
(then T wrote example on the blackboard and explains)
42.# *I said stop writing everyone.*
43.# *nahi likhna h na. (don’t have to write)*
228. *Now, denominators are 8 and 16*
44.#S(c): *Yes*
Excerpt 4.2.a: Mathematics classroom

Science Classroom

Science class was held once every day and one textbook was used for teaching the prescribed syllabus to the learners. This excerpt was taken from a class in which a chapter ‘Animals and their Food’ was being taught. Teacher entered the classroom and looked into her diary. She asked all the students to take out the books and open the chapter ‘Animals and Food’. She did not write the topic to be taught on the blackboard and started the chapter without checking the previous knowledge of the learners.

- 45.# **T (read from the book):** *According to the class of food they eat, animals can be classified into two groups.*
- 46.# **(in a loud voice while looking at learners)** *So, number one is herbivorous animals*
- 47.# **S (c) (children repeated loudly after teacher):** herbivorous animal
- 48.# **T(in normal tone):** *Herbivores is herbs.*
- 49.# *So, the animals who eat green plants are known as herbivores.*
(children repeat after T ‘herbivores animals)
- 50.# **(rephrases her sentence)** *Or you can say in other words plant eating animals are known as herbivorous animals*
(paused and looked towards the children for repeating the main phrase)
- 51.# **S (c) :** *Herbivores*
(children look into book and read the definition given in the book)
- 52.# *Plant eating animal are called herbivores.*
- 53.# **T(while looking at children):** *Now can you give me an example of herbivorous animal.*
- 54.# **S (c): (children after looking into book)** *Mam cow, giraffe, rabbit*
- 55.# **T:** *Yes. So, plant eating animals are called herbivores*
- 56.# *because they have to cut the vegetation, they have sharp teeth.*

Excerpt 4.2 b: Mathematics classroom

Both the excerpts, from the mathematics and science classrooms, discussed above, showed that the teachers started the classrooms interaction without recapitulating anything about the existing knowledge of the learners on the content to be taught, i.e., fraction or animal and their food habits. There was no indicator to point out the level of the previous knowledge of the learners or their existing readiness to learn the aforementioned topics in both the classrooms.

Data Analysis

The conversations show that neither science nor mathematics teachers initiated any dialogue on the prior knowledge of the learner. Teachers started teaching the content directly from the textbook without discussing any relevance of the taught concept or

bringing in everyday experiences of the learners. From the above excerpts, it was also clearly evident that the learners always responded in chorus and repeated the phrases spoken by the teachers. In mathematics classroom, teachers used English as the medium of instruction, whereas in science classroom, teachers used Hindi to translate and explain the text given in the textbook. The meaning of ‘unlike fraction’ and/or ‘herbivores’ was provided from the textbook; no attempts were made to expand the textbook knowledge to everyday real life examples. In neither of the two classrooms, the teachers interrogated the understanding of learners reading the taught concept. Prior knowledge is also considered essential for determining the difficulty level of comprehensible input to be given to the learners. Having observed the science and mathematics classrooms and knowing the teachers’ understanding of prior knowledge in learning and in practice, we probed both teachers in the following manner:

346.#Q. What is the role of prior knowledge in learning? What are the prerequisite(s) necessary for learning the mathematical/scientific concepts?

347.#: *Prior knowledge is necessary to understand the level of knowledge learners have on the topic taught.*

348.# *However, due to time limitation for completing the prescribed syllabus, we do not spend much time on previous knowledge.*

349.# *Secondly, science is a difficult subject with specific scientific and technical terminologies.*

350.# *One problem is that children often interrupt in between the class before I finish the explanation.*

351.# *So, I tell them let me finish first then I’ll explain it. But children get restless at times and create disturbance in the classroom.*

352.# *Then, I strictly tell them to maintain discipline in class. I feel, to understand the subject properly, one needs calm and disciplined environment in the classroom.*

353.#M: *Prior knowledge in mathematics is essential because until and unless one has not learned the concept of division, he/she will not be able to understand the concept of fraction.*

354.# *I try to ask few question in class to understand their level of understanding, however, there is not much time to explore them.*

- 355.# *I tell them (the learners) to **behave in a disciplined manner**, I can't teach in loud and noisy classroom.*
- 356.# *Secondly, I tell them that nobody will ask any question or interrupt, when I am teaching any concept or enquiring about their doubts after I finish my work.*
- 357.# *Also when I am teaching, nobody should write anything because first we do the work in rough and then again in class notebook and that is how they practice the same work.*
- 358.# *See, the learners find mathematics as difficult because of the complex calculations involved.*
- 359.# *So, first thing I instruct them before every class is to listen to me without interrupting and without copying anything in their notebook.*

Excerpt 4.2 c: Interview of Science and Mathematics teachers

Both science and mathematics teachers accepted that prior knowledge is necessary in learning about any concept, but it was found that both teachers skipped exploring the previous knowledge among learners. In response to our query, science teacher explained that science is a '*difficult subject*' with '*scientific and technical terminologies*' (Line 349) and to understand such a '*subject properly, one needs calm and disciplined environment in the classroom*' (line 352). Similarly, mathematics teacher also emphasized on the importance of establishing previous knowledge in class, but she was also found to skip it explicitly and emphasized on '*behaving in disciplined manner*' (see line 355). Both teachers gave '*shortage of time to complete the prescribed syllabuses*' as the common reason for not giving enough time for prior knowledge. It was found that teachers emphasized more on discipline and control on learners in comparison to the assessment of their prior knowledge.

Both the teachers were found to have adopted same strategies for maintaining control over the class whereby the learners were not supposed to interrupt till the teachers finish their instruction and explanation (See line no. 351-52, 355 & 359). The emphasis was on discipline, which was considered as a prerequisite for teaching

'*difficult subjects*' (Line 348,359) such as mathematics and science. However, this raises a serious concern regarding the level of readiness and motivation among the learners which is promoted by such instructional and pedagogic strategies of teacher. The response pattern of the learners in both the science and mathematics classes (See line no. 221, 224, 238, 231, 236 & 239) clearly showed that the learners always responded by repeating the main phrase spoken by the teachers or by reading out from the textbook. The teacher did not provide any opportunity to the learners for expressing their understanding of the taught concept. Even when asked by the teacher to provide some example (See line no. 237-239), the learners ended up reading the examples given in the textbook without showing any interest or initiative in participating in the classroom discussions. Information processing theories of learning emphasize the relevance of prior learning because it helps to alert the mind of the learner and increases his or her readiness to accommodate new learning and expand upon previously accumulated learning.

Therefore, it is pertinent to ask whether in the absence of relevant prior knowledge, the learners would succeed in focusing on the meaning of the '*difficult subjects*' merely depending on the discipline and strict instructional strategies of teacher. Thus, in the following section, the science and mathematics classrooms are discussed in detail to assess whether the instructional input provided by the teachers succeeded in drawing attention of the learners toward the meaning of the content and provided motivation to participate in the teaching–learning process actively.

b. #Classroom discourse with limited participation of learners resulting in the

development of limited ‘math register’.

Cuevas (1984) drew comparison between developing ‘language register’ and ‘math register’. He argued that ‘language register’ refers to the meaning that serves a particular function in the language as well as the words and structure that convey those meaning. Similarly ‘mathematic register’ refers to *the meaning belonging to the natural language used in mathematics, however, “a mathematics register is more precise than the natural language itself because the meanings of the terms are much narrower in scope”* (p. 136). This implies that mathematics has its own vocabulary and syntactic as well as semantic structure that is specific to the mathematical context. Research studies have further elaborated on the different kinds of component (Halliday, 197) and vocabulary (Slavit & Ernest-Slavit, 2007; Rubenstein & Thompson, 2002) that form the part of math register. This excerpt analyzes the extent to which the pedagogic strategies used by the teacher facilitated mathematical register among learners.

Classroom Description

This excerpt was taken from mathematics classroom where the ‘calculation of unlike’ fraction was being taught to the learner. Mathematics teacher was from southern India and did not seem to be well versed in Hindi. Teachers’ lack of command over Hindi was a major motivating factor to use English as the medium of instruction during teaching of mathematical concepts.

216.# T (in a loud voice): *so common denominator, what do you need to take?*

217.# S(c) : (repeats after teacher) *common denominator*

218.# T(loudly): *common denominator, that means
(while pointing towards 8 on the blackboard)*

- 219.# *it should go with 8 table and it should go with*
(pointing towards 16 on the blackboard and waited from students reply)
- 220.# S(c): 16
- 221.# T: *Yes with 16 table*
- 222.# *Common denominator means the same denominator, that number should be common. So, common denominator means that it should go with 8 and 16, so common denominator is*
(Stops and rephrase her sentence)
- 223.# *what I'll do is I'll write table of 8 and 16*
(then T wrote multiplication table of 8 and 16 on the right side of blackboard and read it loudly)
- 224.# 8, 16, 24, 32...80 and 16, 32, 48...
- 225.# *ok, now what is common between these two table, see.*
(without waiting for responses from the learners, T encircles the common number, i.e., 16 in the table of 8 and 16)
- 226.# *now draw a line*
(T drew a line on the blackboard and wrote sixteen below the line)
- 227.# *now what do we write*
- 228.# **(pointed towards 16)**
- 229.# S(c): 16
- 230.# *Now 16 divided by 8 and multiplied by one, plus 16 divided by 16 and multiplied by one*
(While doing this calculation, T slowly pointed towards each number and how it was used in the calculation of common denominator step-by-step and simultaneously read it loudly)
- 231.# *What 16 is common number, 16 is denominator.*
- 232.# *So, what I have done here is that divide common denominator with this denominator, i.e., eight.*
- 233.# *So, first step is you should write common denominator.*

Excerpt 4.2.d: Mathematics classroom

Data Analysis

Above excerpt showed that the student–teacher interactions in a mathematics classroom where unlike fraction was being taught. It was a teacher dominant communication. The teacher used a lot of rephrasing, repetition, and changes in her intonation to emphasize on the key points and also to give clues to the learners to repeat or respond after her. Tone and stress in the voice of teacher elevated whenever

she introduced any step in the calculation. For example, see line no. 218, 223 & 230, teacher spoke loudly to put emphasis on defining '*common denominator*', '*how to find common denominator using mathematical tables*', & '*the step to calculate fraction using common denominator*'. It was observed that voice modulation of the teacher brought out responses among the learners, although such responses usually comprised of repetition of phrases. Out of eighteen instances in the above shown student-teacher interactions, the learners responded only thrice (line no.243, 246, 256) collectively, where certain voices were louder than others. Teacher used her voice and a lot of non-verbal cues as a pedagogic supplementary tool to point out the mistakes of the learners and also to give hints for eliciting responses from the learners. It was commonly observed in the mathematics classroom that whenever any student gave wrong answer, the mathematics teacher either raised her voice or provided a hint, so that the learner can select the correct response. Such instances further showed that the learner merely repeated the teacher's response and the level of their understanding could not be ascertained.

