# A Study of the Impact of Dynamic Assessment on L2 English Teachers' Classroom Interactional Practices

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**BY**

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I, **B. Salomi Snehalatha,** hereby declare that the work embodied in this thesis titled **A Study of the Impact of Dynamic Assessment on L2 English Teachers' Classroom Interactional Practices** has not been submitted in part or in full to this or any other University or Institution for the award of any degree or diploma, and is carried out by me under the supervision of **Pingali Sailaja**, Professor, Centre for English Language Studies, University of Hyderabad, Hyderabad. I hereby agree that my thesis can be deposited in Shodhganga/INFLIBNET.

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This is to certify that the thesis titled **A Study of the Impact of Dynamic Assessment on L2 Teachers' Classroom Interactional Practices** submitted by **B. Salomi Snehalatha** bearing registration number **15HGPH01** in partial fulfilment of the requirements for the award of Doctor of Philosophy in the School of Humanities is a bonafide work carried out by her under my supervision and guidance. This thesis is free from plagiarism and has not been submitted previously in part or in full to this or any other University or Institution for the award of any degree or diploma.

The following publications and conference presentations were carried out by the candidate during the Ph.D. programme:

**A. Publications**

a. Salomi Snehalatha, B. (2022). Preparing in-service teachers for exploratory action research: The potential of mentor's mediational discourse in promoting conceptual thinking. *Fortell. 44*, 55-68. ISSN: 2229-6557

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Further, the student has passed the following courses towards fulfillment of coursework requirements during her Ph.D. programme:

| S.No. | Course Code | Name of the Course | Credits | Pass/Fail |
|---|---|---|---|---|
| 1. | EG-821 | Discourse Analysis (DA) | 4 | PASS |
| 2. | EG-822 | Advanced Course in Language Assessment (ALA) | 4 | PASS |
| 3. | EG-825 | Analyzing Texts and Contexts: Perspectives from Critical Pedagogy | 4 | PASS |
| 4. | EG-826 | Sociolinguistics | 4 | PASS |
| 5. | EG-828 | Cognitive Linguistics and Second Language Learning and Technology | 4 | PASS |

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**Abstract**

This study explores the impact of dynamic assessment on classroom interactional practices of second language teachers in ESL context. Numerous studies in the ESL context have attempted to describe the effective and ineffective classroom behaviours of L2 teachers and the consequences of such behaviours on language learning opportunities for students. Yet, very few studies till date explored the processes in which L2 teachers can be supported in overcoming their ineffective or routine behaviours and learning to take effective interactive decisions.

In this study, the research questions attempted to find 1) the dominant interactional patterns in the participant teachers' classes before DA2) the role of DA in shaping teachers' conceptual thinking in relation to classroom interactional practices and 3) the extent to which DA can promote change in the classroom interactional practices of L2 teachers. Six teachers working in Zilla Parishad high schools of Telangana participated in this study. Quasi-experimental research design (i.e., pre-task, intervention and post-task format on a single group of participants) was used as the purpose of the study was to trace the process of change in the participants' ability to think conceptually. In the intervention, teachers were taught effective questioning and follow-up features and then assessed dynamically based on their real-time classroom interactional practices. In this study, DA procedures were conducted with each teacher individually following the observation of a lesson. The intervention comprised of three DA sessions with each of the six participants. Data collection tools included video recordings of teachers' classroom interactions - before and after the intervention, and audio recordings of interactions between the researcher (also the mediator in this study) and the teachers during the DA sessions. Mixed method approach was used for data analysis.

The data revealed that by the end of the intervention there was a decrease in the frequency of mediation required by four teachers. Analysis of teachers' reciprocal moves

showed a rise in the frequency of the independent moves of five teachers by the end of the intervention. Post-DA samples of teachers showed that DA impacted the teachers' classroom interactional practices. Improvement was noticed in aspects such as a) generating more opportunities for learner participation b) using greater number of high-level evaluation moves and c) uptake of students' responses. However, the improvement noticed in the post-DA lessons varied from teacher to teacher.

The results of the intervention were attributed to the teachers' heightened awareness of effective interactional strategies and reflection on their own classroom choices – all of which became possible because of engaging teachers in DA. This study concludes with an argument that DA should be taken seriously as a means of promoting L2 teachers' conceptual thinking which is pivotal in achieving the educational and curricular goals prescribed in the policy. The study concludes with a discussion on the key findings. Implications and directions for further research are presented.

## Table of Contents

# Chapter 1: Introduction

This introductory chapter provides an overview of the current study. The background of the study and the research problem are discussed. The rationale and motivation for the study and the significance of the study are presented. The final section presents an outline of the thesis.

## 1.1 Aim of the study

The broad focus of this study was on exploring the relationship between assessment and instruction in the development of second language teacher competences. In particular, this study investigated the impact of Dynamic assessment (DA) - an alternative form of assessment, on shaping the conceptual thinking of experienced L2 teachers working in an ESL context. The concept of DA emerges from the Sociocultural theory of mind put forward by Lev Vygotsky (1978). It is a specific form of verbal mediational strategy in which assessment is combined with instruction. This kind of mediational strategy is used purposefully by teachers/educators/tutors for maximizing the performance or the cognitive abilities of their learners. The effectiveness of DA is extensively explored in varied areas of student learning. Nevertheless, there is a distinct paucity of research on how DA can be used to support teacher learning or teacher competences.

This study was aimed at filling the gap in the research by employing DA as a mediational strategy while interacting with teachers during post-observation meetings. The study aimed to find how the mediational strategy i.e., DA enabled teachers to learn to think conceptually about their own classroom interactional practices. The study also aimed to find whether the conceptual thinking has been transferred to new lessons through an analysis of the differences in their interactional practices before and after intervention.

## 1.2 Background to the study

Classroom is highly regarded as a space where students learn more. However, studies on what actually happens in the classroom and how classroom interaction is associated with variations in student learning outcomes reveal a gloomy picture of the state of affairs in Indian school education system. In a report on the quality of education in India by Annual Status of Education Report (2022) it was stated that 'a majority of children reaching middle school in India were not sufficiently equipped with foundational literacy skills, let alone higher-level capabilities' (Banerji, 2022; p. 24). The same report also stated that 'much of the academic content transacted in schools was driven by preparation for board examinations rather than development of the ability to apply what they know to solving real world problems' (p. 26). Research studies specifically focused on classroom interactional practices of teachers point towards poor opportunities for students to learn or speak in classrooms. For instance, in a study on teacher talk in privately funded schools catering to children from low-income families of Hyderabad in India, it was found that the classroom discourse was marked by directive forms of teaching such as teacher-led recitation and recall and highly ritualized teacher-pupil exchanges which lacked in quality (Smith, Hardman, & Tooley, 2005). Similar findings were reported by a study which explored the effectiveness of teacher-student classroom interactions in the classrooms of Telangana and Andhra Pradesh (Grijalva et al., 2018). In this study, the researchers observed classes of English and Mathematics teachers working in different types of government and private schools using CLASS-Secondary (Classroom Assessment Scoring System), a tool designed for observation of classes. According to this report, teachers scored least in the domain of 'interactional support' when compared to the other two variables of the study i.e., 'classroom organization' and 'emotional support'. It was also found that teacher-led lessons gave inadequate chances for students to demonstrate autonomy. Another interesting finding from this study is that more disadvantaged students are taught by teachers with lower

CLASS scores, while more advantaged children are taught by higher-scoring teachers. Based on these findings, the researchers opine that 'classroom instructional activities are failing to enhance critical thinking skills and provide a meaningful learning experience; something which is a real cause for concern' (p. 13).

The concern for providing meaningful learning experiences while taking into account the linguistic, cultural and social backgrounds of the learners is not something new or specific to India. There is a call from experts and educationists alike for providing meaningful interactional opportunities to students in educational contexts across the globe (Arend & Sunnen, 2016; Guo, 2019; Incecay, 2010; Mercer, 1995; Teo, 2016). Furthermore, in today's rapidly changing world there is a call for development of higher level competences such as learner autonomy (Kumaravadivelu, 1994; NCF, 2005; Prabhu, 1990), collaborative skills (Parsons & Taylor, 2011), critical and creative thinking skills (Wan & Gut, 2011), etc. while simultaneously focusing on teaching of content and development of language skills prescribed in the syllabus.

On one hand the expectations from the current 21st century students are rapidly evolving and on the other as research reports and studies demonstrate that teachers are not well prepared to suit the current demands of the education system. The gap between the expected curricular goals and teachers' actual interactional practices can be considered a reason for the 'learning crisis' (Grijalva et al., 2018) in the classrooms of ESL contexts.

***Significance of classroom interaction in promoting learning***

Classroom interaction refers to the interaction that evolves between teacher and learners as part of the process of accomplishing the lesson (Ellis, 1994). In formal education system, classroom interaction occupies a very special significance as it is one of the means for teachers to achieve the curricular goals and also the pedagogic objectives of the class. Especially in L2 classrooms, where language is the medium and the focus of instruction, interaction serves not

only as input to students but also functions as a tool to enhance student learning in the class. According to Teo (2016), 'classroom talk or teacher-student interaction is the software vital to lubricate the hardware (i.e., textbooks or technology) aimed at driving the teaching and learning processes in the classroom' (p. 58). Pianta and Hamre (2009) describe it as the primary engine through which children learn.

In ESL contexts, teacher-whole class interaction happens to be the most commonly observed structure of discourse when compared to other forms such as student-student interactions. Teachers enjoy absolute authority and power to exercise control in the classroom (Reeve, 2009). They manage the interaction by determining the nature and extent of learner participation in the classroom (Tsui, 2001). Walsh (2006) states that even in the most decentralized classrooms, it is the teacher who has the special power and authority to control the discourse.

Given this scenario, L2 teacher's 'classroom interactional competence' (Walsh, 2006) occupies a special significance in the process of teaching and learning. Classroom interactional competence implies an understanding of the ways in which one's interactional decisions enhance learning and learning opportunities. It also encompasses an understanding of the interactional strategies which are appropriate to the teaching goals and the ability to adjust these strategies to support co-construction of meaning in the class.

Teacher questioning ability is considered an important component of interactional competence as questions can be powerful tools in guiding the linguistic and cognitive development of ESL students (Gibbons, 2003). Teacher questions were found to have a positive impact on student participation in classroom activities and language learning (Kim, 2010). Questions posed by a teacher also play a significant role in helping students develop autonomy (Choi, Land, & Turgeon, 2008; Cohen, 1994; Ismail & Alexander, 2005; King, 1994; King & Rosenshine, 1993; Rosenshine, Meister, & Chapman, 1996), in motivating students to think,

and develop their reflections (Brown & Edmondson, 1985; Cooper & Cowie, 2010), in diagnosing students' misunderstanding (William, 1999), and in providing opportunities for learners with mixed abilities (Sullivan & Clarke, 1991).

Similarly, follow-up is crucial in interaction as teacher choices can play a significant role in promoting language learning. Teacher feedback to students' contributions and errors may serve not only to let learners know how well they have performed but also to increase motivation and build a supportive classroom climate (Chafi & Elkhouzai, 2016). Right kind of feedback is considered crucial for effective teaching and learning process (Hattie & Timperley, 2007). Hattie (2002) stressed that providing appropriate and good quality feedback to students is one of the top five strategies teachers can utilize to enhance student achievement.

***Problematic interactional practices***

Despite the onus on L2 teacher to play an active role in classroom discourse, teachers still seem to be clinging to the traditional roles of explaining the content (Erling, Adinolfi, & Hultgren, 2017). Numerous research studies in classroom interaction of ESL context reveal that teacher questions, feedback and scaffolding strategies are not favourable for language learning.

Long and Sato (1983) found that teachers asked significantly display questions which did not provide sufficient opportunity for students to use the language. In another study in an ESL context, teachers' questions always catered to the lower-order thinking skills and there was no place for challenging questions which would make the learners think (Sardareh, Saad, Othman, & Me, 2014). On the whole, high frequency of procedural and factual type of questions which did not elicit authentic information from the students characterized ESL classrooms.

Empirical evidence regarding ESL teacher's feedback reveals that it is mostly related to evaluation of student's responses (Chafi & Elkhouzai, 2016). Teachers repeat the students'

responses or offer further explanation themselves based on the contributions of students. Studies also reveal that L2 teachers are less tolerant in terms of error correction (Banu, 2012).

***Factors influencing teachers' interactional decisions***

The question of what factors influence teachers' interactional decisions or choices in the classroom has been probed from different perspectives.

First and foremost, Ellis (1994) points out that teachers do not pay as much attention to classroom discourse as they do to other aspects of teaching such as content, method of teaching, tasks for practice and the atmosphere needed to achieve the teaching objectives. In contrast to these 'preactive decisions' i.e., decisions for which planning is done by the teacher before taking a class, several decisions are usually taken in the class on the spur of the moment. These decisions are described as 'interactive decisions' (Tsui, 2003; as in Gün, 2014) and refer to those decisions taken by the teacher when interacting with students in the classroom. Most of such interactive decisions are pertaining to issues such as who may speak and when, for how long and on what topic. Walsh (2006) describes such spontaneous decisions as 'online decision-making' and claims that successful teachers align their online-decision making with the pedagogic goal of the moment. Elmore (2000) calls this process of taking effective decisions as 'the technical core of education' because "decisions about what should be taught at any given time, how it should be taught, what students should be expected to learn at any given time, how they should be grouped within classrooms for purposes of instruction, what they should be required to do to demonstrate their knowledge, and, perhaps most importantly, how their learning should be evaluated — resides in individual classrooms" (p. 5).

Secondly, efficiency in teaching a second language was believed to be a natural outcome of the knowledge of theories of second language acquisition and methods of language teaching (Freeman, 2002). So, interactive decisions are a product of one's pedagogical content knowledge (Shulman, 1986) i.e., a form of practical knowledge used by teachers to guide their

actions. This includes knowledge of academic content, knowledge of how to structure the academic content, knowledge of the common conceptions, misconceptions and other difficulties that students encounter in learning as well as the knowledge of teaching strategies that can be used to address the learning needs of the students. Pedagogical content knowledge is unique to each teacher and is based on the manner in which they personally relate their content knowledge to pedagogic knowledge.

Finally, research on teacher cognition revealed several interesting findings about the factors that actually determine teacher thinking in classroom decisions or practices. Elbaz (1983) opines that every experienced practitioner holds a special kind of knowledge in distinctive ways and this knowledge originates from "first-hand experience of students' interests, needs, strengths and difficulties, and a repertoire of instructional techniques and classroom management skills" (p. 5). Studies on teacher learning reveal that pedagogic content knowledge plays only a partial role in teacher's classroom choices and a vast majority of their choices actually originate from 'teacher's mental lives' (Freeman, 2002) or 'teacher cognition' (Borg, 2003). Teachers' practical reasoning about their work is guided by their personal experiences, practical knowledge and personal beliefs (Penlingotn, 2008).

The brief review of factors guiding teacher's interactive decisions lead to the understanding that as teachers accumulate years of experience, their decisions tend to be guided more by their practical understanding of learners and context rather than their content and pedagogic knowledge. Past experiences as students, beliefs and a host of other factors intervene and determine their choices. Borg (2003) sums up the massive effect of cognition on teacher practice by saying that "teachers are active, thinking decision-makers who make instructional choices by drawing on complex, practically-oriented, personalized, and context-sensitive networks of knowledge, thoughts, and beliefs" (p. 81). They get used to certain routine behaviours in the course of time and learn to manipulate a number of tasks quickly such as

‘initiating turns, responding to student utterances, attending to linguistic mistakes within micro-seconds’ (Sert, 2019; p. 216). However, the issues that need serious attention in the light of the information coming from teacher preparation for interaction, teacher knowledge and teacher cognition are: 1) to what extent teachers’ decisions are favourable to student learning and 2) how can teachers learn to make effective interactive decisions that create an encouraging and motivating atmosphere for language learning in the classroom.

This section started with research reports that brought to light the lacunae in teacher-student classroom interactions in ESL context. The significance of effective classroom interaction in relation to student learning attainment and the problematic patterns observed in interactional practices are presented. Finally, the factors influencing teachers’ interactive choices in the classroom are reviewed. The section concluded by briefly pointing out the research problem that is explored in the current study.

### 1.3 Statement of the problem

In this section, the current state of research in the field of second language teacher learning is briefly described to make a case for the research gap in the literature. Following this, justification for studying this particular research problem is presented.

Initially, second language teacher education (SLTE) was rooted in positivist paradigm wherein the belief was that there is an ‘objective truth or a reality which existed apart from the [teacher]’ (Johnson, 2009; p. 7). Studies in this paradigm followed scientific methods for data collection which did not take into account teacher’s own interpretations of his or her classroom practices. The focus of analysis was on capturing effective features of teaching that lead to better learning among students. In this paradigm, teachers were expected to learn general theories of second language acquisition and methods of teaching as it was assumed that teachers would be able to apply this knowledge to any teaching context. In this paradigm, assessment of teacher competence was also simple and straightforward. It meant documenting

what teachers know about language and how teachers teach the lesson (Freeman, Orzulak & Morrissey, 1999).

However, research in the fields of classroom interaction, teacher cognition and language teaching – all of these redefined the theoretical frameworks in the field of SLTE. Several trends can be noticed after 1970s in SLTE with respect to what is important for a language teacher and how to prepare teachers for achieving better learning outcomes. For instance, after behaviourist approach, came the cognitivist approach, analytic or intuitive approach and applied linguistics perspective (Johnson, 2009; Kanakri, 2017). However, a path-breaking and prominent shift came with the application of sociocultural theory of mind, popularly known as sociocultural theory of learning (hereafter SCT), to SLTE. This epistemological shift in thinking about what constitutes learning and how learning takes place had opened the doors for an interpretive paradigm in SLTE.

According to this approach, the focus of teacher education has to be primarily on the complex ways that teachers think about their own practices and how their practices are shaped by their experiences, beliefs and practical knowledge (Pajares, 1992). Sociocultural perspective emphasizes that learning happens through social activities and that higher-level human cognition has its origin in social life. Hence, studies in SLTE ascribe great importance to collaborative activities through which educator/tutor and teacher come together to discuss the effectiveness of classroom practices.

In this process of learning, utmost importance has been given specifically to the development of the ability for 'conceptual thinking' (Johnson, 2009). Conceptual thinking does not mean the knowledge of concepts. It was defined by Vygotsky (1998) as "a new form of intellectual activity" (p. 56; as in Johnson, 2009). It refers to the ability of teachers 'to reflect on and critique their everyday concepts, and thinking in scientific concepts about aspects of

teaching which are relevant to their daily professional lives' (Johnson, 2009; p. 65). It is considered a prerequisite for attaining expertise in any professional domain.

SCT approach to teacher learning has led to the emergence of a 'host of alternative professional development structures that allow for self-directed, collaborative, inquiry-based learning that is directly relevant to teachers' classrooms' (Johnson, 2009; p. 95). Current research focus in the field of SLTE is on gaining more evidence with respect to the efficacy of professional developmental activities such as Critical Friends Groups (Bambino, 2002), Peer Coaching (Ackland, 1991, Hooker, 2013), Cooperative Development (Edge, 2002) and Teacher Study Groups (Dubetz, 2005). Studies address the questions of how joint activities facilitate reflection, negotiation, collaboration, collective thinking and construction of knowledge. For instance, discussion on Classroom Learning Episodes (CLE) with an expert colleague or a mentor was a practice that was found to promote teacher reflections and understanding of one's own classroom events (Slimani-Rolls & Kiely, 2014). Writing reflective journals and diaries and discussing the issues with the educator/supervisor/mentor is another huge area of research which provides enormous evidence of how dialogue between teachers provides opportunities to think and reflect, all in an environment where there is no fear of being judged or evaluated (Mathew, 2013). Boshell (2002) explains how his experiences of engaging in a year-long Cooperative Development group helped him to understand and teach his students in different ways. Engaging in an extended dialogic process with another teacher created a mediational space which allowed the teacher to articulate his ideas which ultimately lead to the reconceptualization of how he thought about his instructional practices. Golombek (2011) narrates the substantial changes in the conceptual thinking of pre-service teachers when her interactional decisions were subjected to dynamic process of assessment.

As this review of the current state of research in SLTE suggests, there is abounding evidence in support of SCT approach to teacher development from western contexts. However,

there is very little empirical evidence from ESL contexts in relation to the efficacy of SCT approach teacher learning. In particular, there are very few studies that demonstrate the effectiveness of alternative professional development practices which stand on the SCT principles of dialogue between teachers or with a knowledgeable other (i.e., teacher/educator).

Keeping in view the shift in SLTE from positivist to interpretive paradigm and growing realization of the effectiveness of SCT approach in improving teacher practice, this study aims to explore the effectiveness of verbal mediation by a peer/knowledgeable other on L2 teachers' classroom interactional practices. This study specifically focuses on the effectiveness of DA, a specific form of verbal mediation rooted in the principles of SCT, on developing the conceptual thinking of L2 teachers.

***The need for DA in teacher development***

DA is an interactive assessment procedure grounded in the principles of SCT developed by Lev Vygotsky (1978). DA is used in contexts where the purpose of the examiner is not to measure or evaluate the skills of the learners but to maximize their performance (Campione & Brown, 1987). The dialogic mediational strategy used in DA was found to be helpful in many ways. For instance, diagnosing the present abilities or the actual level of thinking becomes possible through DA and this in turn helps in providing appropriate mediation that may lead to learning (Lantolf, Poehner & Swain, 2018; Poehner, 2005, 2007). DA is based on the belief that joint activity and structured dialogue are the fundamental tenets of any process aimed at development. Hence, it is essential and indeed fair, to look beyond a person's independent performance and explore how he or she performs during a joint activity (Poehner & van Compernolle, 2011). The principles underlying DA procedures make it seem to be an apt fit to the field of teacher learning as it makes space for the teacher to articulate his or her thoughts while allowing the other (peer/educator/trainer) to shape teacher thinking by providing appropriate instruction/help when needed. This kind of structured dialogue may help teachers

in reconceptualization of their thoughts, which are modified in the course of time by factors such as personal and practical experiences, and enable them to look at their classroom problems and routine practices in the light of the other's perspective.

The effectiveness of DA as a means of enhancing learning has been extensively studied in second and foreign language learning (Ableeva, 2010; Dörfler, Golke & Artelt, 2009; Poehner, 2005; Safa, Donyaie & Mohammadi, 2015). However, there are very few studies on how DA impacts teacher learning. There is a need for more studies in varied domains for establishing a more robust and convincing evidence as to how DA creates a mediational space in the context of teacher learners. To fill this research gap, this study explores how DA can be a catalyst for change in experienced language teachers' thinking and practice.

### 1.4 Rationale for the study

The rationale for studying the effect of DA on the development of experienced teachers' conceptual thinking comes from the findings that DA as a dialogic mediational procedure can enhance higher mental capacities that include planning, logical thinking, problem solving, and evaluation of the effectiveness of these processes (Lantolf, 2000). Previous studies that investigated into the effectiveness of DA on teacher learning demonstrate that DA can promote teacher reflections of their own practices (Golombek, 2011) as well as enhance teacher learning of new pedagogic concepts (Moradian, Miri, & Qassemi, 2015). However, the affordances and limitations of using DA as a framework to provide dialogic mediational support to experienced L2 teachers has not been addressed in previous studies. The dearth of substantive evidence regarding the effectiveness of DA procedure on development of teachers' higher mental capabilities required for taking effective decisions in the classroom provided the rationale for this study.

Another reason for the study stems from the current emphasis in second language teacher development to find effective and alternative ways of promoting teacher thinking and

improving classroom performance (Johnson & Golombek, 2011). Alternative ways of promoting teacher learning may also applied to the context of experienced teachers (Kubanyiova, 2012). Experience in language teaching does not necessarily entail expertise in thinking (Freeman, 2002; Tsui, 2003) and experts point towards the need for teachers to be cautious from slipping into 'routinized behaviours' that may affect teaching and learning (Thornbury, 1996). Current empirical evidence from teacher cognition reveals that apart from pedagogic knowledge there is a volley of factors (personal experiences of teachers as learners and practitioners, beliefs, attitudes, teaching context etc.) shape teacher's knowledge, thinking and classroom practices (Borg, 2003). It is possible that these factors also influence teachers' reasoning abilities and limit them from impartially evaluating their own practices from different perspectives (Penlington, 2008). Hence, the soundness of such reasoning needs to be questioned by another as individual. Assessment of the effective of their reasoning helps in 1) diagnosis of their current abilities and 2) determining the mediational support that they require to attain their full potential. The argument that teacher change is intertwined with not only reflections but also dialogue with another teacher provides the rationale for investigating the effectiveness of DA in this study.

As mentioned in this section, joint activity and dialogue between participants are necessary components of any teacher development activity. In addition to this, it is significant to recognize and appreciate the value of teacher thinking in the process of change in teacher practice. As DA is based on the principles that satisfy all these requirements for teacher development, the current study aims to investigate the effect of DA on promoting experienced teachers' thinking and practice. The rationale for this study comes from research focus in all the inter-related fields pertaining to this study i.e., classroom interaction, SLTE, SCT, and DA.

Broadly, this study aims to find the effectiveness of DA in shaping L2 teachers' thinking. Specifically, the objectives of the study are: to find whether engaging L2 teachers in

DA-based mediational procedures is practically possible, to analyse the effectiveness of DA in encouraging L2 teachers' ability to articulate their thoughts, and to study the differences in teacher thinking as well as practice as a result of DA. The following section presents the research questions that were used to attain these objectives.

### 1.5 Research questions

The research questions that guided the current study are:

1) What are the dominant interactional patterns in L2 teachers' classes before DA and what is the effect of these practices on opportunities for student participation and second language learning?
2) How can DA-based mediational discourse shape teachers' conceptual thinking in relation to classroom interactional practices?
3) To what extent can DA-based mediational discourse promote change in the classroom interactional practices of L2 teachers?

The preliminary work that contributed to the formulation of these research questions and the purpose of each of these research questions is elaborated in detail in Chapter 4.

### 1.6 Motivation for the study

Motivation for this study comes from the researcher's own experiences as a secondary school English language teacher. The researcher experienced that in-service teacher training programmes do not provide enough space for teachers to deliberate on actual classroom practices. In fact, in-service teacher developmental initiatives are carried out on a large scale and these trainings are most often inappropriate, ineffective and irrelevant to the actual needs of the teachers. Teachers as such feel helpless as on one hand there is no one to support them in their actual needs, and on the other hand quality in student learning is immediately linked up with lack of teachers' commitment and competence. The researcher believes that the current

situation is associated with two factors – a conservative stance of the administrators towards regulating teacher behaviours and a negligible focus on encouraging communities of inquiry wherein teachers can talk, negotiate and solve the problems in their classroom practices. Tsui's (2001) classification of 'etic' and 'emic' thinking in classroom interaction helped the researcher to take a stance regarding the need for engaging teachers in a dialogue. Given the dubious role of 'etic' perspectives (i.e., thinking of scholars or outsider view) in changing teacher's thinking or practice, the researcher felt the need for investigating how 'emic' thinking (i.e., teacher thinking or insider view) can be captured and made a part of teachers' developmental processes. The study thus stems from researcher's interest in arriving at a working model for in-service teacher development that can integrate both emic and etic thinking.

### 1.7 Significance of the study

The significance of investigating the effect of DA on experienced teachers' thinking and practice of classroom interaction is addressed in this section from three different standpoints. Firstly, the findings of this study can give insights into how language can be used during DA procedures to encourage experienced teacher's thinking.

Secondly, this study will also provide empirical evidence for SCT approach in L2 teacher learning. National Curriculum Framework on Teacher Education (NCFTE, 2009) recommends teachers to 'explore, reflect on and develop one's own practice' or 'deepen one's knowledge and update one's academic discipline' (p. 64). In contrast, this study is based on the principle of learning as a social activity. Support of an expert or a peer during a socially negotiated activity is fundamental to the development of higher order thinking skills. Such negotiated experiences will trigger similar types of thinking even when one is working independently (Langer, 1987; Vygotsky, 1978). So, this study can provide empirical evidence that may change the nature and course of future professional development activities.

Finally, the findings of the study could also yield significant insights into ways and means of developing teacher-learner interactions in educational institutions that are similar to the context of the current study. As reviewed in Sec 1.2, teachers are not well prepared to encounter the challenges of the current educational scenario. There is no training programme, as far as the researcher's knowledge goes, that specifically focuses on enhancing teacher's ability to use effective interactional strategies in the classroom. This study hits the bull's eye by addressing the fundamental question of what teacher's actually need to bring about necessary changes in their classroom interactional practices. As such, the findings of this study have the potential to contribute to research on developing the classroom interactional competence of teachers.

Thus, this study is significant from different standpoints and can motivate further research studies on mediational discourse as well as development of teacher-student interactions of ESL context.

### 1.8 Organization of the thesis

Following the introduction, this thesis presents the literature review, theoretical framework, research methodology and analysis of findings of the data in the following chapters. The organization of the thesis and a brief introduction to each of the chapters is given below:

Chapter 2 reviews the literature on classroom interaction and effective interactional features that contribute to second language learning. A review of the current research on in-service teacher development is presented. Research in reflective practices is contrasted with dialogue-based practices to set the ground for the current study.

The focus of Chapters 3 is the theoretical frameworks used in this study. The chapter explains the key concepts from SCT that are central to DA and also reviews the studies that have applied SCT concepts and DA as a means for bringing change in teacher thinking.

In Chapter 4, the research design and methodology adopted in the current study are explained in detail. Details of the pilot study that helped in formulation of research questions, and the details of the main study such as research context, data collection procedures and data analysis methods and tools employed are explained here.

Chapters 5, 6 and 7 address the research questions stated in 1.4 above. Chapter 5 presents the findings pertaining to data collected for answering research question 1. Quantitative and qualitative analysis of baseline classroom interactions of each teacher are presented. The effectiveness of teacher's classroom interactions is analysed in relation to learning opportunities for students in the classroom.

Chapter 6 presents the findings pertaining to data collected during DA procedures. Typologies of mediational prompts and teacher responses are presented. The key findings from the amount and type of mediational support that teacher required during the dynamic process of assessment were presented. Also, key findings from the nature of responses given by the teachers are presented.

Chapter 7 presents the findings from post-DA data. Analysis of the data is focused on finding the extent to which teachers were able to take effective interactive decisions.

Finally, Chapter 8 presents discussion on the findings, and suggests implications of this study for stakeholders in the field of SLTE. The chapter concludes with suggestions regarding how DA can be further researched in future.

## Chapter 2: Classroom Interaction and Teacher Development

This chapter is aimed at reviewing the developments in two inter-related fields of research i.e., L2 classroom interaction and development of L2 teachers' classroom interactional competence. This review is aimed at providing a justification for using DA as a means of developing teachers' conceptual thinking in relation to classroom interaction.

There are four sections in this chapter. The chapter starts with a brief review of the prominent theoretical arguments that emphasise on the role of interaction in second language learning. The following section is aimed at addressing the relation between method of teaching and classroom interaction. The next section in this chapter provides an overview of three prominent strands of research in classroom interactional studies i.e., 1) Initiation-Response-Feedback structure of interaction 2) Importance of classroom/pedagogic context in interaction and 3) Role of teacher cognition in shaping learner participation during classroom interaction. The final section of this chapter provides a brief review of empirical research conducted with the objective of promoting change in L2 teachers' classroom interactional competence. The literature reviewed in this chapter provides a robust empirical support for the use of dynamic assessment approach in developing teacher competencies.

### 2.1 Theories supporting interactionist approach

Classroom interaction refers to the talk that evolves between teacher and learners in the process of accomplishing lesson objectives. Through interaction, 'teachers provide learners the opportunities to encounter input and to practice the target language' (Ellis, 1994; p. 573). However, the benefits of classroom interaction tend to be overridden by certain arguments in literature that interaction is not a necessary condition for development of language proficiency. For instance, Gass and Selinker (2000) expressed an opinion that interaction may be a device for setting the stage but it may not be the only means for learning the target language. At the ground level too, teachers tend to misconstrue classroom interaction as a feature dependent on

the method of teaching. A clear understanding of fundamental issues such as - why interactional approach is recommended in classrooms and how interaction is different from communicative method are essential before discussing aspects such as developing L2 teachers' ability to use effective classroom interactional features.

This section provides a brief response to the above two questions by drawing support from second language acquisition theories that strongly support interactionist approach in L2 teaching and learning.

**(i) Interaction Hypothesis:** The Interaction Hypothesis (IH) proposed by Long (1985) is a theory of second language acquisition according to which the development of language proficiency becomes possible primarily through communication between the participants. It is based on two important arguments. Firstly, similar to the IH proposed by Krashen (1992), it states that comprehensible input is necessary for second language acquisition. Secondly, the IH states that input has to be made comprehensible to the learners through negotiation of meaning in conversations. Long (1985) suggests many ways through which input can be modified for the benefit of the learners. It includes slowing down the pace, simplifying the vocabulary, repeating with clear articulation, etc. In due course, IH was expanded to include other types interactional strategies in the negotiation of meaning such as confirmation checks, clarification requests, recasts (rephrasing an incorrect sentence with the correct structure), and explicit feedback. On the whole, IH talks about how the input has to be comprehensible and modified for maximizing learning.

**(ii) Output Hypothesis:** Following this, Swain and Lapkin (1995) emphasized on the importance of 'learner output' and put forward 'Output Hypothesis'. According to him, it is only by using target language that learners get a chance to use the language and test the hypotheses about their 'interlanguage'. In other words, the mistakes made while using the target language or the emergent language pushes the learners to come up with alternative ways

of putting the meaning across. Unlike IH, Swain contends that producing language itself is a source of learning. These theories of second language acquisition hypothesize about the productive role of input and output, but do not have much to say about the social nature of language and cognition (van Lier, 1996; p. 50).

**(iii) Socio-cultural theory of mind:** Vygotsky's Socio-cultural theory of mind has implications for classroom interaction as well. This theory is based on the premise that development of cognition or higher-order psychological functions is rooted in an individual's interactions with people around (ex: parents, peers, experts, teachers, etc.). From a socio-cultural perspective, education is not at all about transmission of knowledge and skills but it is about 'the development of understanding and formation of minds to learn' (Wells, 2002; p. 2). It advocates that it is neither the teacher nor the learner who is the focus of attention in the teaching learning process. It is the quality of the 'activity' that both the teacher and the learners are engaged in that determines the potential for learning anything. Hence, teaching is viewed as a dialogic mediation. Thus, SCT lays utmost emphasis on interaction as a means of not only language acquisition but also cognitive development.

**(iv) Dialogism:** Likewise, Bakhtin's (1986) concept of Dialogism also emphasises on the social nature of language in the process of teaching and learning. Bakhtin believes that language is something more than an arrangement of grammatical structures. Meaning always exists in dialogue and from this point of view every dialogue that is used in a context is actually connected to some bigger ideology. Dialogism is based on the premise that the meaning of an utterance or an event is not derived from the content of the words alone but rather from its interplay with what went before (previous utterances or 'precedent') and what will come later (anticipated responses or 'antecedent') (as cited in Nystrand et al., 2003). Dialogism necessitates switching between various mental perspectives and different voices because each participant brings to communication something unique and original (Alexander, 2010). In

formal educational contexts, dialogism recommends engagement of learners and extended participation of students as a means of dynamic transformation of students' understanding.

In addition to these theoretical arguments, empirical research in different fields such as second language acquisition, and classroom interactional studies speaks volumes about the positive effects of interaction on students' L2 learning and development. A positive correlation was observed between teacher learner interactions and improved LSRW skills (Hamano-Bunce, 2011; Wette, 2015), cognitive development (Antón & Di Camilla, 1999; Mercer & Littleton, 2007), rise in learning outcomes (Burns & Myhill, 2004), and rise in motivation and self-confidence levels of the students to articulate or voice their questions (Clément, Dörnyei, & Noels, 1994). Research findings show that classroom interaction has more impact on learning when students are engaged in shared understanding (Mercer, 1995), negotiation of meaning (Gibbons, 2006) and dialogic co-construction of meaning (Wells & Arauz, 2006).

In the backdrop of the above reviewed theoretical arguments and empirical findings, it can be concluded that interaction is an indispensable component of classroom learning. Hence, the stance taken in this study is that by engaging learners in classroom interaction and by providing regular, meaningful and genuine opportunities to use the target language, students are likely to improve their L2 as well as other higher-order thinking skills.

The following section addresses the relation between classroom interaction and communicative method of teaching. This section aims to clarify the commonly held misconception in teacher communities of ESL contexts that interaction means communicative method of teaching.

### 2.2 Classroom Interaction vs. Communicative Method of Teaching

Before the popularity of Communicative approach to language teaching, teachers' role in classroom was tied to two prominent aspects of teaching i.e., presentation of content and providing positive feedback (Larsen-Freeman, 2000). Methods such as Structural method and

Audio-lingual method which stemmed from Behaviourist approach to language teaching are based on the principle of transmission of right behaviours to students by means of stimulus, and reinforcement (Lightbown & Spada, 2021). In these methods of teaching, opportunities for independent use of target language or engaging students in interaction was not a serious concern when compared to other aspects such as graded presentation of content or providing practice.

Since 1980s however there has been an unprecedented emphasis on communicative activities in classroom discourse (Thornbury, 2016). The newly emerged Communicative Language Teaching (CLT) attached great importance to the use of target language for real-life needs in the classroom. For the first time, immense importance was attributed to the notion that language learning can at best be accomplished by actually simulating real life communicative events in classroom. As per this methodology, teachers are expected to provide opportunities for learners to experiment and try out what they know (Richards, 2006). Teachers are encouraged to make space for communicative tasks/activities which would develop in students the ability to communicate freely in real-time situations outside the classroom. CLT was glorified as a one-time solution for all the issues concerning language learning and it was extensively recommended at all stages and for all levels of learners throughout the world.

Nevertheless, CLT soon began to be critiqued for several reasons among which lack of interaction between participants was one of the main concerns. Nunan (1987) questioned the credibility of the publications across the world that CLT revolution had swept through language classrooms and empirically investigated whether interaction is actually genuine in these classrooms. He found that the classes he observed 'did not represent the genuine conversations outside the classroom and that they were also characterized by teacher explanations, drills, and pseudo-communicative activities in which the teacher decided for most of the time who should say what, and when' (p. 139). It was found in several studies that practitioners decoupled the

notion of a perfect method from actual practice and just followed what they considered as best, in their context and for their learners (Gao, 2011). Studies over the past two decades that focused on teachers' role in classroom discourse demonstrate that teachers do what is feasible rather than what is recommended by experts (Kumaravadivelu, 1993; Piller and Skillings, 2005; Shrestha, 2012). Similar findings can be noticed in several other studies carried out in various ESL and EFL contexts (Mohammadi & Ahmadi, 2015; Smith, Hardman & Tooley, 2005; Sardareh et al., 2014; Teo, 2016). These studies show that opportunities for learning are determined by teacher and that communicative method of teaching is not a sufficient indicator of learning in the class.

In the wake of the empirical findings that brought to light the gap between recommended practice and actual classroom practice, a new argument that teachers should have autonomy in deciding what is best for their class began to take shape (Kumaravadivelu, 1994; Pennycook, 1989; Prabhu, 1990). Describing it as 'post-method pedagogy', Kumaravadivelu (2002) claimed that it is the teachers' 'sense of plausibility' which plays a crucial role in determining one's choices at the grassroots level rather than the method of teaching. According to him, the best method of teaching a language lies in 'the practices of teacher capable of generating varied and situation-specific ideas … that makes sense in terms of current pedagogical and theoretical knowledge' (p.41). In short, in the current post-method era experts suggest teachers to act as informed decision makers with a comprehensive understanding of their immediate context rather than blindly follow prescribed methods.

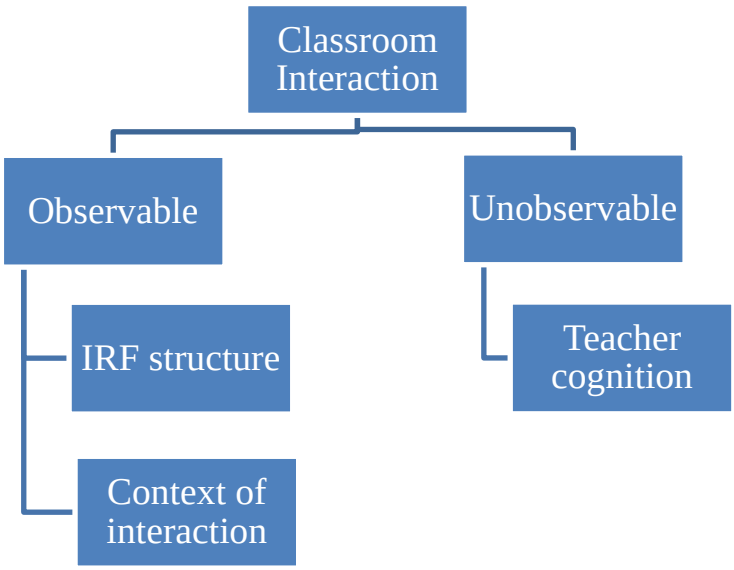
It is argued in this section that teacher-student interaction is a phenomenon that is not only independent of the method of teaching, especially CLT, but also a key feature in the process of maximizing L2 learning opportunities for learners. According to Christie (2005), classroom discourse is a register in itself which needs to be studied seriously because of the high stakes associated with education.

## 2.3 Making sense of teacher-led classroom interactions

Classroom processes are very complex and pose a challenge to researchers. Literature tells that researchers' focus while studying classroom interaction has been broadly on two dimensions – 'the observable' (Allwright and Bailey, 1991) and 'the unobservable' (Tsui, 1998) dimensions. Observable aspects of classroom interaction include aspects such as the amount of learner participation, language used by teachers and learners, and structures and patterns of classroom interaction. According to Tsui (1998) there is an unobservable dimension to classroom interaction which actually has a tremendous influence on classroom interactional practices and it constitutes learners' and teachers' beliefs, personal theories, mental lives, previous knowledge, prior experiences, etc. All these unobservable phenomena which were found to have an impact on classroom practices were brought under an umbrella term called 'Teacher Cognition' by Borg (2003). Tsui (1998) points out that it would be naive to ignore the teachers' perspectives and rely completely on data collected through observation of lessons. Currently, many researchers focus on this unobservable dimension of classroom interaction.

Thus, studies on classroom interaction moved from analysis of observable phenomena such as teacher questions and feedback patterns to interpretation of the effect of unobservable phenomena i.e., teacher cognition on learning and learner participation. Figure 1 is a graphical representation of the observable and unobservable dimensions of classroom interaction and the major areas of research under each dimension.

Figure 1: Dimensions of classroom interaction




The review in this section captures the major arguments and developments in the observable and unobservable dimensions of classroom interaction. They are: 1) Initiation-Response-Feedback (IRF) structure of interaction 2) Context of interaction and 3) L2 teacher cognition. The aim of this section was to point out the significance of each of these aspects in analysing the effectiveness of classroom interactions.

### 2.3.1 IRF Structure of Interaction

IRF structure was for the first time identified by Sinclair and Coulthard in 1978 as part of their analysis of classroom discourse in L1 primary classrooms (Seedhouse, 2004). In this question-answer exchange, it is usually the teacher who asks a question to a student to test his or her knowledge or understanding. The student responds to the question, and then the teacher gives feedback based on the student's response. The following is an example of the IRF structure in a language classroom:

| | |
|---|---|
| T: What is the capital of India? You. | (Initiation) |
| S: New Delhi. | (Response) |
| T: Very good. | (Feedback) |

In this example, the teacher initiated the interaction by nominating a student to complete a task, the student responded to it by giving an accurate answer and finally, the teacher reacted to the student's contribution by positively evaluating it. In classroom interactional studies, IRF exchange typically means that the teacher is the initiator of the exchange. Nassaji and Wells (2000) state that 'teacher initiation move is a prerequisite for a sequence to be treated as an IRF structure or a 'triadic dialogue' because 'teacher initiation move has a greater prospect for eliciting a response from a student' (p. 388).

Questioning by teacher is the most common way in which the interaction is initiated in a classroom. Teachers ask questions at various phases of the class. For instance, teacher may ask questions before starting of a lesson to know students' previous knowledge, during the explanation of a lesson to check comprehension and after the lesson to test their knowledge and skills.