Using words in any language interchangeably is a common phenomenon; however, it is the context that truly brings out the exact meaning of the words for the learners. Therefore, the teacher should contextualize and locate the meaning of the key terms in the context of mathematical concepts. Above excerpt showed that there was a lot of rephrasing and repetition of instruction in loud voice, but the teacher did not elaborate and contextualize the mathematical key terms. For example, there were two different numbers as denominator and so a '*common denominator*' was required. The meaning of '*common*' in this instance was explained as '*same*' (See line.222), which is incorrect. The correct meaning would be '*shared number*' not the '*same*'

number'. It is necessary to explicitly elaborate on such terms, especially to the learners with a weak English comprehension.

Position paper on teaching of mathematics (2005) described one of the visions for teaching of mathematics in the following words, "*School mathematics takes place in a situation where children use abstraction to perceive relationships, to see structure, to reason about things, to argue the truth or falsity of statements (p.2)*". This implies that teacher should focus on augmenting the logical and relational skills among the learners. Teacher wrote the table of 8 and 16 and took out the common number from the two (see line no.223-225) for calculating the common denominator. This was a kind of shortcut method for calculating the common denominator. There were two problems with such a strategy. First, it alleviates the anxiety among those learners who have not yet mastered the mathematical table, thus leaving them with a limited choice of relying on guesswork. Second, and more importantly, the learners remained deprived of logical connection behind the calculation of common denominator through the procedure of calculating lowest common multiplier. Calculating common denominator using the lowest common multiplier method would have extended the learners understanding of the 'common denominator' as well as the relationship between various mathematical concepts. Such a pedagogic approach contradicts the recommendation for teaching of mathematics emphasized in the position papers discussed above. Such short-cut strategies might help the learner in solving the mathematical calculation. However, failing to perceive the relationships among various concepts and to develop the reason for dealing with abstraction and validating a statement, the pedagogic strategies used by the mathematics teacher fail to develop 'math register' among the learners.

c.#Teaching of mathematics encouraged calculational discourse instead of conceptual discourse for facilitating performance in examination among learners

NCF (2005) sets the goal of *developing children's' abilities for mathematisation'* as the main goal of mathematics education. It further categorized these goals into 'narrow aim' and 'higher aim'. Narrow aim encompasses *the development of 'useful' capabilities, particularly those relating to numeracy-numbers, decimals and percentages* (p.42). Higher aim needs to target the development of child's resources *to think and reason mathematically, to pursue assumptions to their logical conclusion and to handle abstraction* (pp.42). The development of reasoning and abstraction during the primary years of schooling provides the foundation for tackling the difficulty level of mathematics in higher grades for learner. The use of English as a medium of instruction poses double challenge of language comprehension and developing math register for the teachers and learners. However, the research and guiding documents in the area of teaching of mathematics advocate the development of mathematical reasoning as its prime target. Therefore, we used the excerpt from mathematics classroom to understand the extent to which the teaching-learning strategies focus on the inculcating the conceptual skills in mathematics among the learners in classroom.

Classroom Description

The following excerpt is taken from the mathematics class, where the teacher had finished teaching the concept of 'unlike fraction' (described in the previous excerpt no.) and provided the following instructions to the learners:

233.#T: *First question is already finished, but you should do like this*
(pointing towards the step-wise calculation of algebraic problem written on the blackboard)

234.# *You should follow the order, the method.*

235.# *You should not say 'mam y to yha s aage aa gaye'*

236.# *You should not do this, I'll not accept.*

237.# *You should do the problem following this method only.*

238.# *Followed everyone?*

239.#S(c): *Yes, ma'am*

240.#T: *Ok, lets solve another problem*

241.# *First of all what should we take ?*

(drew a line)

242.#S(c): *Common denominator*

243.#T: *What we'll take first?*

244.#S(c): *Common denominator*

245.#T: *Now 4 and 8, can anyone say the common denominator?*

(S1 and S4 raised their hands)

246.# *No, you'll not say.*

247.# *S8, what is common denominator?*

(S8 stood silently for few seconds then t asks S4)

248.# *S4, you tell, what is common denominator?*

249.#S4: *Ma'am 8*

250.#T: *Yes, very good 8*

251.# *8 because it goes with 4 and*

(pointing towards 8 written on the blackboard)

252.#S(c): *8*

253.# *Yes, 8*

254.# *because 8 is common to both four and eight, followed everyone*

255.#S(c): *Yes, ma'am*

256.#T: *So the first step is you write common denominator, i.e., 8*

257.# *Next 4 divided by 2, what will be the answer?*

258.#S(9): *2*

259.#T: *2, very good*

260.# *S6, you give the answer, what will the answer? next?*

(S6 stood with blank face and pencil in her hand)

261.# *T: that's the answer you calculated, what is the answer?*

(S6 remained silent)

262.# *S6 is not concentrating in our class*

263.# *S9, what will you do with 2?*

264.#S9: *Multiply*

265.#T: *Yes, very good, multiply the number*

266.# *So, 2 multiplied by (pauses)*

- 267.#(c): 3
 268.#: *Yes, 2 multiplied by 3, now 8 divided by 8 is... S6*
 269.#6: 1
 270.#: *Yes and now 1 multiplied by 2*
 271.# *Now, 2 multiplied by 3 is 6 and 1 multiplied by 2.*
 (pointing towards the blackboard) $3 \times 2?$
- 272.#(c): 6
 273.#: $2 \times 1?$
 274.#(c): 2
 275.#: *Now, 6 plus 2 is 8*
 276.# *So its 8 by 8*
 277.# *So, can you divide 8 by 8?*
 278.#(c): *No ma'am*
 279.#(surprisingly in a questionable tone): *You can divide 8 by 8?*
 280.#(c): *No ma'am*
 281.#(frantically in a louder tone): *You can divide 8 by 8*
 282.#(c): *Yes ma'am*
 283.#: *Yes, you can divide 8 by 8 and the answer is (pauses for few seconds) 1*
 284.#(c): 1
 285.#: *followed?*
 286.#(c): *Yes ma'am*

Excerpt 4.2. e: Mathematics classroom

Data Analysis

The above excerpt showed an interaction from mathematics classroom, where the teacher had discussed an example of calculating 'unlike fraction'. It was observed that the responses invoked by the questions raised by the teacher largely constituted of responses collectively given by the whole class. It was observed that there were many other students who did not show any interest in calculations and were busy in copying the calculations from the blackboard. Out of 56 turns, the learners responded collectively 12 times (line no. 239, 242, 244, 253, 256, 269, 277, 281, 283, 285, 287, 289) and 6 times they responded individually (line no.248, 250, 259, 261, 266, 271). So, classroom interaction was dominated by teacher's talk and collective responses. Many of the students were found to simply guess or repeat after the responses given

by their loud counterparts, which were clearly evident after looking at the ending lines, i.e., 278-284, of this excerpt. This classroom interaction was modulated through the non-verbal cues and gestures of the teacher for invoking responses from learners.

Cobb (1998) categorized academic discourse in mathematics into ‘conceptual discourse’ and ‘calculational discourse’. Calculational discourse has been referred to as the *discussion in which primary topic of conversation is any type of calculational process while conceptual discourse comprised of discussion in which reason for calculating ways also become explicit topic of conversation* (pp.46). Classroom interaction discussed in the above excerpt showed that teacher emphasized on the mastery of steps involved in the calculation of ‘unlike’ fraction. Line no.233-239 clearly showed her preference for *order and method* of calculating the unlike fraction as taught by her. The concluding statement, i.e., ‘*first question is already finished, but you should do like this*’, clearly illustrates the teacher’s emphasis on ‘step-wise’ calculation.

Furthermore, during practice of the taught concept, the teacher strictly adhered to the step-wise process starting from calculation of common denominator. Line 267-272 showed the interaction between the teacher and the learner, where teacher solved another example from ‘unlike fraction’. The teacher opened the discussion to class while calculating common denominator. Initially, those students who regularly participated in the classroom tried to answer the question but the teacher tried to involve other students and asked the question to S8. After S8 failed to provide any answer, the teacher allowed another student (S4) to respond; this student also participated regularly in the class. Nevertheless, she did not interrogate S8 for not being able to calculate and provide the answer in the class. Teacher simply calculated

the answer, wrote it on the blackboard and the whole class repeated it loudly after the teacher. There was no discussion about the inability of S8 to answer the question. Similar pattern was evident in line 261-266, where S6 could not respond to teacher's query. S6 was not probed further regarding the trouble in calculation; rather the teacher declared that S6 was not being attentive in class. In the successive turns (See line 270-272) when S6 gave the response, teacher did not inquire his method of calculating the answer and remained busy in calculating further. Teacher performed a few more calculations on the blackboard. A few learners participated while others simply repeated the answer loudly and copied the calculations into their notebooks.

There was another instance in this excerpt which showed that the focus of teacher was in teaching calculational discourse because she didn't engage the learners in any conceptual discourse. In line 280-281, while calculating the 'unlike fraction', the teacher probed whether 8 could be divided by 8 from the learners. Learners collectively responded 'No', which came as a big surprise for the teacher. Her facial expression changed immediately and she repeated the wrong reply loudly with raised eyebrows and widely opened eyes. Learner immediately changed the answer to 'yes', which wasn't interrogated further by teacher. Teacher finished the calculation before finally asking the learners if they could follow the process of calculation.

All the instances discussed above clearly showed that the emphasis in the classroom was on performing a step-wise calculation regimen rather than gaining a conceptual understanding. More importantly, teacher did not provide any opportunity to the learners to solve the problem independently. Such routine practice of calculation over blackboard by teacher, without equal participation from learners, provided evidences for teacher's aim of teaching the steps involved in the calculation.

Under such circumstances, the extent of conceptual understanding of learners largely remains in doubt. We inquired about the reason for such strong emphasis on a strict step-wise regimen in problem solving, to which she replied as follows:

Such instructional strategies are used to make the calculational task easier for the learners. At least, this way they (learners) will remember the step and will be able to solve the problem. Because of lack of proficiency in English, many learners simply learn the step to solve mathematical problem. See, these children can do basic calculation easily. So, if they remember the steps they can easily solve the problem. Many of them do not score well in mathematics. So, I tell them that I will give marks till the step and calculation is right. This increases their chances of scoring more in exam.

Excerpt 4.2 f: Interview of mathematics teacher

These observations reconciled more with the ‘narrow aim’ of teaching mathematics as outlined by NCF (2005) and discussed above. As per NCF (2005), the focus lies on *the development of ‘useful’ capabilities, particularly those relating to numeracy-numbers, decimals and percentages* (pp.42). However, it is never known about the number of learners who actually achieved even the narrow aim because the teacher never interrogated the learners randomly. Learners’ replies were usually loud, collective, and repetitive one-word answers, providing evidences about the limited focus of the teacher on calculations instead of strengthening the conceptual understanding among learners.

d.# Code-switching used in science classroom could not facilitate the classroom discourse because it failed to connect to everyday experience of the learners.

For true science education, the Position Paper on teaching of Science (2005) listed the learner (child), the environment (physical, biological & social life in which

learner is embedded) and object of learning (science) as essential prerequisites. It further argued that *primary science education has to be a phase of joyful learning for the child with ample opportunities for exploration of the environment, to interact with it and to talk about it* (2005:12). The following excerpt is taken from science classroom to examine the extent to which the teaching–learning strategy such as code-switching could facilitate the classroom discourse, by moving from everyday discourse to scientific discourse.

Classroom description

- 274.#T: Now parasites (reads the text) *some animals live on our body or*
 275.# *inside our body and they eat our digested food. This kind of*
 276.# *animals is known as parasites.*
 277.# **(while taking round in the class)** *Parasites, para plus sites,*
so the animal who eat on others are known as parasites
 278.# *So what are parasites?*
 279.# *The animal who eat or feed on others are known as parasites*
 280.# ***jaise teacher kehti h na mera to dimag khaa liyaa, so at***
that time you are becoming parasites and we are like a host.
(Children repeats term like parasites and host after the children)
- 281.# *So two terms are there, number one parasites and number two host*
- 282.# *The animals who live on other's body is known as 'parasite' and the body on which they live is*
(pauses and waiting for children to answer and after few seconds continues her narration), is known as host.
- 283.# **(children repeats after T the term 'host')**
- 284.# *The body on which they feed is known as host as lice.*
- 285.# *Lice lives in our hairs, **haina***
(waiting for children to give answer and then after few seconds continues her narration)
- 286.# ***hamare baalo m rehti h aur khoon peeti h.***
- 287.# *So they are parasites and we are hosts*
- 288.#S5 **(raises his hand, after T permission stands and says):**
*Ma'am, **hamare andar parasites hote h aur vo parasite hum dekh nhi sakte.***

(T listens to him and disagrees and moves towards blackboard for further explanation with the help of a diagram)

289.#T: *There are parasites in our body.*

290.# *They are white in color, live in elementary canal and have a mouth like this (she draws a worm with bell-shaped mouth) known as sucker.*

291.# *isko bolte h sucker*

292.# *kya hota h, y is sucker s hamari elementary canal k saath chipak jaate h and sucks our digested food.*

293.# *vo jo hamara khanaa hota h, vo is sucker s suck karte h and*

294.# *because of this, we become weak day by day because we are not getting the proper diet.*

295.# *In this case, this is a parasite and we are, we are (Repeats and waits for children to complete the sentence)*

296.# *this is parasite and we are (pauses)*

297.# *S3, this is parasite and we are (pauses for his reply)*

Excerpt 4.2. g: Science classroom

It was also observed that while the teacher was busy delivering lecture on ‘parasite and food’, some students were busy copying text from other student’s notebook. There was a girl in the class sitting at the backbench, who was busy in drawing patterns on a rough page, while another student was making a paper toy. Teacher did not check whether students opened the correct page of the textbook, and it was observed that many students were sitting without science books and many were on the wrong page on the book. Throughout the classroom, the students repeated the main term or word after the teacher like, herbivores, carnivores, parasites, host, etc. None of the students asked for any clarification or queries regarding the topic taught.

Data Analysis

The above excerpt showed that out of 22 instances of teacher–student interaction held over about 40 minutes, only once a student replied to the teacher’s query (line 286). It was observed that mostly learners respond in collective manner

(line 278-280) that comprised of repetition of key-words spoken by teacher or reading single or a few words or phrases from the science textbook. Lines 280, 283, 292-294 showed that the teacher frequently left her sentences intentionally incomplete for learners to complete. Teacher read the text from science textbook and repeated as well as rephrased each sentence two to three times. This was followed by the translation of English text into Hindi, whereby the teacher highlighted and loudly read out the key scientific terms in English like prey, carnivores, herbivores, molar, pre-molar, etc. Students repeated each sentence after the teacher but still needed to refer to the book to provide answers. So, even when the teacher asked any question in English, the learners replied in single word after looking from the book. Although the translation of English text in Hindi was done to facilitate the comprehension among the learners (as discussed in previous chapter), the position paper on teaching of Science (2005) cautions against this kind of pedagogic approach as a serious problem to child-centered pedagogy. It is argued that *“learning through local language or mother tongue is most natural; but even while teaching in local language, care should be taken not to adopt a ‘purist’ approach’ and not to load the child with terms and words that mean nothing to the child”* (Position Paper on teaching of Science, 2005:12). The teacher neither explored the understanding of learners about the scientific key-terms such as prey, carnivores, herbivores, parasite, and host nor did she ask about the examples or learner’s personal experience with the taught concept. This narrowed down the concept of scientific inquiry that aims to engage the learner in exploratory talk or activity rather than merely passing on the information given in the science textbook to the learners.

It was also evident from the interaction shown in line 286-287 that the teacher

missed an opportunity to develop an insight provided by the learner into an elaborate discussion. Teacher taught about ‘parasite and host’, so S5 curiously gave an input on parasite saying that *parasite resides in our body and we can’t see them* (Ma’am, *hamare andar parasites hote h aur vo parasite hum dekh nhi sakte*). Teacher did not interrogated the learner regarding his source of information on parasite, level of accuracy or inaccuracy of information, or his experience with parasite in everyday life. Rather, the teacher started elaborating on the parasite in human stomach and physical illness. Therefore, such kind of translation or code-switching using local language or mother tongue actually didn’t serve the purpose of exploration or learning among learners.

The introductory lines 274-279 of this excerpt showed that learners were perceived sometime as animals that causes illness among teachers. In these lines, teacher introduced the concept of host and parasite, whereby she called the learners as ‘parasite’ and teachers as ‘host’ as an example. ‘*dimag khaa liyaa*’, is a Hindi idiom that essentially means ‘being irritated because of a person’s behavior or act’. Analogy drawn for learners as parasite and teacher as host showed the presence of coercive spaces in the classroom where the learners were perceived as burden on the teachers. It was commonly observed during teaching of different subjects such as mathematics, English, and social sciences that learners were usually mocked and portrayed negatively by the teacher. To conclude, the analysis of science classroom revealed that translation or code-switching used by the teacher for developing the conceptual comprehension among the learners had no development beyond the literal meaning of the words.

e.# Instructional input during teaching of science became ambiguous due to the lack of structure and focus during translation of English text in Hindi

Mathematics classroom discussed in the previous section showed that the teacher used a lot of non-verbal cues along with strict use of English to make mathematical input comprehensible for learners in the classroom. As a result, the learners acquired skills in solving problems in numerical form but found it difficult to interpret and solve mathematical problems when given in a sentence form. Science teacher has a different instructional approach in which she resisted school's policy of 'English only' as the medium of instruction and frequently used code-switching or translation of English text to Hindi. This section will analyze the science classroom to understand the implication of negotiation of instructional approach by science teacher on learning of science by the learners.

Classroom Description

This excerpt was taken from science classroom where the teacher was teaching about herbivorous animals and the relationship between their physical structure and eating habits.

241.# T: *Yes, so plant eating animals are called herbivorous animals*

242.# (reads the text): *They have long and strong legs to travel long distances in search of food.*

243.# *What does it means? Because they have to cut the vegetation.*

244.# *kya gaaye(cow) kaise khaati h?*

245.# *vo apne daant s ghaans ko kaat k khati h?*

246.# *upar s patiaa jo hoti h trees m,*

247.# *haina jo chote chote trees h plants hote h, then leaves of those plants are fresh.*

248.# *So for this purpose, they have sharp biting teeth*

249.# (rephrased the sentence) *because they have to cut the vegetation, they have sharp front teeth.*

- 250.# *And after that they grinded the vegetation with the help of their back teeth.*
- 251.# **(Teacher held her own jaw while saying back teeth).**
What are they called?
- 252.# **S (c) (children repeat after T):** *Back teeth*
- 253.# **T:** *What do we call back teeth?*
- 254.# *Jab maine teeth k chapter padaya then I told you*
- 255.# **S1(raises his hand):** *ma'am.*

(T nodded her head and permit him to answer)

- 256.# **S1:** *Molar and Premolar (other children repeats after S1)*
- 257.# **T:** *Good.*
- 258.# *So, molars and premolars are their teeth through which they chew their food,*
- 259.# *or they grind their food*
- 260.# *Because they have to grind their food, that's why they have strong grinding teeth and these are molars.*
- 261.# *So, grindings teeth are molars.*
- 262.# **S (c)(children repeats after the T):** *Molars*
- 263.# **T:** *Now, next are carnivores, flesh eating animals are called carnivorous animals.*
- 264.# **S (c)(children repeat after T):** *Carnivorous animal*
- Excerpt 4.2. h: Science classroom**

It can be observed from the above excerpt that the teacher read from the science textbook and frequently switched between English and Hindi for elaborating the meaning of the science text. She used elaborate sentences for explaining the meaning of text to the learners, which were also rephrased and repeated frequently. Learners had a submissive role in the classroom interaction whereby they were found to participate in very limited manner. The responses of the learners were mostly in chorus and comprised of one-word answer or repetition of key phrases after the teacher.