Feedback is another important function that teachers routinely perform in L2 classrooms. Findings from studies on feedback suggest that there are several ways in which teachers respond to students' contributions. For instance, positive evaluation i.e., use of words such as 'good', 'correct', 'excellent' etc. is the most common way of providing feedback to students (Kasper, 1985; Nassaji & Wells, 2000; Cullen, 2002; Nystrand et al., 2003). Cullen (2002) suggests that feedback move can be used to perform two roles - 'evaluative role' (to accept or reject a response) and 'discoursal role' i.e., to use a student's response to further extend the discourse. He suggests that the former be called as 'feedback' and the later as 'follow-up' because of their two different purposes and suggests that the discoursal role of feedback is more helpful in 'sustaining and developing a dialogue between the teacher and the class' (p. 120). Nystrand et al. (2003) also put forward a similar argument in relation to the follow-up move of teachers. They suggest practitioners to focus on the discoursal role of the follow-up or 'uptake' of students' responses.

The effectiveness of IRF structure in classroom discourse has been subjected to extensive scrutiny for many years (Christie, 2005). Two contrasting perspectives emerge in the literature regarding its role in facilitating student participation and learning in the classroom. While IRF sequence in classrooms is recognized as the 'dominant discourse genre even when teachers are attempting to create a more dialogic style of interaction in their classroom' (Nassaji and Wells, 2000; p. 400), it is also criticized by many for reasons such as lacking in genuine or natural communication (Nunan, 1987) and being a constraint for student participation (Dinsmore, 1985).

IRF sequence was particularly subjected to severe criticism when CLT had been gaining popularity. The structure was contrasted with genuine patterns of interaction outside the classroom and was considered as an obstacle in developing communication skills (Nunan, 1987; Waring 2009). In a study on the analysis of three Japanese teachers' classroom interactions on the lesson 'Waiting for Godot', Dinsmore (1985) critiqued that the teachers just followed the routine IRF structure of asking questions and positively evaluating students' responses. He concluded his study by stating that the use of IRF structure contributed to the 'persistence of teacher's power to initiate discourse and to judge the correctness of other participants' contributions' (p. 227). Similarly, Lemke (1990) and Wood (1992) argued that the dominance of IRF pattern would limit the student participation in classroom discourse. Using IRF structure was described as 'antithetical to the educational goal of encouraging students' intellectual-discursive initiative and creativity' (Wood 1992; as cited in Nassaji and Wells, 2000). In another study based on the analyses of 2-hour adult ESL classes in the United States, Waring (2009) observed that a student delayed asking her doubt because of the teacher's stringent adherence to IRF sequence. The delay in the student-generated question for a considerable stretch of time was attributed to 'the ill-effect of IRF sequence and participants' understanding of the overall turn allocation system' (p. 807). Drawing from such findings,

Waring opined that IRF sequences offer little space for students to volunteer or solicit information and limits the students from voicing their questions or doubts until permitted.

Other side effects of IRF framework of interaction as pointed out in research include students preferring to remain silent and rarely giving a response (Lee & Ng, 2009) and teachers conditioning learners, from a very early age, just to answer questions and respond to prompts (Nunan, 1987). Thus, due to the dominance of CLT methodology, teacher-learner interaction was expected to replicate spoken discourse in the world outside the classroom and classes with IRF pattern were evaluated as dull and as a hindrance to students' language development.

On the other hand, there is a counter-argument that IRF pattern is the most dominant form of interaction in a class and instead of looking at it from a negative lens it can be actually used by a teacher to extend the interaction and maximize learner participation. Cullen (1998) argues that the communicativeness of a classroom cannot be strictly determined by features that represent authentic communication existing outside the classroom. He states that 'in the search for authentic communication one should not ignore the reality of the classroom context and the features which make for effective communication within the context' (p. 185). In a six-year long action research project on classroom interaction at school level that covered both Sciences and Arts, Nassaji and Wells (2000) found that IRF was the most dominant pattern of interaction across classes and across subjects. In both the disciplines nearly 75-85% of the sequences were initiated by teachers' questions. In fact, IRF structure prevailed over other forms of student-student interaction in pair and group activities. They found that skilful teachers used the IRF structure for negotiation of meaning and co-construction of knowledge in addition to testing students' understanding. So, Nassaji and Wells claim that a question posed by a teacher has a higher prospect for eliciting a response from the learner (p. 400).

Finally, Howe & Abedin (2013) in their review of 225 classroom interactional studies call for putting an end to the discussion on IRF structure by stating that 'the study of dialogic

patterns should not be given high priority in future research as there has been a static situation since the past 40 years and so little change has taken place in the basic pattern [IRF] of classroom dialogue' (p. 344).

The following section focuses on the next important area of research under the observable dimension of classroom interaction i.e., the significance of the context in which the interaction takes place.

### 2.3.2 The context of interaction

Focus on classroom context started with the recognition that 'a blanket interpretation of IRF structure to all the contexts that operate in a classroom is not sufficient to explain the finer nuances of classroom interaction' (Walsh, 2006; p. 57). In other words, the notion of 'a single L2 lesson context' is considered too broad to account for the different types of interactions that take place between the participants in a classroom. Classroom teaching and learning constitutes a series of smaller contexts which may require a change in interactional patterns as and when there is a change in the pedagogical focus. While there are some contexts that need greater amount of teacher talk and very little learner participation, some other contexts need more active learner participation and only a little amount of teacher talk.

Mercer and Dawes (2014) explain that a question such as 'Why does the moon appear to change shape?' can elicit different responses from students depending on whether the teacher asks it in a first meeting in the class or after the completion of a sequence of lessons on the topic. While the teacher's question in the first context might be to test students' previous knowledge, in the second context the function of the same question would be to test the understanding of the students. The two contexts are different and as such, the nature and extent of student participation in these two contexts may vary considerably despite the fact that the question is the same in the both the contexts.

Similarly, Mukarovsky (1977), in a discussion on teacher talk states that '[in a classroom] monologic and dialogic discourse are in a dynamic polarity in which sometimes dialogue, sometimes monologue, gains the upper hand according to the time and milieu' (p. 85; as cited in Nystrand et al. 2003). While contexts such as explanation of topics may require teacher monologue, other contexts such as opening the floor for discussion, informal oral assessment, checking of previous knowledge and negotiation of new ideas require extended dialogue with learners. The review illustrates that the context is the crucial factor in determining what is to be said, when, how and what kind of responses are expected from learners. According to Seedhouse (1996), 'context should be seen as the interface between pedagogy and interaction and thus as the environment through which the institutional business is accomplished' (p.118).

Several typologies of classroom contexts exist in the literature, each of which aims at fostering a better understanding of the relation between classroom context, interactional opportunities and student learning. Seedhouse (2004) divided classroom contexts into four different types based on the pedagogic focus or objective of the teacher in that particular context. They are:

1. Procedural context: Focus is on 'setting something up'. Teacher instructs the learners about the task or the upcoming work.
2. Form and accuracy context: Teacher's aim is to teach linguistic forms and make the learners produce accurate grammatical structures.
3. Meaning and fluency context: Teacher's goal is to maximize interaction and thus develop fluency.
4. Task-oriented context: Focus is on generating communication between learners.

According to Seedhouse (2004), 'each L2 classroom context has its own pedagogical focus and corresponding organization of turn taking and sequence' (p. 101). According to him, while meaning and fluency context demands teachers to negotiate for meaning and encourage

oral fluency, the form and accuracy context may only require teachers to give practice and do corrective feedback. Thus, according to him, 'context should be seen as the interface between pedagogy and interaction and thus as the environment through which the institutional business is accomplished' (p.118).

A similar but a deeper and finer-grained analysis of classroom contexts and corresponding interactional features can be seen in the 'Self-assessment framework of L2 classroom modes' put forward by Walsh (2006). In an attempt to provide a tool that teachers can use for a better understanding of their own classroom interaction practices, Walsh categorized classroom contexts into four modes – managerial mode, materials mode, skills and systems mode and classroom context mode. According to Walsh, mode is a micro-context with 'clearly defined pedagogic goals and distinctive interactional features' (p. 62). The classification of contexts into modes is based on the idea that interaction and pedagogic focus are interrelated and when the pedagogic focus changes interactional patterns between the participants change too.

Mode analysis recognizes that understanding and meaning are jointly constructed by participants but the prime responsibility for their construction lies with the teacher. Walsh (2003) recommends L2 practitioners to consciously plan their language use so that it corresponds to their pedagogic focus. He described the ability to use interactional features appropriate to the pedagogic goals of the context as classroom interactional competence. It encompasses the ability to 1) maximize interactional space, 2) shape learner contributions through variety of scaffolding strategies, and 3) use of effective elicitation techniques.

Review of literature in this sub-section point toward the importance of context in determining interactional opportunities for learners. It is not mandatory that every micro-context should be interactive. However, in order to augment the opportunities for L2 learning,

interactional features that correspond to the pedagogic goals of the context are to be chosen by the teacher in a discrete manner.

This brings to the next area of research that falls under the unobservable dimension of classroom interaction i.e., the role of teacher cognition in the process of engaging learner participation and maximizing learning opportunities.

### 2.3.3 Teacher cognition

Teacher cognition falls under the unobservable dimension of classroom interaction. Investigations into teacher cognition reveal several interesting findings with respect to the teacher's role in classroom interaction. Borg and Al-Busaidi (2012) state that students' L2 acquisition is not always the motivation behind teachers' interactive decisions. Instead, teachers' decisions originate from a variety of cognitive and contextual factors such as teachers' beliefs, personal practical knowledge, perceptions of SLA theories, previous knowledge and experiences as learners and as teachers (Borg, 2003). The findings demonstrate that the knowledge and skills transmitted through teacher education (pre-service/in-service) are filtered by experiences accumulated over years as learners and observation of teachers. These set of learning experiences are transformed into beliefs about how languages are learnt and how teaching should or should not be done (Kubanyiova, 2012).

Decision-making is a skill which is interspersed with every aspect of a teacher's professional life. Teachers' interactive decisions have more influence on student learning when compared to their preactive decisions (See Sec 1.2). For instance, after reading a paragraph or completing a lesson, teachers ask questions to test comprehension. The questions may be planned in advance by the teacher but aspects such as who should be given the opportunities to answer or how many opportunities should be given are not usually planned. Even though it is planned, it may not necessarily be implemented as per the plan strictly during the actual interactions with students. When unexpected responses or complex situations arise in the class,

teachers decide to make changes to the original plan to maintain a smooth flow of classroom activity (Shavelson, 1983). In some classroom contexts, student behaviour and reactions account for a teacher's interactive decision-making (Tsui, 2005).

Studies in teacher cognition reveal inconsistencies between teacher claims and actual classroom practices. In a study by Feryok (2008) on classroom practices, it was found that the teacher made claims of using communicative approach as per the data collected through e-mail interviews and post-observation conference. However, analysis of data showed that there is a dissonance between the stated cognition and actual practices. According to the researcher, understanding of the contextual factors in which she taught made the teacher to develop her own personal practical theory of communicative approach and this understanding directed the instructional choices of the teacher. In another study conducted by Chou (2008) with three Taiwanese elementary school language teachers, it was found that the teachers had knowledge of theory and principles of language teaching but they developed their own practical principles with respect to the communicative activities and scaffolding strategies implemented in the class. Upon analysis of the data collected through interviews, classroom observations, teachers' reflective journals, and teaching materials, it was found that the teachers' pedagogic knowledge was generated as a result of their experiences with students in their contexts. These studies reveal that the instructional decisions of teachers were influenced by the practical knowledge of teachers which were the result of a combination of situational, theoretical, personal, social and experiential factors (Elbaz, 1983).

The effect of teacher cognition on student learning becomes more evident during interaction with learners. Research shows that learner participation is intricately connected with the type of initiation and follow-up moves chosen by the teacher (Nassaji and Wells, 2000; Nunn, 1999; Moritoshi, 2006; Sardareh et al. 2014; Wright, 2016). A common finding in many of the studies cited here is that teachers hampered meaningful learning opportunities to their

students by choosing closed/display questions. On the other hand, teachers who opted for open/referential type of questions did it purposefully to elicit greater student participation. Nystrand et al. (2003) found through their longitudinal study of classroom interactions spanning over different subjects and levels that teachers who 'purposefully' or 'intentionally' used greater number of authentic and cognitively demanding questions were able to engage their learners in meaningful and worthwhile discussions. But studies also reveal that teachers have propensity for overuse of display questions despite their awareness about the value of referential questions (Petek, 2013).

The powerful role of teacher cognition can also be observed clearly in the kind of feedback/follow-up moves that teachers choose. In a three-year long study on two experienced Italian TESOL teachers, Garton (2008) traced how teachers' beliefs manifested in their follow-up strategies. Both the participant teachers, Charlotte and Linda, expressed their concern for a good relationship with learners and for supporting their learners in the learning process. However, analysis of their classroom interactional practices demonstrated that both of them differed in the learning opportunities that they created for learners. Charlotte who believed more in creating a positive affective atmosphere in the classroom focused less on accuracy while giving feedback. She always gave positive evaluation whether the learner's contribution is correct or not and sometimes even completed the students' partial responses. On the other hand, Linda strongly believed that part of a teacher's role is to have good knowledge of the language and transmit that knowledge to learners. Owing to this belief, Linda's follow-up moves always consisted of elaboration of student's response through which she gave some more information about the language. Her follow-up moves involved more teacher talking time and fewer opportunities for learners to produce the target language. Based on the findings of this study, Garton concludes that in order to "fully exploit the range of opportunities that

classroom interaction offers for learning, we need to become aware of our beliefs and the effect that they have on our classroom practice" (p. 83).

In this section, three different strands of research in classroom interaction i.e. IRF structure of interaction, the context of interaction and the role of teacher cognition in interaction are reviewed. Review of research suggests that IRF is the fundamental structure of interaction and that interactional opportunities provided to learners are dependent on micro-context or mode of the classroom. Apart from these two features, most importantly, teacher cognition plays a pivotal role in determining the learner participation and learning opportunities in a class.

As classroom interaction is considered the primary engine through which children learn (Pianta and Hamre, 2009), experts suggest that it is essential for teachers to reflect on the effectiveness of their interactional decisions and to check their relevance to the pedagogic goal of the moment (Borg, 2003; Crandall, 2000; Freeman, 2006; Johnson, 2009; Walsh, 2006). The following section is a brief review of studies that investigated into how L2 teachers can at best be supported in changing their routine practices.

### 2.4 Fostering Change in Teacher Praxis

The current study is based on the awareness that teachers' interactional decisions are central to the whole enterprise of education and hence it is very essential to help teachers 'articulate and reflect on the beliefs that motivate their interactions' (Burns, 1992; p. 64). As Garton (2008) had suggested "we need to find a way of exploring what we do in the classroom in order to better understand it and, if we feel we need to, change it" (p. 83).

#### 2.4.1 Approaches

Two broad approaches were observed in studies aimed at teacher development. The first is the 'empirical-rational tradition' (Richardson & Placier, 2001) where change in teacher thinking is equated with implementation of prescribed behaviours in the classroom. In this

approach, checklists, rating scales and frameworks (eg. Flanders, 1965; Malamah-Thomas, 1987) are created for capturing teacher practices and classroom activities immaculately. Judgments about interaction are based primarily on teacher behaviours observed in the class. However, this approach was criticised as it was realized that teachers practice what they deem to be the best rather than what is recommended to them by trainers. Besides, in this approach someone outside the classroom (policy makers, administrators, school board members) holds the power over change and when teachers do not implement the suggested change they are judged as recalcitrant and resistant. On the whole, it led to a discontentment that language teacher education programmes have failed to prepare teachers for the realities of the classroom.

The second approach is the 'normative-re-educative tradition' (Richardson & Placier, 2001; p. 906). This tradition originated with the shift in SLTE towards constructivist and socio-cultural perspectives of learning. The proponents claim that classroom practices are socio-cognitive undertakings of teachers and hence teacher change can happen only when teachers are made the primary source of knowledge about teaching. With this realization, the concept of 'reflection-on-action' began to gain widespread attention in the field of teacher development. Reflection-on-action refers to the process of reviewing, analysing, and evaluating the thinking processes or the decisions after the situation (Schon, 1987; as cited in Munby, 1989). Reflection-on-action was widely recommended in teacher education as it enables teachers to rethink and review their behaviours, actions and abilities that will ultimately lead to transformation in practice.

However, it is also suggested by experts that reflecting on a situation is no simple task for teachers as it is not a common practice, especially in ESL educational contexts, to articulate their tacit knowledge underlying their interactional decisions. In order to overcome this limitation, Penlington (2008) emphasises collaboration between researchers/teacher educators and teachers. He argues that 'teachers are limited in how they can reflect on their actions and

in order to overcome these limitations it is essential for teachers to engage in a dialogue with others (colleagues, researchers, experts) to facilitate deep exploration and development of practical reasoning' (p.1312).

### 2.4.2 Review of studies

Research in the domain of teacher change abounds with studies on how reflective practices fostered a change in teacher praxis. Following is a review of selected empirical studies specifically related to the study of the nature of dialogue in the activity of reflecting on classroom interactions. These studies give rich insights into the effective ways in which dialogue can be structured and used to support teacher learning. The studies reviewed are categorised into two groups. They are 1) Studies based on teacher educator/researcher's feedback and 3) Studies focused on dialogue between teacher and an expert/peer.

#### 2.4.2.1 Studies based on feedback by an expert

'The intent of giving feedback is to promote positive change in the teachers' classroom practices' (Bailey, 2006; p. 141). Teacher education/training programmes have been historically glued to the idea that teachers can positively adjust their teaching practices when they are provided constructive, systematic feedback on their teaching practices by a skilful teacher educator/supervisor. Expert/trainer supports teachers via commentaries on written and observed lesson plans and facilitates conversations that promote reflection on practice. The trainer also directs the trainees to different teaching behaviours through providing advice, offering suggestions and redirecting the teacher to thinking differently about their teaching practice. The discussion or conversation between the teacher and the expert is considered an opportunity for the former to share his/her problems and get potential solutions to the problems.

Studies focused on feedback aim to see the interconnection between the comments/suggestions provided by the teacher and change in teachers' interactional practices.

Ma (2009) studied the effectiveness of feedback given by trainers to trainees working on a Certificate in Teaching English to Speakers of Other Languages (TESOL) course at a language school in South Africa. In this study, the trainees received feedback on issues such as 'lesson aims', 'monitoring students', and 'error correction'. Through this feedback, trainees were able to improve their pedagogic knowledge as well as their interaction with students. However, the participant trainees in Ma's study reported in the post-feedback interviews that trainers rated their teaching behaviours differently at different times depending on their personal views and that the trainee was allowed to contribute to the discussion only as long as he or she was acquiescent with the trainer. In another study by Copland (2010) on pre-service teachers studying for a Certificate in English Language Teaching for Adults (CELTA), it was found that the trainees got feedback that was needed to improve the areas of weakness in their performance. However, analysis of discourse during post-observation feedback sessions revealed that the trainer's feedback caused disquiet and tension in the trainees. These studies demonstrate that trainers had the power or the high ground in feedback sessions and providing opportunities to reflect on practice was not a priority for them.

Studies aimed at providing feedback to experienced teachers are relatively rare because 'in-service teachers are already supposed to be competent' (Bailey, 2006; p. 267). So, in the place of direct feedback researchers use some tangible reminder of an event such as videotapes, audiotapes, transcripts, selective verbatim quotes or observation schedules 'to stimulate recall of the mental processes in operation during the event during a post-observation conference' (Gass and Mackey, 2000; p. 17). However, Bailey (2006) suggests that in 'the process of supervising in-service teachers it is better for the supervisor to keep quiet and allow the teachers to interpret the data and generate their own alternatives' (p. 218).

The above studies indicate that there are several complexities and challenges in the process of giving/receiving direct feedback, as it would often result in domination by trainers and resistance to new ideas by teachers.

#### *2.4.2.2 Studies based on dialogue with a peer/expert*

The coming together of like-minded professionals or colleagues is said to create a meditational space that is conducive for development. This kind of space is supposed to provide a teacher the freedom to articulate thoughts that are "tentative, troubling, incomplete, partial or emergent" (Mann, 2003; p. 246). The interactions between the teacher and expert/colleagues/peer are also grounded in respect, empathy and sincerity and any kind of evaluative judgment on the teacher's performance or personal theories is avoided.

In a study conducted by Slimani-Rolls and Kiely (2014), the classroom interactions of three university teachers were recorded and analysed using the framework of Exploratory Practice and Classroom Learning Episodes (CLEs) as a tool for facilitating discussions. In this study, teachers and co-researchers identified certain CLEs which demonstrated a puzzling issue/problem/challenge that the teachers had been facing in their daily routine practice. Following the identification of a CLE, the teachers were asked to articulate the discrepancies between their intentions/expectations and what transpired in classes. They were also motivated to share their insecurities about the value of their recurrent classroom interactional practices. The researchers conclude that micro-analyses of CLEs and discussions with teachers in the workshops yielded several positive outcomes. Firstly, the teachers realized the importance of accepting students as capable of independent thinking and decision making. Secondly, the teachers understood 'good practices' and 'bad practices' in their teaching and this ultimately made them efficient enough in transforming their own pedagogy. This study highlights two important components in raising teachers' awareness of classroom interactional competence -

first, the need for identifying CLEs in actual classroom data and second, the need for an expert's or a peer's non-judgmental support during discussions based on the identified CLEs.

Harvey (2011) examined the discourse of a series of post-observation conferences between the mentor and two practicing English language teachers. The aim of the study was to investigate the relationship between mediational discourse and change in teacher thinking. In this study, the mentor (the researcher herself) prompted the teachers to think conceptually about language teaching and also modelled expert ways of thinking through different types of verbal and conceptual abstractions. A macro-level analysis of mediational discourse revealed that there was development of conceptual thinking in one teacher, but less so in the second teacher. This study exemplifies how a meaningful dialogue can be constructed with teachers by focusing on areas of improvement in the lived classroom events.

The empirical studies reviewed in this section point towards the effectiveness of dialogue with teachers in the process of bringing about a change in their praxis.

## 2.5 Conclusion

This chapter aimed at reviewing the literature on teacher-led interactions in L2 classrooms and bring out the significance of teacher development in interactional decision-making. It started with finding the theoretical and empirical evidence in support of interactionist approach to teaching second language. Following this it was argued that classroom interaction should not be confused with communicative method of teaching and that providing as many learning opportunities as possible to students should be the primary goal of language teachers. The second section in this chapter reviewed classroom interaction from three different perspectives: IRF structure, context of interaction and the role of teacher cognition in interaction. The popular arguments and development in these three fields are reviewed. Among all the three factors, teacher cognition was found to play a significant role in interaction as teachers control the interaction through their decisions.

Hence, it is highly essential to reflect on the effectiveness of one's interactive decisions in relation to student learning. The review of empirical studies reveals that self-reflection is a highly cognitively challenging process. L2 teachers need the support of another teacher with whom they can freely talk about the gaps in their praxis. Teachers have to be made to explicitly talk about their decisions or choices by engaging them in a dialogue. This understanding of inside perspectives is extremely necessary to support teachers in the process of change. Not only this, it is also important for the dialogue to be non-judgmental or non-evaluative. On the whole, this chapter provides a robust background support for the research problem that the current study explores i.e., how to foster change in L2 teachers' interactional practices.

The following chapter briefly presents the SCT framework used in this study. The principles underlying DA, which is used in this study with the specific objective of promoting change in teachers' interactional practices, are presented.

# Chapter 3: Theoretical Framework

As mentioned in Chapter 1 (Sec 1.1), the theoretical approach proposed for this study is based on Vygotskian SCT. The current chapter is a review of the theoretical principles of SCT underlying DA procedures used in this study. The review is specifically focused on the important concepts used in this study for analysis of meditational discourse and evaluation of its impact on teacher learning.

The chapter begins with a brief introduction to SCT. The following section provides a detailed review of the principles underlying DA, the reasons for why DA approach is considered suitable for this study on promoting teacher conceptual development in contrast to other prevalent forms of mediation such as scaffolding and formative assessment, and finally reviews the studies that adopted DA as a means of development in the domain of second language teacher education.

## 3.1 Socio-cultural theory of learning

Unlike the proponents of Behaviourist and Cognitive theories of learning who valued innate capacity and input processing models of development, the Russian psychologist Lev Vygotsky assigned a highly significant and instrumental role to socio-cultural factors in the process of achieving learning outcomes (Lidz, 1991). Renowned as the Socio-cultural theory of learning (SCT), this theory is based on the assumption that learning has its basis in interaction with other people. Socialization is fundamental for forming of higher mental and psychological connections in the mind. In other words, the genesis of higher mental functions or cognitive development takes place when the process of learning is intertwined with the social and cultural practices pre-existing in the given context. Hence, SCT underscores the value of joint or collaborative activities as a means of learning.

SCT perspective towards product and process of learning are explained in detail below:

### *3.1.1 The product of learning*

The outcomes of learning according to SCT refer to sophisticated ways of perceiving and analysing experiences and ideas. According to Wertsch (1998), the product of learning from an SCT perspective implies "mastering a set of cultural tools provided by the setting … skills and intelligences … new improved forms of thought … an ideal outcome of abstract thought … new, more powerful perspectives on reality" (p 38-39).

According to Vygotsky (1978), the expected products of learning in any discipline can be broadly classified into two categories. They are 1) Spontaneous or everyday concepts and 2) Scientific or abstract conceptualizations. Spontaneous concepts are formed in the human mind through concrete situations of day-to-day lived experiences. On the other hand, formation of scientific concepts happens through formal input and through reading of prescribed textbooks. The interaction and interdependence of spontaneous and scientific concepts is the key to the shaping of conceptual thinking of an individual. Both spontaneous and scientific concepts are equally important to comprehend reality and "to carry out mental activity that is maximally independent of the concrete context" (Wertsch, 1985, p.104). Applying this theory to the context of teacher gaining classroom interactional competence, for instance, a teacher may have developed certain spontaneous concepts through one's own experiences or through those shared by other teachers and friends. On the other hand, scientific concepts related to classroom interaction are taught through formal input during pre-service teacher education or by reading relevant material on teacher talk or by attending workshops on developing classroom interactional skills. All such experiences together lead to the construction of beliefs, knowledge and emotions in a teacher's mind and it is from these constructs that a teacher consciously or tacitly draws upon to figure out decisions and actions (Penlington, 2008). Table 3.1 is a brief summary of the differences between spontaneous and scientific concepts (as in Harvey, 2011).

**Table 3.1: Differences between spontaneous and scientific concepts**

| Spontaneous concepts | Scientific concepts |
|---|---|
| a. Originate in lived experience<br>b. Immediate<br>c. Unsystematic, not tied to other concepts<br>d. Highly contextual<br>e. Not open to inspection | a. Originate in formal instruction<br>b. Mediated<br>c. Part of a systematic, logical, hierarchy of concepts<br>d. Decontextualized<br>e. Open to inspection |

However, the independent existence of spontaneous and scientific concepts is not the expected learning outcome in the teacher education context. It is the ability of a teacher to think conceptually that is the product of learning according to SCT. Conceptual thinking refers to the ability of a teacher to analyze and understand spontaneous or every day concepts (eg. beliefs, personal theories, practical experiences) from the perspective of the scientific concepts (eg. theories of learning and language acquisition, knowledge of certain effective classroom interactional features) that he or she holds. In order to achieve this product i.e., the ability for conceptual thinking, SCT proposes that the process of learning has to be rooted in social practices.

### *3.1.2 The process of learning*

As per SCT, the process of achieving learning outcomes is grounded in two fundamental tenets. They are 1) Social sources of development and 2) Mediation. These two aspects are considered pivotal in determining the progress of an individual from being a novice to becoming an expert in any given field (John-Steiner and Mahn, 1996).

a) Social sources of development

According to Vygotsky (1978), the process of learning includes the use of a variety of material, semiotic, cultural and psychological tools existing in a given society. For instance,

material tools refer to physical objects such as toys, books, videos and other things, semiotic tools refer to language, and psychological tools refer to cognitive functions such as thinking, perception, etc. These tools should be used strategically by parent/teacher in the process of exerting some influence or regulation on the individual learning (Wertsch, 1985).

b.) Mediation

Mediation is the assistance or support provided by a knowledgeable other (parent/teacher/peer) by using the material or semiotic tools available in a community. It is a very common concept in many social contexts (Gibbons, 2003). Mediated actions can be noticed in parents who interact with their children with an aim to develop their skills, values and behaviours. These mediated actions over a period of time contribute to the development of the child's high-level mental processes such as "voluntary attention, logical problem-solving, planning and evaluation, and voluntary learning" (Lantolf, 1994, p. 418). Mediation is a process that humans employ in order to regulate the material world of their own or others by using 'culturally constructed artefacts, concepts and activities' (Lantolf and Thorne, 2006; p. 79).

Mediational experiences are essential in the process of learning or developing higher psychological functions of learners. Mediation contributes to the formation of connections between mental representations and the world. Development of a child's ability to use its own higher-order psychological functions or maturity in cognition is directly related to the mediational learning experiences that it gets in formal and informal contexts. In short, SCT is based on the assumption that cognitive changes emanate from 'the productive intrusion of other people and cultural tools in the developmental processes' (Newman et al., 1989).

In mediation, dialogue between the interlocutors is crucial. Mediation is almost similar to the concept of 'languaging', a process which Swain and Deters (2007) define as the "use of speaking and writing to mediate cognitively complex activities" (p. 822). However, mediation

is different from languaging as it has the theoretical support of SCT and in mediation 'the focus is less on the language user and more on the dialogic nature of verbal interaction' (Harvey, 2011; p. 12). Thus, dialogue is the most influential tool in the creation of thought during mediational processes.

In this section, the SCT views on product and process of learning are presented. The following section presents DA and elaborates the theoretical principles based on which DA was developed.

### 3.2 Dynamic assessment

Application of SCT to the field of testing has led to the development of an alternative form of assessment centred on interactions between the examiner and the examinee. DA was developed by Luria, a close associate of Vygotsky and one of the initial supporters of SCT, and popularized by Reuven Feuerstein (Poehner, 2007). DA was founded on the need for understanding the processes of learning rather than evaluating an individual solely based on the products of learning (Lidz, 2014).

In traditional forms of testing, the role of the examiner is absolutely neutral and the test is usually aimed at measuring the past learning of the individual. In contrast, DA approach is based on the belief that dialectic integration of assessment with instruction is essential to promote learner development (Poehner, 2005). It allows the examiner to intervene in the performance of the examinee - either before, during or after the task completion depending on the target of the test (Leung and Mohan, 2004). In DA, the examiners also provide active and direct instruction when needed in order to provide the right conceptual model of thinking to the examinees (Lidz, 1991).

DA refers to a range of verbal mediational procedures that incorporate assessment with instruction (Poehner, 2008). Several approaches to DA exist in the literature depending on the task, subject matter and the learner characteristics (Grigorenko and Sternberg, 1998). In spite

of the differences in the approaches and research designs, one common principle that runs through all DA procedures is 'the incorporation of instructional interaction i.e., mediation within the assessment process in order to estimate in a qualitative way the potential of a [learner] to learn regarding a specific task or domain' (Maragkaki and Hessels, 2016; p. 33).

Mediation given in DA should satisfy three criteria according to Aljaafreh & Lantolf (1994). First, it should be graduated, which means that it should be appropriate and in harmony with the learners' Zone of Proximal Development (ZPD); second, it ought to be contingent upon the learners' need, or the help should be provided when the learners need it and withdrawn when the need is satisfied; and third, it should be dialogic.

### 3.3 Principles underlying DA

The key concepts underpinning DA are ZPD, mediation, intersubjectivity and internalisation. Each of these concepts is explained below in relation to its relevance to the study.

#### 3.3.1 ZPD

DA is based on one of the key constructs in SCT i.e., ZPD. The term ZPD has been initially developed by Vygotsky (1978) to argue against the general conception in the educational field that independent problem solving is the only indication of an individual's mental functioning (Lantolf and Poehner, 2004). According to Vygotsky, an individual's true ability has to be evaluated only after providing some assistance or support and analysing how the individual responds to the assistance. The performance that one exhibits with the support of an expert should be taken as an indicator of that person's true ability. This gap between one's individual performance and performance exhibited in the presence of someone's guidance is defined as ZPD. In other words, ZPD is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as

determined through problem solving under adult guidance or in collaboration with more capable peers" (Chaiklin, 2003; p. 86).

The concept ZPD is used by researchers and teachers for understanding the learning potential of an individual. The implication of this concept is that 'instruction needs to be sensitive to the learner's ZPD' (Poehner, 2005; p. 40). The concept of ZPD is also considered helpful in understanding individual differences in learning. Not all individuals' processes of development are alike as these processes differ from individual to individual, and across time periods for specific individuals (Lantolf and Thorne, 2006). The concept of ZPD helps teachers/researchers to plan instruction in ways that can sufficiently and productively support learner development. According to Poehner (2005) instruction that does not take account the ZPD of the learner will only lead to development on a hit-or-miss basis (p. 40).

In teacher education contexts, the concept of ZPD can be highly useful in supporting teacher learning. Review of literature demonstrates that teachers' 'prior experiences, their interpretations of the activities that they engage in, and the contexts in which they work influence in shaping how and why teachers do what they do' (Johnson, 2009; p. 9). As such, the actual classroom interactional practices reveal only a partial picture of a teacher's true interactional competence. In order to know the true potential of the teacher, it is essential to know his or her ZPD by providing appropriate mediational assistance. An understanding of the teacher's ZPD also enables the mediator to provide individual-specific support to the teacher. Thus, the concept of ZPD is extremely helpful in the context of teacher learning.

The following section explains the role and significance of mediation, another important principle underlying DA procedures.

### 3.3.2 Mediation

As explained in Sec 3.2b, SCT highlights the significance of mediation in the process of learning. DA is based on the tenet that mediation is pivotal to learning. In DA procedures,

mediation refers to the systematic and structured dialogue initiated by the tutor/researcher for knowing the ZPD of the learner. Mediation is also dynamic in nature as the help provided is adjusted between two different orders of discourse: the current levels of learners' knowledge (i.e., zone of actual development) and the broader knowledge into which the learners are being apprenticed (i.e., ZPD) (Kozulin et al. 2003).

As according to SCT it is not sufficient to know the current capabilities alone, mediation in DA is aimed at identifying the individual's ability to respond to the interactional assistance that the mediator provides in the form of implicit and explicit prompts. DA in fact refers to the use of the specific mediational strategy i.e., offering implicit to explicit assistance by the mediator in order to know the learner's current level of thinking and to provide instruction only when needed.

Having said that dialogue is crucial in mediation, it also implies that mediation is not just unidirectional in nature. The process of mediation is inter-dependent and intertwined with the responsiveness or 'reciprocity' of the learner to the assistance provided by the mediator in the form of hints, clues, explanation, etc. (Poehner and Lantolf, 2005; p. 241).

In the current study, DA was used as a means to promote teachers' thinking. Mediation is specifically embedded in DA procedures (i.e., offering implicit to explicit assistance based on the reciprocity of the teachers) as the purpose of the study was to explore 'the mental structuring that underlie the way teachers conceptualize and think about what they do' (Woods, 1990; as in Burns, 1992).

### 3.3.3 Intersubjectivity

Intersubjectivity is another crucial component of SCT underlying DA. Intersubjectivity refers to the shared understanding that individuals arrive at about a particular concept, experience, or perspective. Intersubjectivity is "the degree to which interlocutors in a communicative situation share a perspective" (Wertsch, 1998; as cited in Harvey, 2011).

According to Rommetveit & Blakar (1979), all human verbal communication is 'a social and dynamically negotiated process'. The notion of intersubjectivity is essential to strategic mediation within the ZPD because it is essential in the interaction for a learner to understand the situation from an expert's point of view is necessary (Johnson, 2011). Similarly, it is also essential for the learner to verbalize one's thoughts explicitly to make the expert understand his point of view. Negotiations carried out lead both the learner and the expert to a level of mutual understanding, and shared agreement or disagreement. Attaining intersubjectivity itself is the process of learning which subsequently may result in the movement of the ability to self-regulate higher psychological functions from external (inter-psychological) plane to internal (intra-psychological) plane i.e., internalization.

In the current study, intersubjectivity has a special significance as teachers hold different forms of knowledge. Discussions regarding a problem or a pedagogical concept may lead to a shared understanding or perspective between the teachers. The processes of mediation and negotiation carried out in the dynamic procedures of assessment can lead to internalization of conceptual thinking.

### 3.3.4 Internalization

Internalization is another concept underlying DA. According to SCT, internalization does not refer to the product of learning. It is described as "a process that occurs simultaneously in social practice and in the human brain/mind" (John-steiner & Mahn, 1996; p. 196). This concept is related to Vygotsky's argument that an individual's development occurs on two planes: the intra-psychological plane through the interaction between the individual and other human (i.e., teacher or peer) and inter-psychological plane which is a representation of the individual's control over the use of the cognitive tools.

Gal'perin (1989) states that there are three stages in this process of internalization aptly explain the process. They are i) making an external action maximally explicit ii) transference

of its representation to audible speech and iii) transference of its representation to inner speech (as cited in Wertsch, 1985, p. 66). Thus, the process in which what was once an external assistance gradually turns into an internally available resource to the individual was described as internalization.

As far as the current study is concerned, the aim was to enable the teachers to internalize the concepts underlying conceptual thinking that is required to provide maximum learning opportunities to learners in the classroom. Internalization of the concepts can be deciphered in two ways in the context of teacher learning. Firstly, difference in the opportunities that the teacher generates in the class after DA procedures may be taken as an indicator of internalization of conceptual thinking. Secondly, teachers' reciprocity to the mediator's interactional assistance during DA procedures also is an indicator of internalization of concepts explicitly instructed by the mediator.

In this section, the SCT principles underlying DA procedures are elaborated. The following section is a brief review of the popular formats and approaches followed in DA studies. The review is also aimed at providing a rationale for the approach and format used in the current study on teacher development.

### 3.4 Sandwich and Cake formats of DA

A review of the literature shows that mediation in DA is usually embedded in two common formats: Sandwich and cake formats (Sternberg and Grigorenko, 2002). The sandwich format is similar to the traditional experimental research design in which an intervention is conducted after a pre-test and before a post-test. The pre-test score serves as the baseline measure and the post-test score illustrates the effect of the intervention on the learners' performance or learning. Thus, the sandwich format typically consists of three stages i.e., pre-test – mediation (instruction) – post-test. The type of mediation during the second phase of the sandwich format depends on the objectives and the purpose of the study.

The layered-cake format, on the other hand, refers to the procedures in which mediation is administered during the assessment process itself (Poehner, 2005). According to Sternberg and Grigorenko (2002), the layered-cake format is mostly used in individualized instruction. For example, in discrete item tests, the mediator provides an item-by-item mediation during the completion of a task (Guthke et al. 1986; as cited in Ableeva, 2010).

The formats thus are primarily indicative of the research design of the DA study rather than the type of assistance provided to the learners. Having said that mediation in DA is couched in either sandwich format or layered-cake format, the following section gives a detailed review of the two popular approaches to mediation in DA studies.

### 3.5 Approaches to DA

Two broad approaches to mediation are followed in DA. They are: interventionist and interactionist approach. Both the interventionist and interactionist approaches are based on the theoretical understanding that assistance provided by a more experienced member in a joint activity enables the learner to function at the maximum potential level of ability. However, the fundamental difference between the two approaches seems to lie in the order in which mediational assistance is provided by the mediator. In the interventionist approach to DA, assistance is provided by the mediator by adhering closely to a pre-scripted list of hints. On the other hand, in the interactionist approach, assistance is not pre-determined but is contingent with the response given by the learner. In other words, mediator makes subjective judgments on the type and amount of mediation that the learner needs.

A review of the studies on interventionist and interactionist approaches is deemed essential at this juncture to provide a rationale for the approach adopted in the current study.

### 3.5.1 Interventionist approach

As has already been mentioned, interventionist approach is popularly known for the use of a predetermined menu of hints and rating scales for the mediator to interpret the development of the learner in the given domain. For instance, Aljaafreh and Lantolf (1994) in a study on the effect of negative feedback on learning L2 writing used a 13-point regulatory scale ranging from implicit to explicit mediation. For example, while assistance at level 0 implied that the learner is able to perform by himself/herself, level 12 indicated that the learner needs explicit help from the tutor. Using the pointers in the regulatory scale in contingence with the learners' responses, the researchers provided appropriate feedback to the learners. The analysis of the mediated data showed that intervention of the tutor reduced considerably for one of the students from the first to the second episodes. In a small-scale study by Aghaebrahimian et al. (2014), on Iranian EFL learners, the researchers used a 5-point scale of levelled guidance to help the learners write better essays. The scale of mediation was predetermined by the researchers and was aimed at interpreting the development of the learner from other-regulation to self-regulation. In another study, Ableeva (2010) devised a typology of strategies to mediate the learners' performance while performing listening comprehension tasks. However, in this study though the typology was predetermined in advance, the researcher 'adjusted the mediation to the quality of listening performance of each learner' (p. 261). The results of the study indicated that DA allowed the researcher to know not only their actual level of ability but also to diagnose/assess their potential level of listening development, while at the same time promoting the development.

Though the studies demonstrate that assistance in the interventionist approach to DA is designed to be sensitive to the ZPD of the learner, Poehner and Lantolf (2005) critique this approach as 'strongly psychometric in nature and rooted in the interpretation of ZPD as a difference score between pre-test and post-test' (p. 239).

In the current study, it would not be helpful to rigidly follow a prefabricated menu of hints as the purpose of the study is to engage teachers in explicitly talking about the beliefs, experiences, views, and practical knowledge that guided their interactive decisions. It is essential that the teacher participants get enough room for verbalizing their inner thoughts and ideas that motivated their decisions and utterances in the classroom.

### 3.5.2 Interactionist approach

In contrast to the above, interactionist approach is found to be more promising in promoting and interpreting development. Unlike interventionist studies, the interactionist approach cares more for "qualitative assessment of psychological processes and dynamics of their development" (Minick,1987; p. 119). This approach is considered closer to Vygotsky's original proposition that development of a child needs to be interpreted during the interaction with the child (Vygotsky, 1998, p. 204). The procedure of mediation in interactionist approach is hence based on researcher/examinee/teacher's assumptions about the responses of the learners and the mediation required for that response. In this approach, the researcher may use hints and prompts but not necessarily in a graduated fashion and the focus is laid more on understanding the zone of actual development in order to reach the ZPD.

In a study by Poehner (2005) on advanced undergraduate learners of L2 French, the researcher 'did not use a pre-specified set of hints and leading questions but allowed the mediation to emerge from the mediator-learner collaboration' (p. 94). The interaction between the mediator and the participant involved a constant cycle of tutor moves, learner responses and then an appropriate adjustment by the mediator based on the learner's response to the assistance provided. Analysis of the interaction between the mediator and the learners demonstrated that "mediation led not only to improved performance, but also the learners' enhanced understanding of the processes underlying that performance" (p. 315). In another study by Shrestha (2011) on the effect of tutor mediation on academic writing skills of

undergraduate students of business studies, interactionist DA helped in diagnosing the students' problems. The analysis of the final DA of students' writing texts demonstrated that while there has been progression in the performance of one of the participants, there was regression in the performance of another participant. These studies demonstrate that in interactionist studies, the researcher's focus is oriented more towards tracing the process of development rather than measurement of scores.

To sum up, in interactionist approach, qualitative interpretation of learner development as observed during interaction takes precedence over statistical measures of pre- and post-task performance. Quantitative analysis of the mediational data is not helpful in arriving at a complete picture of the learner's potential. As such the current study adopts an interactionist DA procedure and aims to track the progress of the teachers through qualitative analysis of dialogue in the DA procedures.

The following section is a review of studies that explored the impact of DA on the development of teacher cognition.

### 3.6 Review of studies

A review of literature in second language teacher education reveals that there are very few studies that looked into the effectiveness of DA in the context of teacher development. Yakışık and Çakır (2017), for instance, used DA procedure to develop the speaking abilities of prospective English teachers. For this purpose, thirty-six learners from the Gazi University School of Foreign Languages, enrolled in a one-year intensive language training programme were recruited. The participants were found to lack the productive skills which are very essential for being good role models in the classrooms once they start their careers. The researchers used the Sandwich format (pre-test – treatment – post-test) to see the improvement in their ability to narrate a news item. Interactionist DA approach was used to mediate in the performance of experimental group learners. In the DA sessions, the researchers intervened in

the teachers' performance whenever needed to ask questions, offer suggestions, provide correction, provide help or make general observations about the performance. The researchers report that pre-DA information was resourceful and indicated potential ways of helping learners overcome the problems' (p. 28). Based on the assessment information, an enrichment programme was designed and administered during the treatment phase of the study. Later, the post-test phase once again comprised of task on narrating a news item. Analysis of post-test data showed that there is significant improvement in the appropriate use of verb tenses by the teachers while narrating the news item. The qualitative analysis of dialogue with teachers during pre- and post-DA sessions demonstrated that experimental group learners needed less mediation during the post-DA. The study demonstrates that DA is not only helpful in diagnosing the problems in teachers' abilities but also in providing appropriate mediational assistance.

In another study, Golombek (2011) used DA to mediate in the ability of a teacher-learner named Abra to engineer student participation in a speaking and listening class. The study is based on the argument that DA enables 'mediator to discern the student's inter-psychological ability, and the mediator and the student's joint activity serve to promote that student's future development' (p. 126). The DA session was conducted in combination with the video recorded performance of Abra. The video served as a springboard for identifying the problems in Abra's ability to encourage meaningful student participation in the class.

The mediation initially started with a number of attempts at 'back channelling to elicit explanation' as the researcher deemed it necessary to first understand how the teacher perceives the situation or defines the situation i.e., the zone of actual development of Abra. Later, the mediation graduated from implicit assistance such as 'direct questioning to elicit an alternative instructional response', towards an explicit support such 'voicing an expert's response'. The mediation also included an attempt on the part of the mediator to 'elicit reasoning' because the

teacher's conceptual thinking can only be understood when Abra talks explicitly about her intentions behind the alternative that she has provided. Thus, the cognitive and emotional dissonance caused during the process of watching the recorded performance served as an opportunity for providing mediation. Thus, the interactionist DA procedure enabled the mediator to not only assess Abra's conceptual thinking but also to reorient her in expert ways of thinking.

In this study, however, Abra was a native speaker of English who graduated from a large public university in the United States. Her educational background in this context explains her proactive role in designing the instructional plan and also her interest to take the class alone even when there was a chance for the teacher-learners to teach in pairs. Because of her educational background and interest perhaps, Abra was able to self-reflect and self-evaluate even at the level of implicit support from the mediator.

In another study, Moradian, Miri and Qassemi (2015) explored the effectiveness of DA on the ability of four pre-service teachers enrolled in a teacher education programme. The researchers specifically focused on the capability of the participants to shape learner contributions as a part of interactional discourse. The findings showed that DA played a key role in promoting the teachers' ability for generating precious opportunities for learners' involvement, and consequently learning. In this study, the researchers initially video- and audio-recorded classroom data of the teachers to identify the samples in which they missed the opportunity for shaping learner contributions. On the basis of the subjective analysis of the data one-on-one DA sessions were held with each of the teachers. In the DA session, their tutor (one of the researchers) tried to assist them to critically reflect on the strategies they adopted to shape their learners' contributions. The researchers claim that in such dialogic contexts the ZPD of the teachers was nurtured. The data collected after the DA sessions indicated a rise in the total frequency and variety of the strategies employed by the teachers. An interesting finding in this

study which is similar to Shrestha's (2011) study on academic writing is that teachers' type of development differed greatly from one another.

While DA may yield sound and reflective responses from teachers in English as first language context and in pre-service teacher contexts, it is worth investigating to see how DA mediational discourse gets shaped in an ESL context, where according to Johnson and Golombek (2018) teachers who may not be proficient in English themselves are being prepared to teach English and use English as the medium of instruction. The current study thus attempts to fill this gap in SLTE research by using DA procedures to understand the process of teacher learning and the potential of the teachers to learn conceptual thinking.

### 3.7 Conclusion

This chapter was focused on presenting the theoretical framework i.e., SCT of the study. The product and process of learning according to the SCT are elucidated. The principles underlying DA procedures, the formats and approaches in which DA studies are carried out are elaborated in detail. This chapter provided a brief review of the studies that explored the effectiveness of DA specifically in the domain of classroom interaction. Studies demonstrate that DA is helpful in diagnosing teachers' ZPD as well as in providing appropriate mediational assistance to teacher learners. Based on the review, it was concluded that there is a dearth of studies on DA in ESL context. In the following chapter, the research methodology of the study is explained in detail.

# Chapter 4: Research Methodology

This study aimed to study the impact of DA on cognitive thinking of the L2 teachers' classroom interactional practices. The literature review demonstrates that the studies on DA are rare in ESL contexts. The review also informs that there is a need to further expand this line of inquiry in connection to teacher learning. The current study is thus guided by the following research questions:

1) What are the dominant interactional patterns in L2 teachers' classes before DA and what is the effect of these practices on opportunities for student participation and second language learning?

2) How can DA-based mediational discourse shape teachers' conceptual thinking in relation to classroom interactional practices?

3) To what extent can DA-based mediational discourse promote change in the classroom interactional practices of L2 teachers?

This chapter elaborates the methodology followed for data collection and data analysis. The first section briefly presents the background details of how the researcher prepared for the study. This is followed by details pertaining to the main study i.e., the research design, research site, sampling technique, participants, methods used for data collection and tools used for analysis of data. The final section gives a brief overview of the ethical challenges encountered in the study and the measures taken to overcome those challenges.

## 4.1 Preparation for the study

Collecting data from L2 teachers has been very crucial in the current study. First and foremost, recruiting the participants for the study was an overwhelming challenge for the researcher considering the ground reality that there existed a gulf between the worlds of practitioners and researchers. It was observed that practitioners do not appreciate research and

researchers do not have a positive disposition towards practitioners (Robinson, 2003). Practitioners find researchers to be arrogant, ready to criticise and recommend change, without appreciating the complexity of the contexts they are investigating (Hammersley, 2000). Based on this preliminary understanding of teachers' attitudes towards research, it was realized that there would be more likelihood for miscommunication and resentment when teachers are probed about their practices in the classroom. Though the researcher is an experienced teacher herself and often worked as teacher trainer at the block level meetings, this qualification may not be sufficient to engage teachers in a constructive dialogue. The literature review too demonstrated that research studies on DA in language learning as well as teacher education were conducted by tutors/educators who identified a problem in their students and felt the need for a DA approach to improve the students' performance (Golombek, 2011; Moradian, Miri and Qassemi, 2015; Poehner, 2005; Shrestha, 2011). In order to overcome the challenges that a researcher may encounter in the field and also to find suitable participants for the study, it was considered essential to make field visits and make contacts with L2 teachers.

For this purpose, the researcher approached private and government schools wherein the researcher had prior contacts. The researcher had easier access to government schools because of her job as a teacher in a Zilla Parishad high school. In order to observe the classes, the researcher first sought the permission of the Head master, then the head teacher where such a system existed, and finally that of the L2 teachers. Five schools – two private and three government schools – provided permission to observe their teachers' classes and video/audio record as per the teacher's will. The administrators and teachers were informed about the objectives of the study and the teacher's role in the study for seeking their informed consent (Appendix A). While a few interested teachers gave their consent to let the researcher just observe their classes, others permitted the researcher to either video or audio record their classes. The ethical concerns and challenges that were encountered by the researcher during

this phase as well as the main study are elaborated in detail in Sec. 4.5. On the whole, during this phase, 19 classes of 11 teachers – nine teachers working in government schools and two teachers working in private schools were observed. Classes ranging from VI to X were observed as the goal was to observe the interactional practices of teachers and get familiarized with the dynamic process of mediation while talking to teachers. The classes observed varied considerably depending on the proficiency levels of teachers, and skills taught by the teacher.

A period of one and half months was spent on visiting schools, getting permissions, and observing the classes. Brief informal discussions were held with teachers about the topic and their plan prior to teaching. Later, the researcher observed the classes quietly sitting in the last bench of the class. Majority of teachers took regular lessons or grammar tasks while some teachers took additional interest and selected an out-of-the-syllabus language task or story as they had given their consent for recording the class. In one of the incidents, it was noticed that a teacher had already rehearsed the task with the students before the researcher had arrived and took the same topic for the second time for the purpose of recording.

The practical exposure to real-time classroom interactional practices equipped the researcher with a fundamental understanding of the type of interactional opportunities that L2 teachers generate in classes. In classes focused on reading comprehension, explanation of the text was intermittently marked by closed-ended questions aimed at checking comprehension. Other classes in which teachers took up speaking activities, story discussion, picture-description activities and revision class there were several instances of teacher encouraging student participation. However, teachers' feedback moves consisted of only positive evaluation and no follow-up questions were posed by the teacher to generate new learning opportunities. With this experience of observation and analysis of classroom data the researcher gained experience in identifying areas for improvement in the teachers' interactional practices.

Preliminary analysis of data recorded in this stage helped in developing a conceptual tool for analysis of classroom interactions in the main study (See 4.6).

During this stage, the researcher also gained experience in providing mediation as some of the teachers were enthusiastic to get feedback from the researcher about their teaching. Through observation of classes, it was understood that teachers differed in their ability to engage in classroom interaction and hence the dialogic mediation that teachers need should be based on the areas in which they are lacking or experiencing difficulties. This experience of providing feedback helped the researcher to reflect on her own strengths and limitations in the process of engaging teachers in dialogue.

The initial preparation played a crucial role in meeting prospective participants, explaining about the project and taking their signed consent for the main study and developing rapport with them. According to Golombek (2011) knowing the teacher well is very important in DA as it helps in building intersubjectivity and providing appropriate mediation.

The insights gained at this stage helped in perceiving the need for a change in L2 teachers' classroom interactional practices and also the potential of alternative assessment practices such as DA in promoting change in teacher practice. Based on this understanding, the methodology for the main study was designed and implemented. The following section explains in detail the methodology followed in the main study.

## 4.2 Main study

This section elucidates the details of the main study such as the research site, participants, methods used for data collection and the tools used for data analysis.

### 4.2.1 Research site

The current study was carried out on teachers working in different Zilla Parishad high schools of Hyderabad and Ranga Reddy districts. Zilla Parishad schools are public funded

schools run by the state government under the aegis of the Directorate of School Education. One of the reasons for choosing government schools for the current study is that the researcher had easier access to these schools owing to her profession as a school teacher. Moreover, sufficient number of teachers from these schools gave their signed consent for participation in the study. Due to these practical considerations, the study was carried out on L2 teachers of English medium government secondary schools.

In India, government schools provide free education and hence a vast majority of children from middle and low-income sections are enrolled in these schools. These schools offer facilities such as mid-day meals, uniform, and textbooks free of cost to all students. These schools are spacious and equipped with facilities such as a large playground, library, laboratory, and computer lab. In the schools where the current study was carried out, the classrooms were also equipped with overhead projectors and computers to facilitate IT integrated teaching.

Most of the students studying in these schools are first generation learners. Generally, these students do not have the benefit of encountering the English language either at home or in their neighbourhood. Given this background, students of these schools normally have beginner level proficiency in LSRW skills or in other words the level which corresponds to the A1 and A2 levels of CEFR (Common European Framework of Reference for Languages). Students can understand English, know basic vocabulary and can write and speak simple sentences. Some gifted students in the class can narrate stories and talk about their previous experiences using simple vocabulary. However, a vast majority of students in the class remain passive which leads many teachers to the conclusion that students are not active because they do not know English. So, it is a common phenomenon in these classrooms to come across teachers who explain the content in L1 to students (Mukhopadhyay, 2020). Translation and

transmission practices are widely practised and justified by the teachers owing to the 'students' non-comprehension of English' (Mohanty, Panda and Pal, 2010).

In educational contexts such as these, there seems to be a wide gap between the learners' needs and the suggestions of policy makers to use dialogic teaching practices in the classrooms (NCF, 2005). There is a need for intense research on teachers' interactional decisions in these contexts as students get an opportunity to listen to and use English only in the classroom. Teachers of these schools thus have greater responsibility of providing sufficient number of opportunities to students for speaking in L2. The decision to carry out the study in a government school context hence seemed appropriate.

### 4.2.2 Sampling technique

Purposive sampling technique was employed in this study to recruit the participants. Purposive sampling is the technique which is used when participants are chosen on the basis of practical considerations (Opie, 2004). Finding participants for this study constituted a major challenge for the researcher as not every teacher may like to discuss what he or she had done with an outsider. Besides, teacher development programmes in the Indian context are mostly training-oriented (National Curriculum Framework for Teacher Education, 2009). As a result of this, teachers are mostly used to being passive recipients of information. Discussing one's classroom practices openly would be relatively a new and intimidating experience for the participants. In addition to this, considering the fact that DA is a time-consuming process (Golombek, 2011), it is very essential for the participants to be genuinely interested, and willing to openly discuss their classroom practices with the researcher. Keeping these aspects in view, the primary target in this study was to find teachers who were completely willing to discuss their practices with the researcher. So, purposive sampling technique was used to select the participants from amongst those who had given their consent.

The participants of the current study represent the characteristics of the population of secondary school level L2 teachers. The sample included teachers who were promoted to high school level after a few years of experience as primary school teachers, a primary school teacher deputed in a high school to teach English, and teachers who started their careers directly as secondary school level teachers. On the whole, the sample included six experienced teachers who were well aware of their students' needs, proficiency levels and social background. The following section presents the background of each teacher participant of this study.

### 4.2.3 Participants

The participants were given pseudonyms to maintain their privacy.

(A) Parimala

Parimala has been working as a high school teacher of English for the past eight years and prior to that she worked as primary school teacher for four years. She has 12 years of teaching experience. She was transferred from a very remote place in Telangana to the current school a year before the study was conducted. She teaches English to students of grades VI to X. All her education was in English medium and she was capable of conversing freely in English. Her educational qualifications were B. Sc., B. Ed. at the time of starting her career. Later, Parimala completed her Master's degree in English literature and also Masters in Education through distance mode. She attended several in-service training programmes during her career. She believes that communicative language teaching is the best method of developing English language skills of students.

Parimala enjoys being an English teacher. She is very good at preparing a variety of teaching-learning material for students. She has interest in pursuing research and so she expressed enthusiasm to participate in the study. Her motivation to participate in the study was to improve her teaching skills.

(B) Kiran:

Kiran had been working in the current school for a year. He worked as a primary school teacher for five years before being promoted to secondary school as English teacher. He has a total teaching experience of 14 years. He currently teaches to students from grade VII to X. His education until 12th standard was in Telugu medium. Like Parimala, Kiran was basically a science student, and he always dreamt of becoming a science teacher. After joining as primary school teacher, he completed M. Sc. in Botany as well as M. A. in English literature, both through distance mode. Later, he got an opportunity to be promoted as a teacher of English. Though it was not his wish to be an English teacher, he did not want to lose the opportunity of a promotion. No matter what, he currently enjoys teaching English and tries to develop all the skills required to be an efficient and effective teacher. He wants his classes to be child-centred and communicative in nature.

Kiran attended many in-service training programmes during his entire career. He also worked as a master trainer at local as well as district level in-service teacher training programmes.

(C) Mohan

Mohan has been working as a high school English teacher for the past 10 years. He is one of the three participants of the study who started their careers as primary school teacher and later was promoted to high school. His educational qualifications are M. A. in English literature and B. Ed. Mohan too attended a number of in-service training programmes during his entire career.

Mohan joined the study with the intention of learning. He especially liked the ideas of recording the class and watching it later to identify strengths and weaknesses. He is not very fluent in English when compared to other participants of the group but converses only in English with colleagues and students as he wants to learn and also be a role model for students.

He feels that his current students are not serious about education and they are not able to use English despite his motivation.

Mohan's education all through has been in Telugu medium until his under graduation. Mohan hails from an agricultural family and he is a first-generation learner in his family. He stays in a far-off place from the school which takes him nearly two hours to reach the school. Despite all odds, Mohan is very passionate about learning something new every day. He reads grammar books whenever he gets a leisure period and writes beautiful poems in the Telugu language.

(D) Stephen

Stephen has six years of teaching experience as high school English teacher. His education too was in the Telugu medium until grade 10. His educational qualifications are M. A., B. Ed. He started his career directly as a high school English language teacher and has been working in the same school since then.

Stephen's ambition has always been to become an English teacher since his student days. So, he completely enjoys being an English teacher. He considers it a great opportunity to be able to teach English subject to young learners as it is a global language and is very crucial in building up the careers of students. He wanted to be a part of the study as he wanted to know more about the strengths and weaknesses in his teaching style. He believes that students should learn in a joyful environment. However, he feels that it is very difficult to the proficiency levels of the students. His interest in students is so high that he often spends his own money to buy teaching-learning material such as activity cards, books and CDs for the school library.

(E) Anita

Anita works in a school meant exclusively for Scheduled Tribe girls. Her qualifications are M. A., B. Ed. Anita has a teaching experience of nine years. She joined her current school very recently and at the time of this study she was still trying to understand her students. She

is an active participant in in-service training programmes and is very much interested in English language teaching. Out of her own interest, she did an online course on integrating technology with teaching. She believes that teachers are lifelong learners and they should be always open to learning.

As Anita's work is in a school meant for tribal girls, she faces a number of challenges in terms of teaching them English. These students are also not well versed in Telugu which adds further to her problems according to the teacher. The teacher does not know Lambada which is the native language of the students. So as per the teacher it is very difficult to teach English to these students as she cannot even explain in Lambada language. She is worried about the poor speaking and writing skills of her students. Her intention to join the study was to know from the researcher how to develop the basic LSRW skills of her students.

(F) Farha

Farha is a Secondary Grade Teacher who is on deputation as English teacher at a high school. She has teaching experience of six years. Her educational qualifications are B.A., B. Ed. She has been pursuing M. A. in English literature at the time of the study.

Farha worked as a teacher trainer for in-service training programmes and complex meetings meant for primary teachers. She is interested in teaching but her passion is getting into an administrative job by appearing for competitive examinations. She feels that she is better at administration rather than teaching. But she has never neglected teaching or developing her teaching skills. She also likes children a lot and believes in joyful learning. She is very friendly with her students and tries to teach English grammar and vocabulary through songs and dance. She has made many videos for primary school children on learning English. Though she loves teaching English and being with students, her ultimate goal is to get into a higher rank and for this she has also been preparing for the upcoming competitive exams.

The following section elaborates the research design and the procedure followed for data collection.

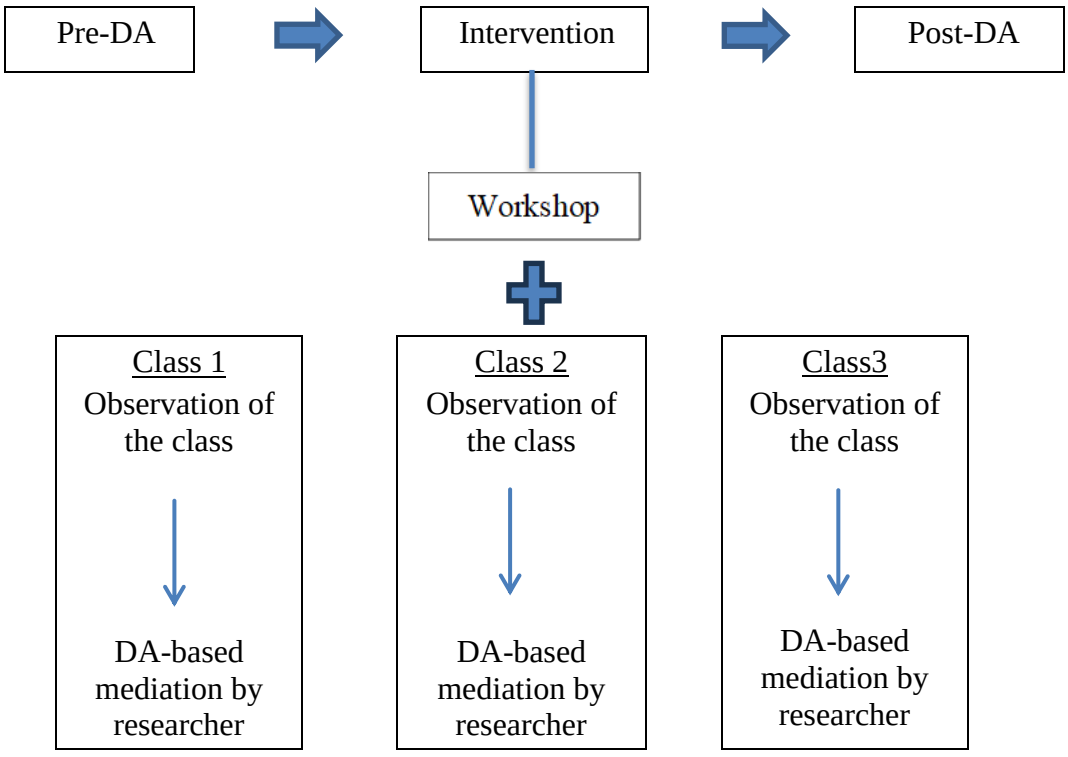
### 4.2.4 Research design

The research design of this study is based on the principles of anti-positivist or interpretive research paradigm (Johnson, 2009). In research concerning English language teaching and learning, qualitative research is considered ideal for providing insights into social, cultural and contextual conditions and influences that promote learning. Qualitative paradigm especially underpins the studies where the focus is on understanding how learning occurs through close study of a small numbers of learners (Sullivan and Sargeant, 2011). DA studies are predominantly qualitative in nature as the focus is on the examination of the qualitative development of individuals' higher mental functions over time (Lantolf & Thorne, 2006). A qualitative approach to investigation into learning is also chosen when researchers believe that "humans construct their own reality, and understanding what they do may be based on why they believe they do it" (Savenye & Robinson, 1996; p. 1046).

In order to achieve the objective of the study, quasi-experimental pretest-posttest research design was followed (Dörnyei, 2007). Quasi-experimental design is different from a true experimental design as there is only one group of participants on whom the intervention is implemented. This design is also in tune with the objective of the study which is to observe the changes in the group's performance as a result of the intervention. As a part of this design, participants' entry level performance was recorded. Following this, intervention was provided in the form of DA spanning six based mediation sessions hours of instruction (two days). As a part of intervention, a work shop was taken for the teachers. The researcher prepared a module suitable to the current needs of the study. This module included aspects such as 1) importance of classroom interaction 2) role of a teacher in classroom interaction 3) effective features of classroom interaction and 4) practical work on analysing classroom interaction. These aspects

were taught through PowerPoint presentations in computer lab at a school where all the participants assembled. For providing practice in understanding classroom discourse and the teacher's role, transcriptions of selective examples from the data collected were printed and provided as handouts. Teachers were categorized into two groups for facilitating informal conversations among themselves regarding the strengths and weaknesses of the examples provided in the handouts. After the workshop, the researcher met each teacher individually for observation of the class and conducting DA procedure. Each teacher's classroom interaction was recorded and it was used as the source for conducting DA procedures. Intervention in this study consisted of three cycles of DA sessions. Figure 4.1 is a diagrammatical representation of the research design of the study.

**Figure 4.1: Research design**




As per the research design, classroom interaction data was collected once again after the intervention in order to gauge the extent to which teachers were able to take their learning

beyond the assessment contexts into regular classes. In short, classroom data was collected once before the treatment and once after the treatment.

The following section elaborates the methods used for data collection during the main study.

### 4.2.5 Methods of data collection

In this section, the methods used for data collection are described. As mentioned in Sec 4.4, the current study is oriented towards collecting qualitative data because the objective of the study was to look into conceptual thinking of the teachers when provided with dialogic support. In congruence with this objective, methods such as classroom observation, video recording of lessons, and video-stimulated recall during DA sessions were used for data collection. The purpose for each of these methods in this study is explained in detail below:

(i) Classroom observation:

In mainstream educational research as well research on L2 teacher education, classroom observation is one of the popular methods for obtaining valuable and informative evidence about the unfolding teaching and learning events in the classroom. Cohen, Manion and Morrison (2017) point out that the unique strength of observation is its potential to produce valid and authentic data because it facilitates data collection directly by looking at real situations.

As such, in the current study, in order to find answers for the research questions 1 and 3, non-participant classroom observation was used. The researcher played the role of an unobtrusive observer of the teacher's role in the classroom. It was also non-participant as the purpose was to get as much naturalistic data as possible and any hindrance from the researcher would only disturb the flow of communication between the teacher and the students.

In addition to being non-participant, the classroom observation of the current study was also unstructured. In other words, the researcher did not use any standardized tool for classroom observation in this study because the purpose of the research study was not to evaluate the teacher but to know the initiation and feedback moves used by the teacher to shape learner participation and L2 learning. Structured observation or the use of a standardized tool for observation would not give insights into the contextual factors that guided the teacher's choices. Besides, the current study required a bird's eye-view of the entire interaction in order to provide appropriate mediation. Keeping these factors in view, non-participant and unstructured observation was adopted in this study for the purpose of collecting classroom data.

Classroom observations in this study were supported by other modes of data preservation because objective interpretation and assessment of the teachers' classroom choices requires the researcher to go back and view the performance multiples times. In order to preserve the data for the purposes of analysis and mediation at a later stage, the researcher recorded the interactions while observing the classes.

(ii) Video recording:

Video-recording was one of the procedures used for preserving classroom data. It was not just as a way of preserving the data for later analysis but it was also used as a 'semiotic tool' for promoting the reflections of teachers about the 'online decisions' (Walsh, 2003) that they had taken in the class. Ample evidence exists in the literature about the vast benefits of video-based research in teacher education (Daşkın & Hatipoğlu, 2014; Hockly, 2016). Videos are increasingly used as semiotic tools in the process of mediating in teacher learning, and to draw teacher's attention to the missed opportunities for interaction during the class (Brantley-Dias et al., 2008; Xu, Widjaja, & Ferguson, 2018).

So, in order to meet the dual needs of using the video as a tool for stimulating recall as well as a tool in the process of analysis, video-recording was preferred. For this purpose, the

researcher used Samsung Note 3 mobile phone. The mobile had good picture and sound clarity and almost everything that the teacher and the learners said in the classroom could be recorded and heard clearly even from a distant corner in the classroom. Also, the use of a mobile to record the data did not cause much distraction to the teacher or the learners as a tripod with a mounted camera may have caused. In order to do video-recording, the researcher sat along with the students in the last bench of the class and tried to capture the utterances of the teacher and students.

(iii) Audio recording of interactionist DA sessions:

Interactionist DA-based mediation was used in the study to collect the data required to answer RQ2 i.e., how can DA-based mediational discourse shape teachers' conceptual thinking in relation to classroom interactional practices? In order to answer this question, the researcher primarily interacted with the teacher on the basis of the areas of improvement identified by the researcher before conducting the DA session. In order to facilitate dialogue, the video was shared with the teacher prior to the DA session and also used while conducting DA.

In order to facilitate free and open talk with the teachers, video recording of DA sessions was avoided. However, for the purpose of preservation of data for analysis, audio recording of the interaction was done using the phone. Each mediation session lasted for 45-90 minutes. On the whole, 18 interactive mediation sessions, three for each teacher were audio-recorded.

### 4.2.6 Data analysis

The research questions in this study were addressed by data collected from two contexts i.e., classroom data which refers to teachers' interaction with their students before and after the treatment (Research questions: 1 and 3) and mediation data, which refers to the interaction between the researcher and the teacher (Research question: 2). This section elaborates the tools

used for analysis of the classroom data and the mediation data. Mixed method approach was used for analysis of the data.

**a) Classroom data:** Classroom data comprised of 12 classes – two classes of each of the participant. These lessons were transcribed using Descript, an online software application that automatically transcribes videos into text. Nevertheless, the transcribed text was thoroughly cross checked by the researcher before analysing the data.

Drawing from the literature review and based on the experiences during the initial preparation for the study, the researcher developed a conceptual framework that facilitated identification of effective features in teacher-led classroom interactions. This framework was developed relying on the observations made by Nystrand et al. (2003) regarding effective classroom interactional features.

In the analysis of classroom data one IRF exchange was taken as a unit of analysis. In the Initiation turn of the teacher, questions play a pivotal role in generating language learning opportunities for students. So, the teacher questions were analysed for 1) authenticity of the question and 2) the cognitive demand that the question put on the learners in using the language. Asking authentic or quasi-authentic questions was considered an effective feature of teacher-led classroom interaction as they gave an opportunity to students to use the language or talk about one's own personal experiences. For the second criterion i.e., Cognitive demand, asking cognitively demanding questions was an considered an effective feature of classroom interaction as such questions encouraged students to apply their cognitive strategies in giving a response.

However, the framework was not based on the assumption that non-authentic and less-cognitively demanding questions were ineffective features of interaction. Such types of questions are crucial in eliciting participation especially in educational institutions that cater to low-proficiency learners. However, the attempt in expanding the conceptual thinking of

teachers in this study is to assist them in progressing from excessive use of non-authentic and less-cognitively demanding questions towards more authentic and quasi-authentic questions.

Similarly, in analysing the teacher's follow-up move, two criteria were used i.e., evaluation and uptake. Using high-level evaluation was considered an effective feature of interaction and it encompassed strategies that give rich language input to students. They were strategies such as 1) adding new information to the student's response, 2) modelling an incorrect response of the student, 3) translating the response given in local language into English and 4) reformulating a student's response in teacher's own words. With respect to the second criterion of the teacher's follow-up, uptake of the students' responses was considered an effective feature of classroom interaction. As reviewed in the literature, follow-up response has a discoursal role too and this was found to play a crucial role in generating new language learning opportunities for students (Cullen, 2002; Nystrand, 2003). Uptake gives insights into how much importance a teacher gives to the students' responses in extending the interaction.

Having said this, this framework was not based on the assumption that using low-level evaluation or not using uptake is ineffective interactional feature. Low-level evaluation is highly essential in a class of low-proficiency learners and uptake cannot be or need not be done for each and every student's response. However, effective classroom interaction is one in which the teacher does not miss an opportunity to weave the students' responses into the emerging interaction.

Thus, the conceptual framework used in this study was based on review of effective classroom interactional features. The framework was used in the analysis of pre-DA as well as post-DA classroom interactions of the study. Table 4.1 was the conceptual framework used for the analysis of classroom interactions.

**Table 4.1. Conceptual framework used for data analysis.**

| Teacher Turn | Criterion | Description |
|---|---|---|
| ***INITIATION*** | **1) AUTHENTICITY OF THE QUESTION:** This criterion gives insight into what type of responses the teacher is interested in eliciting from the students. | **1) Non-authentic questions:** Non-authentic questions are closed-ended questions. In this type of questions, the teacher elicits a specific detail from the text. There is only one pre-specified answer for the question. The teacher knows the answer and expects the same from students.<br><br>**2) Quasi-authentic questions:** Quasi-authentic questions are open-ended questions used for testing comprehension. These questions have the potential to elicit multiple responses from students. The teacher knows the answers but does not how a student may respond.<br><br>**3) Authentic questions:** Authentic question are open-ended questions for which the teacher does not know the answer at all. These questions are used to elicit students' personal opinions, experiences, suggestions and justifications on the topic being discussed. |
| | **2) COGNITIVE DEMAND:** This criterion gives insight into the level of thinking that the teacher is eliciting from the students. | **1) Low cognitive-demand:** Questions that make the learner answer from memory or previous learning cycles of the lesson.<br><br>**2) High cognitive demand:** Questions that enable the learner to answer by using any kind of higher-order cognitive strategy such as application, analysis, problem-solving, etc. |
| ***FOLLOW-UP*** | **1) LEVEL OF EVALUATION:** This criterion gives insight into the extent to which a teacher uses students' responses as a means of providing rich language input to students. | **1) Low-level evaluation:** Follow-up move in which the teacher simply accepts, confirms or appreciates the student's response.<br><br>**2) High-level evaluation:** Follow-up move in which the teacher uses some kind of a strategy to shape a student's response such as:<br>• adding new information,<br>• modelling an inaccurate response in the right form<br>• translating the response into English<br>• 4) reformulating the student's response |
| | **2) UPTAKE:** This criterion gives insight into the extent to which a teacher extends the interaction further. | **1) Absent:** Follow-up move in which the teacher does not ask any new question based on the response of a student.<br>**2) Present:** Follow-up move in which the teacher asks a new question based the student's response in order to extend the interaction further, to seek confirmation, or to check clarification. |

**(b) Mediation data**

Mediation data (i.e., researcher-teacher interactions during the DA sessions) is crucial for this study to explore RQ2. The mediation data in this study comprises the data collected during the three interactive DA sessions between the researcher and the teacher (See Figure 4.1). The audio-recorded data was transcribed using Descript. The transcribed data was cross checked and analysed.

As mentioned earlier, in this study, the researcher followed an open and flexible approach during the interaction with the teachers. Similarly, teachers would differ in their responses to the same type of mediation provided by the researcher. Responses of the teachers during interactions with the researcher would provide valuable insights into teacher's conceptual thinking. The analysis was aimed at identifying the different types of mediational assistance provided by the researcher and how these moves shaped the conceptual thinking of teachers.

In analysing the dialogue, the researcher's mediational moves were organized in separate excel sheets thematically. This resulted in a typology of implicit and explicit prompts used by the mediator and also gave insights into the frequency of each move. The frequency of the researcher's mediational prompts gave insights into the overall effect of DA on teachers' conceptual thinking.

Similarly, in analysing how teachers responded to the researcher's mediational assistance, the teachers' reciprocal moves were organized thematically. This emerged in a typology of dependent and independent moves that teachers used in response to the researcher's mediational assistance. The types and frequency of the moves used by each teacher gave insights into their ability for conceptual thinking.

Shrestha's (2011) typology of mediator moves and learner reciprocal was initially adopted as a starting point for analysis. However, in the due course new moves were added and

some were deleted as the current context of learning was drastically different from the context in which Shrestha's study was carried out.

The following section presents the ethical issues that were encountered in the process of data collection.

### 4.3 Ethical issues

As this study was concerned with teacher participation and observation of teachers' classroom performance, there were a number of ethical challenges surrounding data collection. For instance, it was almost impossible to get the consent of the students and their parents because the strength of the students in each class was nearly 30-45 and on the whole. It meant taking the consent of nearly 200 students and their parents. Getting the consent of all these students and their parents would have taken away a lot of the researcher's time as a number of classes were observed and recorded in this study. Moreover, as a vast majority of students' parents are not educated, it would be only a namesake even if the parents were asked to sign on a letter of consent. Similarly, recording the classroom discourse meant that the teachers' and some of the students' faces would be captured in the video which is certainly not ethical. However, recording the data could not be avoided as classroom interaction is fundamental to the current study and the quality of mediation may greatly differ in the absence of a video/audio. Both these issues presented serious ethical challenges for the researcher.

However, some of these issues were addressed through institutional permissions and some through feasible procedures. The headmasters and the teachers were all informed about the study orally and through a written note mentioning all the details of the study. All the participants in the main study gave their signed consent. In relation to this, permissions were also taken from headmasters of the schools for allowing their teachers to participate in the study.

With respect to students and their parents' permission, there were no written letters of consent from each one of them. However, students were orally informed about the purpose of my presence in their classes, and the need for recording the classroom interaction. In addition to this, in order to overcome the gap in procuring the consent of each and every parent, the researcher in the current study attended the meeting of the School Monitoring Committee, an important body in taking decisions related to students and school, and informed them about the study and video recording. This body has a chairman, parents, youth and teachers as members apart from the headmaster and teachers. The researcher attended the meetings in the schools whose teachers participated in the study and informed the committee about the study. No objection was made by anyone for data collection in the schools or video recording of the classes.

### 4.4 Conclusion

This chapter has explained in detail the research methodology of the study. As mentioned in the chapter, the current study followed a quasi-experimental research design. This study followed a mixed method approach. However, it was mostly qualitative owing to the focus of the study on analysis of mediational assistance provided in the form of interactionist DA. Qualitative analysis allowed the researcher to examine the interaction and locate the process of change in the teachers' ability for conceptual thinking. The following chapter presents the findings from pre-DA classroom data of the participants.

# Chapter 5: Analysis of Pre-DA Data

This chapter presents findings from the analysis of the data pertaining to the first research question of the study: What are the dominant interactional patterns in L2 teachers' classes before DA and what is the effect of these practices on opportunities for student participation and second language learning? The focus of this research question is on finding 1) the type of questions asked to elicit learner participation and 2) the type of follow-up moves used for shaping learner contributions and generating new opportunities. The target of this research question is to get an insight into the pre-DA classroom interactional practices of each participant teacher and also to interpret the effect of the teachers' interactional choices on second language learning in the classroom.

The first section in this chapter presents the quantitative findings related to the participants' questioning and follow-up choices. This is followed by qualitative analysis of episodes that illustrate each pattern and the effect of each interactional pattern on student learning. The final section in this chapter is a discussion of the findings from pre-DA data.

## 5.1 Particulars of Pre-DA data

As mentioned in the previous chapter, six in-service teachers working in Zilla Parishad high schools of two different districts in Telangana state participated in this study (Sec 4.4.3). Two classes of each participant teacher were observed during the pre-DA phase. Table 5.1 presents the pedagogic objective and time duration of each lesson observed.

**Table 5.1 Lessons Observed during Pre-DA Phase of the Study**

| Name | Lesson observed | Pedagogic objective | Time |
|---|---|---|---|
| **Kiran** | 1. Home Work | To test students' comprehension of the main ideas presented in the lesson. | 23:49 |
| | 2. Desert Island | To develop oral fluency. | 20:13 |
| **Parimala** | 1. A Nation's Strength | To explain the poem and check their comprehension | 11:38 |
| | 2. Village life, City life | To enable students to talk about the differences between village and city. | 15:11 |
| **Mohan** | 1. Havoc of flood | To enable students to describe the events in a picture.<br>To develop students' ability to talk on the theme - disasters. | 12:32 |
| | 2. Rendezvous with Ray | To facilitate the comprehension of text through questioning and explanation. | 15:38 |
| **Stephen** | 1. Degrees of Comparison | To give practice in transformation of sentences from one degree of comparison to another. | 16:08 |
| | 2. The Donkey on the Island | To provide extensive reading opportunities to students and to promote their reading comprehension skills. | 16:24 |
| **Anita** | 1. What is man without a beast? | To help students understand difficult vocabulary in the text and to facilitate their comprehension of the text. | 15:25 |
| | 2. Grammar: Use, Used and Used to | To check the students' understanding of the words 'use' and 'used'.<br>To explain the concept of 'Used to' and give practice. | 21:10 |
| **Farha** | 1. Parts of speech | To revise students' knowledge of the parts of speech. | 10:00 |
| | 2. The Snake and the Mirror | To develop oral fluency of the students. | 15:00 |

In the pre-DA stage, all the lessons taken by the teachers were from the syllabus prescribed for the students except one lesson i.e., Desert Island. The following section presents

the quantitative findings derived from the lessons taken by each participant. The findings are presented in the form of percentages.

### 5.2 Quantitative analysis

In this section, quantitative findings from the classroom data of each participant are presented. This section provides an overview of the micro-contexts observed in each lesson and the type of initiation and follow-up turns identified in each of those contexts.

**A) Parimala**

Parimala took two classes in this study – one for grade VI and another for grade VII students. The first lesson (L1) was a poem titled 'A Nation's Strength' prescribed for grade VI students. In this class, three classroom contexts were observed. In the first context, the teacher gave the meanings of difficult words and told the students to read the poem quietly. The teacher also instructed the students to ask for meanings of difficult words which resulted in a few student-initiated exchanges. Following this, the teacher explained the poem line by line and asked comprehension questions intermittently which resulted in the creation of brief dialogic spells. In the final context of the class, the teacher orally assessed students' understanding of the content. In this lesson, there were total 24 IRF exchanges.

Parimala's Lesson 2 (L2) was taken to grade VII students. This class was based on eliciting from students the differences between towns and villages, which was the main theme of a lesson prescribed in the syllabus - 'The Town Mouse and the Country Mouse'. This topic was chosen by the teacher as she just completed the lesson the previous day. In this class, two micro-contexts were observed i.e., giving instructions, and oral interaction on the topic. Table 5.2 presents the quantitative findings with respect to the initiation and follow-up choices made by Parimala in these two classes.

In the interactions of both the classes, it was found that 60% of the teacher's questions belonged to non-authentic category. This was followed by quasi-authentic questions which constituted 35%, and then authentic questions which constituted 5% of the total questions posed by the teacher. Findings regarding the cognitive demand of the questions revealed that a vast majority of the questions i.e., 85% of the questions belonged to low demand category and only 15% belonged to high demand category.

**Table 5.2 Initiation and follow-up choices of Parimala**

| | | Criterion | Micro contexts | | | | | N=40 | % |
|---|---|---|---|---|---|---|---|---|---|
| | | | L1 (N=24) | | | L2 (N=16) | | | |
| | | | Pre-reading | Explanation of text | Oral assessment | Giving Instructions | Interaction | | |
| *INITIATION* | *AUTHENTICITY* | Non-authentic | 3 | 10 | 1 | 2 | 8 | 24 | 60% |
| | | Quasi-authentic | - | 7 | 3 | - | 4 | 14 | 35% |
| | | Authentic | - | - | - | - | 2 | 2 | 5% |
| | *COGNITIVE DEMAND* | Low demand | 3 | 15 | 4 | 2 | 10 | 34 | 85% |
| | | High demand | - | 2 | - | - | 4 | 6 | 15% |
| *FOLLOW-UP* | *EVALUATION* | Low-level | 3 | 17 | 1 | 2 | 13 | 36 | 90% |
| | | High-level | | | | | | | |
| | | Adding new information | - | - | 1 | - | - | 1 | 2.5% |
| | | Modelling | - | - | - | - | - | - | - |
| | | Translation | - | - | - | - | - | - | - |
| | | Reformulation | - | - | 2 | - | 1 | 3 | 7.5% |
| | *UPTAKE* | No uptake | 3 | 13 | 4 | 1 | 13 | 34 | 85% |
| | | Uptake of response | | | | | | | |
| | | To seek confirmation | - | - | - | - | - | - | - |
| | | To check clarification | | | | | | | |
| | | To extend interaction | - | 4 | - | - | 2 | 6 | 15% |

N = Total number of IRF exchanges

With respect to the choices in the follow-up turn, it was found that low-level evaluation constituted 90% of the choices made by the teacher. High-level evaluation turns constituted of - teacher adding information (2.5%) and reformulation of students' response (7.5%). In the category of Uptake, the data demonstrate that there was no uptake of students' responses in 85% of the exchanges. In all the rest of the 15% of the follow-up turns, an uptake question was asked for the purpose of extending learner contributions on the topic.

**B) Kiran**

Kiran took to classes for grade IX students during the pre-DA phase. His Lesson 1 (L1) was related to a prose lesson titled 'Homework'. In this class, three contexts were observed. Firstly, the teacher did a quick recap of the content discussed in the previous class. Following this, the teacher read the text aloud and explained the final paragraphs in the lesson. During this context, there were teacher-initiated dialogic spells intermittently. Finally, the teacher tested the students' understanding of the content in the lesson with the help of the questions given in the textbook. On the whole, in this lesson, 16 teacher-pupil exchanges took place.

The second lesson (L2) taken by Kiran was a communicative task titled 'Desert Island'. In this task students have to imagine that they will be spending three days alone in an island and they will be allowed to take only three things along with them. The students have to tell what items they would be taking along with them to the island. The pedagogic objective of this communicative task was to provide practice in speaking. It was a whole class task and based entirely on teacher-pupil interaction. In the first context, the teacher introduced the task and explained in detail all the related information and instructions. In the second context, the teacher elicited responses from a few students on what they would prefer to take along with them to the island and why. In this class, on the whole, 21 teacher-pupil exchanges were observed. Table 5.3 presents the quantitative findings with respect to the initiation and follow-up choices made by the teacher.

**Table 5.3 Initiation and follow-up choices of Kiran**

| | | Criterion | Micro contexts | | | | | N= 37 | % |
|---|---|---|---|---|---|---|---|---|---|
| | | | L1 (N=16) | | | L2 (N=21) | | | |
| | | | Recap | Elicitation while explaining | Oral assessment | Task instruction | Task | | |
| *INITIATION* | *AUTHENTICITY* | Non-authentic | - | 6 | 1 | 4 | 11 | 23 | 62% |
| | | Quasi-authentic | - | - | 8 | - | - | 8 | 22% |
| | | Authentic | - | - | 1 | 3 | 3 | 6 | 16% |
| | *COGNITIVE DEMAND* | Low demand | - | 4 | 6 | 7 | 6 | 24 | 65% |
| | | High demand | - | 2 | 4 | - | 8 | 13 | 35% |
| *FOLLOW-UP* | *EVALUATION* | Low-level | - | 5 | 1 | 5 | 8 | 19 | 51% |
| | | High-level: | | | | | | | |
| | | Adding new information | - | 1 | 8 | 2 | 5 | 16 | 43% |
| | | Modelling | - | - | - | - | - | - | - |
| | | Translation | - | - | 1 | - | - | 1 | 3% |
| | | Reformulation | - | - | - | - | 1 | 1 | 3% |
| | *UPTAKE* | No uptake | - | 6 | 9 | 7 | 7 | 29 | 78% |
| | | Uptake of response: | | | | | | | |
| | | To seek confirmation | - | - | - | - | - | - | - |
| | | To check clarification | - | - | 1 | - | 6 | 7 | 19% |
| | | To extend interaction | - | - | - | - | 1 | 1 | 3% |

The quantitative data in Table 5.3 demonstrates that more than 62% of Kiran's questions were of non-authentic type. Quasi-authentic and authentic questions constituted 22%

and 16% respectively. Regarding the cognitive demand of the questions, the data shows that 65% of the questions were of low-demand type while 35% of the questions were of high cognitive demand.