Data Analysis

The above excerpt and classroom description were examined for understanding the implications of negotiation of instructional approach by the science

teacher on learning of science by learners. It was evident from the above excerpt that science teacher resisted the school's policy of using 'English only' as the medium of instruction and hence frequently used Hindi during classroom interactions. The teacher posed a number of questions to the learners during classroom interactions, but didn't wait for the learners to respond. Instead she answered the questions and continued explaining the meaning of the text. Even in the instances when she switched to Hindi (see line no.238-239), she didn't give any opportunity to the learners to participate and respond. Line 236-244 showed mismatch between the text read from the science textbook and its meaning as was explained by the science teacher by using intermittent Hindi translation. Sentences read from the textbook explained the physical feature of herbivorous animals as '*have long and strong legs to travel long distances in search of food*' (line 236), however, the science teacher explained the teeth of herbivores in the succeeding sentences (see Line no.237-244). This clearly showed that despite using Hindi for explanation, science teacher lost track of establishing relationship between *long and strong legs* and food habits of herbivores. Furthermore, line 240-241 revealed that the Hindi sentences by the teacher were randomly phrased and were incorrect syntactically. Although the sentence from the science textbook was about the structure of legs of herbivores, the teacher ended up explaining the different types of teeth and their role in grinding food. Thereafter, without recapitulating the original sentence about the physical structure of herbivores, the teacher started the topic on 'carnivores'.

Lack of interest and motivation among the learners was explicitly evident from a) the total number and nature of responses of the learner, and b) the fact that none of the learner pointed out the discrepancy between the text given in the textbook and the explanation of herbivorous animals. Out of the 24 instances of student-

teacher interactions, the learners responded only five times (line no.246, 249, 250, 256 & 258) and that too using mostly one-word phrases repeated after the teacher. Furthermore, none of the learners asked any questions regarding the physical structure and food habit of herbivores as described in the textbook, i.e., structure of legs. Rather, the learners silently followed the explanation given by the teacher and repeated the key phrase after the teacher. Although the teacher resisted the policy of 'English only' as the medium of instruction, she frequently used Hindi during classroom interaction, an overview of her pedagogic strategy showed the lack of conceptual understanding regarding the use of home language as a pedagogic tool. The use of home language for mere explanation of the text without any focus on the content made the classroom interaction more ambiguous.

f.# English acted as a language barrier for learners because they could not comprehend the mathematical problems given in the sentence form.

Theme no. 4.2.(c) discussed above show that the focus of the teacher was primarily on calculational discourse, which resulted in an inadequate development of math register. In the chapter 3, it was undoubtedly revealed that the teaching of English didn't succeed in developing adequate proficiency of English among learners. Teacher in mathematics classroom was often found to use Hindi during translation or code-switching of English text for explaining the meaning to the learners in classroom. It was also found that the teacher often highlighted the keywords and their meaning such as, 'many', 'more', 'sum', 'much', etc., during teaching of mathematics for developing conceptual understanding among the learners. With such pedagogic

practices and English as the medium of assessment, it was necessary to examine the extent to which the learners can successfully solve the mathematical calculation. Therefore, the learners were given a mock test to check the extent to which they could perform in mathematics test. The problems to be solved given in the test were taken from the first chapter of the mathematics textbook, which comprised of revision of the concepts done in grade IV. Therefore, technically the difficulty level of this test was equivalent to that of grade IV.

Assignment Description

The assignment comprised of 15 problems based on the concept of addition, subtraction, multiplication, and division. This task was different from the routine pattern of assessment of the learners which comprised of mathematical problems done either in the classroom or from practical exercises given at the end of the chapter. Additionally, teachers preferred to give mathematical problems that directly hinted at the solution (for example, find the sum, multiply the following etc.) or give more objective type questions, which can be, at times, done with the help of guess work. The assignment had total 15 mathematical problems. This section will use only few problems as an example selected on the basis of different mathematical concepts to examine the extent to which the learners can comprehend and solve the mathematical problems independently. The concepts were already taught to the learners in the class. This assessment was conducted only for the purpose of research and the result of the assessment was not disclosed to the teachers or learners.

There were three mathematical problems to be solved using the conceptual understanding of place value, addition and subtraction as described below.

A.#Your house no. is 4724

_____ ¹ (write in words).
 Your tuition teacher's house is 8 houses away from your house. Your tuition teacher house no. is _____ ².

_____ ³ (write in words).
 You collected Rs. _____ ⁴ Rupees _____ ⁵ (write in words), which is equivalent to the place of 7 in your house number. Your friend carried money three times more than what you had. Altogether both of you carried Rs _____ ⁶ (Rupees _____ ⁷).
 But you need money which is equivalent to the amount, if the number in thousands and hundred places are interchanged. So, you need amount Rs. _____ ⁸ (Rupees _____ ⁹).
 How much more money you need to collect? Rs. _____ ¹⁰ (Rupees _____ ¹¹).

B.# What is the period and the place value of 5 and 9 in 96521?
 _____ ¹²
 What number will you get if you interchange the place value of thousands and tens?
 _____ ¹³

C.# In 94,689 how many times is the 9 on the left greater than 9 on the right?
 _____ ¹⁴.

Out of the 30 learners in the mathematics class, 24 learners partially solved problem A, which means that these 24 learners gave answer for filling in the blank number 1. Out of the 30 learners, 18 gave answer to the blank numbers 4 and 5, after a hint given by us. Only 3 out of 30 students completed question no.1 giving all the answers using the concept of place value and addition. For problem B, 21 out of the 30 students replied partially, which means that these learners gave reply to the blank number 12 only. With an exception of 3 learners, all other learners either gave wrong reply or left the column blank. For problem C, 5 out of 30 learners wrote the place value of 9 in the 94689, however, it was considered as wrong answer because the learners were supposed to calculate the difference between the position of 9 on the left and 9 on the right using the concept of place value and subtraction. Therefore, part C was considered as replied wrongly by everyone.

The test contained 12 problems that needed to be solved using the concept of addition, subtraction, multiplication, and division. 4 out of the 12 problems are described below for analysis.

A.# Crows have two legs each and cow four each. How many legs altogether

7 crows and 3 cows have?

$$3 \times 4 = 12$$

$$7 \times 2 = 14$$

$$12 + 14 = 26$$

i.# What do 12 stand for?

ii.# Explain how we arrive at this number

iii.# What do 14 stand for?

iv.# What do 26 stand for?

v.# Are there any more cows or more crows?

vi.# How is it, then the crows have more legs (14) than the cows (12)?

B.# Every Friday, meena deposits money in her bank account. On the first Friday, she had deposited Rs.24692 and on the second Friday, she had deposited 2419 more than the first time. What is the total amount deposited?

C.# The difference between the two numbers is 17961. If the greater number is 44629, find the smaller number.

D.# How many hours are there in 4260?

E.# Fill in the blank to make a pattern using +, -, ×, ÷

$$18 \quad _ \quad 2 = 9 \quad _ \quad 2 = 11 \quad _ \quad 2 = 22 \quad _ \quad 2 = 20$$

$$7 \quad _ \quad 3 = 21 \quad _ \quad 3 = 7 \quad _ \quad 3 = 10 \quad _ \quad 3 = 7$$

From the above four problems, only problem E was calculated and replied correctly by almost 21 learners in the class. Except 5 learners, Problem A was either left blank or solved incorrectly by all learners, as most of them usually added the two given number. Problem C was also replied incorrectly by almost all except 5, as most of the learners chose the smaller number out of the two given number and re-wrote it as answer. Few learners used addition for calculating the answer. Only 3, out of 30 students gave the correct reply to problem D and the rest left it blank.

Data Analysis

This test was conducted to assess the extent to which a learner could understand and solve word or statement problem easily when the same is described as simple numerical problem. Simple numerical problems are those which explicitly mention the use of formula for calculating the given problem. For example, Problem E in which it was clearly evident that the learners need to use addition, subtraction, division and multiplication sign to get the given answers. Similarly, such problems can be asked in different manner. For example, solve the given equation, add or subtract or multiply or divide the given number. It becomes easier to identify the key terms, calculational formulas to understand the underlying mathematical concepts that need to be used for solving the given problem. Therefore, even with inadequate proficiency in English, the learners solved such problems successfully. However, the trouble begins when a learner has to read the problem in a language, which he or she finds difficult to comprehend and solve. This not only demotivates the learners to engage in mathematical reasoning but also develops a kind of fear against the numbers and calculations, which are also commonly known as 'Math Phobia'. This has also been described and discussed as widely held phenomena in the Position Paper on Teaching of Mathematics by NCERT (2005) *'if any subject area of study evokes wide emotional comment, it is mathematics. It is quite the social norm for anyone to proudly declare that s/he could never learn mathematics. While these may be adult attitude, among children (who are compelled to pass mathematics examinations), there is often fear and anxiety. Mathematics anxiety and 'math phobia' are terms that are used in popular literature (pp.5).* Fear and anxiety related

to mathematical calculations limit the focus of both, teacher and learner, in calculating discourse instead of initiating a conceptual discourse.

Looking at the description of mathematics test above, it is quite evident that the learners found it difficult to comprehend the sentences in English. All learners attempted to solve problem E in the test and majority of them solved it correctly. Because the reason behind it is that problem E simply demanded filling of blanks with appropriate mathematical symbols. Besides this, Problem A was based on the concept of place value and it was also attempted by everyone, however, none of them was able to solve the complete problem. Most of the learners remained confined to the filling of the blanks where they had to describe the given number in words. They could not attempt the increasing complexity in the calculations. This shows that the learners focused on the key operational terms for solving the problem such as ‘write in words’, ‘how much’, ‘how many’, ‘total amount’, ‘greater’, ‘smaller’, etc. But solving problem by locating the key-terms didn’t help the learner with mathematical proficiency and performance, as the lack of proficiency in English deprived them of the ability to contextualize the key-term. Hence, in the case of problem B, few learners simply added the two numbers given, instead of complex addition, because they highlighted and focused on the ‘total’ given in the problem. Similarly, many learners chose to write the smaller number among the given number in problem C, which proved to be an incorrect answer.