Regarding the evaluation choices in the follow-up turn, the data demonstrates that low-level evaluation pattern was the dominant choice. They constituted 51% of the total evaluation choices of the teacher. In other words, the teacher chose to use acceptance, rejection or appreciation for a vast majority of the students' responses. In the rest of the 49% of evaluation choices, the most consistent was adding new information to student's contributions. The use of other evaluation choices such as modelling, translation and reformulation of the student's response is negligible in the interactions of both the classes. Finally, concerning the uptake of students' responses, it was found that in 78% of the exchanges there was no uptake of students' responses. In other words, the teacher did not pose any new question to extend the interaction further. However, in the rest of the 22% of the exchanges, uptake was observed and it was done primarily for the purpose of providing more opportunities for learner participation.

**(C) Mohan**

The two classes taken by Mohan were: 'A Havoc of Flood' (L1) a prose lesson for grade IX, and 'Rendezvous with Ray' (L2) a prose lesson for grade X students. In L1, the teacher discussed the picture given in the lesson as a pre-reading activity. The class was completely based on teacher-pupil interaction and hence there were two micro-contexts. In the first micro-context, the teacher gave instructions to students and in the second the teacher elicited responses from students focusing on the incident depicted in the picture (flood and evacuation of people) and the theme of the lesson i.e., disasters. In this lesson, a total of 35 IRF exchanges were identified. Mohan's L2 was primarily focused on explanation of the lesson. Three micro-contexts were observed in this lesson i.e., recapitulation of the previous class, reading and explanation of the text and finally vocabulary practice. In this lesson, 17 IRF

exchanges were identified. The interactional choices of Mohan in these two lessons are presented in Table 5.4.

**Table 5.4 Initiation and follow-up choices of Mohan**

| | | Criterion | Micro contexts | | | | | L1 & L2 N=52 | % |
|---|---|---|---|---|---|---|---|---|---|
| | | | L1 (N=35) | | L2 (N=17) | | | | |
| | | | Giving instructions | Oral Interaction | Recap | Explanation of text | Vocabulary practice | | |
| *INITIATION* | *AUTHENTICITY* | Non-authentic | - | 19 | 1 | 10 | 3 | 33 | 63% |
| | | Quasi-authentic | - | 7 | 2 | - | - | 9 | 17% |
| | | Authentic | 2 | 7 | - | 1 | - | 10 | 19% |
| | *COGNITIVE DEMAND* | Low demand | 1 | 14 | 1 | 9 | 3 | 28 | 54% |
| | | High demand | 1 | 19 | 2 | 2 | - | 24 | 46% |
| *FOLLOW-UP* | *EVALUATION* | Low-level | 2 | 24 | 3 | 8 | 3 | 40 | 77% |
| | | High-level: | | | | | | | |
| | | Adding new information | - | 3 | - | 2 | - | 5 | 10% |
| | | Modelling | - | 1 | - | - | - | 1 | 2% |
| | | Translation | - | - | - | - | - | - | - |
| | | Reformulation | - | 5 | - | 1 | - | 6 | 11% |
| | *UPTAKE* | No uptake | 1 | 22 | 3 | 9 | 2 | 37 | 71% |
| | | Uptake of response | | | | | | | |
| | | To seek confirmation | - | 1 | - | - | - | 1 | 2% |
| | | To check clarification | - | - | - | - | - | - | - |
| | | To extend interaction | 1 | 10 | - | 2 | 1 | 12 | 27% |

The finding in the first criterion of Authenticity is that there is a combination of different types of questions in Mohan's interactions. Though non-authentic questions (63%) were the dominant type, quasi-authentic and authentic questions constituted of 31% and 19%

respectively. In the second criterion i.e. cognitive demand of the questions posed by the teacher, the data shows that 54% of the questions were of low demand while 46% of the questions placed high demand on students' thinking abilities.

Concerning the follow-up choices of the teacher, the data shows that the teacher's dominant choice was low-level evaluation. In 77% of the exchanges, the teacher only chose to accept the response and move on to the next question or another student. In addition, Mohan occasionally used high-level evaluation turns such as adding new information (10%), modelling (2%) and reformulation (11%).

Finally, with respect to the uptake choices of the teacher, the data shows that there was no uptake of student's responses in 71% of the IRF exchanges. In the rest of the 29% of exchanges, uptake was observed and it was done mostly for the purpose of extending interactional opportunities to the students (23%).

**(D) Stephen**

Stephen took two classes in the pre-DA phase – one for grade VIII students on transformation of sentences using degrees of comparison (L1) and another for grade VI students on story reading (L2). Regarding L1, the students were already taught the process of transforming a sentence from one degree of comparison to another in the previous class. The teacher prepared to give practice on the same topic for the current class. In this class, two contexts - recapitulation and grammar practice - were noticed. In the first context, the teacher recapitulated the students' knowledge of the grammar concept. In the second context, the students did the activity of transforming sentences from one degree of comparison to another as per the teacher's direction. This was conducted as a whole class activity and the teacher elicited answers by nominating students. In this class, total 39 IRF exchanges were identified. Table 5.5 shows the initiation and follow-up turns chosen by Stephen in his classes.

**Table 5.5 Initiation and follow-up choices of Stephen**

| | | Criterion | Micro contexts | | | L1 & L2 N=58 | % |
|---|---|---|---|---|---|---|---|
| | | | L1 (N=38) | | L2 (N=20) | | |
| | | | Recap | Grammar Practice | Story reading | | |
| *INITIATION* | *AUTHENTICITY* | Non-authentic | 13 | 25 | 20 | 58 | 100% |
| | | Quasi-authentic | - | - | - | - | - |
| | | Authentic | - | - | - | - | - |
| | *COGNITIVE DEMAND* | Low demand | 13 | 16 | 18 | 47 | 81% |
| | | High demand | - | 9 | 2 | 11 | 19% |
| *FOLLOW-UP* | *EVALUATION* | Low-level | 11 | 21 | 20 | 52 | 89% |
| | | High-level: | | | | | |
| | | Adding new information | 1 | - | 3 | 4 | 7% |
| | | Modelling | - | - | 1 | 1 | 2% |
| | | Translation | - | - | 1 | 1 | 2% |
| | | Reformulation | - | - | - | - | - |
| | *UPTAKE* | No uptake | 13 | 19 | 18 | 50 | 86% |
| | | Uptake of response | | | | | |
| | | To seek confirmation | - | - | - | - | - |
| | | To check clarification | - | - | - | - | - |
| | | To extend interaction | - | 4 | 4 | 8 | 14% |

Stephen's L2 was related to a story titled 'The Donkey on the Island'. This short story was selected for developing extensive reading habits of the students. The story book has two to three sentences and a colourful picture on each page. The teacher displayed the soft copy of the story on white board with the help of a projector and all the students were able to read the story. In this class, there was only one context. The teacher read aloud the content in each page

and while doing this he also explained and asked questions to check the comprehension of the students. This resulted in brief dialogic spells during the class. Table 5.5 shows the initiation and follow-up patterns found in the classes taken by Stephen.

The data demonstrate that in the interactions of these two lessons, only non-authentic questions were noticed (100%). With respect to the cognitive demand of the questions, less cognitively demanding type of questions was the dominant pattern in both the lessons constituting 81% of the total questions.

In the criterion of evaluation of students' contribution, the quantitative findings reveal that Stephen's dominant choice was low-level evaluation. In nearly 89% of the exchanges the teacher used low-level evaluation turns such as praise, acceptance or rejection of a response. In addition to this, Adding new information is the most highly used evaluation strategy by Stephen (7%). Finally, in the criterion of uptake, the data reveal that there was no uptake in 86% of the exchanges.

**(E) Anita**

Anita's L1 was a prose lesson titled 'What is man without a beast?' prescribed for grade IX students. The lesson structure in L1 constituted three contexts i.e., oral interaction based on the pre-reading activity (picture) of the lesson, introducing the meanings of new vocabulary from the lesson and giving brief practice, and finally reading and understanding a small portion from the lesson. In this lesson, on the whole there were 25 IRF exchanges. L2 was a grammar lesson aimed at teaching the use of the phrase 'used to' and giving practice to students. The lesson structure in this class can be categorized into three contexts. First, the teacher did recapitulation of the content i.e., 'use' and 'used' taught in the previous class. Second, the teacher explained how to use the phrase 'used to', and in the final context, the students were given practice in framing sentences using the phrase. In this class, 26 IRF exchanges were

identified. Table 5.6 shows the initiation and follow-up patterns found in the classes taken by Anita.

**Table 5.6 Initiation and follow-up choices of Anita**

| | | Criterion | Micro contexts | | | | | | L1 & L2 N=51 | % |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | L1 (N=25) | | | L2 (N=26) | | | | |
| | | | Oral Interaction | Eliciting | Text | Recap | Grammar | Practice | | |
| *INITIATION* | *AUTHENTICITY* | Non-authentic | 3 | 3 | 15 | 1 | 6 | 11 | 39 | 76% |
| | | Quasi-authentic | - | 2 | 2 | - | - | - | 4 | 8% |
| | | Authentic | - | - | - | 4 | - | 4 | 8 | 16% |
| | *COGNITIVE DEMAND* | Low demand | 3 | 3 | 15 | 2 | 6 | 14 | 43 | 84% |
| | | High demand | - | 2 | 2 | 3 | - | 1 | 8 | 16% |
| *FOLLOW-UP* | *EVALUATION* | Low-level | 3 | 3 | 10 | 5 | 6 | 14 | 41 | 80% |
| | | High-level: | | | | | | | | |
| | | Adding new information | - | - | 3 | - | - | 1 | 4 | 8% |
| | | Modelling | - | - | - | - | - | - | - | - |
| | | Translation | - | - | - | - | - | - | - | - |
| | | Reformulation | - | 2 | 4 | - | - | - | 6 | 12% |
| | *UPTAKE* | No uptake | 3 | 3 | 13 | 5 | 6 | 13 | 43 | 84% |
| | | Uptake of response | | | | | | | | |
| | | To seek confirmation | - | - | - | - | - | - | - | - |
| | | To check clarification | - | - | - | - | - | - | - | - |
| | | To extend interaction | - | 2 | 4 | - | - | 2 | 8 | 16% |

The data in the table show that non-authentic and less cognitively demanding type of questions were dominant in the initiation turn of the teacher. Amongst the total number of

questions, 76% of the questions belonged to NA category and 84% of questions were of less cognitively demanding category.

In the first criterion of the follow-up turn i.e., evaluation, it was noticed that in 80% of the exchanges the teacher turns were of low-level category. The teacher occasionally used high-level evaluation strategies such as – adding new information (8%) and reformulation (12%). Concerning uptake of students' responses, it was found that in 84% of the exchanges there was no uptake. In the rest of the 16% of the exchanges, uptake of the students' contributions was present and it was done primarily for the purpose of extending learner participation further (16%).

**(F) Farha**

Two classes were taken by Farha in the pre-DA phase of the study. L1 is a revision class on parts of speech for grade VIII students and L2 is oral interaction with grade IX students based on the picture provided in the text book as a pre-reading activity in the lesson 'The Snake and the Mirror'. Both the classes were carried out as whole class activities and there was only one context throughout in each of these two lessons. In L1, the context was oral assessment of students' knowledge of parts of speech while in L2 it was the elicitation of responses based on the picture. The total number of IRF exchanges in L1 and L2 were 41 and 52 respectively. Table 5.7 shows the initiation and follow-up patterns found in the two classes taken by Farha.

Unlike other participants, the percentage of authentic questions is found to be the highest (40%) in Farha's interactions. However, the category of non-authentic questions was of the highest proportion (55%) in her interactions. In the criterion of cognitive demand, the data shows that the percentage of low demand and high demand questions was equal.

**Table 5.7 Initiation and follow-up choices of Farha**

| | | Code | Micro contexts | | L1 & L2 N=93 | % |
|---|---|---|---|---|---|---|
| | | | L1 (N=41) | L2 (N=52) | | |
| | | | Oral interaction (Grammar) | Oral interaction (Picture) | | |
| *INITIATION* | *AUTHENTICITY* | Non-authentic | 24 | 27 | 51 | 55% |
| | | Quasi-authentic | - | 5 | 5 | 5% |
| | | Authentic | 17 | 20 | 37 | 40% |
| | *COGNITIVE DEMAND* | Low demand | 22 | 25 | 47 | 50% |
| | | High demand | 19 | 27 | 46 | 50% |
| *FOLLOW-UP* | *EVALUATION* | Low-level | 23 | 23 | 56 | 60% |
| | | High-level: | | | | |
| | | Adding new information | 3 | 14 | 17 | 18% |
| | | Modelling | - | - | - | - |
| | | Translation | - | 1 | 1 | 1% |
| | | Reformulation | 12 | 7 | 19 | 20% |
| | *UPTAKE* | No uptake | 26 | 24 | 50 | 54% |
| | | Uptake of response: | | | | |
| | | To seek confirmation | 2 | 2 | 4 | 4% |
| | | To check clarification | - | - | - | - |
| | | To extend interaction | 19 | 20 | 39 | 42% |

Concerning the follow-up choices of the teacher, the data shows that the teacher's dominant choice was low-level evaluation (60%). In addition to this, the teacher occasionally

used high-level evaluation features such as - adding new information (18%) and reformulation (20%).

Finally, with respect to the uptake of the students' responses, the data shows that the teacher was in favour of probing further into students' responses. Unlike other participants, in 46% of the exchanges the teacher asked a new question based on the student's response. The teacher also used uptake for seeking confirmation of the student's response for 4 times amounting to 4% of the total exchanges.

The following is a summary of the quantitative findings and the conclusions drawn on the basis of these findings.

**Summary of the quantitative findings:**

The quantitative data in the pre-DA phase of the study primarily reveal that all the participants created an interactive atmosphere and generated many opportunities in the class through their initiation and follow-up moves. The number of IRF exchanges in the pre-DA phase ranged from 37 to 93 within a time span of 10-25 minutes.

The quantitative data in this section also reveal certain patterns that are common across all the participants as well as specific to each participant. The findings common to all participants are:

1) In the initiation move, non-authentic and low-cognitively demanding type of questions were common
2) In the follow-up move, low-level evaluation and absence of uptake were the dominant choices
3) As far as evaluation choices are concerned, low-level evaluation was the dominant feature in majority of the participants' interactions.
4) Absence of uptake was the commonly observed dominant feature

In addition to these common patterns, certain specific patterns in each of the participant's interactions were also identified through the quantitative data. They are:

1) Quasi-authentic type of questions were more in interactions of Kiran (22%) and Parimala (35%)
2) Authentic questions occurred mostly in the interactions of Farha (20%).
3) High cognitively demanding questions were found to a high degree in the interactions of Kiran (35%) and Mohan (46%).
4) Kiran and Farha's interactions showed greater use of high-level evaluation moves when compared to other participants at 49% and 39% respectively. The findings in their interactions demonstrated that they gave high preference to the use of strategies such as adding new information and reformulation.
5) Farha alone gave a very high preference to uptake of students' responses. Nearly 55% of IRF exchanges in her interaction were found to have an uptake question.

The quantitative findings in this section give insight into the dominant initiation and follow-up choices made by the participant teacher. However, this analysis does not clearly show the relation between teachers' interactional practices and opportunities for language learning. This kind of critical understanding is pivotal for a researcher/assessor to provide appropriate mediation. Hence, the following section presents the qualitative analysis of the dominant interactional patterns commonly observed across all the teacher participants of this study.

### 5.3 Qualitative analysis

This section is aimed at answering a part of the first RQ i.e., '**what effect did teachers' interactional decisions have on learner participation and language learning?'** This section is broadly categorized into four sub-sections based on the four criteria used in the quantitative

analysis of the data i.e., authenticity of the questions, cognitive demand of the questions, level of evaluation and uptake. In each sub-section, analysis is focused on explicating the relation between teachers' interactional choices and opportunities for language learning.

**1) Authenticity**

The quantitative data presented in the previous section revealed that the common choice of the teachers was non-authentic questions in the initiation move. However, Farha was an exception in this study as she used a combination of different types of questions. These two patterns observed in this study are illustrated below using extracts from the data.

**a) Extensive use of non-authentic questions**

The following episode taken from the lesson 'The Donkey on the Island' taught by Stephen illustrates how the use of non-authentic questions minimized the role of learners in the classroom.

This episode is drawn from the context in which the teacher read and explained the story to students. The teacher intermittently checked students' comprehension while simultaneously reading and explaining the story. The episode presented below is from the context in the story where the main character, i.e., a donkey, leaves its friends and goes to a new island as it finds the new place more attractive. In this extract, there is clear evidence that the nature of questions obstructed language learning opportunities to students.

**Extract 5.1**

61. **T**: Where did it go? Where did donkey go?
62. Ss: Another island.
63. T: Very good. Another island.
64. (Reads the text)

65. T: Who is telling that? Who?
66. Ss: Donkey (All children loudly)
67. T: Donkey is telling, "Wow, so much grass."

68. T: What is there in the new island?
69. Ss: So much grass. (loudly)

70. T: (Reads from the text)

71. T: This is a heavenly place. Heavenly place means
**72.** ***chala santhoshanga vunda galigetuvanti* … means …**
**73.** ***svargam lanti place anamata*. [A place where one can live happily.**
**74.** **It means a place like heaven.]**
75. (Reads a line and asks the meaning of a new word)
76. What is the meaning of excited? (enacting excitement)
**77. Ss:** ***Santhoshanga***
78. **T:** Happy.

79. T: So the donkey said it is a heavenly place.
80. It is very happy. You can see in the picture.
81. (Pointing to the picture in the text)
82. See the picture, how the donkey is?
83. Ss: Very happy.
84. T: Right. Donkey is very happy.
85. Donkey made new friends there.
86. New friends. Okay.

87. T: New friends means two friends are there.
88. One is hen. One is …?
89. Ss: Pig.
90. T: These two are new friends.

91. T: Who are the old friends?
92. Ss: Rabbit, goat. (all loudly)
93. T: Goat and …
95. Ss: Rabbit.

94. T: Goat and rabbit are old friends.
95. New friends are …?
96. Ss: Pig and hen.
97. T: Hen. Ok. Good.
98. Now, let's continue.

In this episode, the teacher uses NA questions with the purpose of eliciting responses from the students. The number of learner-turns show that teacher questions encouraged learner participation in the class. However, these questions were only meant to test if the students remember all the important details. All the questions in this episode were of NA type such as 'Where did the donkey go?' (Line 61), 'Who is telling that?', (Line 65), 'What is the meaning of excited?' (Line 76), and 'Who are the old friends?' (Line 92). These non-authentic questions are called display questions as students have the answer in the material or they answer from

their memory. In other words, they do not have to think much for giving a response. In one of the exchanges (Lines 68-70), the teacher first said that there is so much grass on the island and then asked a question to drill the same - 'What is there in the new island?'. Similarly in another exchange (Lines 81-86), the teacher already said that the donkey looked very happy in the previous exchange and then asked about the same, perhaps to drill the phrase 'very happy'. The recurrent use of non-authentic questions makes it evident that the purpose of oral assessment was to provide drilling and to test their memory of simple, factual details in the story. The teacher overlooked the potential areas in the story for genuine interaction (ex: migrating to a new place, making new friends, regret, etc.) which could have elicited more meaningful learning opportunities for students and focused only on factual details. This type of questions may serve the function of keeping students active and motivated (McCormick & Donato, 1994) but they do not provide genuine speaking opportunities to students. They do not actively encourage students to reflect on the events in the story being studied because they do not have to produce any output of their own. These questions obstructed the opportunities of the students to relate the events in the story to their lives or consider new perspectives of the theme. Once the teacher got the correct answers for all his questions, he appreciated the students for their active participation and proceeds to the next part of the story.

In this episode, the teacher created many opportunities to involve students in the interaction through questions that gave them an opportunity to showcase their understanding of the story. However, the learner turns were very short due to the nature of the questions asked repeatedly by the teacher. Moreover, all the responses given by the students were given loudly in groups indicating that the questions were too simple for their level. Though voluntary and choral responses can be considered as a sign of student involvement (Antón, 1999), there was no scope in this context for students to use their emergent language and check their hypotheses about language use (Meddings & Thornbury, 2009).

The following episode demonstrates the effect of a combination of different types of questions on student learning.

**b) Combination of different types of questions**

The following episode is taken from Farha's L2 i.e., interaction based on the pre-reading activity (picture) from the lesson 'The Snake and the Mirror'. This picture-based interaction was carried out as a whole class activity for the duration of 15 minutes. The pedagogic goal for this class was to develop the oral fluency of students. In tandem with this objective, the teacher asked 52 questions during the 15 minutes of interaction and through her questions, elicited learner contributions that ranged from simple factual details to personal experiences. In the extract 5.2 given below, the teacher's focus is on pointing the students' attention to the roof of the kutcha house (given in the picture) through which rats and later on in the story a snake enters into the house. It becomes evident through the interaction in this excerpt that the teacher consistently created opportunities for learner involvement through different types of questions.

**Extract 5.2**

12. T: Please go through the picture on page no. 3.
13. Observe the picture. You have 2 minutes.
14. Picture on page no. 3.
15. [After 5 minutes]
16. What do you see in the picture *ma*?
17. S1: He is reading teacher.

18. T: What do you see actually? Who is reading?
19. S2: A man.
20. T: A man is reading.

21. T: Where is he sitting?
22. S3: Opposite mirror.

23. T: Can we say in front of the mirror?
24. Ss: Yes teacher.
25. T: You can see a man sitting in front of the mirror.

26. T: Where is he sitting actually?
27. S4: In a chair
28. T: In a chair, right? At the table.

29. T: By sitting in a chair at the table … in front of a mirror …
30. he is doing something. What is that, *nana*? **[What is that, dear?]**
31. S5: He is reading a book.

32. T: What kind of book he might be reading? Can you guess?
33. Ss: No … No teacher.
34. T: No. Ok. Fine.

35. T: What else do you see in the surrounding?
36. S6: Rats.
37. T: Rats.

38. T: So, what do you understand by that?
39. S7: Rats are coming from the roof.
40. T: Yes. Correct.

41. T: Have you ever come across that kind of things in your houses?
42. Ss: [Silence]

43. T: Why do rats come into house?
44. S8: For eating food teacher.

45. T: Did anything happen like that in any body's house?
46. S9: Yes teacher. Rats coming to eat rice in our house.
47. Rice bags we keep in one room teacher. There so many
48. rats coming.

49. T: How did they enter the house?
50. Ss: Holes … windows … doors teacher.
51. T: Through windows. Through the doors.
52. Yeah. Very good.

In this episode, the teacher uses non-authentic questions along with authentic questions occasionally to lead students to guess what is not evident in the picture and to talk about their personal experiences. The teacher initially recruited the students' interest (Wood et al., 1976; as cited in Antón, 1999) by asking for information that is present in the picture. The first question 'what do you see in the picture?' is a direct request for the learners to get involved in the interaction with their personal observations. It gives the students freedom to express what appealed to them specifically in the picture. The subsequent interaction was built upon the responses given by the students. The teacher drew the students' attention to the setting of the room given in the picture and this exposed students to some new elements in the language.

Here, for instance, the teacher provided a scaffold to students by introducing prepositional phrases such as ‘in front of mirror’ (Line 23), and ‘at the table’ (Line 28). The teacher also withheld from giving her own description and focused exclusively on engaging learner participation. Thus, non-authentic questions were used strategically by the teacher to ensure learner participation before proceeding to elicit more open-ended responses.

After a few non-authentic questions, the teacher tried to elicit a response from the students by asking a quasi-authentic question such as - Can you guess what kind of book he might be reading? (Line 32). Students cannot respond to this question by looking at the picture. There is no possibility for the students to give choral responses for this question. Hence it can be considered an opportunity for students to exercise their imagination.

Finally, the teacher also gave opportunities to students to talk about their personal experiences by asking authentic questions such as ‘Have you come across that kind of things in your houses?’ (Line 41) and ‘Did anything happen like that in any body’s house?’ (Line 45). These questions were open invitations to students to become participants in the conversation. Thus, through a combination of different types of questions Farha not only created opportunities for students to talk what they noticed in the picture but also opened the floor for a productive dialogue in the classroom. This type of interaction to some extent fits in Nystrand et al.’s (2003) observation that some teachers “skilfully set discussion up by first reviewing basic material as a way of establishing the topic for discussion, and once this is accomplished, they move on to a more probing and interpretive level, in which student ideas and views are elicited and encouraged” (p. 141).

The following section illustrates how the cognitive demand of the questions is related to language learning opportunities of the students.

**a) Cognitive demand**

The quantitative data presented in the previous section revealed that the common choice of the teachers was less cognitively demanding questions in the initiation move. However, Kiran and Mohan were exceptions in this aspect as they used more cognitively demanding questions. These two patterns observed in this study are illustrated below using extracts from the data.

**(a) Extensive use of LCD questions**

The following episode is drawn from Anita's L2 in which the teacher taught the grammar concept 'used to' and gave practice. The pedagogic goal of the teacher was to teach the phrase 'used to' and give practice to students in using the phrase. This grammar component was selected by the teacher as it is prescribed in the textbook of grade VIII. In the previous class, the teacher had already taught the simple present tense form - 'use' and past tense form 'used'. On the day of observation, the teacher started by recapitulating the previous day's content and after a brief interaction with students proceeded to explain the target grammatical form for that day i.e., 'used to'. The following excerpt (5.3) is drawn from the context of recapitulation. In this episode, the teacher can be observed encouraging learners to participate in the interaction but the cognitive demand of the questions raises doubts about the quality of language learning in the class.

**Excerpt 5.3**

1. T: Uh ... ok children. What did we discuss yesterday?
2. We discussed about …?
3. Yesterday … *manam em nerchukunnam cheppandi*.
   **[Tell what we discussed yesterday]**
4. Ss: Use … used.
5. T: [Teacher writes on the board]

6. T: Ok, do you know the meanings of these words?
7. Ss: Yes, teacher.

8. T: Can anyone say an example with 'use'?

9. Ss: [Murmur]

10. T: [Teacher nominates a student]
11. S2: [Inaudible]
12. T: Uh … Ok. Very good XXXX.
13. I use a book.
14. [Teacher writes the sentence on the board].
15. Very good. Very good. Excellent.

16. T: Yes. Can anyone say one more example?
17. S3: I use pen.
18. T: I use pen.
19. [Teacher writes on the board]
20. I use pen.

21. T. For what? Why do you use pen?
22. S4: Write.
23. T: To write. I use pen to write. Very good.
24. Whenever you say I use something, you should say for
25. What ... for what you are using that thing also you should
26. tell. Like for example, I use pen to write.

27. T: Next, Used … What is the meaning of 'used'?
28. S5: Used *ante … inthaku mundu vadinam*. **[Used means we used it before]**
29. T: Yes … *inthaku mundu vadinam ani artham*. **[It means that we used it before]**

30. T: Can you give an example?
31. S5: I used bus to come to school.
32. T: Yes. Very good. See. It is so easy.
33. I use this purse [showing the purse to the class].
34. In the previous school, I used a hand bag.
35. Okay?

36. T: Now, open your textbooks.
37. Today we are going to learn a new grammar topic and that is …
38. [Writes the topic on the board] 'used to'.

In this episode, the teacher's pedagogic purpose was to orally assess the students' understanding of the differences between simple present tense 'use' and simple past tense 'used'. What stands out clearly in this episode is that teacher questions had closed opportunities for interaction in the class. The teacher started in turn 1 with a phatic question (What did we discuss yesterday?) which is merely a rhetorical device and not intended as a true question (Antón, 1999) and then involved the students in a series of questions. The cognitive level of the questions in this episode was not meant to pose any challenge to learners. They were only

aimed at eliciting a few simple sentences that the teacher would go on to use in her explanation later. The opportunities given by the teacher to students to frame own sentences may have encouraged learners to apply their knowledge but they were neither sufficient nor challenging enough for students of secondary school. The questions do not motivate students to apply their higher order thinking skills. The output that students produced in this episode is not indicative of their thinking. It is possible that students may have simply repeated the sentences that they came across while explaining the concept on the previous day.

Had the teacher created a challenging task for students where they would get opportunities to think at a higher level, the unfolding interaction would have opened the floor for scaffolding, corrective feedback and negotiation of meaning. For example, analysis and synthesis which are higher order thinking skills can be encouraged through simple routine tasks such as identification of error in a sentence, explaining the reason behind the error and grouping/matching sentences. However, the questions posed by the teacher in this episode did not need the students to think or produce much output.

This episode illustrates that the use of less cognitively demanding questions did not only hamper the quantity of student participation but also obstructed new language learning opportunities for students.

**b) Combination of LCD and HCD questions**

This episode from Kiran's L2 i.e., 'Desert Island' depicts the effect of asking high cognitively demanding type of questions on learning opportunities for students. 'Desert Island' is a task in which students have to imagine that they will be spending three days alone in a house located on an island and that they will be allowed to take only three things along with them. The pedagogic objective of the teacher was to develop oral fluency of students. The excerpt is drawn from the context in which the teacher elicited responses from one of the

students. Interaction in this episode (5.4) demonstrates the way in which teacher constructed opportunities that accommodated the need for higher order thinking.

**Excerpt 5.4**

53. T: Those who want to respond, just raise your hands. Don't
54. bother about mistake … b*adha padaalsina avasaram ledu*.
**[No need to feel sorry]**
55. Everybody will do mistakes. Without mistakes you can't
56. learn anything. So think and tell me,
57. what will you take to the island?
58. S1: I will take story books because there … there I will get bore.
59. T: Uh … you will take story books.

60. T: Why?
61. Why you prefer story books?
62. S1: I like reading story books. I will feel bore there.
63. That time, I can read story books. For time pass.
64. T: Uh … if you get bore. You have to spend seven days there.
65. So, to get time pass, it means, you will be engaged in
66. reading books.

67. T: Do you have any book in your mind? What story books
68. will you take there?
69. S1: I will take comic books, Chandamama …

70. T: Ok … what other things you will take? Remember, you
71. are allowed to take three things.
72. S1: I will choose a sweater.
73. T: Sweater! Ok you can take sweater because … may be it is
74. very cold there … the weather there may be cold. Isn't it?
75. Without sweater you may not spend comfortably there.
76. Yes, right. Good choice. Sweater definitely necessary.
77. Very good.

78. T: Next. One more thing? What will you take?
79. S1: I will take a bag full of snacks.
80. T: [Laughs]
81. Ok.

82. T: Suppose in the last minute, you are allowed to take only two items.
83. You have to leave one item.
84. Which item will you leave and why?
85. **S1**: [Silence for a few seconds]
86. I will leave snacks sir. I will take story books because without
87. books I will feel bore … next, sweater sir … no sweater,
88. I will feel cold.
89. T: Ok. You are clear.

90. T: Now, you tell me [Pointing to another student]
91. What do you think about this type of reality game?
92. I mean games or shows … there is a famous show going on
93. now?

94. XXXX sir.
95. T: Uh … XXXX. What do you think about it?
96. What do you think about reality games like this?

In this interaction, the teacher's initial focus was on finding from the student what items he would prefer to take along with him to the island. The questions in the initial stages set the ground for subsequent challenging questions. Towards the end of this episode, the teacher posed cognitively demanding questions such as 'which item will you leave and why?' (Line 84) and 'What do you think about this game?' (Line 91). The first question requires students to decide what will be more useful to him when he would be alone on the island and justify his decision. The next question puts a demand on the student to think about the merits and demerits of reality games. These questions can be considered as opportunities constructed by the teacher to encourage higher order thinking skills such as decision making and analysis.

It may be contended that the interaction in this class is primarily directed by the type of the task chosen. Though such an argument is true to a certain extent, it is also equally true that without teacher's initiation students wouldn't have got such opportunities to think or express their reasoning abilities in the classroom.

**(C) Level of Evaluation**

The quantitative data in the previous section revealed that low-level evaluation was the dominant choice commonly observed in all the participants' interactions. Low-level evaluation in this study is used as an umbrella term for routine choices such as acceptance, rejection or appreciation of the student's response. The following extract illustrates the effect of extensive use of low-level evaluation strategies on language learning opportunities for students.

This episode is from Parimala's L2 i.e., a whole class activity on eliciting the differences between village and city. The pedagogic purpose was to develop in the students the ability to talk about the differences between village and town. The following excerpt (5.5)

illustrates the effect of extensive use of low-level evaluation on language learning opportunities for students.

**Excerpt 5.5**

37.T: [Teacher draws a table on the board with two columns
38. and writes the headings - village and city]
39. So children at least … you have to mention five differences
40. between the village and the city.
41. One by one. Ok? Come on.
42. [Pointing to a student in the first bench]
43. What is the first difference?
44. S1. In village, there is no pollution … there is green fields.
45. T: Ok.

46. S1: In city, there is no green fields … and in city only pollution.
47. T: [Teacher writes the responses on the board]
48. Then, next. [Pointing to the student sitting next to S1]
49. S2: In city, there are multi-stored buildings.
50. T: Ok … multi-stored buildings.

51. S2: Factories.
52. T: Hmm.

53. S2: In village, small houses.

54. T: In village, what do you see? Which houses?
55. S2: Pucca.
56. T: Pch … kutcha houses.
57. [Writes the words on the board]

58. T: Then, next.
59. What is the difference between village life and city life?
60. S3: In city, so many people.
61. In village is … [struggling for a word]

62. T: Next.
63. S4: The village is surrounded by beautiful trees.
64. Cities are surrounded by industries and factories.
65. T: [Writes the points on the board]
66. Ok. Sit down. Next

In this episode, the teacher can be seen using mostly low-level evaluation strategies such as acceptance, silence, or rejection in the evaluation move. Due to the extensive use of

such interactional practices, the teacher missed providing appropriate support to students even when there were instances such as ungrammatical responses and breakdown of communication. Teacher's evaluation choices in turn obstructed some of the language learning opportunities for students. For instance, after S1 gave response 'There is green fields' (Line 44), the teacher's evaluation move was to accept it (Line 45). Here, in response to the student's ungrammatical response, the teacher had the choice to model the response by repeating the same sentence in the accurate form. Due to the absence of any kind of effort to provide accurate language input, the students can be said to have lost opportunities to check and reformulate the hypothesis in their emergent language.

Similarly, when S2 gave a wrong answer for the question 'Which houses do you see in villages?' (Line 54), the teacher immediately expressed her disappointment and corrected the student's response (Line 56). In this exchange, teacher's wait time may have garnered contributions from other students or self-correction by the student who made the mistake. There was a choice for the teacher to tell the student to think again or give a clue or even redirect the question to another student. However, the teacher's immediate intervention obstructed self-correction as well as participation from other students.

In the IRF exchange (Lines 59-61) where there was communication breakdown due to the inability of the student to find the right word the teacher simply stopped him and moved on to the next student. Finally, in Line 66 which was a follow-up move to S4's response i.e., 'Cities are surrounded by industries and factories'; the teacher could have either elaborated or asked an uptake question. Such strategies may have opened the floor for responsive dialogue in the classroom and affected the subsequent course of the discussion.

The interaction in this episode can be said to have obstructed student learning mainly because of the evaluation choices made by the teacher. Had the teacher mediated in the student learning by shaping students' contributions or by incorporating the students' responses into the

unfolding classroom dialogue, there would have been a rich language input for students and exchange of ideas in the classroom.

**(D) Uptake**

As per the quantitative data absence of uptake of students' responses was prominent in most of the participants' interactions (except Farha). The effect of this particular feature on language learning opportunities for students is illustrated with the help of an extract from Mohan's class.

The interaction in the following extract is centred on the concept of disasters, which is the theme of the lesson 'Havoc of flood' prescribed for grade IX students. The pedagogic purpose of the interaction in this context was to informally assess the students' understanding of the differences between man-made and natural disasters. This brief dialogic spell occurred while the teacher was explaining the lesson. In this excerpt (5.6) there is clear evidence that absence of uptake has obstructed the language learning opportunities for students.

**Excerpt 5.6**

**37.** T: So, let me know, how many types of disasters are there?
**38.** S1: Two types.
**39.** T: Two types of disasters.

**40.** T: (Pointing to a student) Let me know what are they?
**41.** S2: Man-made disaster and natural disasters.
**42.** T: Man-made disaster and natural disasters. Sit down.

**43.** (Pointing to another student in the third bench)
**44.** Mr. XXXX, what are man-made disasters?
**45.** S3: The man-made disasters are blasting buildings, fires and …

**46.** T Bomb blasting?
**47.** S4: Yes sir.
**48.** T: Uh … [nodding head to continue further]
**49.** S4: [Inaudible]
**50.** S5: [Another student volunteers]
**51.** T: Ok sit down [to S4].

**52.** T: You. [Pointing to S5]

**53.** S5: Fire accidents.
**54.** T: Fire accidents. Uh.

**55.** S6: Breakdown dams.
**56.** T: Breakdown? [Gestures to repeat again as it was not audible]
**57.** S6: Dams …and buildings.
**58.** T: Uhhh. Yes, yes, you are right. Perfectly. So wantedly some
**59.** People … Some people try to damage the life of people. Uh …
**60.** they cause some damage to people's life. we are watching on
**61.** TVs, medias, here and there. So man-made disasters are there,
**62.** and natural disasters are there.

In this episode, the teacher engaged active learner participation by asking simple questions. As a follow-up to the students' responses in turns 39 and 42, the teacher generated new uptake questions in turns 41 (What are they?) and 44 (What are man-made disasters?). These two uptake questions were non-authentic and cognitively less-demanding types of questions. These two questions served the purpose of initiating the interaction but there was no uptake of actual genuine responses given by the students.

By merely accepting the students' responses, the teacher missed generating new opportunities for the students to learn the language. For instance, students' responses in turns 45, 53 and 55 could have been further probed through an uptake question. There was a choice for the teacher to open the floor for narration of incidents which they witnessed or express their opinions on why people cause disasters. Especially, for the student's response i.e., 'Fire accidents' in Line 54, there was a possibility to generate new questions which would enable students to differentiate between incident that happen accidentally and those that are caused purposefully by people. This kind of meaningful interaction would happen only with uptake of students' responses. Such mediation of learning by the teacher would have opened new opportunities for scaffolding and negotiation of meaning. Instead, the teacher himself summarized the interaction by saying that man-made disasters are purposefully done by some

people to damage the lives of others (58-62). This kind of summary would have been appropriate after eliciting information from students.

### 5.4 Discussion

In this chapter the participant teachers' questioning and follow-up moves were analysed quantitatively and qualitatively. Two criteria were used for analysing initiation turns of the teachers i.e., authenticity and cognitive demand, and two criteria for analysing the follow-up turns i.e., evaluation and uptake. Findings from data related to pre-DA classroom discourse of six participants are presented. The most important finding in this study is that the dominant interactive paradigm in English language classrooms is still based on IRF sequences. All the 12 classes observed in this phase of study are whole class activities characterised by teacher questions, student responses and follow-up by teacher. Pair or group work activities were not part of the classroom activities in this study. This finding is similar to that in Nassaji and Wells' (2000) six-year long research project on classroom interaction in which it was found that IRF was the most dominant pattern of interaction and that it prevailed over other forms of student-student interaction in pair and group activities.

The interactional patterns identified in this study indicate that teachers in fact encouraged learner participation by creating an interactive atmosphere in the class. However, some of their interactional decisions are not conducive for learning and moreover the teachers missed several opportunities to facilitate language learning. Antón (1999) in his study on a large number of L2 classroom interactions concluded that learner-centred discourse provides ample opportunities to students for negotiation of meaning and co-construction of knowledge whereas teacher-centred discourse provides rare or limited opportunities for negotiation. From this perspective, engaging learner participation itself is not a sufficient criterion for evaluating the effectiveness of a particular interactional pattern. What is more important is the kind of opportunities that students get to express their ideas, voice their opinions, learn to interact,

negotiate for meaning making, discuss their conceptual understanding and share their knowledge and skills.

In this study, each participant exhibited varied ways of interacting with the students. Qualitative analysis has shown the effect of each of these patterns on opportunities for language learning in the classroom. While some practices were considered supportive to student learning, some others were considered to be least supportive for student learning. The interactional patterns observed in the teachers' practices add strength to the argument that although teachers are in favour of dialogic practices in the classroom, there is still need for teachers to reflect on the effect of their moment-to-moment interactive decisions on language learning opportunities in the class.

### 5.5 Conclusion

In this chapter, the findings from quantitative analysis of data were presented. The findings were further elaborated through qualitative analysis of illustrative examples in relation to their effect on language learning opportunities for students. Based on these findings three DA sessions were conducted with each participant over a period of three months. The following chapter presents findings from the intervention stage of the study i.e., observation of class followed by DA.

## Chapter 6: Analysis of data from DA sessions

As explained in chapter 2, research on second language teacher development has focused very little on ways of supporting teacher's conceptual learning. To address this gap, this study primarily focused on examining teacher thinking which underlies one's choices in real-time classroom interaction. For this, the researcher elicited teacher thinking through interactions after observation of classes. Unlike the feedback sessions of an educator or an expert, these post-observation interactions were carried out specifically in DA format, an assessment approach to mediation. The purpose of using DA in this study was mainly to identify the ZPD of the teachers and provide appropriate support that they require for a change in their conceptual understanding.

This chapter presents the findings from the analysis of data collected during the intervention phase i.e., DA-based meditational procedures carried out after observation of participants' classes. Specifically, this chapter answers RQ 2 i.e. 'How can DA-based meditational discourse shape teachers' conceptual thinking in relation to classroom interactional practices?' This question is answered by analysing the data collected during DA sessions. The data was subjected to quantitative and qualitative analysis for finding evidence of how DA approach to mediation contributed to conceptual learning of teachers. The findings presented in this chapter can contribute to the expanding body of research on the significance of SCT and specifically of DA in supporting teacher learning.

The first section of this chapter presents the different categories of issues that were discussed with teachers in DA sessions. The second section presents examples of the theoretical principles followed in the DA-based meditational discourse carried out in this study. Following this section, the findings from the DA procedures i.e., mediation provided by the researcher with illustrative examples are presented. The final section of this chapter presents findings from

teachers' responsivity to the mediation and provides a glimpse of the effect of DA on teachers' conceptual thinking.

### 6.1 Issues addressed in DA sessions

This section was aimed at presenting a clear picture of the kinds of issues that were mediated by the researcher during the DA sessions. As a part of the intervention, total 18 lessons were observed and 18 DA sessions were conducted. Pre-DA lessons were used for the initial DA session. On some occasions, teachers did not want to be assessed on the basis of their Pre-DA lessons. So, they were given the choice to teach another lesson of their choice. On the whole, the focus of all the lessons observed in the intervention stage was on how the teachers elicited learner participation and engaged learners in meaningful interactions. Appendix B provides the list of the lessons and the tasks taken by teachers at this stage of the study.

A vast majority of issues identified for assessment in the DA sessions were related to questioning and follow-up practices of teachers. These issues were identified by the researcher as a part of the preparation for providing mediation in DA sessions. In addition to these problems which were identified prior to DA sessions, other kinds of major and minor issues were also found in the data. These issues emerged unexpectedly as teachers felt free to discuss their concerns regarding teaching with the researcher. The interactionist approach to DA used in this study could be a reason for this. Nevertheless, the researcher broadly followed DA approach to mediation and abstained from giving feedback or instruction to teachers at the very beginning. Furthermore, on some occasions, the teachers deviated into general conversations which were not directly related to classroom interaction. Though the researcher allowed space for such deviations during the actual DA sessions, such episodes were deleted from the current analysis.

On the whole, the findings presented in this section were derived from 191 DA episodes drawn from 18 DA sessions. The term episode was used to refer to the DA procedure carried out concerning one specific issue. Each of the DA session ranged from 60-75 minutes. Table 6.1 presents the number of episodes identified in each of the DA sessions.