Mathematics teacher admits about identifying and highlighting the use of key terms for making the mathematical concept comprehensible, in the following words:

*Definitely its numerical form, where they don't need interpretation.
In sentence form, they get confused and sometime don't get the*

meaning, although they can interpret the meaning through terms. For example, if I ask how much left? So, the term 'left' signifies 'balance'. Similarly, when a question says 'each' child, so the term 'each' means 'one'. Thus, in similar manner children learns to pick the main terms and acknowledge their meaning. Actually for all the mathematical concepts, they identify certain terms. For example, for addition, they look for the terms like 'total', 'sum', 'together'; for subtraction, they look for terms like 'left', 'how much', 'difference' and for multiplication, they look for terms like 'product' are used. In multiplication questions, we say what is the product? So, children know that they have to do multiplication. Division involves dividend, quotient, and divisor, so these terms imply that problem needs to be solved through the concept of division.

Excerpt 4.2.i: Interview of Mathematics teacher

Thus, it was evident from mathematics teacher verbatim that the identification and location of the key-words was part of the pedagogic practices. Nevertheless, the manner in which the learners identified and interpreted these key words showed the lack of linguistic proficiency involved in the interpretation of these key-words which didn't help the learner in performing better. The conceptual understanding of mathematics or any other subject requires student participation using descriptions, comparison, drawing conclusions, abstractions etc., and through the use of mathematical symbols and language. But teachers in School LC limited the use of key-terms for developing an association with the mathematical concept to facilitate performance of the examination.

After this written test, we orally interpreted each problem in Hindi to see its impact on the engagement of learner in solving the problem. Contrary to the results of written test, oral test showed increase in interest and participation among the learners for finding the solution of problem. Especially, when each problem was contextualized using their examples, the learners seemed to enjoy solving the problem and correcting each other. This indicates that the learners' lack of proficiency in

English, which is the medium of assessment, actually interferes with his or her cognitive engagement in the mathematical discourse. Despite the use of Hindi (home language) during teaching of mathematics for better strengthening of the conceptual understanding, the learner showed low performance on the mathematical task. This showed two underlying problem that are caused due to inadequate proficiency in English, which was used as the medium of instruction for teaching of mathematics. First, even if the key-terms were explained in Hindi during the pedagogic practices in classroom, the medium of assessment is written in English, which the learners find difficult to comprehend, especially for the mathematical problem, which requires comprehension of sentences, explanation and detailed descriptive answer. Second, the identification of terms associated with different mathematical operation can't develop math register among the learners.

For developing math register in English, the learners should participate and engage in academic discourse using detailed and oral descriptions, explanations, abstractions, and drawing conclusion. However, mathematical classrooms were found to be focused only on the calculations, one-word answer, repetitions, guess-work, etc. Clark (1975) argued that language plays crucial role in teaching and learning of mathematics because linguistic proficiency determines the extent of participation in mathematical activity which usually comprises of representation, discussion, translation, description, description, verbalization, representation, and validation. To conclude, there is need to develop adequate proficiency in English among the learners if it is to be used as the medium of instruction for teaching of mathematics (or other subjects).

4.3 INTERPRETATION AND DISCUSSION

Using any language as a medium of instruction for teaching various subjects demand academic proficiency in that particular language. Cummins (1984a, 1984b) showed that it takes five to seven years to develop native-like proficiency in L2 among second language learners. NCF also (2005) envisioned and recommended *language across curriculum* for promotion of multilingualism in school, especially till the primary classes. In the words of NCF (2005) *Language education is not confined to language classroom. A science, social science or mathematics class is ipso fact a language class. Learning the subject means learning the terminology, understanding the concepts and being able to discuss and write about them critically* (pp.38). This implies that focus of teaching during primary grades should be on development of basic skills of everyday life through engaging the child in different discourses, however language should be an integral part of this primary learning. In school LC, curriculum was divided into subject teaching and language teaching, where teaching of English was further divided into different components. It was concluded in the last chapter, that learners developed limited conversational fluency in class. This chapter provided data from mathematics and science classroom to study the following objectives:

- a.# To examine the socio-linguistic understanding of students and the disciplines by the teachers and the manner in which it inform their language use policies in Science and mathematics class.
- b.# To examine the extent to which linguistic proficiency in English influence teaching and learning of other subjects, like mathematics and science, in a class where English is used as medium of instruction.

c.# To examine the manner in which the teaching–learning strategies employed in low cost English medium school shaped the negotiation of English–vernacular divide.

This section situates and discusses the findings of this study in the light of theoretical framework guiding this research study. Objective a) and b) have been collectively discussed in first theme and objective c) has been addressed in second theme under this part of chapter.

1.# Development of academic proficiency in English is critical for teaching and learning of other subjects to deal with the double pedagogic challenge, which comprised of comprehension of English and accessing the subject specific register.

This chapter intends to examine the use of English as the medium of instruction, as a critical factor in teaching-learning of science and mathematics for the first generation learners, who neither had adequate academic support for learning of English at home nor developed academic proficiency in English in the school. It is strongly argued in NCF (2005) that *Language(s) are the medium through which most knowledge is constructed and hence they are closely tied to the thoughts and identity of the individual. In fact, they are so closely bound with identity of the individual that to destroy or wipe out a child's mother tongue is interfere with the sense of self. Effective understanding and use of language enables the child to make connection between ideas, people and things and to relate to the world around them (p.36).*

Therefore, home language constitutes both affective and cognitive components of

child's personality and the inclusion of home language has a positive effect on these components. Research studies conducted in different countries affirms the positive correlation between bilingualism and metalinguistic abilities (Ricciardelli, 1992, 1993; Bialystok, 1987a, 1987b, 1988; Lasagabaster, 1998; Mohanty, 1994, etc.).

Using any language as the medium of instruction for teaching of various subjects demanded academic proficiency in that particular language. This was also acknowledged by educators in this study in their interview, where they admitted that medium of instruction should be one in which the student is comfortable and proficient. However, there were major contradictions in this view and practice of the educators in School LC. From the interview conducted with the educators, it was evident that English has emerged as the preferred medium of instruction because it is in demand, provide better job opportunities and enhanced social status. Educators were aware of the linguistic background of the learners, which was predominantly Hindi and the linguistic demand of the curriculum, which was predominantly English. The teachers tried to negotiate this linguistic mismatch through the inclusion of Hindi in the various teaching–learning strategies. However, the inclusion of Hindi could not be of much help for the learner because it was only used for explaining the literal meaning (see section 4.2 d & e), but could not engage the learners cognitively.

As discussed in the previous chapter, the teaching of English developed limited conversational skills in learner, which was limited to the reproduction of the text or content they learned in English class. Learners were rarely found engaging in either everyday or academic conversations in English with teachers or fellow students (see section 4.2). It was found that the limited conversational fluency in English posed as a language barrier, thus resulting in the emergence of *double pedagogic challenges*

for both the teachers and learners. These pedagogic challenges include a) understanding and communicating in English; and b) understanding and communicating in the subject specific register, i.e., science or mathematics. These challenges were evident in both mathematics and science classrooms, where teacher had to explain the meaning of the text given in English, explain the underlying concept and then develop the skills among the learners where they could reproduce the acquired conceptual understanding in English. The findings of the mathematics classroom of School LC (See 4.2 (b), (c) & (f)) revealed that the teachers and learners faced almost all these challenges in these classrooms. With limited conversational fluency, the learners could not comprehend the mathematical problem given in sentence form in English.

Although teachers tried to resolve these problems through strategies such as explicitly highlighting the key-words and their associated meaning, the failure of the teacher to recognize the words get their meaning based on their context, so the same word may mean different if used differently. For example, the phrases such as *how much more*, *how much left* were ambiguous and confusing for learners when used in abstract form in mathematics class. The findings of this study suggested that the mathematics teacher developed limited ‘math register’ among the learners. Limited ‘math register’ means that learners learn to solve the problem by checking out the terms representing mathematical calculation such as *sum*, *difference*, *how many*, *dividend*. This helped the learner to get the technical skills to pass their mathematical examination, but the learners could not build a sound conceptual understanding. As a result, the learners could hardly interweave and apply the mathematical knowledge based on their contribution in classroom discourses. One of the interesting comment

made by the teacher during an informal interaction with us was that many of the learners had grocery shops as their family business, where they spent some time every day in assisting their parents, and this habit makes them good in calculations. However, if a learner was asked about question of ratio-proportion or fraction in classroom, they either remained silent or just calculate as per the given formula.

For teaching of mathematics during primary years of school, NCF (2005) strongly recommended that “*apart from computational skills, stress must be laid on identifying, expressing and explaining patterns, on estimation and approximation in solving problems, on making connections, and on the development of skills of language in communication and reasoning*” (pp. 45). But with limited conversational proficiency in English, the aim of teaching of mathematics was hardly achieved in School LC. It was found that by excluding the home language from classroom, English only as the medium of instruction subtracted the opportunities for developing the understanding of mathematical concepts, thereby restricting the process of meaning-making in the classroom.

Teacher managed to develop limited math register during the classroom, however, she felt helplessness during assessment that was conducted in English. Assessment constituted context-reduced and cognitively demanding communication with the learners who were dependent only on the available linguistic cues. The learners needed to develop academic language proficiency in the language of assessment to interpret the linguistic cues independently and to perform the examination. It was observed that the teachers provided the learners with a format of questions, which would be part of their assignment sheets or examination paper to be conducted in English. They were aware of the fact that the learners were not

proficient enough in English to comprehend question paper, so they were given important question from each chapter to be prepared for their class assignments or examination. The focus of teachers on providing easy question paper or assignment as a part of the assessment showed that English posed difficulties for learner in comprehension and completing the assignment. A number of research studies shows that learners tend to achieve low scores when the language of assessment is L2 (Gaarder, 1975; Mecker & Mecker, 1973; Mycue, 1968).