**Table 6.1 Episodes in each DA session**

| **Participant** | **No. of episodes** | | | **Total** |
|---|---|---|---|---|
| | DA1 | DA2 | DA3 | |
| Parimala | 8 | 12 | 10 | 30 |
| Kiran | 12 | 14 | 7 | 33 |
| Mohan | 9 | 8 | 10 | 27 |
| Stephen | 16 | 14 | 8 | 38 |
| Anita | 11 | 10 | 10 | 31 |
| Farha | 12 | 11 | 9 | 32 |
| | | | Total | 191 |

The kind of issues for which interactive DA was carried out in this study can be broadly divided into four categories. They are:

1) basic assumptions underlying interactionist approach to language teaching

2) concepts underlying effective questioning

3) concepts underlying follow-up practices and

4) miscellaneous issues related to classroom interaction.

Table 6.1 provides a comprehensive view of the issues identified in the DA sessions conducted with each of the participant teachers of this study.

The first category - basic assumptions underlying interactionist approach refer to assessment of teachers' beliefs and opinions about the credibility of interactionist approach in promoting language learning. The topics addressed in this category include teachers' assumptions about 1) interactionist approach to teaching 2) teacher's role in generating

interactional opportunities 3) the need for extending interaction 4) the necessity for eliciting learner participation in the classroom and 5) the usefulness of shaping learner contributions. Teacher responses regarding these fundamental aspects revealed their inherent perceptions and this information helped in using appropriate prompts/hints in the dynamic process of supporting teacher learning. Of all the 191 episodes, 8 episodes in DA1, 10 episodes in DA2 and 14 in DA3 were related to fundamental aspects.

All the issues associated with assessment of concepts underlying effective questioning practices constituted the second broad category of the DA sessions. This category includes mediation provided in relation to teachers' questioning moves during their classroom interactions. They are:

- missed opportunities for questioning students
- asking appropriate questions to elicit the participation of silent and passive students
- maintaining a balance between authentic and non-authentic questions
- questions that can enhance higher order thinking skills of students, and
- using authentic questions to promote genuine interactional opportunities

Of all the 191 episodes used for analysis, 29 episodes in DA1, 20 episodes in DA2 and 23 episodes in DA3 were related to assessment of teachers' questioning moves.

The third category of issues in the DA sessions is related to assessment of concepts underlying effective follow-up practices. It included problematic aspects identified in the teachers' follow-up choices during classroom interactions. They are:

- importance of follow-up moves in extending interaction
- significance of uptake questions in providing interactional opportunities
- high-level evaluation strategies such as modelling, reformulation and extension
- the need for positive evaluation of students' responses
- seeking clarification for vague and brief responses given by students

- form-focused feedback

Of all the 191 episodes used for analysis, 21 episodes in DA1, 17 episodes in DA2 and 15 in DA3 were related to the third theme.

The fourth and the final theme in the DA sessions covered all the other issues related to classroom interaction. However, these issues were more specific to individual participants and did not feature commonly in all the DA sessions. This category included assessment in issues such as the following:

- eliciting learner participation in vocabulary and grammar activities
- giving clear instructions before a task
- using transition markers while shifting from one task to another
- avoiding teacher echo and teacher interruption of student responses
- Reducing teacher talk and giving opportunities to students

As mentioned earlier, a vast majority of issues mediated in the DA sessions were identified by the researcher after watching classroom videos and going through the transcriptions carefully more than once. Teacher moves which were either problematic or disruptive for student learning and areas which had potential for improvement were identified by the researcher for assessment purpose. Hence, the first three categories were commonly found in all the DA sessions of all the six participants. The concepts pertaining to the fourth category however varied from teacher to teacher.

The following section presents in detail the theoretical principles followed in DA sessions for supporting teachers' conceptual thinking.

### 6.2 Nature of mediation in DA

In this section, the nature of interactive and dynamic process of assessment carried out with the participant teachers is presented with illustrative examples from the data. The analysis

revealed the presence of the significant features of verbal mediation identified in the review of SCT framework (Chapter 3). Each of these features is presented with examples.

***(a) Shared understanding of task***

Shared understanding of the role and significance of mediation was found to be consistently present in the data collected at various stages of the study i.e., in the informal interviews conducted prior to the intervention stage, and the interactions of DA sessions. During the recruitment of participants for this study, the researcher provided in the consent form a brief write-up on how DA sessions would be carried out (Appendix A). This was done to ensure that the teachers are well aware of their role in the DA sessions. The researcher clearly explained the process of assessment to the teachers during the pre-DA interviews to all the teachers. During the DA sessions, all the participants, at some point or other, exhibited their awareness of the purpose of mediation. They welcomed the new idea of deliberating on the classroom events and talked about the purpose for joining the project and the expectations they had from this project. All of them looked forward to researcher's mediation as they considered it helpful for development of their teaching practices. During one of the informal interviews in pre-DA stage while talking about the type of questions that can elicit learner participation, Anita (A) clearly expressed her expectations for associating with the researcher in this project.

**Excerpt 6.1**

A: When we record the class then only **we'll know clearly**. **I liked that idea**. Recording the class and discussing, it is a new idea ma'am. Yeah, **that is why I included in this project** … this aspect also because I will teach … uh, then you say … *ee features itla vuntai* [**These are the features**], *class lo itla use cheyali* [**You have to use them this way in the class**], *itla chesthe pillalaki use avuthundi* [**if you do like this, it will be useful for the children**] … this discussion will be **very helpful** to me.

Anita liked the idea of recording the class and going through it critically to know her strengths and weaknesses in her own classroom interaction. She was also clear about how the researcher's mediation (Lines 4, 5 and 6) would help her. Her statement clearly indicates that the teacher was aware and well-prepared for the task. In one of the DA sessions, Mohan (M) shared his understanding of the task when the researcher (R) asked about his opinion on an alternative plan suggested by her.

**Excerpt 6.2**

| | | |
|---|---|---|
| 1 | R: | I think you should have allowed the student to complete what he was saying? |
| 2 | | Do you agree with me, sir? [Smiling] |
| 3 | M: | **I understood** when you told me **…** you told me when you took the |
| 4 | | interview this [study] is different. I know … |
| 5 | | **you are going to catch my mistakes [Laughing]**. |
| 6 | R: | No, sir. I'm not catching mistakes. [Laughing] |
| 7 | M: | But not like that. **You are asking what I am thinking**. |
| 8 | | **This is like a discussion**. We are discussing, and, uh, |
| 9 | | together … mutually, **we are thinking what uses children have** ... |
| 10 | | when you do like this, like that. No problem, ma'am. You tell what problems |
| 11 | | you saw in my class. I am here to learn. |

Mohan pointed out that the DA session was going to be a challenging process wherein there would be identification of problematic aspects in the interaction (Line 6) and finding a solution (Line 9) through sharing of views and opinions on the areas of improvement (Line 7 & 8). These examples illustrate that the participants were aware of the purpose and process of conducting assessment. This shared understanding of the task played a major role in carrying out the dynamic process of assessment with teachers and in enabling teacher co-operation.

***(b) Intersubjectivity***

Intersubjectivity is the degree to which interlocutors share a perspective in a communicative situation (Wertsch, 1998). That is, intersubjectivity is a process wherein participants in a task work together to achieve a shared perspective and maintain mutual understanding.

During the DA sessions, the researcher elicited teachers' opinions about the problem identified and the suggestion provided. The researcher confirmed if the teachers agreed with the researcher's interpretation of a given context before further assessment. These measures were taken by the researcher to ensure intersubjectivity with the teachers. On some occasions, the researcher encouraged teachers to elaborate on their views in order to understand their perspective clearly. On some other occasions, where a teacher rejected the problem as a petty matter, the researcher explained with examples why it can be problematic and what would be the disadvantages of continuing such a practice. In such cases, the teachers would listen patiently to the researcher's explanation and either accept it or reiterate the practical difficulties in the implementation of such ideas in their local context. Through this process of negotiation and mutual understanding, the problem at hand was discussed leading to learning for the teacher as well as the researcher. Excerpt 6.3 provides an example from Farha's DA2 where the researcher suggested that Farha should have given positive evaluation for a student's response. In response to this suggestion, Farha (F) reasoned why she did not appreciate the student. The researcher accepted it and no longer pursued the point.

**Excerpt 6.3**

R: Yeah. I feel you should, you could have given some motivation to them like motivation in the sense, uh, uh, some kind of appreciation or praise.
F: **No ma'am. Actually, this word is very common and uh, when you know something which is very common, you don't feel like appreciating when they really know something which is different others don't know.**
R: Okay.
F: **When you're giving some answer for some specific thing, which others don't know, you know, maybe you have put in hard work for that. So, there you have to be appreciated. That time you are actually praising and that is like good. Otherwise, good appreciation. This is just for, for the sake of doing.** I, I feel like that.
R: Okay. Fine.

In this situation, the researcher was suggesting that she appreciate the child who gave the title of the movie from which the teacher used a small clipping in the pre-task activity. Farha gave her rationale for why appreciation is not a good choice in that context (Lines 4–12). The researcher accepted it as the teacher clearly verbalized her personal theory for evaluation of students' responses. Further pursuing the issue at that moment may have hampered the process of attaining intersubjectivity.

Excerpt 6.4 shows how negotiation was done in order to attain intersubjectivity with Anita. In one of the DA sessions, the researcher indicated that the teacher thought of an activity that could have elicited the participation of her students who were mostly silent throughout the class.

**Excerpt 6.4**

**A:** Actually, it was my, uh, ma'am, actually … proper, uh, background of the lesson or **proper input was not given to the students**, I think.

R: So, whatever it may be, given this situation, **what do you think you could have done, uh, to, uh, elicit their participation at the very first instance?**

A: Uh, so **proper input should be given to them actually**.

R: So, you're saying that some input should have been given to them no. **So, what do you think could have been the right input or right way of giving that input to this set of students**?

A: Some vocabulary. Basic vocabulary. Attempt meaning also they are unable to say ... hm … some vocabulary. Daily usage vocabulary is not, uh, given to them, I think.

R: Okay.

A: Actually, the word 'futile' is in the lesson only. [Yes] Irritation is in the lesson only. They should know the meanings of that words. [R: Yes] So, it means that, uh, they were not given proper input. **The previous teacher didn't teach anything ma'am.**

R**:** Uh. Hm … **that is also right. I completely understand your problem. The teacher should have given the input** related to the vocabulary when she was teaching the lesson itself. But **we don't know what happened and that is gone**. Gone now. [A: Yeah.] **If you keep thinking from that point of view, you can never think of what is best for these students. Now, let us think of this situation.** We know the current status of the students. You have decided to do this exercise for this set of students. **Now, let us think what is the best thing to do?**

A: **Yes ma'am. What is the use now talking about the past?**

This excerpt shows that the researcher was trying to encourage Anita to think about an interesting task for her students. However, Anita continued to talk about the cause for the students' poor knowledge of vocabulary (Lines 2 & 6) and about the teacher whom she considered responsible for the present condition of the students (Line 17). In that situation, the researcher first agreed with the teacher that it is indeed a problem (Line 18) and then subtly hinted that the issue at hand is not to criticize others but to think of the best practice in the given situation (Line 20–23). In order to make the teacher realize the importance of planning for the present rather than looking into the past, the researcher pointed out the importance of planning (Line 25). To this, Anita agreed with the researcher's suggestion and stated that there is no use in talking about the past.

The excerpts presented in this section clearly indicate how the researcher sought to develop intersubjectivity with the teachers and arrived at a shared perspective.

***(c) Graduated and contingent help***

This is the most significant feature which demarcates DA from other types of verbal mediation. In this current study, the researcher attempted to identify the actual zone of teacher development by offering prompts or suggestions only when needed by the teacher. During interactions with the teachers regarding a problem identified, the researcher purposefully used implicit prompts initially to encourage teacher to verbalizer his/her thoughts, reflections, reasons and ideas. Only in the absence of a satisfactory response from the teacher, the researcher chose to give explicit instruction. This was done keeping in view the goal of the study i.e., to assess and in the process assist teachers in the development of their conceptual thinking. In this study, a preliminary glance at the data indicates that this feature was present in every episode.

Excerpt 6.5 illustrates how graduated and contingent help was provided by the researcher to the participants. In the first lesson taught by Kiran (Lesson 1: Desert Island), the

teacher had chosen not to do any kind of evaluation of the student's ungrammatical response. So, in the following DA session, the researcher decided to assess teacher's understanding of the follow-up strategies as the teacher had chosen to simply accept the student's response.

**Excerpt 6.5**

R**:** So, this girl gave the response, 'Listening music'. **Do you notice any problem in that response?** Listening music.
K: Hm. [After a few seconds]. It should be ... listening to music?
R: Yes. The correct structure ... it should be ... listening to music rather than listening music. **But you just accepted the response and went on to the next student.**
K: Generally, when we are speaking, uh, listening music, it is, it is going on ... commonly said like that.
R: Yeah, it's an Indian English expression but it's a mistake. **Do you think the students should have been introduced to the correct structure?**
K: **At that time, it is, I think it is, may not be. Why because they have to come forward. If I corrected it, another student will not come, not come to say like that. All of a sudden if I start correcting their mistakes, they feel somewhat. Definitely other people won't come out to speak with me. So, at that time it is not at all necessary. Later on, if it is time permitted, uh, then we can say about it.**
R: So, depending on the time and depending on the situation of the students. We can correct. That's fine. **Can you think of a follow-up technique where students will not feel offended and at the same time get an exposure to the mistake?**
K: [After thinking for a few seconds] What ma'am? I don't know. [Smiling] Fine. **Actually, when students commit mistakes, they need feedback so that they may not repeat it again. Actually, it's up to the teacher to decide whether to correct or not. What I think, uh, we can correct that, uh, we can correct, uh, that particular expression of the student. But this correction we can do in an implicit way without directly telling them that it's a mistake. This is called ... modelling the learner's contribution. It means, means uh repeating the student's grammatically erroneous utterance in an accurate way. Here you will not be telling that that it is wrong or why it is wrong. Just in a subtle or implicit way you will give them the right form in your follow-up move. This is called modelling. I feel that this technique would have been suitable in this context.**

In this episode, the teacher was first prompted to identify the problem in the student's response (Lines 1 & 2). Though the teacher identified the mistake and corrected it (Line 3), he did not say anything about why he chose to accept the student's response. The researcher then prompted the teacher to reflect on the issue of repair the student's response (Lines 9 & 10). As

the teacher's rationale indicated a gap in conceptual thinking, the researcher prompted the teacher if he could think of any follow-up strategy suitable to such contexts (Lines 19 & 20). In other words, the researcher did not directly provide the solution but first confirmed if he knew any follow-up technique suitable to the given context. Finally, based on the teacher's claim of insufficient knowledge regarding the concept (Line 21) the researcher gave explicit instruction to the teacher (Lines 22 – 33). This way, the dynamic process of assessment was carried out in a graded and contingent manner so as to diagnose teacher ZPD and provide appropriate support.

Now, the following section presents findings from the analysis of the mediation provided by the researcher. The findings demonstrate how the researcher's mediational moves were aimed at shaping teachers' ZPD. The findings shed light on the impact of DA approach in modelling conceptual thinking and shaping teachers' understanding of classroom interactional practices.

### 6.3 Supporting teacher ZPD

In this study, the researcher's primary objective was to provide the right mediational assistance in the development of teachers' conceptual thinking. Hence, in this section the key findings from the analysis of mediational moves are presented with illustrative examples. The focus is on the type of prompts, frequency of the prompts and how the prompts shaped teacher thinking.

#### 6.3.1 Types of mediational moves

In this study, DA-based dialogic mediation was offered to each teacher participant in three DA sessions. In these DA sessions the teachers were not offered the same type of mediation in the same order. Unlike interventionist approach to DA where the tutor/assessor

follows a similar sequence of mediational moves with all the learners, different mediational moves were used with different participants contingent upon their responses.

The mediational moves were also offered by the researcher keeping in view the assessment as well as the pedagogic purposes of the study. The implicit to explicit types of assistance helped in assessment of teachers' conceptual thinking. The kind of support that the teachers required to verbalize their thinking gave the researcher a glimpse of the additional support and instruction that they require to internalize the concepts. For instance, teachers who required greater number of implicit prompts were assessed as less independent in their thinking and so explicit instruction was provided once again. On the other hand, teachers who gave sufficient indication of their conceptual understanding with a minimum support were assessed as capable of independent thinking. The implicit to explicit kind of assistance that the teachers needed was also taken as an indicator of their future potential.

The mediational strategy of implicit to explicit assistance was also planned with a pedagogic purpose in view. The researcher used a variety of implicit moves in order to encourage teachers to think in a specific direction or by inviting to comment or reflect on the problem identified. The implicit prompts were in fact opportunities provided to teachers to think, reason, defend and reflect on their classroom choices. In situations where the implicit prompts failed to elicit a satisfactory response from the teachers, the researcher offered explicit prompts for a better understanding of the concept. Thus, the prompts were offered with the pedagogic goal of fostering teachers' conceptual thinking.

Thus, the researcher provided ample opportunities for teachers to think about their lived classroom experiences conceptually. Table 6.2 presents the mediational moves used by the researcher. In this study, 20 different types of prompts were used out of which 13 prompts were of implicit type and the rest 7 were of explicit type. Colour coding was used to easily indicate

the difference between implicit and explicit prompts. Red was used for implicit prompts and blue for explicit prompts.

**Table 6.2 Typology of mediational moves**

| S. No. | IMPLICIT PROMPTS | S. No. | EXPLICIT PROMPTS |
|---|---|---|---|
| 1 | Describing the details in the context | 14 | Explaining the gap in teacher's understanding |
| 2 | Drawing teacher's attention to the problem | 15 | Presenting a plausible alternative |
| 3 | Asking for teacher reflections/opinions | 16 | Explaining the rationale for the suggestion |
| 4 | Probing to elaborate further | 17 | Visualizing the effect of alternative practice |
| 5 | Pointing out the specific problem in the teacher's move | 18 | Explicit instruction of concept |
| 6 | Evaluating teacher's rationale / reasoning | 19 | Sharing views based on experience/observation |
| 7 | Reminding the pedagogic objective | 20 | Addressing teacher's doubts/ prejudices |
| 8 | Pointing to the teacher's role in interaction | | |
| 9 | Encouraging to think by providing a hint | | |
| 10 | Encouraging recall of classroom events | | |
| 11 | Playing video to recall or clarify | | |
| 12 | Asking to consider an alternative | | |
| 13 | Direct questioning on awareness of concept | | |

The following sub-section presents the examples for different types of implicit and explicit prompts used in this study.

**(a) Implicit prompts**

A mediational move was considered implicit when the researcher encourages teacher thinking or teacher reflections. In this study, 13 different types of implicit prompts were used

(Table 6.2, S. No. 1-13). Excerpt 6.6 illustrates how an implicit prompt i.e., move 2 (drawing teacher's attention to the problem identified) enabled Farha to recognize the problem that the researcher implicitly pointed out. The episode is from Farha's DA2 (Lesson: Selfish giant).

**Excerpt 6.6**

1 R**:** You just said, "Open your textbooks. See the picture in the textbook".
2 F: Actually, ma'am, **before showing the picture itself, we can,**
3 **uh, uh, before going into the textbook itself, we can, uh, prepare them**,
4 **with other examples** outside … other than the textbook. [R: Okay.]
5 Like. Like in the beginning only we, we can ask them, uh, **did they go to**
6 **temples or church?** And they say, yes, we go to temples and church. So,
7 what do you find there? Then they say all kinds of shops and all that.
8 Then, uh, they, one may also say even beggars or poor children. [R: Hm.]
9 Then, uh, **do you give anything to the beggars**? [R: Okay] **Did you**
10 **anytime give anything to the people like them? Do you help them?**
11 Okay? **How are they? How do, how they look?**
12 All these questions we can ask. **Then they come to the mindset what**
13 **lesson is about … sharing things, being kind**.
14 R: Okay ma'am.

In the above excerpt, the researcher just gave an implicit prompt of drawing teacher's attention to the problem (Line 1) i.e., missed opportunity for learner involvement before starting the lesson. Farha responded to this implicit prompt by sharing her ideas on how she could have made that particular context interactive. She mentioned a series of questions that she could have asked in that context to motivate the students (Lines 5, 9, 10 & 11) instead of starting the lesson with brief instructions. Farha also expressed the reason for why she thought the alternative idea of asking questions would have been beneficial in that context (Lines 12 & 13) without any further prompt from the researcher. This excerpt demonstrates that the researcher's implicit prompt was sufficient for Farha to recognize the problem and demonstrate her conceptual thinking. The prompt directed her to see the gap and she then clearly verbalized her conceptions of what could have been a better move in that context. Had the researcher used any explicit move at the outset, it may have been seen as redundant by the teacher and also it wouldn't have been possible for the researcher to identify her ZPD. The researcher did not

provide further assistance on this particular aspect as the teacher's response was considered sufficient to assess her conceptual thinking

The following excerpt from DA2 of Stephen (Lesson: The Limping Horse) illustrates how the researcher used different types of implicit moves to encourage teacher learning. Excerpt 6.7 was from an episode in which the focus was on the scope for eliciting learner participation at the time of giving instruction before a task. Initially, the researcher gave implicit assistance to the teacher by using move 2 (drawing teacher's attention to the problematic aspect; Line 1). Following this, the researcher implicitly pointed out the specific limitation in Stephen's choice through move 5 (pointing out the specific problem in the teacher's move; Lines 3 & 4). The researcher gave a direction to the teacher to think about the adequacy of instructions provided to students. However, Stephen's (S) response in Lines 7 & 8 indicated that he did not identify the problem that the researcher was hinting at.

**Excerpt 6.7**

| | | |
|---|---|---|
| 1 | R: | Let's talk about the instruction that you have given to the learners. |
| 2 | S: | Yes ma'am. |
| 3 | R: | Did your instructions give sufficient direction to students about what is |
| 4 | | going to happen in the class? … In the next few minutes? |
| 5 | S: | Hm. [Thinking] |
| 6 | R: | Do you think these instructions ... uh … are they sufficient? |
| 7 | S: | Hm. Yes ma'am. They are clear. I told them to read ... why did I tell them to |
| 8 | | read? Because they have to read and understand it. |
| 9 | R: | But then, if you tell students what will happen after they read the story, they |
| 10 | | will have a purpose for reading and I think they will read more carefully. |
| 11 | S: | Yes. I have told them that there is a fun story and they have to read it |
| 12 | | silently. Then they have started to read. |
| 13 | R: | Can you think of any other idea or any instruction? |
| 14 | S: | Yes. Actually, I think this is not enough. This is very less. I can motivate |
| 15 | | them more. |
| 16 | R: | [After waiting for a while] Okay. You tell now ... in this context ... |
| 17 | | think from the students' point of view … what more information you could |
| 18 | | have given the students regarding the task? |
| 19 | S: | What I could have said here is ... after going into the class, |
| 20 | | I should have talked about the background of the story, how to read the story, |
| 21 | | what to do when difficult words are there. [R: Okay.] |
| 22 | | The purpose of reading this....in fact, I should have talked for a while to bring |
| 23 | | curiosity in the learners to know more about the story. [R: Okay.] |
| 24 | | Then ... after doing all this ... I should have told them to read the story. |

25 R: Ok. That's one good way of introducing the lesson.

At this stage, the researcher once again implicitly prompted him to consider an alternative using move 12 (asking to consider an alternative; Line 13). This implicit prompt probably made Stephen think what else he could have done in that context of giving instruction. He came up with an alternative idea that he could have motivated the students more but could not elaborate it (Lines 14 & 15). At this juncture, the researcher used move 9 (encouraging to think by providing a hint) to Stephen by asking him to think from the students' point of view and what information that they would need to participate completely in the reading task (Lines 17 & 18). At this point, the teacher began to verbalize his ideas of what else would have been possible in the context under focus (Lines 19-24). Thus, with the help of a series of implicit prompts the researcher attempted to expand the ZPD of the teacher. The researcher's explicit feedback or suggestion might have concealed Stephen's ability to think conceptually and there wouldn't have been an opportunity to figure out his ZPD. This episode shows how Stephen's conceptual thinking was shaped by providing graded and contingent assistance.

Likewise, move 9 (asking to consider a possible alternative) was used by the researcher to promote teachers' ability to find solutions and think of interesting ideas that can maximize learner participation. Thinking for an alternative is very essential in teaching as effective teachers constantly think for new ideas that can enhance learning in their classrooms. The following example (Excerpt 6.8) illustrates how this particular move was employed in Mohan's DA. The implicit move in this excerpt is focused on the issue of uptake in Mohan's DA1 (Lesson: A Havoc of Flood). After going through Mohan's class, the researcher identified that the teacher overlooked a potential space for uptake questions in the following exchange:

T: People are waiting on the terrace; some people are climbing down the helicopter. Some serious situation is going on here. Let me know, did you see this type of situation any time in your life?
Ss: No sir.

T: Okay. But this is a real incident which happened in Kurnool.

The teacher in this exchange had accepted students' response and moved on to explanation. Based on this exchange, the researcher asked Mohan (M) to think of an uptake question for the students' response rather than providing a suggestion directly.

**Excerpt 6.8**

R: Ah, you asked an authentic question here …hm you are interested in knowing their previous experience? But here they said no … it's possible because they may have never, uh, experienced it in real. Here, what uptake question is possible here, uh, hm, based on students' response?

M: [Silence]

R: They may not have seen in their life … But instead of ignoring their response, you can ask whether they have seen in any movie or TV news … here, the chance was there. Ah … It's common. Now-a-days, in everybody's home, hm, televisions are there. News channels cover these incidents continuously. There was scope for asking questions. Just think … think of some suitable question.

M: Ah. Yes, yes, yes. There was possibility. I can ask … uh, okay, not in real life, but on TV or phone you may have seen. Someone will say I have seen sir.

In this episode, the researcher encouraged Mohan to think by asking for an alternative (move 12; Lines 4 & 5) and then encouraged to think by providing a clue (move 9; Lines 7 & 8). With this implicit support, the teacher was able to recognize that there is a chance for uptake questions in that context.

Move 3 (asking for teacher reflections/opinions) was another implicit prompt that was deployed to encourage teacher reflections. Many a time, in the DA sessions, teacher reflections helped researcher to decide the next move. On some occasions, the researcher questioned the choices of the teachers to enable them to reflect on the problem identified. Excerpt 6.9 exemplifies how move 3 was used in Anita's DA2 to make her reflect on her questioning practices. By watching her classroom video, the researcher identified that the teacher focused extensively on eliciting the meanings of words and sentences. The teacher's focus on meanings hindered student participation and there was silence throughout the class. Lack of students'

active participation in her class ultimately made the teacher feel frustrated. While discussing this issue the researcher used move 3 as one of the implicit moves.

**Excerpt 6.9**

1 R: You were in between asking the students to tell the meanings of the
2 difficult words. For example, the word proved. You asked them the meaning.
3 What do you think about the cognitive challenge of this question?
4 Is it low or high for their level?
5 A: It's high ma'am for them.
6 R: Was it a right choice to ask them about the meanings of the words?
7 A: Hm. [Thinking]
8 R: [After a few seconds] You want them to respond …
9 but how will they respond when you ask for meanings.
10 They don't have anything to say!
11 A: That only, uh, that only.
12 Actually, I didn't know that they are so far away from English ...

Anita joined a new school and she was just getting to know her students when she joined this project. She was flabbergasted at the low proficiency levels of her students at the new school. Their level of participation was extremely low according to the teacher. Despite this, the teacher focused extensively on eliciting the meanings of difficult words. So, in the DA procedures, the researcher encouraged the teacher to reflect on the connection between the cognitive level of her questions and students' participation. This implicit prompt seemed to make the teacher reflect as she sat quietly thinking for a few seconds. Her response, however, did not indicate a change in her thinking as she once again began to talk about the poor proficiency levels of her new students. However, this implicit prompt helped the researcher in identifying her ZPD and the kind of assistance that she would require to learn to think conceptually.

Implicit prompts most often took the form of direct questions that served as invitations to teachers to reflect, think, reason or comment. Wh-questions were used to direct teachers to think in a specific way in relation to a specific issue. For instance, move 2 (drawing teacher's attention to the problem) involved asking questions to assess if the teacher can recognize the

problem on his/her own. The problem was not elucidated at the outset. When using move 5, the researcher did not specify the problem or issue but posed questions relating to the problem indicated. In the same way, move 4 (probing to elaborate further) was in the form of a question. Table 6.3 presents examples for all the 13 types of implicit prompts used in this study. The table shows that most of the implicit prompts were in the form of questions or invitations to comment.

**Table 6.3 Examples of implicit prompts**

| Prompt | Source | Examples |
|---|---|---|
| 1. Describing the details in the context | Parimala DA2: My Free time activities | One of the students has given a very good response. She said 'I help my mother'. By your expression … I could see that you were shocked, surprised or very happy with the student's response. |
| 2. Drawing teacher's attention to the problem | Farha DA2: Picture description activity - The Selfish giant | You asked, "How do you know that he's selfish?" For that there was no answer for a long time. Again, you repeated, "How do you know? … How do you know that he's selfish?" But still there was silence. Do you agree with what I'm saying? |
| 3. Asking for teacher reflections/opinions | Anita DA3: Bridging the gap activity - Picture description | I observed that in one context … you were taking the students' words, one-word answers and you were reformulating them as full sentences and writing on the board. Did you do it consciously or just spontaneously you got that idea? |
| 4. Probing to elaborate further | Mohan DA1: A Havoc of Flood: Picture description activity | Would you like to add anything else? |
| 5. Pointing out the specific problem | Anita DA2: Grammar activity | Do you feel that there is any problem in the instructions given to students? |
| 6. Evaluating teacher's rationale/reasoning | Kiran DA3: Games and sports | Yes. Absolutely. Students would've got a chance to use language. |

| | | |
|---|---|---|
| 7. Reminding the pedagogic objective | Stephen DA2: Story: The Limping Horse | But then the objective of the lesson is to know whether they have comprehended the story or not. How will a teacher know about the students' comprehension levels? |
| 8. Pointing to the teacher's role in interaction | Parimala DA1: Desert Island | What should a teacher do when the students are giving responses? |
| 9. Encouraging to think by providing a hint | Farha DA3: The Trial | Do you think it would have been better if you had given them clear instructions in the beginning itself? |
| 10. Encouraging recall of classroom events | Stephen DA1: Desert Island | Can you recall why you planned to start the class this way? |
| 11. Playing video to recall or clarify | Mohan DA3: Desert Island | Do you want me to play the video once, sir? |
| 12. Asking to consider an alternative | Parimala DA2: My Free time activities | Just imagine that you have time and you want to elicit responses from other students … for example there will be students who come from home. What would you do in this situation here? |
| 13. Direct questioning on awareness of concept | Kiran DA3: Games and Sports | What are the different ways of providing high-level evaluation? Can you please tell me? |

The excerpts and examples presented in this section clearly elaborate the use of implicit prompts in shaping teachers' conceptual understanding.

**(b) Explicit prompts**

On some occasions the researcher moved from offering implicit to increasingly explicit assistance. Explicit assistance (S. No. 14–20 in Table 6.2) meant providing alternative ideas for classroom practice, explaining the limitation in teacher's reasoning, explaining the rationale underlying the mediator's suggestion, visualizing the effect of alternative practice or explaining the concept. This type of explicit assistance was given only when the teacher showed limited understanding through brief and insufficient responses. For example, Excerpt 6.10 presents how the researcher moved from offering implicit prompts to explanation of different types of

evaluation practices that can be used to shape students' contributions. The following is an episode from DA1 of Parimala (Lesson: Desert Island).

**Excerpt 6.10**

| | | |
|---|---|---|
| 1 | R: | So, next you started asking questions about daily routine. Uh, one of the boys |
| 2 | | has stood up and started ... he started talking about his daily routine. |
| 3 | P: | Yes. |
| 4 | R: | He said, "I woke up early in the morning". |
| 5 | P: | Yes. |
| 6 | R: | Is there any problem in this student's response and your follow-up move … |
| 7 | | in this exchange? |
| 8 | P: | [After a few seconds] What ma'am? |
| 9 | R: | Shall we watch the video once again? |
| 10 | P: | Yes. |
| 11 | R: | [Researcher plays the video] |
| 12 | P: | Hm ... he said "I woke up early in the morning". I also said the same thing. |
| 13 | R: | Yes. You repeated the same thing and wrote the same thing on board. |
| 14 | | So, in this context, what else would have been an appropriate move? |
| 15 | P: | I will say "That is not the right sentence. You should say I wake up". |
| 16 | R: | Yes. [Waiting for the response] Okay. You will give direct feedback. |
| 17 | P: | No. Because there is no time to go into deep details. |
| 18 | R: | So that is one strategy of giving feedback. What else can be done in the |
| 19 | | follow-up moves by a teacher? |
| 20 | P: | [After thinking for a few seconds] Correcting only. What else? [Doubtfully] |
| 21 | R: | [After waiting for a few seconds] What you are saying is called 'direct |
| 22 | | feedback'. You are directly correcting the student. But there are other ways |
| 23 | | like for example in this context, you can simply model the students' |
| 24 | | contribution by saying 'You wake up early in the morning'. Rephrasing is |
| 25 | | another possibility. It means … instead of repeating the same thing as it is, |
| 26 | | you make small adjustments to what the student has said. Like he said |
| 27 | | "I woke up early in the morning", then you can say 'Oh! You get up very |
| 28 | | early'. Here you replaced woke up with get up … new phrase. If you make |
| 29 | | such changes to the original response, that would be called reformulation. |
| 30 | | So, if you give such kind of follow-up to the student's response and write |
| 31 | | them on the board, then they will get a lot of input, right? |
| 32 | P: | So, reformulation should be done. |
| 33 | R: | It's not like that. There is no rule that you should do reformulation or you |
| 34 | | should do modelling. It's up to you to decide what you'll do. |
| 35 | | But, what is most important is that you as a teacher should have a proper |
| 36 | | reason for whatever decision you take in the class. |

*Explicit assistance is coded in blue.

The researcher in this episode initially gave a number of implicit hints to Parimala regarding the problem identified in her follow-up move. The researcher introduced the topic by describing the context initially (Move 1; Lines 1 & 2). Following this move, the teacher

pointed out the specific problem in the student's response (Move 5; Line 4). To both these implicit hints, the teacher's response was 'Yes' (Lines 3 & 5) which was insufficient to interpret the teacher's ZPD. After this, the researcher provided a hint by specifically mentioning that there is a problem in the student's response and the teacher's follow-up move (Move 9; Lines 6 & 7). When the teacher was still unable to recognize the problem (Line 8), the researcher played the video once again to support teacher's recall of the context (Move 11; Line 11). This implicit support of offering to watch the video enabled the teacher to recall the flaw in her follow-up choice (Line 12) but still her response was not yet sufficient to interpret her understanding of the concept of follow-up. So, in order to further investigate her ZPD, the researcher asked her to consider an alternative practice instead of echoing the ungrammatical response of the student (Move 12; Lines 13 & 14). In response to this mediational move, the teacher came up with an alternative i.e., correcting the student's mistake (Line 15). As this response of the teacher still didn't showcase her understanding of the HLE (high-level evaluation) strategies explained in the workshop, the teacher once again encouraged the teacher to consider other follow-up moves possible in that context (Move 9; Lines 18 & 19). At this juncture too, the teacher was still unable to think of any other follow-up strategy suitable to the given context.

Finally, the researcher explicitly instructed the teacher on all the follow-up strategies in the given context (Move 18; Lines 21 – 31). However, the teacher still showed a gap in her understanding of how to choose a follow-up move (Line 32). So, the mediator explicitly pointed out the limitation in the teacher's thinking (Move 13; Line 33 & 34) and explicated the teacher's role in real-time classroom situations (Move 17; Lines 35 & 36).

As the above episode illustrates, explicit instruction i.e., move 18 was used only when teachers showcased very limited or insufficient understanding of concepts in the context of

implicit assistance. Explicit instruction was given to teachers on different aspects of interaction.

Table 6.4 presents a few examples of the explicit instruction in this study.

**Table 6.4 Examples of explicit instruction**

| Aspect of teaching | Examples |
|---|---|
| Questioning (Anita DA2: Grammar activity) | Display questions means just one word they'll give [A: Yeah, yeah] and you know the answer for that question. Display means you are just asking for the sake of asking. To test them. Those are called as display questions. Here, for example, you are asking, uh, habits *ante enti*. [Habits means what?] [A: Yes] You know the answer for that question, right? Only one specific answer is there, but there is no possibility for variety in students' responses. So, mostly display questions are there, and it is, it's not wrong to ask display questions. There's nothing wrong in that. Most of that will be … if you, uh, if we are teaching grammar, for example, like this [A: Hm] there won't be much scope for open-ended questions. Most of them will be [That only, that only] will be, ah, display questions. |
| Follow-up (Kiran DA1: Desert Island) | Or you can model it. Modelling means, it means, uh, giving the right structure for the incorrect or ungrammatical utterance of the student. For example, this student used Telugu structure here. If you repeat the same in English, then they'll know that this is the way to use in English for what I have said in Telugu. So that is called modelling.<br><br>What happens when we read lots of books means "knowledge" they said. Just a word. In such a situation, you could have reformulated it in such a way [K: Uh] so that they will get exposure … for telling such answers. That is called Reformulation. |
| Importance of providing feedback (Parimala DA3: The Limping Horse) | Yeah, it's up to you to decide what you'll do or how you will give feedback depending on the learner's contribution. There is nothing like this is the right way or this is the wrong way. At that point of time, you have to be sensitive to the learner's response and decide on what is the best way of giving feedback. Like what is the best thing to be done there in the given context? Okay? |
| Opportunities for genuine interaction (Farha DA1: Picture description - Puru, the Brave) | So, I feel that, I feel that here you have, uh, missed a very genuine opportunity for instruction ma'am because this kind of situations are, uh, are, uh, common in our day-to-day life. There will be so many such incidents and we always focus on our subject only in the class. Whereas here it's a very, uh, good chance for asking questions. You don't know the answers for those questions. Students will be interested to talk about themselves. Their experiences, their celebrations. And uh, also … they'll also feel that the teacher is really interested in my, uh, in my experiences, in my life like that it is, uh, it sounds very genuine if you, uh, ask such questions to students whenever there is an opportunity. |

As the above examples demonstrate, explicit prompts most often ran into long researcher turns as they were used to give instruction or explanation. Table 6.5 provides examples for each of the explicit prompts used in this study.

**Table 6.5 Other explicit prompts used in the study**

| Type of prompt | Examples |
|---|---|
| 14. Explaining the gap in teacher's understanding (Kiran DA1: Desert Island) | … With whom do you want to spend? So, if we ask this type of questions, there will be more scope for the learners to answer. Use English language. You are saying, no, you are asking many questions, but they're not able to come up. So, if, I feel that if we ask these types of questions, which are more related to their, uh, own personal experiences and ask as many referential questions as possible, then they will try. |
| 15. Presenting a plausible alternative (Anita DA2: Grammar activity) | What else you can do ma'am is … here another possibility is, uh, we can, we can draw two columns on the board. You can, uh, draw two columns on the board, but in one column you can, uh, write the word daily activity, something which we do daily. Okay? And something which we did yesterday or, uh, last year or something in the past. Students have to come and write what they want to say in the appropriate column. This activity may increase learner participation … and also, it will help you to assess their understanding of the concept. |
| 16. Explaining the rationale for the suggestion (Farha DA2: Picture description activity - The Selfish Giant) | And if there are any mistakes in the students' responses, we can correct them. Uh. That is a primary reason for giving feedback. First, giving opportunities for them to respond and then there will be a chance for teachers for observing and correcting. [F: Yeah]. We learnt about formative assessment. When they are given opportunities to speak only … we get to know their drawbacks. So, that is why I'm suggesting to elicit more responses from the children in the classroom. |
| 17. Visualizing the effect of alternative practice (Kiran DA1: Desert Island) | This is only a beginning. If you go on continuously asking questions and interacting like this, after a few days, they will get used to it and they will be able to speak little bit. At least, they will be able to understand you and gradually they will improve. |
| 19. Sharing views based on classroom observations and researcher's experiences (Mohan DA2: My Free Time Activities) | Then instead of, uh, talking about any particular incident, the boy said, uh, because they don't have food, I will give them food he said. I'm thinking that the boy is saying what he will do in his free time. No one helps poor people in free time. He's not exactly telling what he did or what he used to do. He's saying some imaginary thing. I felt like that. |

| | |
|---|---|
| 20. Addressing the doubts, questions and prejudices of teachers (Stephen DA1: Desert Island) | I don't think so, sir. Why do you think like that? You were asking questions in between. But most of the questions you were asking were in Telugu. That's a different issue. But you were asking good number of questions to check their comprehension. |

The excerpts and the examples presented above illustrate the different types of mediational moves used in this study. The mediational strategy of moving from offering implicit to explicit prompts helped in providing the right assistance appropriate to teacher's ZPD. Through such a strategy the researcher could diagnose the gaps and limitations in teacher thinking. Now, the following section throws light on the frequency of mediational moves.

### 6.3.2 Frequency of mediational moves

This section is aimed at presenting the most frequently used implicit and explicit prompts in the study. A summary of the mediational moves used in the intervention phase of the study is presented in Table 6.6. In counting the frequency of the moves, all the episodes related to the first three categories mentioned in Sec 6.1 were taken into account. This was done in order to maintain uniformity in the type of issues that were assessed. On the whole, 157 episodes were used in the current analysis of frequency.

In the table, the number opposite each move indicates the number of instances it was used with each teacher in each of the three DA sessions. It shows that the researcher employed varied levels of mediational moves for each teacher in each of the DA sessions. The difference in the use of moves indicates the different ZPDs of each teacher. For example, explicit moves 20 (addressing teacher's doubts and prejudices) and 19 (sharing views based on experience/observation) were not at all used with Farha in DA1. On the other hand, Stephen and Kiran were given the highest amount of explicit assistance in the form of moves 20 and19

**Table 6.6 Frequency of mediational moves**

| MEDIATIONAL MOVES | PARIMALA | | | KIRAN | | | MOHAN | | | STEPHEN | | | ANITA | | | FARHA | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DA 1 | DA 2 | DA 3 | DA 1 | DA 2 | DA 3 | DA 1 | DA 2 | DA 3 | DA 1 | DA 2 | DA 3 | DA 1 | DA 2 | DA 3 | DA 1 | DA 2 | DA 3 | |
| 1. Describing the details in the context | 4 | 4 | 5 | 8 | 8 | 4 | 2 | 5 | 3 | 5 | 4 | 4 | 4 | 7 | 3 | 5 | 4 | 3 | 82 |
| 2. Drawing teacher's attention to the problem | 2 | 9 | 6 | 8 | 5 | 3 | 3 | 3 | 4 | 4 | 3 | 8 | 6 | 3 | 3 | 3 | 3 | 2 | 78 |
| 3. Asking for teacher reflections/opinions | 8 | 3 | 3 | 9 | 8 | 6 | 7 | 6 | 5 | 14 | 6 | 4 | 8 | 5 | 3 | 5 | 10 | 8 | 118 |
| 4. Probing to elaborate further | 7 | 10 | 5 | 2 | 3 | 5 | 2 | 1 | 4 | 6 | 5 | 5 | 6 | 8 | 6 | 1 | 3 | 3 | 82 |
| 5. Pointing out the specific problem | 4 | 5 | 4 | 4 | 5 | 2 | 3 | 3 | 2 | 7 | 2 | 3 | 5 | 1 | 3 | 4 | 2 | 1 | 60 |
| 6. Evaluating teacher's rationale/reasoning | 5 | 11 | 3 | 13 | 8 | 3 | 2 | 5 | 4 | 5 | 3 | 6 | 9 | 8 | 3 | 3 | 5 | - | 96 |
| 7. Reminding the pedagogic objective | 2 | 1 | 1 | - | 1 | - | 1 | - | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | - | - | 21 |
| 8. Pointing to the teacher's role in interaction | 1 | - | 2 | - | - | - | 3 | 1 | 2 | 2 | 1 | 2 | 3 | - | 1 | - | 1 | - | 19 |
| 9. Encouraging to think by providing a hint | 16 | 11 | 10 | 12 | 8 | 3 | 14 | 14 | 15 | 17 | 10 | 11 | 7 | 8 | 10 | 4 | 10 | 5 | 185 |
| 10. Encouraging recall of classroom events | 1 | 5 | 2 | 5 | 1 | 1 | 2 | 5 | 3 | 3 | 1 | 4 | - | 3 | 4 | 3 | - | 3 | 46 |
| 11. Playing video to recall or clarify | 1 | 4 | - | 1 | 1 | - | - | 1 | - | 1 | 2 | 1 | 1 | 1 | - | 1 | - | - | 15 |
| 12. Asking to consider an alternative | 6 | 7 | 7 | 6 | 4 | 2 | 3 | 5 | 4 | 13 | 10 | 5 | 9 | 4 | 2 | 4 | 5 | 5 | 101 |
| 13. Direct questioning on awareness of concept | 3 | - | 4 | 4 | 6 | 4 | 1 | - | 1 | 1 | 2 | 4 | 1 | 4 | 4 | 1 | - | 4 | 44 |
| 14. Explaining the gap in teacher's understanding | 3 | 3 | 3 | - | 3 | 1 | 1 | - | 4 | 1 | 2 | 3 | 2 | 3 | 3 | - | 2 | - | 34 |
| 15. Presenting a plausible alternative | 3 | 10 | 8 | 14 | 9 | 2 | 5 | 5 | 6 | 19 | 10 | 15 | 13 | 12 | 10 | 6 | 3 | - | 150 |
| 16. Explaining the rationale for the suggestion | 3 | 6 | 6 | 7 | 7 | - | 1 | 2 | 4 | 2 | 8 | 4 | 7 | 10 | 8 | 10 | 7 | - | 92 |
| 17. Visualizing the effect of alternative practice | 1 | - | 5 | 2 | 2 | - | - | 2 | 3 | 1 | 4 | 2 | 6 | 2 | 2 | 1 | 1 | 1 | 35 |
| 18. Explicit instruction of concept | 6 | 8 | 6 | 5 | 6 | - | 4 | 2 | 5 | 5 | 10 | 5 | 8 | 10 | - | 1 | - | - | 81 |
| 19. Sharing views based on experience/observation | - | 1 | 3 | 9 | 3 | 2 | - | 5 | 4 | 3 | 7 | 5 | 3 | 6 | 3 | - | - | - | 54 |
| 20. Addressing teacher's doubts/prejudices | 2 | 2 | 2 | 1 | - | 1 | - | 2 | - | 8 | - | 2 | 7 | 1 | 3 | - | - | - | 31 |
| Total | 78 | 110 | 95 | 110 | 88 | 39 | 50 | 77 | 75 | 129 | 101 | 110 | 117 | 109 | 73 | 54 | 57 | 35 | |

respectively in DA1. However, Stephen alone required highest explicit assistance of move 15 (thinking of a plausible alternative) in DA1.

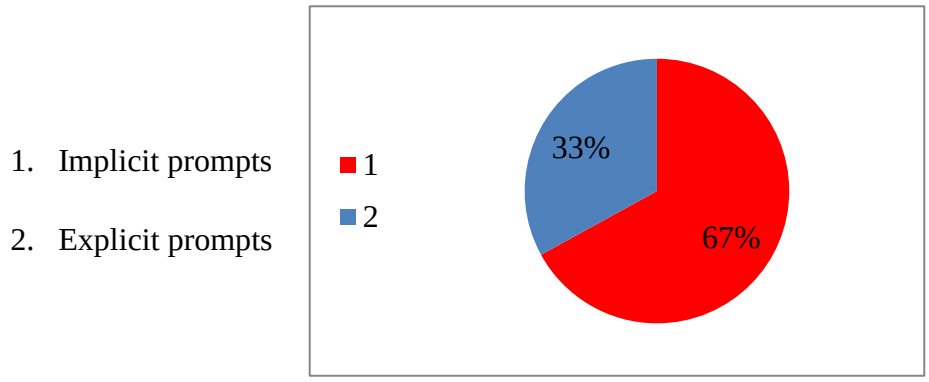
Similarly, move 18 (explicit instruction of concept) was provided multiple times to all teachers in DA1 while Farha required it only once. In DA2 and DA3 sessions too, there were variations in the type and amount of assistance provided to teachers. For instance, while move 4 (probing to elaborate further) was used extensively with Parimala and Anita, it was used only once with Mohan in DA2. Likewise, in DA3, while Stephen and Anita still needed the highest amount of explicit assistance in the form of move 15 (presenting a plausible alternative), Kiran needed it only once. These examples demonstrate that the mediator used different types of moves to support teachers' conceptual learning.

Considering the frequency of each type of move, it was found that implicit move 9 (encouraging to think by providing a hint), 3 (asking for teacher reflections or opinions) and 12 (asking to consider an alternative) were the most frequently used in all the DA sessions with all the participants. There were 185 instances of move 9, 118 instances of move 3 and 101 instances of move 12.

On the other hand, explicit moves 15 (presenting a plausible alternative), 16 (explaining the rationale for the suggestion) and 18 (explicit instruction of the concept) were the most frequently used in the DA sessions with 150, 92 and 81 instances respectively. On the whole, 67% of the overall moves were of implicit type while 33% of the moves belonged to the

category of explicit assistance. The proportion of the implicit and explicit moves used in this study is presented in Fig 6.1.

**Figure 6.1 Proportion of implicit and explicit prompts in DA sessions**




Higher frequency of implicit moves in this study demonstrates that the researcher had provided all the possible support dynamically to encourage teachers' conceptual thinking in a face-to-face oral assessment scenario. Mediational moves were used discretely keeping in view the ZPD of the teachers.

Now, in the following section, teachers' responsiveness to mediation is discussed.

### 6.4 Effect of DA on shaping teacher ZPD

In this section, key findings from teachers' reciprocal moves in terms of their type and frequency are presented. This analysis was aimed at understanding the effect of mediation on teachers' conceptual thinking.

The focus of this section was to present illustrative examples of how DA-based mediational discourse shaped teachers' understanding of classroom practices. A comparison of the frequency of the mediational moves required by teachers in DA1 and DA3 revealed that there was a rise in the number of mediational moves provided to Parimala (DA1: 78, DA3: 95), and Mohan (DA1: 50, DA3: 75). Conversely, there was reduction in the number of mediational moves provided to Kiran (DA1: 110, DA3: 39), Stephen (DA1: 129, DA3: 104), Anita (DA1:

117, DA3: 73) and Farha (DA1: 54, DA3: 35). However, the difference in the mediational moves from DA1 to DA3 alone was not a sufficient indicator of the effect of DA on teacher's ZPD. For this purpose, teachers' reciprocal moves were also analyzed to identify the extent to which their response reveals the ability to think independently.

### 6.4.1 Types of teacher reciprocal moves

As explained earlier, mediational moves in this study were contingent upon the teachers' responsivity. Throughout the DA procedures teachers were given ample opportunities to externalize their thoughts. Their responses were used by the researcher to assess whether the teacher is capable of independent thinking or is dependent on other's support for conceptual thinking. Hence, a typology of teacher responses was developed based on the data from DA sessions. Shrestha's (2011) typology of learner moves was initially used as the base for categorization of teachers' moves. However, it was later adapted and developed as new moves emerged in the analysis. The list of teacher reciprocal moves is presented in Table 6.7 below.

**Table 6.7 Typology of teacher reciprocal moves**

| S. No. | Dependent | S. No. | Independent |
|---|---|---|---|
| 1 | Back channelling / silence | 10 | Explaining the problem in the teacher-pupil exchange |
| 2 | Giving brief and insufficient response | 11 | Justifying one's choice with a sound rationale |
| 3 | Defending one's move for some reason that lacks conceptual understanding | 12 | Self-reflection |
| 4 | Citing problems in the local context | 13 | Supporting one's citing personal theories |
| 5 | Claiming inability/insufficient knowledge | 14 | Expressing views about the utility of the mediator's suggestion |
| 6 | Demonstrating incorrect/insufficient understanding | 15 | Suggesting alternative ideas suitable to the context |

| | | | |
|---|---|---|---|
| 7 | Agreeing with the mediator's view/suggestion | 16 | Verbalizing conceptual understanding |
| 8 | Thinking of an alternative based on mediator's prompt | 17 | Rejecting mediator's suggestion by providing a rationale |
| 9 | Checking conceptual understanding with the mediator | | |

Colour coding was used once again to help the reader easily indicate the difference between moves that indicate dependence and moves that indicate independent thinking. Green indicates that the teacher is more dependent on external support and purple indicates that the teacher is independent in conceptual thinking.

The above list of teacher reciprocal moves was derived on the basis of nature of the responses given by the teachers in verbalizing their thoughts about the lived classroom events. From this perspective, moves 1-9 indicate that the teachers were more dependent on the researcher for conceptual thinking while moves 10-17 indicate that the teachers were more independent. The order of the moves as shown in Table 6.7 is more or less indicative of their conceptual thinking. For instance, *citing problems in the local context* (move 4) and *claiming inability/insufficient knowledge* (move 5) come before *agreeing with the mediator's view or suggestion* (move 7) because the former moves do not indicate any kind of conceptual thinking while the later indicates some level of conceptual understanding.

As with the researcher's mediational moves, the teacher's moves also overlapped occasionally. For instance, Stephen's (S) response below could be considered both as move 3 (*defending one's choice for some reason that lacks conceptual understanding)* and move 6 (*demonstrating incorrect and insufficient conceptual understanding).*

1. S: I thought that since I have learned in the same way … it's a good
2. practice. What they will learn more than this? They should know the
3. story. That's all.

Responses such as the above were double-coded. Excerpt 6.11 illustrates Farha's justification of her choice (move 11) in DA2 (Selfish giant) session when the researcher asked her to reflect on the cognitive demand of her questions.

**Excerpt 6.11**

R: I felt that the question was authentic as you were asking them to explain the reason.
F: Yes. Yes. I asked them to narrate a small incident which happened in their lives.
R: Is it not difficult for their level?
F: No. No. They could have got a chance to narrate something there. Because it is their own personal thing. They feel happy to share with me. I know my students. They were all very excited. And also, you know … they can answer, hm … but you were there no, they were feeling a little shy. But it is a helpful and very interesting topic. They should be given chances to talk. If we don't give, who else will give? … I asked it to encourage them. It actually would curiosity to the other participants and the others also would've, uh, uh, involved in that.

This excerpt shows that Farha purposely posed high cognitively demanding question to her students and she verbalized it clearly in her reciprocal move (move 16).

During the DA sessions, Stephen and Parimala quite frequently expressed their views about the utility of the mediator's suggestions (move 14).

**Excerpt 6.12**

R: Could you think of some ideas for checking with the learners after giving instructions?
S: Hmm ... how ma'am?
R: Like asking … did you all understand everything I told you? Do you have anything to ask me? Please let me know if you have any doubts.
S: Okay. Okay ... I can also tell them to repeat what I have said.
R: Yeah ... exactly. Do such opportunities to speak in the class would be helpful for the students?
S: Yes. Definitely. Nice ma'am. What you have said is 100% right. I will follow this in my classes. I never ask questions … really … in my class. I don't want to frighten them. I want them to enjoy my class happily.

This excerpt demonstrates that Stephen not only evaluated the researcher's support, but also indicated his intention of changing his routine practice of not involving learners in any kind of interaction in the class.

Table 6.8 shows that move 16 (*verbalizing conceptual understanding)* featured more in Farha's (n = 14) DA sessions. In others' responses too, move 16 featured but the analysis of the actual responses demonstrate that they were very brief and were given in response to the researcher's prompt only. The following excerpt from Kiran's DA3 demonstrates how he verbalized his conceptual understanding when the researcher prompted him.

**Excerpt 6.13**

1 R: Ah. So, can you recollect the different types of strategies that we can use
2 when a student gives a response?
3 K: We have to extend the student's response or you can reformulate it.
4 We can also use modelling. Okay. What I learnt from this discussion is that
5 I am reformulating too long.
6 I have to reduce it …hm … and give more chances to students. [Smiling]

Thus, it was found that each teacher varied in the type of reciprocal moves they used in response to the mediation. Further examples of different types of teacher reciprocal moves are provided in Appendix C.

### 6.4.2 Frequency of teacher reciprocal moves

In this study, it was found that teacher varied in the frequency of the reciprocal moves that they used to the mediation provided by the researcher. Table 6.8 presents the summary of the type and frequency of the reciprocal moves made by the teachers in the three DA sessions of this study. The variations in the types and frequency of the teacher moves indicate the variations in conceptual thinking of teachers. In other words, the variations signify the variations in their ZPDs. For example, while move 11 (*justifying one's choice with a sound rationale)* occurred recurrently in Farha's DA sessions, move 5 (*citing problems in the local context*) was mainly found in all of Parimala's DA procedures and especially in DA1 of Anita.

**Table 6.8 Frequency of teacher reciprocal moves**

| RECIPROCAL MOVES | PARIMALA | | | KIRAN | | | MOHAN | | | STEPHEN | | | ANITA | | | FARHA | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DA1 | DA2 | DA3 | DA1 | DA2 | DA3 | DA1 | DA2 | DA3 | DA1 | DA2 | DA3 | DA1 | DA2 | DA3 | DA1 | DA2 | DA3 | |
| 1. Back channelling / silence | 13 | 35 | 24 | 33 | 24 | 8 | 4 | 11 | 16 | 23 | 22 | 16 | 25 | 12 | 14 | 9 | 7 | 7 | 303 |
| 2. Giving brief and insufficient response | 31 | 39 | 28 | 23 | 13 | 3 | 11 | 21 | 12 | 25 | 15 | 13 | 24 | 22 | 15 | 7 | 4 | 2 | 308 |
| 3. Defending one's move for some reason that lacks conceptual understanding | 1 | 2 | - | 7 | 7 | 2 | 2 | 10 | 3 | 15 | 8 | 14 | 9 | 10 | - | 5 | 5 | - | 100 |
| 4. Citing problems in the local context | 2 | 2 | 3 | 10 | - | - | - | - | - | - | - | - | 16 | 16 | - | 5 | 7 | 2 | 63 |
| 5. Claiming inability/insufficient knowledge | 2 | 1 | 1 | 2 | 7 | - | 3 | 5 | 8 | 15 | 14 | 10 | 12 | 12 | 5 | 1 | 3 | - | 101 |
| 6. Demonstrating incorrect/insufficient understanding | 5 | 3 | 7 | 4 | 6 | - | 6 | 3 | 1 | 13 | 12 | 10 | 3 | 4 | 2 | 7 | 3 | - | 89 |
| 7. Agreeing with the mediator's view/suggestion | 8 | 12 | 15 | 10 | 15 | 8 | 5 | 6 | 10 | 8 | 9 | 12 | 19 | 7 | 9 | 6 | 5 | 1 | 165 |
| 8. Thinking of an alternative based on mediator's prompt | 8 | 10 | 8 | 7 | 3 | 6 | 7 | 8 | 14 | 13 | 2 | 8 | 13 | 5 | 5 | 1 | 1 | 1 | 128 |
| 9. Checking conceptual understanding with the mediator | 5 | 2 | 3 | - | - | - | 3 | 5 | - | 2 | 3 | 7 | - | 1 | 4 | 2 | 3 | 3 | 43 |
| 10. Explaining the problem in the teacher-pupil exchange | - | - | 1 | 2 | 4 | - | 2 | 1 | 2 | - | - | 1 | 4 | 5 | 2 | 2 | 3 | 2 | 31 |
| 11. Justifying one's choice with a sound rationale | - | - | - | 3 | 2 | 2 | - | 1 | 1 | 2 | 3 | 3 | 2 | 3 | 1 | 5 | 6 | 5 | 39 |
| 12. Self-reflection | - | - | - | - | - | - | 2 | 3 | 3 | 1 | 2 | 2 | 3 | 1 | 3 | 2 | 8 | 5 | 35 |
| 13. Supporting one's choice citing personal theories | - | - | - | - | - | - | - | 1 | - | 3 | 2 | - | 2 | 2 | - | 2 | 1 | 1 | 14 |
| 14. Expressing views about the utility of the mediator's suggestion | - | - | - | 1 | - | - | 2 | - | - | 2 | 3 | 3 | 4 | 1 | 3 | 1 | 1 | 1 | 22 |
| 15. Suggesting alternative ideas suitable to the context | 3 | 3 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 3 | 3 | 1 | 4 | 40 |
| 16. Verbalizing conceptual understanding | - | 1 | 1 | 4 | 3 | 6 | - | - | 1 | 5 | 4 | 8 | 4 | 6 | 6 | 4 | 4 | 6 | 63 |
| 17. Rejecting mediator's suggestion by providing a rationale | - | - | - | 2 | 2 | 2 | 2 | 1 | 3 | - | - | - | - | 1 | 1 | 1 | 2 | 2 | 19 |

The frequency of the reciprocal moves across the three DA sessions as shown in Table 6.8 indicates that dependent move 2 (*giving brief and insufficient responses;* n = 308) and move 1 (*back channelling/silence;* n = 303) were the most frequently employed moves by the teachers over the period of the study. These findings indicate that the participants were more dependent on the researcher for conceptualizing their understanding. Furthermore, the findings show that the next two most frequently used moves of the participants were move 7 *(agreeing with the mediator's view or suggestion;* n = 165*)* and move 8 (*thinking of an alternative based on mediator's prompt;* n = 128) also adds to the finding that the participants were more dependent on external assistance throughout the DA sessions.

Among the independent moves, the type of response most frequently used by the mediator was move 16 (*verbalization of conceptual understanding;* n = 63). This may be associated with the researcher's attempt to identify the teachers' ZPD through various types of implicit and explicit prompts.

**6.9 Difference in teachers' independent moves from DA1 to DA3**

| **Name of the participant** | **Total No. of reciprocal moves in DA1** | **No. & % of independent moves in DA1** | **Total No. of reciprocal moves in DA3** | **No. & % independent moves in DA3** |
|---|---|---|---|---|
| Parimala | 78 | 3 (4%) | 95 | 6 (6%) |
| Kiran | 110 | 14 (13%) | 39 | 12 (30%) |
| Mohan | 50 | 9 (18%) | 75 | 11 (15%) |
| Stephen | 129 | 15 (12%) | 110 | 20 (18%) |
| Anita | 117 | 21 (18%) | 73 | 19 (26%) |
| Farha | 54 | 20 (37%) | 35 | 26 (74%) |

The above table shows that all the participants (except Mohan) used higher number of independent moves when compared to the same in DA1. Farha showed the highest progress in the use of independent moves from DA1 to DA3. The frequency of independent moves also

demonstrates improvement in teachers' conceptual thinking when supported through the mediational strategy of DA. Further examples of how mediational moves shaped teachers' reciprocal moves are presented in Appendix D.

### 6.5 Summary

This chapter presented results from the analysis of the mediation provided in DA approach to six in-service L2 English teachers regarding their classroom interactional practices. The findings presented in this chapter address RQ2. The main focus of this chapter was on explaining how DA shaped the ZPD of the teachers in the context of the support provided by the researcher. This chapter also provided a list of mediational strategies that may be applicable to formative assessment contexts in in-service as well as pre-service teacher educational contexts.

The results presented in this chapter showed that an analysis of the mediator-teacher interaction helps in understanding teachers' dynamic process of development in conceptual thinking. A common complaint about DA approach is the difficulty in moving from theory to practice (Lauchlan, 2012). This study addresses this gap as it demonstrates that DA can be practically applied to teacher education context. However, it has to be noted that DA in teacher education context requires precision and attention to detail on the part of the researcher/educator. The teachers in this study required a great deal of support and assistance in the process of verbalizing their conceptual understanding. The results of this study demonstrate that if the researcher/educator identifies the ZPD of the teacher accurately and provides appropriate support, the teachers are likely to learn from such support and develop their conceptual thinking skills. The support that is provided targeting the teachers' actual zone of development is likely to be taken seriously by the teacher. However, it is also observed in this study that DA may not automatically lead to change.

The analysis of both the mediator's and the teachers' reciprocal moves provided insight into how much control the teachers gained over their conceptual thinking with respect to classroom interaction. Paying attention to this process of development is more essential than evaluations based on classroom observations.

An examination of the extent to which this conceptual thinking has been forwarded to actual classroom situations is also essential to complement the findings in this chapter. Hence, the next chapter is aimed at analysing the post-DA samples from teachers' classroom data, which is the RQ3 of this study.

## Chapter 7: Analysis of Post-DA Data

In chapter 6, it was argued that the meditational strategy of interactionist DA assisted the teachers in the development of conceptual thinking with respect to classroom interactional practices. In order to find further supporting evidence for this argument, the post-DA samples of the participant teachers were analysed. It was also essential to explore the extent to which there can be a change in the real-time interactional practices of the teachers. This chapter presents findings from the post-DA lessons of the teachers. In particular, this chapter aims to explore RQ 3: To what extent can DA-based mediation promote change in classroom interactional practices of English language teachers? This question is meant to discover if there is any change in the interactional patterns of teachers.

In the first section of this chapter, the data chosen for analysis is presented. The next section reports the quantitative findings. In the following section, findings from qualitative analysis are presented with illustrative examples. The final section presents a summary of the chapter.

### 7.1 Data selection

The analysis of teachers' reciprocal moves in the DA data demonstrated that three teachers showed more improvement in the percentage of independent moves. They were Farha (DA1 – 54, DA3 – 35), Anita (DA1 – 117, DA3 – 73) and Kiran (DA1 – 110, DA3 – 39). Farha, Anita and Kiran also used more independent reciprocal moves in the overall DA sessions when compared to the other three participants, Parimala, Mohan and Stephen. Mohan's data shows that the number of his independent moves in DA3 (15%) came down when compared to that of DA1 (18%). Based on these findings, the participants were categorized into two groups - Group A (Farha, Anita and Kiran) and Group B (Parimala, Mohan and Stephen) for the sake of comprehensibility and readability in the presentation of findings. Group A indicated a

change in their conceptual thinking through their reciprocal moves while Group B showed less difference in their conceptual thinking when compared to Group A participants.

The following lessons were observed in the post-DA phase of the study. These lessons were transcribed for a thorough analysis of the questioning and follow-up moves of the teachers. No DA procedures were carried out after the observation of these lessons.

**7.1 Details of the post-DA lessons**

| Name | Lesson observed | Pedagogic objective | Time (min) |
|---|---|---|---|
| **Parimala** | Three wishes | To develop speaking skill | 13:00 |
| **Kiran** | Short story: I can take care of myself | To develop students' reading comprehension | 13:45 |
| **Mohan** | Good news - Bad news | To develop in students the ability to describe an incident | 14:32 |
| **Stephen** | Play ground | To develop reading comprehension of students | 12:00 |
| **Anita** | Pre-reading task: Picture description activity on the topic 'Save the Trees' | To develop relevant vocabulary and introduce the theme of the lesson to students | 10:00 |
| **Farha** | School Life | To check students' comprehension of the lesson | 15:25 |

A quick look at the above table shows that all the lessons observed were related to meaning and fluency contexts i.e., oral interaction between teacher and whole class. These post-DA lessons were compared with one of the lessons in which the focus was on development of oral fluency. This measure was taken to maintain similarity in the type of lessons compared.

The key findings from the quantitative and qualitative analysis of the post-DA lessons are presented in the following sections.

## 7.2 Findings from quantitative analysis

This section presents a whole picture of the teachers' questioning and follow-up practices before and after the intervention. The conceptual framework that was used to analyse pre-DA lessons was used for the analysis of post-DA lessons too (See 4.1).

Effective teacher questions include authentic and quasi-authentic questions. Asking questions which are cognitively demanding is another feature that can contribute to effective learning in the classroom. Teacher's follow-up is further categorized into evaluation move and uptake. Effective evaluation strategies are described as high-level evaluation strategies in this study as they can serve as rich input to students. They are 1) adding new information to a student's response, 2) modelling a student's response, 3) translation of a response into L2, and 4) reformulation of a student's response. Finally, the presence of uptake is the key feature in determining the effectiveness of classroom interaction. Uptake is asking a new question based on the response given by a student for purposes such as 1) seeking confirmation, 2) checking clarification and 3) extending the interaction. The extent to which these features are present in teachers' interaction is the focus of the following analysis. Table 7.2 presents the frequency count of Group A participants in all these areas.

The findings demonstrate that there is negligible difference in the frequency of Farha's interactional patterns. The number of authentic, quasi-authentic, and cognitively demanding questions were more or less similar in her lessons before and after DA. However, it was noteworthy that there was a rise in her use of evaluation strategy of modelling (Pre-DA (L2): 0; Post-DA: 5). In the case of Anita, a significant rise in the use of her uptake questions was noticed (Pre-DA (L1): 6; Post-DA: 12). Similarly, in Kiran's lessons, a rise in the frequency of authentic questions (Pre-DA (L2): 6; Post-DA: 14) as well as uptake (Pre-DA (L2): 6; Post-DA: 10) was noticed.

**Table 7.2 Frequencies in the interactional patterns of Group A participants**

| | | Group A | | | | | |
|---|---|---|---|---|---|---|---|
| | | Farha | | Anita | | Kiran | |
| | | Pre-DA | Post-DA | Pre-DA | Post-DA | Pre-DA | Post-DA |
| **QUESTIONS** | Authentic questions | 20 | 16 | - | 1 | 6 | **14** |
| | Quasi-authentic questions | 5 | 14 | 4 | 8 | 8 | 10 |
| | Cognitively demanding questions | 27 | 20 | 4 | 3 | 6 | 5 |
| **EVALUATION** | Teacher adding to student's response | 14 | 15 | 3 | - | 9 | 10 |
| | Modelling student's response | - | **5** | - | 1 | - | 3 |
| | Translating student's response into L2 | 1 | 3 | - | - | 1 | 2 |
| | Reformulation of student's response | 7 | 8 | 6 | 5 | 1 | 4 |
| **UPTAKE** | Uptake question to seek confirmation | 2 | - | - | - | - | - |
| | Uptake question for clarification check | - | 2 | - | 1 | - | 1 |
| | Uptake question to extend interaction | 20 | 32 | 6 | **12** | 6 | **10** |

Thus, the quantitative analysis of the interactional patterns of Group A participants i.e., participants who used more independent reciprocal moves during the DA sessions, revealed that there was a corresponding change in their real-time classroom situations as well.

The following table (Table 7.3) presents the frequency in the questioning and follow-up practices of Group B participants.

**Table 7.3 Frequencies in the interactional patterns of Group B participants**

| | | Group B | | | | | |
|---|---|---|---|---|---|---|---|
| | Teacher | Parimala | | Stephen | | Mohan | |
| | | Pre-DA | Post-DA | Pre-DA | Post-DA | Pre-DA | Post-DA |
| **QUESTIONS** | Authentic questions | 2 | 1 | - | **12** | 7 | 4 |
| | Quasi-authentic questions | 4 | 5 | - | **8** | 9 | 6 |
| | Cognitively demanding questions | 4 | - | 2 | 1 | 1 | - |
| **EVALUATION** | Teacher adding to student's response | - | **3** | 3 | 6 | 3 | 1 |
| | Modelling student's response | - | **2** | 1 | 2 | 1 | - |
| | Translating student's response into L2 | - | - | 1 | - | - | - |
| | Reformulation of student's response | 1 | **3** | - | 1 | 5 | 1 |
| **UPTAKE** | Uptake question to seek confirmation | - | 1 | - | - | 1 | - |
| | Uptake question for clarification check | - | - | - | - | - | - |
| | Uptake question to extend interaction | 2 | **5** | 4 | **10** | 9 | 10 |

Table 7.3 shows that there is a rise in the frequency of Parimala's use of high-level evaluation moves. The difference was in the evaluation moves – adding new information (Pre-DA (L2): 0; Post-DA: 3), modelling (Pre-DA (L2): 0; Post-DA: 2) and reformulation of students' responses (Pre-DA (L2): 1; Post-DA: 3). There was also a rise in the number of uptake questions (Pre-DA (L2): 2; Post-DA: 5). Likewise in Stephen's interactional practices too there was a promising change. There was a difference both in the type and number of authentic questions (Pre-DA (L2): 0; Post-DA: 12) and quasi-authentic questions (Pre-DA (L2): 0; Post-DA: 8) posed by the teacher as well as the uptake of students' responses (Pre-DA (L2): 4; Post-DA: 10). Finally, in the case of Mohan, the findings demonstrate that there was no positive

difference in any of the criteria used for analysis. The quantitative analysis of the interactional patterns of Group B participants (teacher who did not demonstrate much difference in their reciprocal moves during the DA sessions) revealed the interesting finding that out of the three teachers, two teachers showed improvement in their use of effective questioning and follow-up practices.

On the whole, the quantitative findings show a difference in the initiation and follow-up practices of all the teachers (except Mohan). These quantitative findings are triangulated with qualitative analysis of excerpts from post-DA lessons.

### 7.3 Qualitative analysis

The analysis in this section throws light on some of the common themes found across the participants' post-DA lessons. They were a) generation of more opportunities for learner participation b) using greater number of high-level evaluation strategies and c) uptake of students' responses. Representative examples are presented for each of these themes below:

#### 7.3.1 Opportunities for learner participation

Anita's lesson (Picture description activity on the topic 'Save the Trees') demonstrates how the teacher generated more opportunities to encourage the participation of her students. It is worth reminding here that the teacher used to worry so much about the low-proficiency of her students and many a time expressed her frustration in the DA sessions. The researcher used explicit mediational moves such as addressing teacher's doubts and prejudices (move 20) and explicit instruction of concepts (move 18) especially with this teacher to enable her to see how her questioning and follow-up practices would be helpful in her situation. This mediational strategy can be said to have had an impact on her thinking as she finally moved towards more independent conceptual thinking in DA3. The following excerpt demonstrates Anita (T) efforts

in creating more space for learner participation unlike her pre-DA lesson where she easily got frustrated with the students' silence in the class.

**Excerpt 7.1**

| | | |
|---|---|---|
| 1 | T: | **What is this programme?** |
| 2 | Ss: | Save the trees. |
| 3 | T: | Save the trees. Save the … trees. Okay, next. Okay. Okay. |
| 4 | | This is a programme. |
| 5 | T | **Now where is this programme taking place?** |
| 6 | S1: | School. |
| 7 | T: | Okay. **This programme is taking place at a school.** |
| 8 | | Okay? Okay. Now, **who are the people in this picture?** |
| 9 | T: | Who are these people? |
| 10 | | *Ikkadunavaallu evaru mari? Ee programme lo evarevarunnaru*? ***[Who are the people here?] [who are the people in this programme?]*** |
| 11 | S: | Teacher. Students. |
| 12 | T: | Ah, Students and teachers. |
| 13 | | Students and teachers are there in this picture. |
| 14 | | [Writes it on the board]. |
| 15 | T: | Okay. **If any programme is going on ... apart from students** |
| 16 | | **and teachers, who will be there?** |
| 17 | Ss: | [Silence] |
| 18 | T: | Suppose in school, some programme is going on, definitely teachers |
| 19 | | will be there, students will be there. Any other person … apart from |
| 20 | | students and teachers? |
| 21 | S3: | [Silence, after a few seconds] Parents. |
| 22 | T: | Parents, yes. Parents also can take place in the ... can take part in the |
| 23 | | programme. |
| 24 | T: | W**ho else … other than parents?** |
| 25 | S4: | Guest. |
| 26 | T: | Yes. Guest. Good. Stand up. Guest. Okay. |
| 27 | T: | **That guest is called?** |
| 28 | S4: | [Silence]. |
| 29 | T: | Guest, right? |
| 30 | T: | **What do we call the person who comes to our school** |

| | | |
|---|---|---|
| 31 | | **at the time of programmes?** |
| 32 | S5: | Chief guest. |
| 33 | T: | Okay. He is called chief guest. |
| 34 | T: | On children's day, one chief guest came to our school. **Who was that guest?** |
| 35 | S5: | ZPTC. XXXX. |
| 36 | T: | Okay, very good. **Now, what is happening in the programme?** |

The above excerpt shows that Anita extended the interaction by generating a number of questions that can elicit students' participation. The questions were all non-authentic in nature and derived only one-word responses from students. Nevertheless, the excerpt demonstrates the effect of mediation on her ability to elicit learner participation through her questions during a real-time classroom scenario. The excerpt also demonstrates her use of reformulation, one of the high-level evaluation strategies, in lines 7, 13 and 33. These changes in interactional practices speak for the effect of DA on her appropriation and internalization of the fundamental concept i.e., generating more learning opportunities for students in classroom interactions.

Similarly, Stephen from Group B also extended the interaction through a variety of questions. Excerpt 7.2 shows how Stephen (T) attempted to generate more opportunities to maximize students' participation, a feature not so prominent in his pre-DA class. This excerpt is from his post-DA lesson on a short story titled 'Playground'.

**Excerpt 7.2**

| | | |
|---|---|---|
| 1 | T: | Ok … now let's come back to the story. |
| 2 | | **How did Molly solve the problem in the story?** |
| 3 | S1: | Molly tell her friend that now it is her turn. |
| 4 | T: | **What she thought first?** |
| 5 | S2: | She think complaining to teacher. |
| 6: | T: | Yes … first she thought of complaining to teacher. |
| 7 | | But then what did she do? |
| 8 | S3: | She not complain. She told her friend. |

9: T: Yes, she used I message technique and told her friend.
10: She solved the problem herself.
11 Okay … now, **did you all understand the main theme of the lesson?**
12 S4: Yes sir. I message *ane* technique *gurinchi*.
***[It's about a technique called I message]***
13 We should solve problems on our own.
14 T: She always tries to solve the problem herself.
15 She is explaining how she faced a problem and solved her problem.
16 Okay. **Do you find any problems with your friends?**
17 Ss: No … no, sir.

18 T: With your close friends? **Or friends or classmates or in your**
19 **neighbourhood, you have friends no?**
20 Ss: Yes sir.

21 T: **Did you have any problems with them any time?**
22 Ss: Yes sir.

23 T: **What do you do generally?**
24 S6: We will solve the problem.

25 T: **How will you solve?**
26 S7: *Vallu cheduga vunte manchiga avvalani korukuntam.*
*[If they are bad we will try to change them]*

27 T: (Repeats the same in Telugu)
28 Okay. **But what problem you had? And how you solved?**
**29** **Can you explain your experience?**

This excerpt can be taken as an illustration for the effect of mediation on Stephen's conceptual thinking, particularly with respect to generation of more opportunities for students to speak in the classroom. In this interaction, the teacher attempted to elicit previous experiences of students in addition to testing students' comprehension of the short story. This was in stark contrast to his interactional choices of the pre-DA class where he read and explained the story (See Sec 5.6). His personal theory of not 'troubling' the students by asking questions does not seem to influence his interactional choices in the post-DA lesson. This change in practice during a real-time classroom situation could be because of teacher's appropriation and internalization of concepts pertaining to effective classroom interaction.

### 7.3.2 Using greater number of high-level evaluation strategies

As explained in the literature review, high-level evaluation strategies are the strategies that effective teachers use consciously as a means of following up students' responses. Strategies such as modelling, reformulation, teacher adding new information, and translation of responses into L2 were recommended by experts in addition to low-level evaluation strategies such as appreciation or just acceptance of the response. Such strategies are likely to provide a rich language input to students. In this study, these follow-up strategies were taught in the workshop. Their conceptual thinking regarding these strategies was also mediated by the researcher during the DA sessions by using various types of implicit and explicit prompts.

Farha, for instance, was the most interactive of all the participants according to the analysis of the pre-DA lessons. In the DA sessions, she exhibited the highest percentage of independent moves (DA1: 37% and DA3: 74%) when compared to all the other participants. Despite her knowledge and ability, she was still open to learning and her participation in this study enabled her to overcome the gap in her interactional practices i.e., extensive use of low-level evaluation strategies (See 5.8). The frequency of evaluation strategies in post-DA lesson (The School Life) demonstrates that there was a rise in Farha's (T) use of high-level evaluation strategies (Pre-DA: 8; Post-DA: 16). Excerpt 7.3 given below demonstrates this finding.

**Excerpt 7.3**

| | | |
|---|---|---|
| 1 | T: | How do you want your teacher to be? |
| 2 | S1: | Friend, teacher. |
| | | |
| 3 | T: | **Just like a friend.** So, teacher should be like a friend. |
| 4 | | You all agree with this? |
| 5 | Ss: | Yes teacher. |
| | | |
| 6 | T: | Anything else? |
| 7 | S2: | Like mother, teacher. |
| | | |
| 8 | T: | **Yes. Some children want teacher to be like a mother.** |
| 9 | | **A teacher should be like a parent. Whether it's male or female,** |

| | | |
|---|---|---|
| 10 | | **a teacher should be like a parent.** |
| 11 | | Very good. Thank you. |
| 12 | | Anything else? |
| 13 | Ss: | [Silence] |
| 14 | T: | Is that all you expect from your teachers? |
| 15 | Ss: | [Silence] |
| 16 | T: | Why do you want your teachers to be like your friend and parents? |
| 17 | Ss: | [Unclear. Several responses] |
| 18 | T: | Can you elaborate? I know you agree with this. But, why? |
| 19 | | Why do you think a teacher should be your friend? |
| 20 | | XXXX? [Pointing to a student] |
| 21 | S3: | [Feeling shy] |
| 22 | T: | Say something, ma. Do you want your teacher to be friendly? |
| 23 | S4: | Yes teacher. |
| 24 | T: | Yes. Why? |
| 25 | S4: | *manchiga chaduvukovalani cheptaru, teacher.* *[They tell us to study well, teacher]* |
| 26 | T: | Yes. **Teachers tell you to study well, just like your parents.** |
| 27 | | Uh … what else? |
| 28 | S5: | Teachers encourage and … support**.** |
| 29 | T: | Yeah, that means you want your teacher to support you. |
| 30 | | In all the ways … am I right or not? |
| 31 | | What are those ways in which you want the support from your teacher? |
| 32 | S6: | Any problems means … I tell teacher. |
| 33 | **T:** | **That means … you want your teacher to understand your problems.** |

In this excerpt, it can be seen that Farha demonstrated a variety of high-level evaluation strategies. She reformulated the student's response (Line 3: Just like a friend), added new information to another student's response (Lines 9 & 10: A teacher should be like a parent. Whether it's male or female, a teacher should be like a parent.), and also translated the student's response into L2 (Line 26: Teachers tell you to study well just like your parents.). Farha made attempted to shape students' contributions through such high-level strategies in addition to

appreciation and acceptance of students' responses which were her routine evaluation practices.

This change in her practice can be attributed to the researcher-teacher interactions in the DA sessions. On several occasions, the researcher drew attention to the evaluation moves in her lessons (implicit move 2) and made to reflect on the benefits of using a high-level evaluation strategy (implicit move 3). The teacher and the researcher together arrived at a shared perspective through negotiations on the need for follow-up and the most suitable type of follow-up in the IRF exchange under focus (See 6.2 (b) for an example for DA with Farha). Thus, through dynamic process of assessment, an attempt was made by the researcher to mediate Farha's conceptual thinking. This mediational experience perhaps could have further raised her awareness of effective interactional practices.

Group B participant Parimala's post-DA lesson also illustrated a rise in the use of high-level evaluation strategies. Parimala was the least interactive in this entire study with few effective questions and follow-up moves in the pre-DA lessons. However, quantitative analysis of her post-DA lesson indicates a slight rise in her evaluation and uptake choices.

Parimala had actually depended more on the researcher for verbalization of her conceptual thinking. Nevertheless, the change observed in her real-time classroom practices could be due to internalization of concepts that were implicitly and explicitly addressed during the DA sessions. The following excerpt (7.4) demonstrates the quantitative finding that pointed towards a change in Parimala's (T) evaluation practices.

**Excerpt 7.4**

| | | |
|---|---|---|
| 1 | T: | Suppose God comes in front of you, what will you ask? |
| 2 | Ss: | [Silence] |
| 3 | T: | Anything about family, yourself or friends? |
| 4 | S1: | Give good habits. |

| | | |
|---|---|---|
| 5 | T: | Very good. **You will ask God to give good habits.** |
| 6 | | What else? |
| 7 | S2: | My family is healthy. |
| 8 | T: | Very good. **My family should be healthy.** |
| 9 | | Come on, stand up and say what you will ask. |
| 10 | S3: | Give good studies for me. |
| 11 | T: | **Give good knowledge and good marks.** |
| 12 | | Next. Regarding school what you will ask? |
| 13 | | Use the phrase, I wish that … I taught you no yesterday. |
| 14 | S4 | I wish that my school have more rooms. |
| 15 | T: | **More rooms.** [Surprised] Correct. **There are no rooms in our school.** |
| 16 | | Yes. Then? |
| 17 | S5: | I wish there have good students. |
| 18 | T: | **I wish there were good students. Okay.** |
| 19 | | **Uh, next.** |
| 20 | S6: | I wish that we wear nice uniform. |
| 21 | T: | **I wish that we wear nice and colourful uniform.** |
| 22 | | Anything else? Come on. |
| 23 | S7: | I wish there were a good teacher. |
| 24 | T: | Very good. Good teacher. I wish there were more games periods. |
| 25 | | [Smiling] Don't you want more games periods children? |

This excerpt shows the change that was observed in Parimala's interactional practices post-DA i.e., the use of different types of evaluation strategies, especially modelling and reformulation. The teacher used modelling in Lines 8 (My family should be healthy.) and 18 (I wish there were good students.). Similarly, reformulation can be noticed in Line 5 (You will ask God to give good habits.), Line 11 (Give good knowledge and good marks) and Line 21 (I wish that we wear nice and colourful uniform). There were 5 instances of high-level evaluation in her lesson on the whole.

The excerpt presented here actually indicates that there are many other potential areas for improvement in Parimala's post-DA lesson. For instance, on the basis of the above excerpt

it can be seen that her questioning practices need improvement. She had missed many potential areas for uptake of students' responses. Despite these lacunae in her interaction, the slight improvement in her evaluation strategies can be taken as a sign of her maturing abilities. Parimala's post-DA performance affirms an important notion in SCT that each individual differs in the rate at which they appropriate the concepts and hence they also differ in the kind of assistance they require in the process of internalization of concepts.

### 7.3.3 Uptake of students' responses

One of the common areas in which a positive change was noticed in the teachers' interactional practices was uptake of students' responses. In this study, Kiran's post-DA lesson ('I can take care of myself' - a short story prescribed in class VIII textbook) demonstrates the quantitative finding which showed a rise in his uptake questions. Excerpt 7.5 illustrates Kiran's uptake choices after receiving mediation through DA.

**Excerpt 7.5**

| | | |
|---|---|---|
| 1 | T: | Mother rat has a daughter. Young daughter. |
| | | So, mother rat was searching for |
| 2 | | a bridegroom. Whom did she find? |
| 3: | Ss: | Sun God. |
| | | |
| 4 | T: | What is the response given by the Sun God? |
| 5 | S1: | He said, "No". |
| | | |
| 6 | T: | Who is powerful than Sun God? |
| 7 | S2: | Rain. |
| | | |
| 8 | T: | Okay. Sun God said that rain is powerful than himself. |
| 9 | | **Do you think rain is powerful than Sun?** |
| 10 | Ss: | [Silence] |
| | | |
| 11 | T: | **Do you agree that rain is powerful than Sun God?** |
| 12 | Ss: | Yes. |
| | | |
| 13 | T: | **Why? Why do you think rain is powerful than Sun God?** |
| 14 | Ss: | [Silence] |

| | | |
|---|---|---|
| 15 | | Okay. I will ask one question. Can we live without rain? |
| 16 | S3: | No. |
| 17 | T: | **What are the uses of rain?** |
| 18 | S4: | Rains give water. |
| 19 | S5: | Crops will grow because of rains. |
| 20 | T: | **Crops will grow only because of rains. Sun light is not sufficient?** |
| 21 | Ss: | No sir. |
| 22 | T: | Only crops. **Can we live without rain?** |
| 23 | | **Can human beings live without rain?** |
| 24 | Ss: | No sir. |
| 25 | T: | **Why? Why man cannot live without rain?** |
| 26 | | XXXX, stand up and tell. |
| 27 | S6: | There is no drinking water. We will die. |
| 28 | T: | Not only human beings, no creature, no living being can live on this |
| 29 | | Earth planet without rain. |
| 30 | | So, **who do you think is more powerful? Sun or rain?** |
| 31 | S7: | Rain. |
| 32 | S8: | Sun also powerful, sir. No sun, there is no light. |
| 33 | T: | Yes, you are absolutely right. Sun is powerful. If there is no Sun, |
| 34 | | there is no life. But in this story, **why did Sun God say I'm not** |
| 35 | | **powerful … rain is powerful than me?** |
| 36 | S8: | [Silence] |
| 37 | T: | Why because Sun God is very humble. He didn't say I'm great. |
| 38 | | I'm powerful. I will marry. He humbled himself and |
| 39 | | said there is someone else. He is more powerful than me. That is rain. |

This excerpt shows how Kiran developed meaningful interaction in the class through uptake questions (Lines 11, 13, 17, 20, 23, 25, 30, and 34). The rise in uptake questions can be attributed to conceptual thinking that he showcased through independent reciprocal moves in the DA sessions.

This change in practice can be attributed to interactionist DA sessions. On several occasions, the researcher drew attention to how the teacher's idiosyncratic practice of

extensively teacher talk took away the opportunities for students. The researcher tried to attain intersubjectivity on this matter by implicitly as well as explicitly pointing out the need for minimizing his talk and providing more opportunities to students. Thus, this process of collaborative thinking could have stimulated the teacher to self-regulate his ineffective practices.