The findings of the science classroom are in line with the mathematics classroom. In the science classroom as well, the teacher often used code-switching and translation for explaining the meaning of content to the learners, but could not engage the learners in academic discourse. While highlighting the importance of the language development related to knowledge about science during the primary years of schooling, the position paper on teaching of science (NCERT, 2005) suggested that *at the primary stage, children are actively developing their language skills—speaking, reading and writing, which is important to activate their thought and develop framework for observing the world. This stage, therefore, emphasizes on language development through and for science learning* (p.12). This recommendation is an attempt to counter the *double pedagogic challenge* by reducing the gap between language teaching and content teaching. However, the findings of this study suggested that in practice, language and science teaching were done as if the academic discourses of these two subjects were mutually exclusive and independent of each other.

To conclude, the development of academic language proficiency in English was a very critical factor in the teaching–learning of science and mathematics because

limited conversational skills in English led to double pedagogic challenge for both the teachers and students. Although, both mathematics and science teachers, tried to help the learners through strategies such as important questions, preparing easy question papers, etc., however, such strategies were not helpful for the learners merely beyond passing an examination. Learners seemed to have limited role and participation in meaning making process in the classrooms of low cost school.

2.# Teaching learning strategies promote subtractive bilingualism, creating multiple tensions within the existing English-vernacular divide.

This chapter focused on the teaching–learning strategies employed for teaching of science and mathematics in school LC. The analysis of data of different subjects classroom highlighted that code-switching emerged as the most common teaching–learning strategies where both English and Hindi were used simultaneously to convey the meaning to the learner. As discussed in the previous chapter, educators had limited understanding of psycholinguistic processes underlying the second language acquisition. The notion of seeing languages as ‘pure’ resulted in the making of the normal linguistic behaviour such a code-switching in children as erroneous in classroom interactions. Most important observation was that the teacher takes the liberty to use code-switching or even translation frequently in the classroom, but the learners were always discouraged from using code-switching, even if they asked for permission to speak in Hindi. Cummins (2000) suggested that the level of proficiency attained by bilingual students in their two languages exert important influence on their academic and intellectual development. Therefore, learning of number of languages in

bi/multilingual situation must be the ‘enrichment’ (or two-way) of the bilingual program where both the languages must interact and influence mutually. This implied that ideally in any bilingual learning situation such as school LC, the number of languages presented should mutually enrich each other through two-way bilingual enrichment program with focus on the development of additive bilingualism. Contrary to this, the educators viewed learning of English in compartmentalized manner through maximum exposure of English by various means.

It was observed that English and Hindi were compartmentalized into their specific different linguistic zones, with more emphasis on the *English Only* instruction. This preference for English was also evident in the linguistic understanding of educators about English as a language and as a medium of instruction. This understanding is also reflected in the position of English in larger society, where the proficiency in English is a pre-requisite for good financial prospects. Although NCF (2005) has warned against such compartmentalization of languages and envisioned *language across curriculum* and strongly recommended that *Language education is not confined to language classroom. A science, social science or mathematics class is ipso fact a language class. Learning the subject means learning the terminology, understanding the concepts and being able to discuss and write about them critically* (p.38). But this warning is often ignored and school treat language and other subjects as different subjects from as early as grade I.

It was observed in science classroom of School LC that code-switching could not facilitate the classroom discussions as the teacher failed to connect everyday experiences of the learner with the content being taught in the classroom. The extent to which student’s language and culture is incorporated into the school program tends

to be the significant predictor of academic success and the success has been reported and advocated by number of research studies (Beykont, 1994; Camposs & Keatinge, 1988; Ramirez, 1992; Cummins, 2001). However, learner experience variety of dissonance when he or she is denied linguistic and cultural incorporation of his home language, resulting often in wide range of failure manifestation, such as disruptive behavior, extreme silent behavior, absenteeism, cognitive or emotional interruption, etc. This creates a number of discontinuities which ranged from first language to second language, from social talk to academic talk and from everyday register to subject specific register (Moschkovich, 1996).

Educators have an important role in the manner in which they treat the student's language and culture determines the academic outcome. In School LC, educators were aware that learners had Hindi as their home language, but still chose to prefer English as the medium of instruction. The role of educator in school LC was seen as replacing or subtracting students' primary language and culture in the process of assimilating the dominant language and associated culture. So, it was observed that school principal preferred planned English Carols to be practiced in school assembly trying to imitate and incorporate dominant culture present in the high cost schools. This could be attributed to the language proficiency of teacher and partly to the manner in which teachers were trained for language pedagogy during their teacher training program. Teachers in school LC were fluent in Hindi (except Mathematics teacher), so they often used Hindi for instructional purposes to clarify content and concept presented in English in their textbooks. But teacher weren't aware of the ways to create back and forth movement between Hindi and English, so that learner could use English to explain the content learned by them independently.

Cummins (2001) suggested that *an additive orientation is not dependent upon teaching of student's primary language. In many cases, this may not be possible for a variety of reasons (e.g., low concentration of particular group of bilingual students). Even with a monolingual school context, the powerful message can be communicated to students regarding the validity and advantages of primary language development.* In the context of school LC, it is implied that it is essential to provide respect and space to Hindi, alongside English. More importantly, code-switching which is a norm in our daily life is interpreted as 'error' in the classroom and is strictly monitored in the classroom by the educators. However, we need to understand that by restricting languages involved in the code-switching, which usually has home language of the child, we are restricting his culture and identity to lesser powerful domain such as home. Research studies have provided enough evidences that linguistic processes such as code-switching and translation as part of normal linguistic behavior of bi/multilinguals. The acceptance of code-switching as legitimate learning behavior enables us to appreciate the language, culture and identity of the learners, which are important for further cognitive, emotional, and social development. In the absence of such an approach, teaching learning strategies were found to be promoting subtractive bilingualism, creating multiple tensions within the existing English-vernacular divide.

Summary of the Chapter

In the previous chapter, it was concluded that teaching learning strategies developed limited conversational proficiency in English. This chapter examined the extent to which linguistic proficiency in English influence the teaching of mathematics and science. This chapter was divided into two parts. First part examined the socio-linguistic understanding and beliefs of educators about the linguistic background of learner and their respective discipline. It was

found that educators were aware of the difference between the linguistic background of the learners and linguistic demand of the curriculum. In order to negotiate this difference, teachers used Hindi and various visual artifacts for enhancing the mathematical understanding of learner. Second part, examined the extent to which linguistic proficiency in English influence teaching of mathematics and science. It was found that teacher encountered double pedagogic challenge in the classroom, that of understanding the language and understanding subject specific register.

It was concluded that the development of academic language proficiency in English was a very critical factor in the teaching–learning of science and mathematics because limited conversational skills in English led to double pedagogic challenge for both the teachers and students. Although, both mathematics and science teachers, tried to help the learners through strategies such as important questions, preparing easy question papers, etc., however, such strategies were not helpful for the learners merely beyond passing an examination. Learners seemed to have limited role and participation in meaning making process in the classrooms of low cost school.

CHAPTER 5

SUMMARY AND CONCLUSION

India is a country, where language is one of the major determinants for the formation of twenty states. Each state has numerous languages, out of which select few are listed as official, associate official language of the respective state. Within each state, the nativization and hybridization of language is a common phenomenon, because of various socio-political factors, such as local communication, immigration, sharing border with neighboring states etc. These select few languages are usually promoted in powerful domains such as administration, education, competitive examinations, private jobs etc., and further strengthening the dominance of those languages over others languages which are limited to personal domains, such as home, neighbor, friends etc. This provides the evidences that the multilingualism in Indian context is found to the unequal status of languages, which is referred as '*multilingualism of unequals*' by Mohanty (2008).

Implicit linguistic hierarchies exist in the country where few languages are preferred in comparison to other languages due to the associated power and prestige in the society. Mohanty (2008) highlighted that this linguistic hierarchy can be broadly categorized into a *double-divide*, where *upper divide* is between English and vernacular languages, known as *English-vernacular divide*, and a *lower divide* between vernacular and indigenous tribal minority (ITM) languages, known as *Vernacular-other divide*. An example of the double divide is the way English pushes Hindi and other regional languages to lesser powerful domains, and these regional languages further relegating the ITM languages out of power. The process of gaining

the dominance in linguistic hierarchy is a gradual process occurred over the years and marked with complex and continuous interaction of political and social factors. All India Educational Survey discussed in the introduction chapter of this research thesis (pp.25-29) provided glimpse of the manner in which English, over other languages, is emerging as preferred medium of instruction and school subject at various levels of schooling.

The present study aims to address the negotiation of upper divide i.e., *English-vernacular divide* existing in the classrooms of a low-cost EM school in Delhi. In the present study English-vernacular divide refers to linguistic mismatch between the school language for learners i.e. English and the home language of learners i.e. Hindi. Research studies have shown that English as a medium of instruction has turned out to be one of the prominent factors for the choice of school among parents (Srivastava, 2007; Harma, 2011; Lall, 2000; Zurbuchen, 1992). Parents prefer to educate their children in English medium education as opposed to Hindi Medium because of the demand of English in the job market and better economic opportunities in a globalized world. Therefore, the preference for private English medium (EM) education is more persistent among lower and middle socio-economic class, who assumes that EM education is necessary for vertical mobility in the society. Majority of the children coming to low cost English medium schools are from lower socio-economic strata and are first generation English learners.

The economic disparity has given rise huge heterogeneity in private EM schools in India in terms of their quality, cost, and the socio-economic strata to which they cater (Mohanty, 2008a; Hill, Samson & Dasgupta, 2011). Low cost private EM schools are also referred as '*budget*' or '*Low-Fee Private (LFP) schools*'. Nambissan

(2012) argued that often the low cost schools are projected as “*responding to the growing demand of poor families for ‘good quality’ private English medium schools*” (84). However, the perceived extent of this ‘*good quality*’ expected by parents is the main concern raised and explored in number of psychological and sociological research studies (Ramanathan, 2005; Mohanty, 2008; 2010; Baird, 2009; Nambissan, 2012; Srivasatava, 2007; Harma, 2011; De, Noronha & Samson; 2002; Hill, Samson & Dasgupta, 2011). But one of major reasons for selection of EM school over VM medium school, as commonly observed among parents is their preference for English as medium of instruction from grade I. Research study by Mohanty, Panda & Pal (2010) has provided evidences that usually low cost EM school provides *cosmetic anglicized school culture* with focus on the western style of school dress, display material, and behavioral routines, thereby creating mere perception of look-alike culture of high cost school. It was further argued that these school promotes the strong presence of ‘*textbook culture*’. Schools prescribe such textbooks keeping in mind the students’ social strata, where parent can neither afford more expensive books nor can they help their children with complex text and activities.