The following section presents a brief summary of the findings reported in this chapter.

### 7.4 Summary

The goal of this chapter was to explore the difference in the interactional practices of the teachers after conducting dynamic process of assessment. The findings from quantitative and qualitative analyses of the participants' classroom interactions suggest that DA procedures have the potential to bring about a change in teachers' classroom interactional skills. Five of the six participants showed positive change in their ability to enhance learner participation in their classroom interactions. One of the participants' interactional practices remained at the same level as that of pre-DA. An in-depth analysis into Mohan's participation in DA would reveal more interesting facts but it is outside the scope of this study. However, the positive improvement observed in the rest of the participants was found to be at varying levels and in varying concepts related to interaction.

On the whole, in this study, DA appeared to have an impact on the teachers' classroom interactional practices. The improvement in classroom interactional practices may be attributed to changes in their ZPD that took place when their actual zone of development (their initial level of thinking) was targeted. The findings in this study also suggest that bringing about a change in the real-time classroom interactional practices is a lengthy process and teachers may benefit from sustained mediation of a peer/expert. The results presented in this chapter also support the findings from the research on teacher cognition that teachers' conceptual thinking

underlies the ability for effective decision-making during the moment-to-moment classroom interactions.

The next chapter is aimed at presenting a summary of the key findings and discussing the implications of the study.

# Chapter 8: Discussion

This chapter contains five sections: summary of the findings with reference to each research question, discussion of the findings, implications of this study, limitations of the study and finally, directions for further research.

## 8.1 Summary of the findings

In the domain of second language teacher education, a substantial number of studies in ESL contexts focused on describing classroom discourse to better understand the role of expert teachers in stimulating students' participation and engagement. However, there is hardly any research study in the ESL context which explored into the ways and means of improving teacher expertise in classroom discourse. The current study is motivated by the researcher's unhappiness with in-service teacher development programmes which are most often prescriptive in nature and unproductive in terms of actual teacher learning. Being an L2 teacher herself and a resource person to L2 teachers in the local context, the researcher had a preliminary understanding of the kind of interactional practices that experienced teachers tend to follow routinely and the ineffectiveness of such practices in creating language learning opportunities for students. Given this background, the researcher perceived a need for engaging teachers in professional discourse on their own lived classroom events. Such subjective experience of reflecting on one's own interactive decisions was expected to stimulate change in their practices as well. In order to address this issue methodically and contribute to the knowledge and understanding of second language teacher learning, this research project was taken up. It specifically explored the impact of the dynamic process of assessment on English language teachers' classroom interactional practices. A summary of the findings for each research question is presented below:

**RQ1: Initial classroom interactional practices**

The first research question of this study aimed at investigating the initial classroom interactional practices of the six participants who volunteered to be a part of this study. The research question was: What are the dominant interactional patterns in the participant teachers' classes before DA and what is the effect of these practices on opportunities for student participation and second language learning? This question was aimed at gaining insight into the actual questioning and follow-up practices of teachers before providing any intervention. The pedagogic focus of the lessons taken was on developing the oral fluency or speaking skill of the students. The analysis of preliminary interactional practices helped in identifying the teachers' idiosyncratic and routine practices which were found to be not conducive for second language learning in classroom.

A preliminary glimpse at the data (12 lessons, 2 each of 6 participants) demonstrated that the teachers elicited student participation. However, an analysis of the nature of the questions asked by teachers revealed that they were mostly non-authentic in nature and were meant for testing students' comprehension of factual details. The dominant type of questioning pattern found in most of the participants (except one of them, Farha) was use of non-authentic questions which elicited just one-word responses from the students. Students got few opportunities to talk about their personal experiences, previous knowledge, personal observations, views or opinions.

The analysis of teacher questions for cognitive demand on students revealed that teachers were mostly in favour of asking less cognitively demanding questions (except for two teachers - Farha and Kiran). Less cognitively demanding questions meant that the opportunities generated in the class did not give students the fillip needed to exercise their cognitive capabilities. The dominance of non-authentic and less cognitively demanding questions was concluded as unfavourable for second language learning in the classroom.

The analysis of follow-up moves revealed that the dominant pattern in evaluation was use of low-level strategies such as appreciation and repetition of the response. Almost all the teachers appreciated the students for their responses and moved ahead. With respect to uptake of students' responses, it was found that students' responses were simply accepted and they were not probed further. Due to the dominance of low-level evaluation and lack of uptake in the follow-up moves of the teachers, it was once again concluded that the teachers' follow-up moves were unfavourable for second language learning in the classroom.

Other idiosyncratic practices such as teacher interruption, long teacher turns, and insufficient orientation to the task were noticed in teachers' classes. Thus, observation of teachers' classes prior to intervention equipped the researcher with the necessary background information needed to mediate appropriately during DA.

**RQ2: Role of DA in shaping teachers' conceptual thinking**

The second research question of this study was: How can DA-based mediational discourse shape teachers' conceptual thinking in relation to classroom interactional practices? This question was aimed at understanding more closely the efficacy of DA in shaping teacher thinking in relation to classroom interaction. To address this question, the data (i.e., audio recordings) collected during the interactionist DA sessions were used. Mediational moves of the researcher during DA sessions were categorized into implicit and explicit prompts. Likewise, teachers' reciprocal moves were categorized as dependent and independent moves. The frequency of mediator's moves and teachers' reciprocal moves illuminated the nature and role of DA in the process of shaping teacher thinking.

The key finding from the analysis of mediator's moves showed that implicit prompts (67%) were used most often by the researcher when compared to explicit prompts (33%). Secondly, there was reduction in the frequency of the mediational support offered to four teachers (i.e., Kiran, Stephen, Anita and Farha) in the final DA session.

The key finding from the analysis of teachers' reciprocal moves was that the teachers used mostly dependent moves in all the three DA sessions. The recurrent reciprocal moves used were move 2 (*giving brief and insufficient responses),* move 1 (*back channelling/silence)* and move 7 (*agreeing with the mediator's view/suggestion).* However, a comparison of independent reciprocal moves in DA1 and DA3 revealed that three teachers used greater number of independent moves when compared to the other three teachers of this study. While the total number of independent moves in DA1 was 99 (16%), in DA3 it was 147 (35%), indicating a rise in the independent moves of the participants.

**RQ3: Impact of DA on interactional practices**

In the post-DA stage of the study, teachers' classes were video-recorded once again. The initiation and follow-up choices of the teachers in these lessons were analysed in order to compare the frequency of their occurrence with that in the pre-DA lessons. The pedagogic focus of these post-DA lessons was once again on development of oral fluency or speaking skill of the students.

The key finding from this data was that there was improvement in the initiation and follow-up choices of five teachers i.e., Farha, Kiran, Stephen, Anita and Parimala. Not much difference was noticed in the interaction of Mohan. The common changes observed in all the five teachers were a) generation of more opportunities for learner participation b) using greater number of high-level evaluation strategies and c) uptake of students' responses.

**8.2 Discussion of the findings**

Using a quasi-experimental design (i.e., pre-test, intervention and post-test format on one group of participants), this study sought to trace an empirical account of change in L2 teachers' thinking when they are engaged in DA informed analysis of their own interactive decisions. Through a detailed analysis of the recorded data presented in the previous chapters,

this study evidenced that engaging teachers in DA procedures can have a positive impact on their potential for conceptual thinking. In this study, four teachers (except Parimala and Mohan) showed improvement with respect to the amount of mediation they required. The mediational moves which had numbered 129, 117 and 110 in the case of Stephen, Anita and Kiran respectively, decreased during DA3 to 110, 73 and 39. The researcher's moves also decreased in the case of Farha who required the least amount of mediational assistance right from the beginning (DA1 = 54; DA3 = 35). The decrease in the amount of mediational assistance points towards a change in the teachers' ZPD. The variations in the type and amount of mediation that teachers required in the DA sessions could be ascribed to the variations in teachers' ZPD or their actual cognitive level of thinking.

Furthermore, the difference in the teachers' reciprocal moves from DA1 to DA3 also illustrates the positive impact that DA had on their conceptual thinking. Most of the teachers used more independent moves in DA3 (See Table 6.4.3). However, there were variations from one teacher to another in terms of the type and frequency of the independent moves that they used. The findings from Farha (Group A) and Parimala (Group B) best illustrate the difference in the frequency and type of independent moves noticed in this study. In terms of frequency, while Farha showed the highest percentage of difference between the independent reciprocal moves used in DA1 and DA3 (37%), Parimala showed the lowest percentage of difference at 2%. Similarly, in terms of the types of independent moves used, Farha made more use of independent moves such as move 11 *(justifying one's choice with a sound rationale),* move 14 *(expressing views about the utility of the mediator's suggestion)* and move 16 *(verbalizing conceptual understanding)* during DA3. These moves were either non-existent or few in her earlier two DA sessions. Parimala, who showed the lowest percentage of difference in the use of independent reciprocal moves, used move 15 *(suggesting alternative ideas suitable to the context)* thrice and move 16 (*verbalizing conceptual understanding)* once. This explains the

reason for giving more explicit instruction to Parimala. The variations in teachers' responsivity to mediation could be due to the variations in the teachers' interpretations of their lived classroom experiences which included their content knowledge, awareness of students' needs, and beliefs about interaction. Thus, this study shows that DA is a unique model where teachers get individualized support and opportunities to co-construct knowledge with the mediator's support. The most noteworthy point here is that the whole process of assessment is carried out in relation to the teachers' actual zone of development. Hence, variations in actual ZPD and mediational support can be said to have created distinct learning opportunities for each teacher.

The rise in independent moves from DA1 to DA3 in this study could also be due to the reason that mediational discourse is a completely new experience for these teachers. They might have taken time to open up and verbalize their thoughts or ideas freely. Nevertheless, this study demonstrates that DA played a significant role in enabling teachers to externalize their thoughts, identify the problems in their routine practices and in encouraging them to envision more effective ways of providing learning opportunities for students. Negotiation between the researcher and the teachers in the process of attaining intersubjectivity can be said to have brought a change in teachers' ZPD or in other words their potential for conceptual thinking.

DA procedures used in this study proved to be more effective in bringing a fundamental change in teachers' thinking especially because the focus was on analysis of teachers' own classroom practices. Such type of interactionist DA helped in changing their perspectives towards teacher's conspicuous role in generating more learning opportunities for students in the classroom.

The findings of this study add to the existing evidence in support of the effectiveness of DA in promoting learning. The finding that DA had a positive impact on shaping teachers' conceptual thinking resonates with findings from other studies on interactionist DA, where

participants showed improvement in their respective domains of learning such as oral proficiency (Poehner, 2005) and academic writing (Shrestha, 2011) through tutor's mediation. In the field of teacher education, the findings of this study are similar to the findings from the studies conducted by Golombek (2011) and Moradian, Miri and Qassemi (2015) on pre-service teachers. Both these studies demonstrated that participants showed ability for independent decision-making through their reciprocal moves. For instance, the teacher-learner in Golombek's study showed considerable progress in her ability to recognize the problems in her interaction and reflect on what could have been a better move in a given context. Similarly, the four participants in Moradian, Miri and Qassemi's study demonstrated an enhanced perspective of their interactional choices with the support of their teacher educators. In the current study too, the L2 teachers showed an enhanced ability for verbalizing their conceptual understanding (move 16), suggesting alternative ideas suitable to the context (move 15) and justifying the rationale for their choices (move 11). Based on the similarity with the findings of the previous studies, it can be interpreted that DA works effectively in the context of L2 teachers as well.

In addition to the improvement noticed in the conceptual thinking of teachers, the current study also revealed that there was a positive improvement in the nature of questions and follow-up strategies chosen by almost all the teachers (except Mohan) in the post-DA lessons. After the intervention, five out of the six teachers demonstrated considerable difference in their interactive decisions. The difference in teachers' interactive resulted in improved learner participation in the class, and better language learning opportunities for students. This finding is similar to that of the study conducted by Moradian, Miri and Qassemi (2015) in Iran where English is taught as a foreign language. The current study thus adds to the existing evidence on the effectiveness of DA in bringing about a promising change in the teachers' ability for making effective decisions.

Nonetheless, this study shows that there were great variations in the kind of improvement noticed in the teachers' post-DA interactions. Teachers differed markedly in the kind of questioning and follow-up strategies that they deployed during interactions. While Stephen asked a greater number of authentic and quasi-authentic questions, Kiran focused more on uptake questions. While high level evaluation moves were prominent in Parimala and Farha, Anita concentrated more on eliciting learner participation. However, no noticeable change was observed in Mohan's interaction. A similar finding was also noticed in the study of Moradian, Miri and Qassemi's (2015) wherein the four pre-service teachers that participated in the study were found to exhibit varying levels of improvement in their post-DA interactional choices. The current study thus adds to the available evidence that the trajectory in which a particular learner internalizes a concept varies from one another.

The findings of this study also add to the enormous evidence available in support of SCT principle that development first takes place in inter-psychological plane and then becomes a part of intra-psychological plane. This study showed that development is rooted in socialization and mediation provided by an expert/peer/knowledgeable other using semiotic and cultural tools (language and videos in this study) existing in a community of practice. In this study, the researcher primarily used verbal mediation to socialize the teachers regarding expert ways of thinking during interactive decision-making. In addition to the semiotic tool i.e., language, the researcher used videos and transcriptions to encourage teachers' cognitive abilities. Actual data drawn from teachers' own teaching was made available to teachers before DA and this stimulated teachers' agency to externalize their thoughts. In addition to this, the researcher's application of a variety of mediational strategies in harmony with each teacher's ZPD can be said to have paved the way for a surge in independent thinking of the participants. All these mediational experiences provided by the mediator on an inter-psychological plane subsequently led to modifications in the intra-psychological plane, which became evident in

this study through their independent reciprocal moves as well as changes in their interactive decisions. The use of more effective strategies by teachers (i.e., using more authentic and quasi-authentic questions, different types evaluation strategies and uptake of students' responses) can be said to have happened because of the opportunities for co-construction of knowledge in the inter-psychological plane.

Interactionist DA i.e., assessment carried out in an informal and interactive mode also can be said to have enabled the teachers to open up and freely discuss their views and opinions with the researcher. The interaction in this study was free of any kind of judgment or evaluation of teachers' practices. Dialogic mediation of the researcher was purely aimed at teacher learning and change in teacher thinking rather than asking for application of newly taught concepts. The researcher consciously tried to attain intersubjectivity by providing teachers with ample opportunities to see for themselves why certain choices they made in the class were ineffective, and how they can be rectified. The teachers were able to obtain deeper insight into their practices and the internalization of concepts helped them to move beyond their current level of thinking. The changes observed in post-DA lessons point towards the internalization of concepts by the teachers.

Although in this study all the teachers accepted to participate voluntarily, the background of the teachers such as their attitude and agency may also have contributed to variations in their responsiveness. Teachers such as Anita and Stephen appeared to be more willing to actively engage in DA sessions. For instance, during DA Anita took down notes of points that she felt were important for her teaching and Stephen asked more questions to clarify his doubts. Teachers' active participation could have contributed to the formation of their ZPD. More experienced teachers of this study took a back seat in the initiation DA sessions through their brief responses and focused more on rationalization of their actions when compared to other teachers. These may be the reasons for the high incidence of dependent reciprocal moves

such as move 2 *(giving brief and insufficient response)* and move 1 *(silence/back channelling)* in this study. Moreover, Mohan who has 15 years of teaching experience, most often rejected the problems identified by the mediator by trivializing them and most often expected direct feedback from the mediator. This study thus shows that the productivity of DA hinges upon 'learner reciprocity' (Lidz, 1991).

In this section, the findings of the study have been discussed from different perspectives. The following section elaborates the implications of this study to different stakeholders related to the field of L2 teacher development.

### 8.3 Implications of the study

The DA sessions in this study were conducted with a sound theoretical understanding of how language reflects and promotes conceptualizations about lived experiences. Now that the findings of this study have revealed empirical evidence regarding the role of language and mediational discourse, teacher trainers can use DA in fostering L2 teachers' conceptual thinking. Especially, the typology of mediational moves tried out in this study to conduct DA procedures can be used by teacher educators and trainers with their participants.

A significant finding in this study is that dialogic mediation by a peer or knowledgeable other can bring about a change in L2 teachers' conceptual thinking, which underpins the ability to take effective decisions. This implies that trainers/educators/administrators first need to recognize the vital role of alternative assessment practices in in-service teacher development programmes. There should be more space for activities such as open lessons, and post-observation discussions where the weaknesses in the observed lessons are mediated by a trainer or a knowledgeable peer. By engaging teachers in structured dialogue such as DA, their current state of cognitive thinking becomes explicit and it becomes easier for the mediator to impart necessary support or expert ways of thinking to the teachers. Subjecting L2 teachers to these

kinds of dialogic mediational experiences paves way for ‘reorganization, refinement and reconceptualization of conceptual thinking’ (Johnson & Golombek, 2011).

Another major pedagogic implication of this study comes from the data collection procedure used in this study i.e., recording the classes and going through it at a later date. It was observed in the study that video or audio recording of the classes stimulated teachers to reflect on a number of aspects related to their teaching. Not only this, going through the recorded data along with the mediator opened the doors for the teachers to identify those aspects of interaction which they had overlooked or missed to notice. This implies that videos/audios of classroom interaction can be used as self-assessment tools by teachers themselves to identify the areas for improvement. Similarly, recorded data can be used as a diagnostic tool by trainers/peers to mediate in the teacher’s skill development. Teachers working in a school or in a block can come together informally as a study group, share the recorded data with one another and discuss the ways and means of engaging students in more meaningful interactions.

The findings of this study highlight the significance of mediation in an informal set up. These days a number of online and offline informal networking groups (Ex: ELTA, Telangana) exist for L2 teachers’ professional development. Leaders and administrators of such groups can take initiative in designing mentoring services where interactionist DA-based mediation can be provided by subject experts. They can also plan for enrichment programmes that can bring trainers and teachers together as teams for sharing and discussion on lived classroom events. Efforts should also be taken to engage teachers in overtly linking lived classroom experiences or every day classroom practice with theoretical concepts and experts’ suggestions. Such mediational discourse carried out in an informal set up can be more fruitful in fostering teachers’ conceptual thinking because teachers come forward out of their own volition rather than because of some force from an authority.

This study has implications for administrators and heads of institutions as well. With changing times, the role of a teacher has changed from that of a knowledge provider to that of a facilitator. However, there is lack of support to teachers in equipping themselves with appropriate skill sets required to adjust in their new role. In order to face this challenge, interested and volunteer teachers have to give provided training to be mentors. They should have the theoretical knowledge and the skill set required to mediate in other teachers' abilities and lead them towards expertise. For instance, in this study, teachers were not taught the theoretical concepts and terms because it is a whole new experience for teachers to engage in dialogue regarding something that happens within the four walls of the classroom. In such a context, instructing them about theory or technical terms would make it seem like a lecture which may turn them away from the activity. Moreover, in-service teachers may be reluctant to talk about their own practices or receive instruction from a peer. While conducting DA sessions too, the mediator has to actively seek opportunities for encouraging teacher reflections and for modelling conceptual thinking. Mediation requires patience, interest and commitment to teachers' professional development. Policy makers need to focus on the role and significance of mediation and make necessary provisions for creating such a support system at every level of school education. Administrators such as District and Mandal level educational officers and institutional heads should encourage regular teacher-mentor meetings by providing the required logistical support.

Now, the limitations of the study are discussed in the following section.

### 8.4 Limitations of the study

This study only focused on interactional competence of teachers and hence teachers were encouraged to take lessons in which meaning and fluency were the pedagogic objectives of the class. The choice of lessons may have impacted the nature of teachers' questions and follow-up strategies to a certain extent. If the research focus was on form and accuracy

contexts, the interactional patterns may have been different. The change in interactional patterns may have influenced the mediational moves and the reciprocal moves of the teachers as well. Hence, the impact of DA observed in this study cannot be generalized to other areas of language teaching. More studies are needed to prove the robustness of DA in promoting teachers' classroom interactional practices.

Interpretations regarding the effectiveness of DA in this study may be re-examined as the researcher had not looked into the possible effect of social, cultural and historical factors on mediation and responsivity during DA. In this study, Anita showed greater interest in learning by taking down notes, asking questions and doubts while Mohan demonstrated less interest in learning. A quantitative or qualitative study which explores teachers' responsivity in relation to variables such as gender, age, educational background etc. may yield rich insights into how mediation can be done in a more fruitful manner.

The findings of this study are only limited to face-to-face interactions. The results may not be generalized to mediation that may be carried out through computer-based applications or mobiles.

### 8.5 Directions for further research

There is vast scope for further studies on issues related to DA of L2 teacher competencies. First and foremost, there is a huge dearth of studies on the effectiveness of DA in promoting teacher cognition. Hence more studies are needed in this domain to understand closely how DA can be used to support in-service teachers' ability to think conceptually and take effective interactive decisions.

Many of the L2 teachers teaching in government schools face many challenges as they had studied in regional medium schools themselves. So, there is vast scope for studies on the effectiveness of DA or any alternative assessment practice such as self- and peer-assessment

in enhancing teachers' oral proficiency, knowledge of content or their ability to teach in English medium.

This study has focused mainly on individual teacher development and so one-to-one DA sessions were conducted. Obviously, this type of one-to-one interaction is extremely time consuming. Besides, organizing the mediational sessions poses a huge practical challenge to interested teachers unless it is backed by institutional support. In view of these hurdles faced by the researcher while collecting data, it is opined that exploring online DA would be of great contribution to the fields of assessment as well as L2 teacher learning. A number of studies have been carried out on the effectiveness of computer-based DA (CBDA) in the context of different synchronous and asynchronous applications (Birjandi & Ebadi, 2012; Ebadi & Rahimi, 2019; Haez & Delfani, 2022; Kamrood et al., 2019; Rad, 2021; Tzuriel & Shamir, 2002). However, these studies were mostly on primary school and undergraduate learners. There is hardly any study that looked into how CBDA procedures work in the context of in-service teachers. Investigations in this direction would reveal new and rich insights on the role of mediation in teacher learning. Such studies will also be helpful in designing programmes that facilitate mediation on a large scale.

Closely connected with the issue of reaching out to a large group of participants in the place of individualized mediation is the focus on the effectiveness of group DA (GDA). Recently, there has been a growing interest in GDA as well. The possibility of conducting GDA on an entire class of L2 learners has been investigated by Poehner (2009) and on a group of candidates who expected to make careers in the US army by Haywood and Lidz (2006). Shrestha (2011) opines that 'providing mediation that is sensitive to GDA demands much more elaborate planning as it may be complicated and challenging than working in one individual learner's ZPD' (p. 117). Yet, GDA studies on teacher learning are more relevant given the huge number of L2 teachers in government schools. Teachers can be formed into homogenous

groups based on their qualification, experience or any such variable depending upon the purpose of the training. Such grouping makes it possible to identify group ZPD based on which appropriate mediational support can be provided.

### 8.6 Conclusion

Teachers' skill development is crucial in the process of generating equitable learning opportunities for all. However, L2 teachers of government schools suffer from the lack of targeted and need-based capacity building initiatives. This study filled the gap by showing how teachers can change their routine practices by learning to think conceptually. It is significant for exploring two discrete strands of research - alternative assessment practices and L2 teacher learning – in a single study. The study showed that DA in which assessment is coupled with instruction can help teachers to overcome the drawbacks in their interactional practices, and generate more language learning opportunities for their students. It was found that DA boosts the process of teacher learning and enables them to adopt practices that would keep the students interested and motivated in learning English. Future teacher development programmes may yield greater results by applying the sociocultural principles such as collaboration and co-construction of knowledge used in this study for development of teachers' higher cognitive functions. Change in teachers' conceptual thinking is likely to usher in a promising change in the whole enterprise of achieving educational goals and standards.

## References


Ableeva, R. (2010). Dynamic assessment of listening comprehension in second language learning.

Ackland, R. (1991). A review of the peer coaching literature. *Journal of Staff Development, 12*, 22–27.

Aghaebrahimian, A., Rahimirad, M., Ahmadi, A., & Alamdari, J. K. (2014). Dynamic assessment of writing skill in advanced EFL Iranian learners. *Procedia-Social and Behavioral Sciences*, *98*, 60-67.

Ahmadi Safa, M., Donyaie, S., & Malek Mohammadi, R. (2015). An investigation into the effect of interactionist versus interventionist models of dynamic assessment on Iranian EFL learners' speaking skill proficiency. *Teaching English Language*, *9*(2), 146-166.

Alexander, R. (2010). Dialogic teaching essentials. *Singapore: National Institute of Education*, 1-7.

Aljaafreh, A. L., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal, 78*(4), 465-483.

Allwright, D., & Bailey, K. M. (1991). *Focus on the language classroom: An introduction to classroom research for language teachers*. Cambridge University Press.

Antón, M. (1999). The discourse of a learner-centered classroom: Sociocultural perspectives on teacher-learner interaction in the second-language classroom. *The Modern Language Journal*, *83*(3), 303-318.

Antón, M., & DiCamilla, F. J. (1999). Socio-cognitive functions of L1 collaborative interaction in the L2 classroom. *The modern language journal, 83*(2), 233-247.

Arend, B., & Sunnen, P. (2015, November 24-27). Dialogic classroom talk - Rethinking messy classroom interaction [Conference paper]. *EAPRIL Conference Proceedings*, No. 2, pp. 423-434. Luxembourg.

Bailey, K. M. (2006). *Language teacher supervision: A case-based approach.* Cambridge University Press.

Bambino, D. (2002). Critical friends. *Educational leadership*, *59*(6), 25-27.

Banerji, R. (2022). Basics and beyond: The case of middle school children in India. Retrieved from: https://img.asercentre.org/docs/ASER%202022%20report%20pdfs/Articles/Basics%20and%20Beyond_Rukmini%20Banerji.pdf

Birjandi, P., & Ebadi, S. (2012). Microgenesis in dynamic assessment of L2 learners' socio-cognitive development via web 2.0. *Procedia-Social and Behavioral Sciences*, *32*, 34-39.

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language teaching*, *36*(2), 81-109.

Borg, S., & Al-Busaidi, S. (2012). Learner autonomy: English language teachers' beliefs and practices. *ELT journal*, *12*(7), 1-45.

Boshell, M. (2002). What I learnt from giving. In Johnson, K. E. & Golombek, P. R. (Eds.) *Teachers' Narrative Inquiry as Professional Development*, 180-194.

Brantley-Dias, L., Dias, M., Frisch, J., & Rushton, G. (2008). The role of digital video and critical incident analysis in learning to teach science. In *Proceedings of the American Educational Research Association Annual Meeting*.

Brown, G. A. & Edmondson, R. (1985). Asking questions. In E. C. Wragg (Ed.), Classroom teaching skills (pp. 97-120). London: Croom Helm

Burns, A. (1992). Teacher beliefs and their influence on classroom practice. *Prospect*, *7*(3), 56-66.

Burns, C., & Myhill, D. (2004). Interactive or inactive? A consideration of the nature of interaction in whole class teaching. *Cambridge journal of education*, *34*(1), 35-49.

Campione, J. C., & Brown, A. L. (1987). Linking dynamic assessment with school achievement. In C. S. Lidz (Ed.), *Dynamic assessment: An interactional approach to evaluating learning potential* (pp. 82–115). The Guilford Press.

Can Daşkın, N., & Hatipoğlu, Ç. (2019). Reference to a past learning event as a practice of informal formative assessment in L2 classroom interaction. *Language Testing*, *36*(4), 527-551.

Chafi, M. E., & Elkhouzai, E. (2014). Classroom interaction: Investigating the forms and functions of teacher questions in Moroccan primary school. *International Journal of Innovation and Applied Studies*, *6*(3), 352.

Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. *Vygotsky's educational theory in cultural context*, *1*, 39-64.

Chou, C. H. (2008). Exploring elementary English teachers' practical knowledge: A case study of EFL teachers in Taiwan. *Asia pacific education review*, *9*, 529-541.

Choi, I., Land, S. M., & Turgeon, A. (2008). Instructor modeling and online question prompts for supporting peer-questioning during online discussion. *Journal of Educational Technology Systems*, *36*(3), 255-275.

Christie, F. (2005). *Classroom discourse analysis: A functional perspective*. Bloomsbury Publishing.

Clément, R., Dörnyei, Z., & Noels, K. A. (1994). Motivation, self-confidence, and group cohesion in the foreign language classroom. *Language learning*, *44*(3), 417-448.

Cohen, A. D. (1994). *Assessing language ability in the classroom*. Boston: Heinle & Heinle.

Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education*. Taylor & Francis.

Cooper, B., & Cowie, B. (2010). Collaborative research for assessment for learning. *Teaching and Teacher Education*, *26*(4), 979-986.

Copland, F. (2010). Causes of tension in post-observation feedback in pre-service teacher training: An alternative view. *Teaching and Teacher Education*, *26*(3), 466-472.

Crandall, J. J. (2000). Language teacher education. *Annual review of applied linguistics*, *20*, 34-55.

Cullen, R. (1998). Teacher talk and the classroom context. *ELT journal*, *52*(3), 179-187.

Cullen, R. (2002). Supportive teacher talk: The importance of the F-move. *ELT journal*, *56*(2), 117-127.

Darling-Hammond, L., & Bransford, J. (2005). Preparing teachers for a changing world. Report of the committee on teacher education of the national academy of education. San Francisco, CA: Jossey-Bass.

Dinsmore, D. (1985). Waiting for Godot in the EFL classroom. *ELT journal*, *39*(4), 225-234.

Dörfler, T., Golke, S., & Artelt, C. (2009). Dynamic assessment and its potential for the assessment of reading competence. *Studies in Educational Evaluation*, *35*(2-3), 77-82.

Dörnyei, Z. (2007). Research Methods in Applied Linguistics. Oxford University Press.

Dubetz, N. E. (2005). Improving ESL instruction in a bilingual program through collaborative, inquiry-based professional development. *Second language teacher education: International perspectives*, 231-256.

Dunn, W. (2011). Working toward social inclusion through concept development in second language teacher education. In *Research on Second Language Teacher Education* (pp. 64-78). Routledge.

Ebadi, S., & Rahimi, M. (2019). Mediating EFL learners' academic writing skills in online dynamic assessment using Google Docs. *Computer Assisted Language Learning*, *32*(5-6), 527-555.

Elbaz, P. (1983). Teacher thinking: a study of practical knowledge. London: Croom Helm.

Ellis, N. C. (1994). *Implicit and explicit learning of languages*. John Benjamins Publishing Company.

Elmore, R. F. (2000). *Building a new structure for school leadership*. The Albert Shanker Institute.

Erling, E. J., Adinolfi, L., & Hultgren, A. K. (2017). Multilingual classrooms: Opportunities and challenges for English medium instruction in low and middle income contexts. The Open University, British Council and Education Development Trust.

Feryok, A. (2008). An Armenian English language teacher's practical theory of communicative language teaching. *System*, *36*(2), 227-240.

Flanders, N. A. (1965). *Teacher Influence, Pupil Attitudes, and Achievement: Ned A. Flanders* (No. 12). US Department of Health, Education, and Welfare, Office of Education.

Freeman, D. (2002). The hidden side of the work: Teacher knowledge and learning to teach. A perspective from North American educational research on teacher education in English language teaching. *Language teaching*, *35*(1), 1-13.

Freeman, D., Orzulak, M. M., & Morrissey, G. (1999). Assessment in second language teacher education. In Burns, A. & Richards, J. (Eds.) *Cambridge Guide to second language teacher education* (pp. 77-90). Lawrence Erlbaum Associates, Inc.

Gao, L. (2011). Eclecticism or principled eclecticism. *Creative Education*, *2*(04), 363.

Garton, S. (2008). Teacher beliefs and interaction in the language classroom. *Professional encounters in TESOL: Discourses of teachers in teaching*, 67-86.

Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research*. Routledge.

Gass, S. M. & Selinker, L., (2008). *Second language acquisition*. Taylor & Francis.

Gibbons, P. R. (2003). Mediating language learning: teacher interactions with ESL students in a content-based classroom. *TESOL Quarterly, 37*(2), 247-273.

Gibbons, P. (2006). *Bridging discourses in the ESL classroom: Students, teachers and researchers*. Bloomsbury Publishing.

Golombek, P. R. (2011). Dynamic assessment in teacher education: Using dialogic video protocols to intervene in teacher thinking and activity. In Johnson, K. E. & Golombek, P. R. (Eds.) *Research on second language teacher education* (pp. 135-149). Routledge.

Goudena, P. P. (2014). The problem of abbreviation and internalization of private speech. In Diaz, R. M. & Berk, L. E. (Eds.) *Private Speech: From social interaction to self-regulation* (pp. 215-224). Lawrence Erlbaum Associates, Inc.

Grigorenko, E. L., & Sternberg, R. J. (1998). Dynamic testing. *Psychological Bulletin*, *124*(1), 75.

Grijalva, A., Moore, R., Reddy, P., Rolleston, C., & Singh, R. (2018). Classroom Observation Sub-study, 2017-18: Evidence from India. Retrieved from https://www.younglives.org.uk/sites/default/files/migrated/YL-Classroom-Observation-India-May18.pdf

Gun, B. (2014). Making sense of experienced teachers' interactive decisions: Implications for expertise in teaching. *International Journal of Instruction*, *7*(1).

Guo, W., Lau, K. L., & Wei, J. (2019). Teacher feedback and students' self-regulated learning in mathematics: A comparison between a high-achieving and a low-achieving secondary schools. *Studies in Educational Evaluation*, *63*, 48-58.

Harvey, J. (2011). A sociocultural-theory-based study of the impact of mediation during post-observation conferences on language teacher learning [Ph. D. Thesis, University of South Florida]. Digital Commons. Retrieved from: https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=4922&context=etd

Hattie, J. A. (2002). Classroom composition and peer effects. *International Journal of Educational Research*, *37*(5), 449-481.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of educational research*, *77*(1), 81-112.

Haywood, H. C., & Lidz, C. S. (2006). *Dynamic Assessment in Practice: Clinical and Educational Applications*. New York: Cambridge University Press.

Haywood, H. C., & Tzuriel, D. (2002). Applications and challenges in dynamic assessment. *Peabody Journal of Education*, *77*(2), 40-63.

Haez, S. G., & Delfani, M. (2022). The impact of online dynamic assessment on the development of EFL students' speaking skills: a comparison of online synchronous and asynchronous DA sessions. *International TESOL & Technology Journal*, *17*(1), 4-24.

Hammersley, M. (2000). The relevance of qualitative research. *Oxford review of education*, *26*(3-4), 393-405.

Hockly, N. (2018). Video-based observation in language teacher education. *ELT Journal 72*(3), 329-355.

Hooker, T. (2013). Peer coaching: A review of the literature. *Waikato Journal of Education*, *18*(2), 129-139.

Hamano-Bunce, D. (2011). Talk or chat? Chatroom and spoken interaction in a language classroom. *ELT journal*, *65*(4), 426-436.

Howe, C., & Abedin, M. (2013). Classroom dialogue: A systematic review across four decades of research. *Cambridge journal of education*, *43*(3), 325-356.

İnceçay, G. (2010). The role of teacher talk in young learners' language process. *Procedia-Social and Behavioral Sciences*, *2*(2), 277-281.

Ismail, H. N., & Alexander, J. M. (2005). Learning within scripted and nonscripted peer-tutoring sessions: The Malaysian context. *The Journal of Educational Research*, *99*(2), 67-77.

John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational psychologist*, *31*(3-4), 191-206.

Johnson, K. E. (2009). *Second language teacher education: A sociocultural perspective*. Routledge.

Johnson, K. E., & Golombek, P. R. (2003). "Seeing" teacher learning. TESOL Quarterly, 37(4), 729-737.

Johnson, K. E., & Golombek, P. R. (2011). The transformative power of narrative in second language teacher education. TESOL Quarterly, 45(3), 486-509.

Johnson, K. E., & Golombek, P. R. (2018). Informing and transforming language teacher education pedagogy. *Language Teaching Research*, 1-12.

Johnson, K. E., & Golombek, P. R. (2018). Making L2 teacher education matter through Vygotskian-inspired pedagogy and research. In Poehner, M. E., Lantolf, P. J., & Swain, M. (Eds.) *The Routledge handbook of sociocultural theory and second language development* (pp. 443-456). Taylor & Francis.

Johnston, B., & Goettsch, K. (2000). In search of the knowledge base of language teaching: Explanations by experienced teachers. *Canadian Modern Language Review*, *56*(3), 437-468.

Kanakri, A. (2017). Second language teacher education: Preparing teachers for the needs of second language learners. *International Journal of Language Studies*, *11*(1).

Kasper, G. (1985). Repair in foreign language teaching. *Studies in Second Language Acquisition*, *7*(2), 200-215.

Kim, Y. (2010). Scaffolding Through Questions in Upper Elementary ELL Learning. *Literacy teaching and learning*, *15*, 109-136.

King, A. (1994). Autonomy and question asking: The role of personal control in guided student-generated questioning. *Learning and Individual Differences*, *6*(2), 163-185.

King, A., & Rosenshine, B. (1993). Effects of guided cooperative questioning on children's knowledge construction. *The Journal of Experimental Education*, *61*(2), 127-148.

Korthagen, F. A. (2010). Situated learning theory and the pedagogy of teacher education: Towards an integrative view of teacher behavior and teacher learning. *Teaching and teacher education*, *26*(1), 98-106.

Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (Eds.). (2003). *Vygotsky's educational theory in cultural context*. Cambridge University Press.

Krashen, S. (1992). The input hypothesis: An update. *Linguistics and language pedagogy: The state of the art*, 409-431.

Kubanyiova, M. (2012). *Teacher development in action: Understanding language teachers' conceptual change*. New York: Palgrave Macmillan.

Kumaravadivelu, B. (1993). Maximizing learning potential in the communicative classroom. *ELT journal*, *47*(1), 12-21.

Kumaravadivelu, B. (1994). The postmethod condition: (E)merging strategies for second/foreign language teaching. *TESOL Quarterly*, *28*(1), 27-48.

Kumaravadivelu, B. (2002). Method, antimethod, postmethod. *Readings in Methodology*, 36.

Lantolf, J. P. (1994). Sociocultural theory and second language learning: Introduction to the special issue. *The Modern Language Journal*, *78*(4), 418-420.

Lantolf, J. P. (Ed.). (2000). *Sociocultural theory and second language learning*. Oxford University Press.

Lantolf, P. J. (2000b). Second language learning as a mediated process. *Language Teaching* 33(2), 79-96. Retrieved from: http://dx.doi .org/ 10.1017 /S0261444800015329.

Lantolf, J. P. (2009). Dynamic assessment: The dialectic integration of instruction and assessment. *Language Teaching*, *42*(3), 355-368.

Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment of L2 development: Bringing the past into the future. *Journal of Applied Linguistics*, 1(1).

Lantolf, J. P., Poehner, M. E., & Swain, M. (Eds.). (2018). *The Routledge handbook of sociocultural theory and second language development*. Routledge.

Lantolf, J. P. & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.

Lantolf, J. P. & Thorne, S. L. (2007). A linguistics of communicative activity. *Disinventing and reconstituting languages*, *62*, 170-195.

Larsen-Freeman, D. (2000). *Techniques and principles in language teaching*. Oxford University.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge university press.

Lee, W., & Ng, S. (2010). Reducing student reticence through teacher interaction strategy. *ELT journal*, *64*(3), 302-313.

Legutke, M., Thomas, H., & Candlin, C. N. (2014). *Process and experience in the language classroom*. Routledge.

Lemke, J. L. (1990). *Talking science: Language, learning, and values*. Ablex Publishing Corporation.

Leung, C., & Mohan, B. (2004). Teacher formative assessment and talk in classroom contexts: Assessment as discourse and assessment of discourse. *Language Testing*, *21*(3), 335-359.

Lidz, C. S. (1991). *Practitioner's guide to dynamic assessment*. Guilford Press.

Lidz, C. S. (2014). Leaning toward a consensus about dynamic assessment: Can We? Do We Want To? Journal of Cognitive Education and Psychology, 13(3), 2014.

Lightbown, P. M., & Spada, N. (2021). *How Languages Are Learned*. Oxford university press.

Long, M. H., & Porter, P. A. (1985). Group work, interlanguage talk, and second language acquisition. *TESOL quarterly*, *19*(2), 207-228.

Long, M., & Sato, C. (1983). Classroom foreigner talk discourse: Forms and functions of teachers' questions. *In H. Seliger, & M. Long (Eds.), Classroom-Oriented Research in Second Language Acquisition* (pp. 268-286). Rowley, MA: Newsbury House.

Ma, G. 2009. *An enquiry into the discourse of post observation feedback on the TESOL Course at Wits Language School* [Unpublished Dissertation]. University of Warwick.

Malamah-Thomas, A. (1987). *Classroom interaction*. Oxford University

Mann, S. (2003). Dialogic understanding. *Japan Association for Language Teaching*, 246-255.

Maragkaki, I., & Hessels, M. (2016). A pilot study of dynamic assessment of vocabulary in German for bilingual preschoolers in Switzerland. *Journal of Studies in Education*, *7*(1), 32-49.

Mathew, R. (2015). Teacher development as the future of teacher education. In Pickering., J. & Gunasekhar, P. (Eds.), *Innovation in English Language Teacher Education*, (pp. 29-37). British Council: New Delhi.

McCormick, D. E., & Donato, R. (2000). Teacher questions as scaffolded assistance. *Second and foreign language learning through classroom interaction*, 183-201.

Meddings, L., & Thornbury, S. (2009). *Teaching unplugged: Dogme in English language teaching*. Peaslake: Delta.

Mercer, N. (1995). *The guided construction of knowledge: Talk amongst teachers and learners*. Multilingual matters.

Mercer, N., & Dawes, L. (2014). The study of talk between teachers and students, from the 1970s until the 2010s. *Oxford review of education*, *40*(4), 430-445.

Mercer, N., & Littleton, K. (2007). *Dialogue and the development of children's thinking: A sociocultural approach*. Routledge.

Minick, N. (1987). Implications of Vygotsky's theories for dynamic assessment. In C. S. Lidz (Ed.), *Dynamic assessment: An interactional approach to evaluating learning potential* (pp. 116-140). New York, NY, US: Guilford Press.

Mohammadi Moghadam, M., & Ahmadi, A. (2021). The Effect of Dialogic Mediation on the Development of an Experienced Teacher and Learners' Conceptual Development and Actions in the L2 Classroom. *Teaching English Language*, *15*(1), 107-135.

Mohanty, A., Panda, M., & Pal, R. (2010). Language policy in education and classroom practices in India: Is the teacher a cog in the policy wheel?. In *Negotiating language policies in schools* (pp. 225-245). Taylor & Francis.

Moradian, M. R., Miri, M., & Qassemi, Z. (2015). Dynamic assessment and microgenetic development of EFL teachers' classroom interactional competence. *Teaching English Language*, *9*(2), 1-36.

Moritoshi, P. (2006). Teacher questioning, modification and feedback behaviours and their implications for learner production: an action research case study. *Sanyo Gakuen University*.

Mukhopadhyay, L. (2020). Translanguaging in primary level ESL classroom in India: An exploratory study. *International Journal of English Language Teaching*, *7*(2), 1-15.

Munby, H. (1989). Reflection-In-Action and Reflection-On-Action. *Current Issues in Education, 9,* 31-42.

Nassaji, H., & Wells, G. (2000). What's the use of 'triadic dialogue'?: An investigation of teacher-student interaction. *Applied linguistics*, *21*(3), 376-406.

National Council of Educational Research and Training. (2005). National Curriculum Framework 2005. New Delhi.

National Council for Teacher Education. (2009). National Curriculum Framework for Teacher Education: Towards Preparing Professional and Humane Teacher. New Delhi.

Newman, D., Griffin, P., & Cole, M. (1989). *The construction zone: Working for cognitive change in school*. Cambridge University Press.

Nunan, D. (1987). Communicative language teaching: Making it work. *ELT journal*, *41*(2), 136-145.

Nunn, R. (1999). The purposes of language teachers' questions. International Review of Applied Linguistics in Language Teaching, 37(1). P. 23-42.

Nystrand, M., Wu, L. L., Gamoran, A., Zeiser, S., & Long, D. A. (2003). Questions in time: Investigating the structure and dynamics of unfolding classroom discourse. *Discourse processes*, *35*(2), 135-198.

Opie, C. (2004). What is educational research. *Doing educational research,* 1-14.

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of educational research*, *62*(3), 307-332.