The present study was conducted in a low cost EM school of Delhi, where, English is used as a medium of instruction and is also taught as a language subject from grade I. Review of literature suggested that learning of L1 provides cognitive and metalinguistic benefits and facilitates the learning of L2. The *Linguistic Interdependence* (1981a) and *BICS/CALP* (1984b) postulated by Cummins served as the theoretical framework to this study. Cummins (1984a, 1984b) suggest that instruction in classrooms should facilitate transfer of the context-embedded/cognitively undemanding communication (*conversational fluency*) towards

context-reduced/cognitively demanding communication (*academic proficiency*). At this juncture, it is important to ask what kind of language proficiency (conversational or academic) in English is developed in first generation English learners who have no support for the language at home ? How do teachers negotiate the linguistic mismatch, between the school language and home language, through various teaching learning strategies?

This study was conducted using qualitative research method in grade V of a low cost EM school in Delhi, where learners are the first generation English learner and Hindi is their home language. The data was collected using the following methods 1) *classroom observation* with a focus on student–teacher interaction that occur during language and subject teaching, 2) *interviews* with teachers and school administrator, 3) *site documents* such as the language-in-education policy, position papers, national curricular framework, textbooks, exam papers, etc., 4) *audio-video recording* of classroom discourses and school events, such as school assembly, celebration of school functions etc., 5) *fieldnotes* taken during classroom teaching or school events, wherever researcher found that *audio-video recording* would interfere with the natural setting of the events in the classroom or outside the classroom. Data was analyzed using the techniques of content analysis and discourse analysis.

5.1 Given below is the summary of the specific data and the analyses that was used to examine the research questions formulated for this study.

1)#To examine the socio-linguistic understanding and beliefs of educators about

English as a language subject and as the medium of instruction and their impact on the choice of teaching learning strategies in the classroom?

Focus of this research endeavor was to examine the manner in which teacher and student negotiate the English-vernacular divide through teaching learning strategies employed in low cost EM school. Therefore, it was necessary to examine the socio-linguistic understanding and belief of school principal, English, science and mathematics teachers, about English as a language and as a medium of instruction. The researcher also examined how the attitudes and beliefs of educators about medium of instruction inform their choice of teaching learning strategies. The findings of this study suggest that the principal who was the authority figure and took all the important decisions firmly believed in supremacy of English. Despite of being aware of the linguistic background (i.e.was predominantly Hindi) of majority of children in her school, yet the principal insisted on using English as the ‘Only medium of instruction’. The principal also made use of English mandatory for formal and informal interactions in school. According to her, maximum exposure of English will facilitate and enhance language proficiency in English. She designed the activities and curriculum in a way, so that she could provide maximum exposure of English to learners in school. For example, English choirs practiced during morning assembly, emphasis on written work, categorizing English curriculum into different component such as reading, writing, poetry, grammar, composition and literature.

English and subject teachers shared few similarities in socio-linguistic understanding about the English as a language and linguistic background of the learners of school LC. Firstly, majority of the teachers in this school like the principal believed that English has immense instrumental value because of its demand in

powerful domains such as administration, education, job etc. Secondly, these teachers were aware of the difference between the linguistic background of learner and the linguistic demand of the curriculum, which required fluency in English. Thirdly, all of them believed that maximum exposure of English is necessary to develop language proficiency among learners.

However, the teachers encountered different challenges in their classroom due to the gap between the home and school language. While, English teacher faced challenge of developing the linguistic skills in English among learners, science and mathematics teachers were found to dealing with double pedagogical challenge of simultaneously dealing with limited linguistic skills and development of subject specific register. So, in a language classroom, English is both an object and tool of learning, while in science and mathematics classroom, subject specific register is the object and English is the tool to access that object. All the teachers resisted school mandated use of English and included Hindi frequently in the teaching-learning strategies for teaching of their respective subjects.

To conclude, it was found that the socio-linguistic understanding and beliefs of educators about English as a language and as a medium of instruction was based on separate underlying proficiency model of bilingual proficiency, which advocates maximum exposure of target language. However, the choice of teaching learning strategies of all teachers was base more on the pragmatic demand of learners, who couldn't comprehend and communicate in English, forcing teachers to opt for frequent use Hindi in the teaching learning strategies employed in their classroom.

2)# What kind of proficiency (conversational or academic) is developed in English as a result of teaching–learning strategies used in low cost EM school?

English language classroom was examined to understand whether English was taught only through the means of English itself or other contextual cues were also used.. Findings of this study highlight that the teachers resisted the mandated use of ‘English-only’ policy and frequently included Hindi during teaching of English. Teaching–learning strategies such as code-switching, translation, choral recitations, questioning etc., were used extensively in English, but they did not focus on academic and conceptual understanding of formal aspects of language. In fact, learners were provided with a pre-planned format for completing the task and activities conducted in the classroom. Teachers had limited psycholinguistic understanding of the processes involved in second language learning. Such teaching learning strategies did not use Hindi as a pedagogic tool to scaffold language learning and thus could not engage children in academic discourses. Additionally, lack of corrective feedback and compulsion to use the format taught by teacher discourages active and authentic participation of learner, who were found to be limited to monolingual replies and guess work.

It was found that teacher had limited understanding of prior knowledge and restricted the concept of prior knowledge to mere recalling the content taught in previous class. Many a times, teacher skipped such introductory activities due to shortage of time, thus failing to create readiness among learners. Activation of prior knowledge enables the learner to move from context-embedded to context-reduced communication, by highlighting the socio-cultural context of the text and reducing the

idiomatic expression particularly in that given context. Absence of activation of prior knowledge in the teaching-learning practices in LC schools, refrained the development of social context required for initiating an academic dialogue in the classroom, thereby, limiting the classroom spaces to context embedded communication.

It was also found that the instructional input did not provide opportunity to learner to go beyond the literal comprehension and to access the implicit meaning in the text. Instructions by the teacher did not focus on the linguistic aspects provided in the content and it was usually accompanied by lot of interpersonal cues to scaffold the process of language learning. However, the lack of understanding of implicit meaning or message limited the academic activity to merely a mechanical ritual. Children were observed to simply busy in listening to the teacher silently and following the instruction. There was limited of participation of learners in the classroom. Instruction did not aim at developing the decoding skills and semantic agility required for developing comprehension of text among learners. Children were either provided meaning of difficult words, but instruction did not teach contextualizing the term to the learners.

It was found that classroom interaction relied heavily on various interpersonal cues, making classroom more context embedded. It was found that even if teaching learning strategies focused on development of linguistic aspects such as grammar, composition, it was done in manner where learner were the given format but couldn't develop usage independently. To conclude, classroom communication used a lot of interpersonal and contextual cues that turned learning spaces monotonous and cognitively undemanding. Consequently, the learners could develop limited discrete

language skills, which is one of the three dimensions of language proficiency. Cummins (2001) suggested that this skill is developed simultaneously along with the development of conversational proficiency, where a learner focuses more on phonological and decoding aspects of language such as sounds, letters, alphabets, and decoding words into appropriate sounds. Therefore, it was concluded that learner developed limited conversational proficiency as a result of teaching learning strategies used in School LC.

3)# How does linguistic proficiency in English influence teaching and learning of other subjects, like mathematics and science, in a class where English is used as medium of instruction?

Using any language as the medium of instruction for teaching of various subjects demanded academic proficiency in that particular language. This was also acknowledged by educators in this study in their interview, where they admitted that medium of instruction should be one in which the student is comfortable and proficient. As aforementioned, the teaching of English developed limited conversational skills in learner, which was limited to the reproduction of the text or content they learned in English class. Learners were rarely found engaging in either everyday or academic conversations in English with teachers or fellow students. It was found that the limited conversational fluency in English posed as a language barrier, thus resulting in the emergence of *double pedagogic challenges* for both the teachers and learners. These pedagogic challenges include a) understanding and communicating in English; and b) understanding and communicating in the subject

specific register, i.e., science or mathematics. These challenges were evident in both mathematics and science classrooms, where teacher had to explain the meaning of the text given in English, explain the underlying concept and then develop the skills among the learners where they could reproduce the acquired conceptual understanding in English.

Although teachers tried to resolve these problems through strategies such as explicitly highlighting the key words and their associated meaning, but teacher did not train learner to understand the word within its given context. For example, the phrases such as *how much more*, *how much left* were ambiguous and confusing for learners when used in sentence form in mathematics class. The findings of this study suggested that the mathematics teacher developed limited ‘math register’ among the learners. Limited ‘math register’ means that learners learn to solve the problem by checking out the terms representing mathematical calculation such as *sum*, *difference*, *how many*, *dividend*. This helped the learner to get the technical skills to pass their mathematical examination, but the learners could not build a sound conceptual understanding. Teacher managed to develop limited math register during the classroom with the help of Hindi, but, felt helplessness during assessment that was conducted in English. Assessment constituted context-reduced and cognitively demanding communication with the learners who were dependent only on the available linguistic cues. The learners needed to develop academic language proficiency in the language of assessment to interpret the linguistic cues independently and to perform the examination.

Although, both mathematics and science teachers, tried to help the learners through strategies such as pointing out important questions, preparing easy question

papers, etc., however, such strategies were not helpful for the learners merely beyond passing an examination. Learners seemed to have limited role and participation in meaning making process in the classrooms of low cost school.

4)#How the teaching–learning strategies employed in low cost EM school shape the negotiation of English–vernacular divide?

The findings of this study highlighted that there was difference between linguistic demand of the curriculum, which was predominantly English and the linguistic proficiency of learner, which was pre-dominantly Hindi. However, despite of being aware of this linguistic difference the school Principal strictly imposed English as medium of instruction for teaching of all subjects,. The teachers were observed to negotiate this norm at an individual level by using Hindi to translate and explain subject content to students. One of the key findings of this study is that ‘tokenistic’ inclusion of home language could neither facilitate development of basic interpersonal skill in English nor the academic proficiency in English. English teachers frequently used code-switching or translation of English text in Hindi during classroom interaction for basic interpersonal communication and for explanation of a concepts. However, it was observed that they could not use of children’s home language as a pedagogic resource to engage children in dialogues and discussions in the classroom. Despite of using code-switching and translation as a teaching-learning strategy, the teachers perceived the same as a linguistic error when children used this linguistic behavior in the classroom. This shows the teachers perceived languages as

pure and as they were hesitant in admitting use of Hindi as a tool for teaching English language and never encouraged children to code-switch in the classroom.

The socio-linguistic understanding and beliefs of teacher views language as 'pure' entity and emphasized on learning English only through the exposure and usage of English. They believed that use of Hindi might interfere with learning of English. Cummins (2000) suggested that the learning of number of languages in bi/multilingual situation must be the 'enrichment' (or two-way) of the bilingual program where both the languages must interact and influence mutually. This implied that ideally in any bilingual learning situation such as school LC, the number of languages learned should mutually enrich each other through two-way bilingual enrichment program with focus on the development of additive bilingualism. Contrary to this, the educators viewed learning of English in compartmentalized manner through maximum exposure of English by various means. However, learner experience variety of dissonance when he or she is denied linguistic and cultural incorporation of his home language, resulting often in wide range of failure manifestation, such as disruptive behavior, extreme silent behavior, absenteeism, cognitive or emotional interruption, etc. Thus, teaching learning strategies were found to creating multiple tensions within the existing English-Hindi divide.

5.2 Conclusion and Implications of the Research

The present study titled *Negotiating the English-vernacular divide: teaching learning strategies in English Medium schools* was an attempt to understand the manner and the extent to which teaching learning strategies in a low cost EM school succeed in

negotiating the English-vernacular divide. English-vernacular divide in this study was referred to as *linguistic divide between the school language*, i.e. English *and home language of the learner*, i.e. Hindi. Teaching learning strategies used for teaching of English in low cost school were found to be informed by separate underlying proficiency (SUP) model of bilingual proficiency. This resulted in development of limited academic proficiency, where learner developed surface level linguistic skills such as pronunciation, vocabulary and grammar (Discrete dimension of language proficiency). However teaching learning strategies could not develop critical academic skills such as, analysis, synthesis and evaluation. Learning of English, as a route to vertical mobility, necessarily requires development of aforementioned critical academic skills. On the contrary, teaching learning strategies used in low cost school developed limited surface level fluency. Thus, instead of collaborative learning spaces such teaching learning strategies created coercive learning spaces for negotiation of English-vernacular divide, where Educators Teachers addressed the teaching learning strategies at individual level, but could not challenge the ongoing practices at the collective level.

Based on the findings and analysis, this study strongly suggests that home language is not used as a pedagogical tool because the choice of teaching learning strategies in this school was *informed by commonsensical approach rather than psycholinguistic approach*. For cases such as low cost EM schools, where learners have limited support for learning English at home and where learner is introduced English as a language and as medium of instruction, it is strongly advocated that home language of learner should not be restricted in the formal spaces of learning. Academic language proficiency in English can be developed adequately only when

school *follow mutual enrichment (or two-way) bilingual program where both the languages must interact and influence mutually.*

The role of home language is very important in expanding the innate linguistic capacities of the learner to continue the dialogue and also get an opportunity to acquire the second language with a good level of proficiency. The inability to use children's home language as a pedagogical tool can be attributed to the limited understanding of teachers about the psycholinguistic processes underlying second language acquisition in a multilingual class. Therefore, teacher *training program should include compulsory paper on language development*, which are available only in few universities.

It should be kept in mind that primary grades are foundational years of schooling where children acquire basic literacy and numeracy skills. Thus, it should be emphasized that *curriculum should not be segregated into content teaching and language teaching*. Primary education should follow *theme-based pedagogy*, where development of language and content should take simultaneously in every classroom.

5.3 Limitations of The Research

The scope of empirical and theoretical formulations that could be proposed at the end of the research was constrained by the following limitations:

Observer's effect: Researcher's presence in classrooms was essential to tap the teaching-learning strategies employed by the teachers in school LC. However it was observed that the researcher's presence in the classes during the beginning of the field work affected the interaction between the students and the teacher and between the

students. The teacher seemed very conscious and the students tended to be quieter and occasionally distracted. Once the researcher's presence had become regular and a rapport was established between the researcher and the teachers, the interactions in the class became more spontaneous and the participants in the class felt freer to express their emotions, both positive and negative.

Generalizability of the research

There is huge heterogeneity in low cost EM schools in Delhi, but the researcher could not cover different types of low cost EM schools due to paucity of time and difficulty in getting permission to do research in these schools. Consequently, present research was done in one low cost English medium school and is in no way representative of all the low cost English medium schools. However, the researcher tried to counter this limitation by using controlled variables such as government recognition, CBSE curriculum and level of schooling. This limited the generalizability of the research findings to few schools.

No matter how well specified or narrow the objectives in a social science research, there is always more that remains to be explored and understood. Additionally, there may always be more depths to which, what has been explored, can still be further explored. Time, thus becomes a crucial constraint. However, in terms of a continuing engagement, it also presents itself as a promise filled with possibilities of future research.

5.4 Future Research

-Scope to extend this study in Urban multilingual classrooms

Teaching-learning strategies observed in Low cost English medium schools (i.e.

translation, code-switching etc.) may be present in all classrooms, but, in a multilingual classroom they are more complex and substantially different and shape the nature of discourses differently that take place in the classroom. Thus, there is scope to extend this study in Urban multilingual classrooms.

-In-depth exploration of teacher' perspective and training on language pedagogy

The findings of this research are limited to the issue of language and communication and do not address the issues of development of mathematical and scientific discourse and pedagogy. These aspects can be explored in future researches.

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APPENDIX I
CHECKLISTS FOR DATA COLLECTION AND ANALYSIS

Classroom Observations:

Part I: Observing classroom structure and arrangement

- Socio-economic and linguistic profile of the students and the teachers
- How many students are accommodated in a single classroom?
- What is the seating arrangement- how is it decided; is it static across all days or does it differ from day to day; if static- who are the children who get to be in the front/ centre; where does the teacher position his/herself; nature and extent of movement allowed- for teacher as well as students
- What is the time table?
- What are the basic infrastructure available in classroom
- How have the classroom walls been used- charts, paintings, etc.,
- What is the nature of the charts and paintings on the wall- language, themes, interactive, fixed/regularly changed, etc.,
- Are the everyday living contexts of the children reflected in these charts/paintings

Part II: Observing classroom teaching

- What is/are the language/s used in the classroom- (between teacher –teacher, between students) during formal and informal interactions
- Textbooks of English, and other subjects: what kind of activates and content are given/ level of difficulty/supplementary books
- Assessment sheets of grade V
- Classroom Interaction: who initiates classroom interaction/ in which language/ which language is used for formal communication/ which language is used for informal communication
- Interaction outside the classroom: who initiates classroom interaction/ in which language/ which language is used for formal communication/ which language is used for informal communication.
- Individual/ group activities
- In case of group activities: Process of group formations- student mediated or teacher mediated; if group leaders are assigned, who decides the same; extent and

nature of participation of different students; extent and nature of teacher involvement; nature of activities competitive or non-competitive, etc.

Individual activities: do all students get to participate or a selected few (in case of later who decided), nature of activities- Nature of examples and references used by the teacher in the class and frequency of the inclusion of socio-cultural references and local knowledge systems- how are these used to build the concept

Student-teacher interactions

Who all initiate the interactions (teacher/ student/ either of the two)

Nature of interactions- responding to questions of teachers/ sharing experience/ agreeing with teacher/ expressing disagreements/ one student at a time/ students building on each other's statement/ teacher invoked participation/ voluntary participation/ frequency of student's expression in classroom, etc.

Peer-group interactions

Nature of peer group interactions- informal/ non academic vs. academic; on own initiate or on teacher's direction, competitive or helping, language used, frequency of interactions within and outside academic periods, how and in what situations do they share personal experiences/stories with each other; do some children engage in it more often than others; do all students interact with all other students or are these interactions based on certain group formations;

Guiding questions for Classroom observation

How teacher introduces a concept in class: checking prior knowledge, contextualize the prior knowledge and connects to the topic of discussion.

What kind of instruction input teacher provides in the classroom: directly read from textbook, different from textbook, advanced level from the existing knowledge of learners, focus on language.

What are the attitude and beliefs of Principal and teachers: do they share similarities/ differences/ coordination between their view and its practice.

What kind of contextual cues provided by teacher: is it interpersonal or linguistic/ focus of cues/

what kind of activities are planned in classroom or school/ are they related to everyday life/ are they motivating or monotonous

APPENDIX II

Teacher's Profile/ Learner's Profile/ School Profile

Name/ Age/ educational qualification/ mode of learning/ work experience/ Languages known/ year of establishment of school/ who started it/ what were aims and objectives of starting this school/ who is the decision making authority/ Educational level of parents/

- 1.# For how long have you been teaching in this school?
- 2.# How many language do you know?
- 3.# What is your mother tongue/ home language?
- 4.# Which are the newspapaer or magazine you prefer at home
- 5.# What do you think about English as a language?
- 6.# Tell me something about yourself?
- 7.# Tell me something about /subject curriculum?
- 8.# What do you like about your school
- 9.# What do you dislike about school
- 10.#How does a child learn language/s
- 11.#What is the role of language in learning
- 12.#What is the role of socio-cultural context in learning?
- 13.#How do you use a child's linguistic and cultural resources in the classroom?
- 14.#How do you teach a particular concept
- 15.#Which all languages are important for an individual to know and what is the role of the school in teaching these languages?

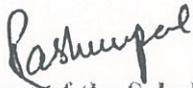
Annexure-I

Jawaharlal Nehru University

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Name of the Author (Research Scholar)	RASHIM PAZ
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3.	Name of Research Scholar	MRS. RASHIM PAL
4.	Name of Guide/Supervisor(s)	1. PROF. MINATI PANDA 2. PROF (RETD.) A.K. MOHANTY (Co. Supervisor) 3.
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6.	Level of Degree	
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8.	School	SOCIAL SCIENCE
9.	Name of affiliated Institution for which JNU is granting the degree	—
10.	Date of Submission	05-01-2016
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