Parsons, J., & Taylor, L. (2011). Improving student engagement. *Current issues in education*, *14*(1).

Penlington, C. (2008). Dialogue as a catalyst for teacher change: A conceptual analysis. *Teaching and teacher education*, *24*(5), 1304-1316.

Pennycook, A. (1989). The concept of method, interested knowledge, and the politics of language teaching. *TESOL quarterly*, *23*(4), 589-618.

Petek, E. (2013). Teacher's beliefs about classroom interaction and their actual practices: a qualitative case study of a native and a non-native English teacher's in-class applications. *Procedia-Social and Behavioral Sciences*, *70*, 1195-1199.

Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational researcher*, *38*(2), 109-119.

Piller, B., & Skillings, M. J. (2005). English Language Teaching Strategies Used by Primary Teachers in One New Delhi, India School. *Tesl-Ej*, *9*(3), n3.

Poehner, M. E. (2005). *Dynamic assessment of oral proficiency among advanced L2 learners of French* [Ph. D. Thesis, The Pennsylvania State University]. Electronic Theses and Dissertations for Graduate School. https://etda.libraries.psu.edu/files/final_submissions/4078

Poehner, M. E. (2007). Beyond the test: L2 dynamic assessment and the transcendence of mediated learning. *The Modern Language Journal*, 91(3), 323-340.

Poehner, M. E. (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting L2 development.* Vol. 9. Springer Science & Business Media.

Poehner, M. E. (2009). Group dynamic assessment: Mediation for the L2 classroom. TESOL Quarterly, 43(3), 471-491.

Poehner, M. E., & Lantolf, J. P. (2005). Dynamic assessment in the language classroom. *Language Teaching Research*, *9*(3), 233-265.

Poehner, M. E., & van Compernolle, R. A. (2011). Frames of interaction in dynamic assessment: Developmental diagnoses of second language learning. *Assessment in Education: Principles, Policy & Practice*, *18*(2), 183-198.

Prabhu, N. S. (1990). There is no best method—Why?. *TESOL Quarterly*, *24*(2), 161-176.

Rad, H. S. (2021). Exploring use of mobile-mediated hybrid dynamic assessment in improving EFL learners' descriptive writing skills. *Computer-Assisted Language Learning*, *22*(1), 111-127.

Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational psychologist*, *44*(3), 159-175.

Richards, K. (2006). *Language and professional identity: Aspects of collaborative interaction*. Springer.

Richardson, V., & Placier, P. (2001). Teacher change. In Richardson, V. (Ed.) *Handbook of research on teaching*, 4, (pp. 905-947). American Educational Research Association.

Robinson, V. (2003). Teachers as researchers: A professional necessity? *Set: Research Information for Teachers*, (1), 27–30.

Rogoff, B. (2008). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, and apprenticeship. *Pedagogy and practice: Culture and identities*, 58-74.

Rommetveit, R. & Blakar, R. M. (Eds.). (1979). *Studies of language, thought, and verbal communication.* Academic Press.

Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of educational research*, *66*(2), 181-221.

Sardareh, S. A., Saad, M. R. M., Othman, A. J., & Me, R. C. (2014). ESL Teachers' Questioning Technique in an Assessment for Learning Context: Promising or Problematic?. *International Education Studies*, *7*(9), 161-174.

Savenye, W. C., & Robinson, R. S. (2013). Qualitative research issues and methods: An introduction for educational technologists. *Handbook of research on educational communications and technology*, 1030-1056.

Scribner, S., & Cole, M. (1978). Literacy without schooling: Testing for intellectual effects. *Harvard Educational Review*, *48*(4), 448-461.

Seedhouse, P. (1996). Classroom interaction: possibilities and impossibilities. *ELT journal*, *50*(1), 16-24.

Seedhouse, P. (2004). The interactional architecture of the language classroom: A conversation analysis perspective. *Language Learning*.

Sert, O. (2019). Classroom interaction and language teacher education. *The Routledge handbook of English language teacher education*, 216-238.

Shavelson, R. J. (1983). Review of research on teachers' pedagogical judgments, plans, and decisions. *The Elementary school journal*, *83*(4), 392-413.

Shrestha, P. V. (2011). *Dynamic assessment of academic writing for business studies* [Ph. D thesis, The Open University]. ISFLA Online Repository. Retrieved from: http://www.isfla.org/Systemics/Print/Theses/Thesis-FINAL-Prithvi-Shrestha.pdf

Shrestha, P. (2012). Teacher professional development using mobile technologies in a large-scale project: Lessons learned from Bangladesh. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, *2*(4), 34-49.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational researcher, 15*(2), 4-14.

Slimani-Rolls, A., & Kiely, R. (2018). *Exploratory practice for continuing professional development: An innovative approach for language teachers*. Springer.

Smith, J. (2001). Modeling the social construction of knowledge in ELT teacher education. ELT Journal, 55, 221-227.

Sternberg, R. J., & Grigorenko, E. L. (2002). *Dynamic testing: The nature and measurement of learning potential*. Cambridge university press.

Smith, F., Hardman, F., & Tooley, J. (2005). Classroom Interaction in Private Schools Serving Low-Income Families in Hyderabad, India. *International Education Journal, 6*(5), 607-618.

Sullivan, P., & Clarke, D. J. (1991). *Communication in the classroom: The importance of good questioning*. Geelong: Deakin University.

Sullivan, G. M., & Sargeant, J. (2011). Qualities of qualitative research: part I. *Journal of graduate medical education, 3*(4), 449-452.

Swain, M., & Deters, P. (2007). "New" mainstream SLA theory: Expanded and enriched. *The Modern Language Journal, 91*, 820-836.

Swain, M., & Lapkin, S. (1995). Problems in output and the cognitive processes they generate: A step towards second language learning. *Applied linguistics, 16*(3), 371-391.

Tarone, E., & Allwright, D. (2005). Second language teacher learning and student second language learning: Shaping the knowledge base. *Second language teacher education: International perspectives*, 5-23.

Teo, P. (2016). Exploring the dialogic space in teaching: A study of teacher talk in the pre-university classroom in Singapore. *Teaching and Teacher Education, 56*, 47-60.

Thornbury, S. (1996). Teachers research teacher talk. *ELT journal, 50*(4), 279-289.

Thornbury, S. (2016). Communicative language teaching in theory and practice. In Hall, G. (Ed) *The Routledge handbook of English language teaching* (pp. 224-237). Routledge.

Tsang, W. K. (2004). Feedback and uptake in teacher-student interaction: An analysis of 18 English lessons in Hong Kong secondary classrooms. *RELC journal, 35*(2), 187-209.

Tsui, A. B. (1998). The 'Unobservable' in classroom interaction. *The Language Teacher 22*(7). 25-26.

Tsui, A. B. (2001). Classroom interaction. *The Cambridge guide to teaching English to speakers of other languages*, 120-125.

Tsui, A. (2003). *Understanding expertise in teaching: Case studies of second language teachers*. Cambridge University Press.

Tsui, A. B. (2005). Expertise in teaching: Perspective and issues. In Johnson, K. (Ed.) *Expertise in teaching: Perspectives and issues* (pp. 167-189). Palgrave Macmillan UK.

Tzuriel, D., & Shamir, A. (2002). The effects of mediation in computer assisted dynamic assessment. *Journal of Computer Assisted Learning*, *18*(1), 21-32.

Vygotsky, L. S. (1978). *Mind in society*. (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.

Walsh, S. (2003). Developing interactional awareness in the second language classroom through teacher self-evaluation. *Language awareness*, *12*(2), 124-142.

Walsh, S. (2006). *Investigating classroom discourse*. Routledge.

Wan, G., & Gut, D. M. (Eds.). (2011). *Bringing schools into the 21st century* (Vol. 13). Springer Science & Business Media.

Waring, H. Z. (2009). Moving out of IRF (Initiation-Response-Feedback): A single case analysis. *Language Learning*, *59*(4), 796-824.

Welk, D. S. (2006). The Trainer's Application of Vygotsky's" Zone of Proximal Development" to Asynchronous Online Training of Faculty Facilitators. *Online Journal of Distance Learning Administration*, *9*(4), n4.

Wells, G. (2002). Learning and teaching for understanding: The key role of collaborative knowledge building. *Advances in research on teaching*, *9*, 1-42.

Wells, G., & Arauz, R. M. (2006). Dialogue in the classroom. *The journal of the learning sciences*, *15*(3), 379-428.

Wertsch, J. V. (1985). *Culture, communication and cognition.* Cambridge University Press.

Wertsch, J. V. (1998). *Mind as action*. Oxford university press.

Wette, R. (2015). Teacher-led collaborative modelling in academic L2 writing courses. *ELT journal*, *69*(1), 71-80.

Williams, G. (1999). The pedagogic device and the production of pedagogic discourse: A case example in early literacy education. In Christie, F. (Ed.) *Pedagogy and the shaping of consciousness* (pp. 88-122). Bloomsbury Publishing.

Wood, D. (1992). Teaching talk. In Norman, K. (Ed.) *Thinking voices: The work of the national oracy project* (pp. 203-214). London: Hodder and Stoughton for the National Curriculum Council. Retrieved from: https://archive.org/details/thinkingvoiceswo0000unse/page/n7/mode/2up

Xu, L., Widjaja, W., & Ferguson, J. (2019). Seeing through the eyes of the teacher? Investigating primary school teachers' professional noticing through a video-based research methodology. *International Journal of Research & Method in Education, 42*(5), 470-484.

Yakışık, B. Y., & Çakır, A. (2017). Dynamic assessment of prospective english teachers'speaking skills. *European Journal of English Language Teaching 2*(1), 22-53.

## Appendices

Appendix A

### INVITATION TO PARTICIPANTS

Dear teacher,

Greetings!

I am conducting a research study on the topic - The impact of Dynamic assessment of classroom interactional practices of English teachers. The research project is aimed at exploring the impact of a new alternative assessment method called Dynamic assessment on promoting second language teachers' use of interactional practices in the classroom.

This project necessitates observation and recording of classes. Following the classroom observation, there will be an interaction session on the practices observed in the class. There will be one DA interaction session once in a month. On the whole there will be three interaction sessions spanning over a period of three months. Finally, one last class will be observed to see the effect of DA. The three DA sessions will be recorded for the purpose of analysis. This study will stretch over a period of two months.

Your participation in this study would be greatly appreciated as it is beneficial from the point of view of current research in the field of second language teacher education. Your insights play a crucial role in this project.

By participating in this study, you are agreeing to let me use the recorded data (i.e., classroom transaction and the assessment session) as well as other sources of data aforementioned for research purpose. The data collected will be strictly used for research.

I would like to assure you that only I and my research supervisor will have access to the recorded data. No information that would reveal your personal or work place details will be used in the thesis. If this data is used for publications in future, no personal information that will identify you will be included.

Please be assured that you are free to withdraw from the project at any point without mentioning the reason. You can withdraw anytime just by intimating the researcher. If you decide to withdraw from the study, any previously collected information about you will be shared with you and will be erased from my personal computer. I am willing to clarify your queries regarding the study at any point of time during the project. Your participation in this study is voluntary.

If you are convinced with all the details of the study and willing to participate, please indicate so by signing the Consent

B. Salomi Snehalatha

Research Scholar
CELS, UoH

**Consent Form**

Name: …….

Workplace/Institution: ……

Designation: …….

Please tick one of the options below and fill the details:

1) I am interested in participating in this study and willing for both classroom observation and dynamic assessment sessions.
2) I am not interested in dynamic assessment sessions but I am willing for my classes to be recorded.
3) I am not interested.

I am willing to take part in this research, and by signing below I give my permission for the data collected to be used anonymously in any written reports, presentations and published papers relating to this study.

Sign: .....

Date: .....

Appendix B

**Lessons observed in the intervention stage for conducting DA sessions:**

| **Name** | **Lesson observed** | **Time** |
|---|---|---|
| **Kiran** | 1. Desert Island | 11:00 |
| | 2. Weekend activities | 10:20 |
| | 3. Games and sports | 14:00 |

| **Name** | **Lesson observed** | **Time** |
|---|---|---|
| **Parimala** | 1. Desert Island | 12:00 |
| | 2. My Free time activities | 10:11 |
| | 3. The Limping Horse | 8:00 |

| **Name** | **Lesson observed** | **Time** |
|---|---|---|
| **Mohan** | 1. Picture description activity from the lesson 'A Havoc of flood' | 12:32 |
| | 2. My Free time activities | 15:38 |
| | 3. Desert Island | 15:00 |

| **Name** | **Lesson observed** | **Time** |
|---|---|---|
| **Stephen** | 1. Desert Island | 16:08 |
| | 2. The Limping Horse | 16:24 |
| | 3. Bridging the gap activity based on a picture prescribed in the textbook | 10:00 |

| Name | Lesson observed | Time |
|---|---|---|
| **Anita** | 1. Vocabulary activity | 7:25 |
| | 2. Grammar activity | 8:30 |
| | 3. Picture description activity | 15:10 |

| Name | Lesson observed | Time |
|---|---|---|
| **Farha** | 1. Picture descriptions from the lesson - Puru, the Brave (Class VII) | 10:00 |
| | 2. Picture description activity from the lesson - The Selfish Giant (Class VIII) | 13:35 |
| | 3. The Trial (Class IX) | 15:00 |

Appendix C

Examples of Teacher Reciprocal Moves

**(a) Dependent moves**

Move 1: Back channelling / Silence (Mohan DA2: My Free Time Activities)

M: Yes, it is a very best occasion. Uh, there I should, uh, have, uh, uh, I should, uh, given him the, given him a right uh, word, for the suitable occasion but I didn't.
R: Okay. What could have been an appropriate word for that context?
M: [Silence]
R: Um, just a normal, simple word.
M: [Silence]
R: Like, why do we go to parks for, for walking? I walk in the park. I take a walk in the park.

Move 2: Giving brief and insufficient response (Parimala DA2: My Free Time Activities)

R: Here, it is reverse, no. First, you said I'm going to ask you some questions. Then you asked about the daily routine. Then you said I am going to introduce this topic and then you asked some more questions. The the procedure is haphazard, no. `Do you feel that there is a little bit of unsystematic way of proceeding in the execution of the lesson?
P: Yes. It should be in a different way.

Move 3: Defending one's move for some reason that lacks conceptual understanding (Kiran DA1: Desert Island)

R: Uh, why because he simply said drink. It may be water or it may be other cool drinks, whatever it may be … we can seek the confirmation there. [Hm] We can ask one more question and seek the voice confirmation about what exactly he said. So that was, uh, missing in that.
K: Hm, if we have enough time, there is scope for asking such type of questions. Why because the time is also stipulated. [Yeah.] Limited. I may not complete.

Move 4: Citing problems in the local context (Anita DA1: Vocabulary activity)

R: Do you think, do you think there is any problem with the objective of the class?
A: After, after the class, after recording, after the class, I realized. But, my HM, he is asking me to complete the syllabus. Sir, I am teaching basics means he is saying what if anyone comes for inspections. They will point out that the syllabus is incomplete.

Move 5: Claiming inability or insufficient knowledge (Stephen DA2: The Limping Horse)

R: Okay. Giving meaning directly, would it be better, do you think so?
S: Uh, I don't, I never think. [Uh.] You know, I don't know whether it's right or wrong. I'm still learning. I'm a learner. [Laughing]

Move 6: Demonstrating incorrect or insufficient understanding
(Farha DA1: Picture description activity - Puru, the Brave)

R: What exactly were you expecting from the learners?
F: They have to write their experience about, uh, the face sheet. I have asked them the questions. They were able to respond. [Hm.] So, that also forms a base for them to write a discourse. And also, the video will, uh, the video gave them the picture of war.
R: Experience means what?
F: Their experience, how they felt looking at the picture, their experience.
R: See, by looking at the picture, it is a feeling that they get. It is not an experience. Experience is something, something that you go through.

Move 7: Agreeing with the mediator's view or suggestion (Stephen DA2: The Limping Horse)

R: You can say 'Yes, very good, this is the story of a limping horse'... and you can extend it further by saying, 'This story is about a horse which was just blindly imitating its trainer'.
S: [Silence]
R: Ok. Did you get it? Do you agree or do you think this is not necessary?
S: Yes ma'am. It is a good idea. All this is very new ma'am.

Move 8: Thinking of an alternative based on mediator's prompt
(Parimala DA1: Desert Island)

R: Can you think of anything else of starting that conversation? May, uh, maybe word by word or simple, simple sentences or …
P: [After a few seconds] Yes. Uh, instead of asking, do you know the meaning of the sentence? I would've asked maybe some, some simple, simple words. Some simple, simple sentences.

Move 9: Checking conceptual understanding with the mediator
(Farha DA3: The Trial)

R: Like for example, um, children, we are going to do a general discussion task now. I'm going to introduce a topic to you on, uh, about women. We, uh, I'll ask you some questions and you are expected to, um, come up with your own, uh, ideas or opinions. Like that you, do you think you should have oriented them towards the task?
F: You mean to say I should have oriented them? Am I right?

**(b) Independent moves**

Move 10: Explaining the problem in the teacher-pupil exchange
(Kiran DA3: Games and Sports)

R: No, actually, you, your, our topic is games and sports, no? So, how did you plan for that? Can you tell something about your planning for the class?
K: So, I thought I got an idea to search the information on net. I gathered some information, I jotted down some points, and first in the introduction of the class, I told, um, myself how I, I, if I, if I am getting a chance to spend my weekends, I told them, um, like I like swimming. Okay. Generally, I would like to spend with, uh, Tennis. [Hm.] But they are not able to understand. Student level concept is not there. That's why I changed the topic to swimming.

Move 11: Justifying one's choice with a sound rationale (Anita DA3: Picture description)

R: But he said they go to class. He said that ... so how can you give feedback to that sentence?
P: Go to class. It's wrong. He should say "I go to school". After going to school, we'll do prayer and after prayer we'll go to class. I think, I think, it would be useful to students if I give feedback on that.

Move 12: Self-reflection (Mohan DA1: A Havoc of Flood)

R: What questions can we ask in this context?
M: Nothing but madam ... when they are responding, uh ... so ... I felt happy. I felt that students have understood well ... uh ... yeah. Doubts or misunderstandings or gaps nothing ... concept they have understood. I'm happy.

Move 13: Supporting one's choice citing personal theories
(Stephen DA3: Picture description activity)

S: Yes. This is one more thing I practice. I don't ask students to guess. I simply don't want to put students in trouble. [Smiling] I explain everything. For vocabulary especially, I used to tell them its meaning in Telugu. For instance, in the previous class, somebody asked me the meaning of 'accumulation'. Then I told the answer in Telugu, which means '*jama cheyadam*'.

Move 14: Expressing views about the utility of the mediator's suggestion
(Farha DA2: Picture description activity - The Selfish Giant)

R: That's, instead of we giving them that consequence, could we have asked that students, what will happen if you are selfish.
F: [After silence for a few seconds] I don't, uh, think that students will have a problem in responding to this question ma'am. They will be able to give ma'am. Instead of, uh, using that word selfish, if you say, uh, if you keep sharing what happens. You'll be having more and more friends. They, they will come to you and your love and bonding will grow. Yes, he's very good and they will like you, uh, in that way we could have prolonged.

Move 15: Suggesting alternative ideas suitable to the context (Anita DA2: Grammar activity)

R: Exactly, ma'am. I was also going to suggest that only. Yeah, you tell ma'am. You tell. Go on.

A: *Asalu* [Actually], I would've written some verbs on the board [Hm] and explain the meanings of that verbs so that they could easily frame the sentences. [Hm.]
For example, *ipudu konni eat ano … work ano … ilanti chinna chinna simple simple verbs pedithe [ah] apudu vaallu answers isthunde. [hm] easy ga chesthunde.*
[For example, few words like … may be eat … may be work … had I given simple words like that, then they would have given answers].
*Akada, I missed that thing.*
[There, I missed that thing.]

Move 16: Verbalizing conceptual understanding (Anita DA3: Picture description activity)

R: Ah. Oh, that's really great, ma'am. So, you said my way of interaction with the children. Can you explain that a little more clearly, ma'am?

A: [Laughing out loudly] So, in the beginning, uh, so I used to, uh, provide them less opportunities, first and hurry to finish the class. [Aha. Okay] Uh, uh, maximum, maximum students were not given opportunities. Time is not given to them. [Yeah]. And, uh, I was not so warm with them. [Uh] Yeah. Later, I changed. Later, I changed. [Okay] So, we need to interact more with the children. That comfort zone we should give. [Hm] So, whatever answers they give, and, uh, what I learned is we should allow them to speak their mother tongue also. [Oh, yes, yes. That I noticed]. Mother tongue is important here because to elicit response from a student mother tongue plays a significant role, I, I say. I think. [Yes] So, if I say, okay, you can say Telugu also they feel comfort no, ma'am.

Move 17: Rejecting mediator's suggestion by providing a rationale
(Mohan DA1: A Havoc of Flood)

R: Yeah. Do you think those questions would have been deviating from the topic or, uh, they would've been suitable?

M: No, I don't accept that I and children deviated. [Uh.] We were on the way. But somewhat we jumped. We achieved the purpose … uh, that pedagogic objective of the class. Yeah.

Appendix D

Episodes of Mediational Discourse from DA Sessions

D1) Kiran DA1, Lesson: Desert Island (Issue: Missed opportunity for interaction)

| **Mediational move** | **Reciprocal move** | **Dialogue** |
|---|---|---|
| 1 - Describing the situation | | Uh ... After asking that question, what is that programme? Uh, you, uh, the student said, Big boss. Then you went on explaining, uh, about what is Big Boss programme like ... they are kept in a room, someone gives some challenges and you explained it all in your own words. |
| | 1 - Back channelling / Silence | Hm. |
| 3 - Asking for teacher reflections | | Do you think uh, students would have been able to explain or talk about the Big boss programme if they were given a chance? |
| | 11 - Providing a rationale | Yes, yes … but most of the people may not, uh, watch them. But there may be few. Few can explain. If I had given them an opportunity ... Yes, they may have responded. But then actually in my mind, I want to declare the topic. First topic ... Before the topic declaration, I wanted to motivate them towards the topic ... that's why I hurried in that way. [Uh.] So, I want to go straight away towards that. I don't want to give much time to motivation. |
| 5 - Pointing out the specific problem in the teacher's move | | Oh, that's the reason you explained everything. Okay. But that was a good opportunity to involve learners in interaction there because everyone knows about that programme. |

| | | |
|---|---|---|
| | 7 - Agreeing with the mediator's suggestion | Yes, yes. I explained. There is such a type of environment. There the big boss may give you some instructions. So, as it is, I am going to give you some instructions. Listen to me and follow me. Like that I explained, but there is a scope to them to talk on that particular topic. |
| 3 - Asking for teacher reflections on the problem identified in the given context | | Are you confident that these students can talk about that programme provided they were given an opportunity? |
| | 2 – Giving brief and insufficient response | Yes, yes. There is a scope for asking. |
| 12 - Asking to consider an alternative | | So, I think you missed an opportunity here. Okay. what questions can be asked here? |
| | 8 – Thinking of an alternative based on mediator's prompt | If I ask them, uh, how many people are there, how many days they are spending there, how they're receiving their instructions. Okay. Like that there are many questions, there is much scope to ask them so they can respond to that questions. |
| 6 – Evaluating teacher's rationale/reasoning | | Exactly. How many students, at what time that programme comes, on which day ... for these questions only one-word answers will be there. |

2) Farha DA3, Lesson: The Trial (Issue: Questions that can elicit more learner participation)

| Mediational move | Reciprocal move | Dialogue |
|---|---|---|
| 2 – Drawing teacher's attention to the problem identified | | [After watching the video]<br><br>Okay. Here ma'am, could you just take a moment and tell what you think about it. |
| | 1 – Back channelling / Silence | [Teacher seems to be thinking] |
| 9 – Encouraging to think by providing a hint | | Just go through what you were [telling], how you were, uh, encouraging them, and there was silence from the students' side. |
| | 1 – Back channelling/ Silence | Yes. [After going through it for a while] Okay. |
| 3 – Asking for teacher reflections | | Just let me know if you see any problem in this context here? |
| | 10 – Explaining the problem in the teacher-pupil exchange<br><br>11 – Justifying one's choice with a sound rationale | [Silence-Thinking]<br><br>This maybe they did not get my point.<br>[After thinking for a few seconds, almost a minute] uh, the question was very simple, like how girls are treated. [Mm-hmm.]<br><br>Question was very simple. How girls are treated, I thought, uh, they would've, uh, distinguished and they would've given answers like, as, uh, girls and boys are not treated equally in their house. Sisters are not treated equally with the brothers. [Hm.]<br>Brothers are looked after very, uh, specially and they're given, uh, special importance, but girls are made to do the housework whereas boys are made to allowed to play outside. So that is what I expected the girls to come out with. |
| 6 – Evaluating teacher's rationale / reasoning | | So, you were expecting that … those responses? [Yes.] And that's why you were telling, uh, um, tell me some incidents where women are ill-treated. That's a good idea, actually! |

| | | |
|---|---|---|
| | 11 – Justifying one's choice with a sound rationale<br><br>10 – Explaining the problem in the teacher-pupil exchange | Yes. Then again, I switched. Women, they got confused, no. So, then I switched to girls and gave a clue.<br><br>Okay? How are girls treated when compared to boys also I asked so that at least then I will get some response.<br>But still, I didn't get any response. |
| 3 – Asking for teacher reflections | | So where do you think the problem lies in this exchange? There is silence, no.<br>[After a few seconds] |
| | 1 – Back channelling / Silence | Yeah. |
| 9 – Encouraging to think by providing a hint | | Even though you simplified and asked, they were totally silent.<br>Do you think, uh, the students cannot answer those questions? |
| | 10 – Explaining the problem in the teacher-pupil exchange | The students could have answered those questions because the question was very simple. So, here itself, how are the girls treated when compared to boys? |
| 19 – Sharing views based on experience / observation<br>(Explicit prompt) | | Why, where do you think the problem lies [in this context]? We, we see very commonly in the classrooms, even though we ask many questions also, there will be silence from the students' side. So, what do you think might be the reason for such silence in the class? It's a common problem for all of us. |
| | 5 – Claiming inability / insufficient knowledge | What reason? I can't say, I'm unable to say because the question was entirely very simple. The topic also was very easy. |
| 9 – Encouraging to think by providing a hint | | Maybe … Maybe we are assuming that it is very simple topic and they have readymade answers like that. Maybe we are assuming like that. |

| | | |
|---|---|---|
| | 15 – Suggesting alternative ideas suitable to the context | Okay. What could have been an alternative here, like encouraging them that, come on, be free. Feel free to express. Um, there, there's a, I'm not going to share your personal, uh, things with anyone here. This is a simple discussion. |
| 6 – Evaluating teacher's rationale / reasoning | | Okay. That could be one option ma'am. |
| | 15 – Suggesting alternative ideas suitable to the context<br>10 – Explaining the problem in the teacher-pupil exchange | Okay. All of you, you should open up and tell me. Come on. It's only a general class. Don't take it seriously.<br><br>Not that they don't know the answers. They know very well the answers. Hm, but they're not telling. That's why there was silence.<br>[Mm.] They could have told. |
| 15 – Presenting a plausible alternative | | Did you hear any incident near your house, like this kind of instance where women are ill-treated in villages? |
| | 17 – Rejecting mediator's suggestion by providing a rationale | No, no, mainly in villages here what I expected is even what I hear is that women burn themselves. [Hm.] They commit suicides. [Hm.] They commit suicide and burn themselves. Or maybe they are burnt by their husbands or mother-in-law burns them or whatever, but this kind of incidents we keep hearing, especially in villages. So, that's why I asked them, did you hear any such incident. [Yeah]<br>Like, I thought that they will tell, yes, there is this lady, she burnt herself. Yes, one man beats his wife, uh, terribly and she comes out yelling, like these kinds of answers, I expected there also. Okay. |
| 6 – Evaluating teacher's rationale / reasoning | | Yes, yes, it did not. |
| | 12 – Self-reflection | Maybe, I should have approached them in a different way. That didn't work out in the class. |

D3) Mohan DA3, Lesson: Desert Island (Issue: Clarity in instructions)

| Mediational move | Reciprocal move | Dialogue |
|---|---|---|
| 5 – Pointing out the specific problem | | Did you ask them to explain what they have understood? |
| | 1 – Backchannelling / Silence | Yeah. |
| 2 – Drawing teacher's attention to the problem | | No. I think they didn't get an opportunity to explain. |
| | 3 – Defending one's move for some reason that lacked conceptual understanding | No. In the conclusion part it is there. Uh....finally I asked them. |
| 9 – Encouraging to think by providing a hint | | No sir, I am asking only about this context. Here … you finished giving instructions.<br><br>Before you asked different students what they would take ... before the production phase, did you ask them whether they have understood all the instructions clearly or not?<br>I think it was not very clear for the students. |
| | 6 – Demonstrating incorrect/insufficient understanding | No, no, no. Before giving instructions or telling them about the task, how do we pose questions? |
| 15 – Presenting a plausible alternative | | Not before that, before asking students to say something.<br><br>I think we can ask them whether they have understood everything or if they have any doubts. |
| | 2 – Giving brief and insufficient response | Before the production part means ... before ... production by students. Yes, yes, yes, I did cross-check. I did. How well they have understood the content and situation, I asked them. |

| | | |
|---|---|---|
| 2 – Drawing teacher's attention to the problem | | Was any student given a chance to explain what they had understood? |
| | 3 – Defending one's move for some reason that lacked conceptual understanding | Yes. They responded. My question was ... see you have successfully completed the one week of desert island trip. How did you feel?<br>[Hm.]<br><br>Question is there in the video. |
| 14 – Explaining the gap in teacher's understanding | | I am telling only about the instructions. I am asking only about cross-checking with the students at the time of giving instructions.<br><br>You have given instructions. But did they understand or not? Have you cross-checked with the students whether they have understood all the instructions?<br><br>Later on, you got some responses. That is well and good. But at the time of giving instructions, did you give them any opportunities for asking any doubt or expressing what they understood?<br><br>Your instructions are different and asking them if they had understood your instructions is a different micro-skill, isn't it? |
| | 3 – Defending one's move for some reason that lacked conceptual understanding | Instructions are different ... task is different. I know. I gave clear instructions ... see children ... you are going there for one week.<br><br>I did ... but you are telling that I did at the conclusion. |
| | | I am not telling that you did at the conclusion, sir. |

| | | |
|---|---|---|
| 18 – Explicit instruction of concept | | [Smiling]<br><br>You gave ... you gave the instructions. They are all very clear.<br><br>But you are assuming that they have understood them all clearly. You are assuming it. It is your assumption only. How can you know or confirm that they have understood unless you asked them a few questions about their understanding?<br>Only when you give one or two students opportunities to tell in their own words what they have understood, then we can confirm that … okay … everyone is clear. |
| | 1 – Back channelling / Silence | Okay. |

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# Preparing In-Service Teachers for Exploratory Action Research: The Potential of Mentor's Mediational Discourse in Promoting Conceptual Thinking

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**Abstract**

Drawing from Vygotsky's Socio-cultural theory of learning, this article explores the potential of mentor's mediational discourse in shaping the conceptual thinking and learning of teacher researchers. Informal mentoring support was provided over a period of six months to four in-service teachers involved in an exploratory action research project funded by the British Council. Conversations were an important component of the mentoring process in this project as they were purposefully used by the mentor to mediate the mentees' conceptual thinking and promote their learning. Analysis of conversations revealed three different types of conceptualizations - explicit guidance, rationalizing and visualizing - used by the mentor to prompt reflection and construction of knowledge. The data also suggests that novice teacher researchers need dialogic support which can be provided by a model of conceptual thinking during conversations. The study has implications for teacher educators and teachers who volunteer to mentor their colleagues, especially in an informal context.

**Keywords:** mentoring, action research, conceptual thinking, mediation, socio-cultural theory, mediational discourse

In teacher education literature, conducting a scientific and systematic inquiry into classroom challenges and problematic situations is considered a necessary skill (Elliott, 1994; Burns, 2010; Smith, Padwad & Bullock, 2017; Smith & Rebolledo, 2018). Teachers are first questioners

and hence they are expected to pose critical questions on the effectiveness of their own teaching practices and find a suitable alternative that would bring a change or improvement in the quality of their students' learning (Cochran-Smith & Lytle, 1999; Stremmel, 2007). Teacher research is used synonymously with the popular method commonly followed by practitioners for conducting research, i.e. 'Action research'. In an action research cycle, teachers first identify a problem, collect the data pertaining to the problem and then analyse and interpret the findings to arrive at a suitable solution. Carr & Kemmis (2003) describe action research as a form of self-reflective inquiry that can be used by teachers to improve the rationality and justice of (i) their own practices, (ii) their understanding of these practices and (iii) the situations in which these practices are carried out. Evidence from studies on teacher research suggests that teachers who are involved in research are more critical, more analytical in their teaching and more open and committed to professional development (Maggioli, 2018; Gnawali et al. 2021). In a study on the opinions of teachers on action research in Turkey, Yigit and Bagceci (2017) found that action research improved teachers' pedagogic knowledge and helped them to have a positive impact upon their students. For these benefits that teacher research can bring to the practitioner, the institution and the whole education system, teacher research is strongly recommended at the policy level. In the Indian teacher education context, the National Curriculum Framework for Teacher Education (2009) suggested that "teachers should be involved in small research projects and case studies through which they can reflect on, share and develop their practice" (p. 68). In order to understand and promote teacher research, there is an immediate need to reorient the focus from teacher training to teacher learning. Especially, since action research involves learning and unlearning of many concepts by teacher-researchers, there is a great need for an in-depth understanding of what teacher-learning entails and for supporting teachers in this challenging journey.

**Teacher-Learning**

A glimpse into research on teacher education suggests that there have been three major developments in understanding how teacher learning takes place. Half a century ago, influenced by the Behavioural school of thought, teacher education centred on transmitting the content and

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teacher learning meant learning of appropriate teaching behaviours. Hence emphasis was laid on enabling teachers to deliver the content through selective methods and techniques (Johnson, 2009). Later, based on the influence of cognitive theories of learning, teacher learning was conceptualized as effective decision-making, and to develop teachers as efficient decision-makers, reflective thinking was strongly promulgated (Crandall, 2000). Recently, a rather lesser explored dimension in teacher education, i.e. teacher cognition began to evolve as a major factor influencing teacher-learning. In an extensive review of research on teacher cognition covering over a period of 25 years, Borg (2003) claimed that teacher cognition, i.e. what teachers know, think, do, and believe, is intertwined with one's prior experiences in life as a student and as a teacher, and it is this unobservable psychological dimension that informs most of the practices and decisions in their teaching contexts.

Johnson (2009) claims that this shift from positivist paradigm to interpretation or situated paradigm in teacher learning did not occur in isolation but was influenced by parallel epistemological shifts in the conceptualization of human learning. While the Behavioural and the Cognitivist schools of thought believed that learning is dependent on the intelligence or capacity of an individual, Vygotsky's (1980) Socio-cultural theory of mind (SCT) suggests that intelligence is not the only sufficient indicator of learning. Learning happens initially through interactions in the world outside and then the concept is internalized in the individual's mind. According to SCT, learning takes place through two kinds of concepts, which he calls as 1) Spontaneous or everyday concepts and 2) Scientific concepts or abstractions (Smagorinsky et al. 2003). While spontaneous concepts are formed in the human mind through concrete situations of day-to-day lived experiences, scientific concepts are shaped through formal input in a classroom and through reading of prescribed textbooks. Applying this theory to action research by teachers, for instance, a teacher may have acquired certain spontaneous concepts through research experiences of other teachers, friends or one's own stint with action research during Bachelors/Masters in Education. On the other hand, certain scientific concepts related to action research may have come from formal input about action research during pre-service teacher education or by reading relevant material on action research or by attending workshops on action research. All these experiences together lead to certain conceptualizations in a teacher's mind, and it is

from these concepts that a teacher consciously or tacitly draws upon to figure out decisions and actions (Penlington, 2008).

Vygotsky's SCT also offers a rich insight into the conditions in which teacher learning can best take place. According to Vygotsky (1978), mediation by an expert or peer during a joint activity is essential for a novice's learning or doing any kind of higher form of mental activity. Mediational support provided by the expert or peer helps the novice to internalize the culturally constructed psychological and semiotic tools (Wertsch, 1985; Poehner, 2005; Johnson, 2009; Harvey & Vásquez, 2015). Applying SCT to teacher education, Johnson (2009) claims that mediation by an expert or a teacher colleague is an important component in teacher learning or teacher development, be it pre-service or in-service.

Using mediational discourse for promoting learning is in fact not a new idea in teacher education. For instance, in pre-service teacher education, supervisors or teachers observe students' practicum classes and give oral feedback on the strengths and weaknesses of the lesson. In the West, a beginning teacher is supported by an experienced teacher colleague, who acts as a mentor and guides the teacher in getting acclimatized to the new set up (State of Victoria, Department of Education and Training, 2016). This process of support and hand holding provided to a teacher is called 'mentoring' and it has found the enthusiastic support of experts, researchers, and teacher educators across the world as a means of promoting English language teacher learning and development (Delaney, 2012). However, mentoring and its usefulness in relation to action research is an area which is still emerging, and teachers/teacher educators are not trained for these purposes in local teacher education contexts.

## Mentoring

Mentoring is commonly referred to the process of providing affordances to a novice or less experienced teacher by a knowledgeable, experienced, highly proficient teacher (Stremmel, 2007). A mentor's disposition towards the mentee varies very differently from that of a supervisor. Unlike a supervisor, the mentor views the mentee as a contributor or a collaborator rather than as a novice whose practices and assumptions need to be scrutinized, assessed, and judged. A major component that distinguishes mentoring from supervision is the bi-directional communication that takes place in the conversations of the participants

(Delaney, 2012). Studies reveal that one of the variables of effective mentoring is the way in which the mentor communicates with the mentee. In conversations, usually, it is observed that mentors spend more time in listening to their mentees' concerns. In a study by Farr (2003), it was observed that the mentor responded to the mentee by using only minimal response tokens (For example, hmm, yes, uh) and thus facilitated teachers' self-reflection through uninterrupted talk. In another study based on mentor-mentee conversation during post-observation conferences, Harvey & Vásquez (2015) demonstrated how a mentor can develop conceptual thinking in beginning teachers through questions, comments, observations, feedback, and suggestions. Severino & Serra (2021), in a small-scale study designed for promoting action research skills of secondary school teachers found that interactions made their mentees more curious and excited about the whole experience of action research. These studies reveal the various ways in which mentors facilitate an open discourse rather than indulging in conversations that are simply pedantic and uni-directional in nature.

The review suggests that the mentor's strategic mediational discourse can have a positive impact on teacher learning. However, there is a dearth of studies that demonstrate how mediational discourse can be carried out by mentor teachers to promote conceptual thinking, especially in the context of action research. In order to address this gap, in this article, I present an analysis of excerpts from mediated discourse carried out with mentees while mentoring in an action research project.

**Research Context**

This study is carried out as a British Council-funded A.S. Hornby project for Exploratory Action Research (EAR). This project is awarded to an organization or a teacher networking community which aims at the development of action research skills of school teachers. English Language Teachers' Association (ELTA), Telangana, a professional community of teachers in Telangana state of India bagged the project for the year 2020-2021. The author of this article, being a member of ELTA, Telangana, volunteered to be a part of the project as a mentor. As this project started at a time when the pandemic was rampant, there was no possibility to meet the teacher researchers (TRs) face-to-face and hence all the meetings were carried out only through virtual platforms (Google Meet and Zoom).

**About the TRs**

During this project, the author mentored four in-service teachers, all working in different Zilla Parishad schools of Telangana. Out of the four teachers, two worked at high school and two others worked at primary school. Their teaching experience ranged from 4-25 years. All the TRs have been involved as resource persons in various mandal, district or state level programmes at different times during their service. They were all intrinsically motivated and committed towards professional development. The teachers had a preliminary understanding of the purpose and benefits of action research when enrolling for the project, but none of them had any experience of conducting classroom-based action research. So, the TRs needed the mentor's support at different phases such as selection of topic, data collection, data analysis, documentation of the findings and in making PPTs and presentations at ELTA meetings. Though their needs were mostly similar, owing to the informal context in which the action research project was carried out, not all teachers were alike in seeking the support of the mentor or responding to the support provided by the mentor.

**Mentoring TRs**

In the process of mentoring the TRs, the mentor tried out using different tools and strategies to promote teacher-learning and thinking. Initially, a WhatsApp group was formed with all the TRs together to share necessary information and material on their respective research topics. One of the TRs who was a primary school teacher needed additional support than the rest of the TRs as action research was completely new for the teacher. The challenges also doubled for this particular teacher as she joined late in the project and missed all the initial orientation sessions and workshops conducted by ELTA. In order to support this TR, other TRs in the group were encouraged to make presentations within the small group. The TRs were encouraged to support one another and learn collaboratively through presentations and discussions. In addition to these, self-assessment questionnaires, prepared by the mentor, were shared with the TRs to enable them to maintain a check on their progress. TRs were also suggested to write reflective diaries of their work. However, nothing was imposed on the teacher, and it was left to the interest and discretion of the TR owing to the informal context

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of the study. The support provided was based on the individual and immediate needs of the TRs.

The TRs needed the support of the mentor especially for a discussion on their doubts, fears, and challenges at different phases of action research such as finalizing the topics, framing of research questions, deciding the data collection tools, etc. These discussions were approached by both the mentor and the TRs as a teaching/learning opportunity. The roles of peer and novice were clear and mutually respected by everyone. Meetings were conducted with a shared understanding of the purpose and as such the discussions were focused and goal-oriented. The meetings were not pre-planned and were carried out as per the convenience of the mentor and the mentee. On an average, a single meeting with each individual teacher took 20-45 minutes. During these conversations, the author, i.e. the mentor of this study mediated the conversations with the objective of promoting the TRs' conceptual thinking.

The following is an analysis of excerpts drawn from mediational conversations recorded randomly over a period of three months.

**Data Analysis**

Excerpts from the conversations that revolved around TRs' doubts and dilemmas have been identified and examined to categorize the mentor's mediation. Three representative samples of the categories in the mentor's conceptualizations, i.e. explicit teaching, hypothesizing and visualizing are presented here.

**Excerpt 1: Explicit Guidance**

Explicit guidance refers to direct explanation by the mentor for bringing in conceptual clarity in the teacher's thinking. In Excerpt 1, the mentor and a TR met to discuss the EAR questions written by the latter. This particular TR had joined very late in the project. The TR learnt about the process of EAR by attending the mid-project presentations made by other team members. On the basis of her understanding, the TR wrote a few questions and wanted to know the feedback of the mentor. As the questions were general and totally irrelevant to her research topic, the mentor explicitly conceptualized the purpose of writing EAR questions.

**Figure 1** *Excerpt from the conversation on review of EAR questions*

1. TR4: How are my research questions, ma'am?
2. M: Yeah, they are okay. We will discuss them … but did you get time to go through
3. the book 'The Handbook on Exploratory Action Research'?
4. TR4: Yes ma'am. I read. I understood also. But by watching XXX's presentation, I
5. got some idea how to write research questions.
6. M: Ok, fine, it's alright mam. Ok … actually … what I want to say is that your research
7. topic is related to developing writing skill through joyful learning, right?
8. So, **what do you know about the current writing skill of your students?**
9. TR4: Mam, I selected this topic because I know that joyful learning is very successful.
10. I have many videos on joyful learning activities and art integrated learning activities.
11. But recently, I understood that my students are not able to write sentences. They
12. are not able to frame sentences. Now they are in 5th class. Next, they will go to 6th
13. class, and they should be able to write when they go to high schools.
14. M: Yes mam. That's right. **But what all you said now is the reason or justification for**
15. **doing action research. But what do you know about the students' level of**
16. **writing? What do you know about the problems in students' writing? In order**
17. **to answer these questions, we should have proper evidence. In research, we**
18. **cannot just assume that we know our students very well. We should first collect**
19. **data and based on the findings, we should make conclusions or take actions.**
20. TR4: Yes ma'am … that is only research. We should have evidence.
21. M: **Yes, so for that we need to write research questions. These research questions**
22. **will help you to decide from whom you should collect evidence. Without**
23. **questions, how will you know what data or what evidences you should**
24. **collect? A lot of time will be wasted if we don't write proper research**
25. **questions. Imagine that we are in darkness, and we don't know where to go.**
26. **Then we need a torch light. Similarly, research questions give you direction**
27. **…. like where to go, what to collect, with whom you should talk to get**
28. **correct data and all that.**
29. TR4: **Okay…so research questions should be on … about … related to my topic.**
30. **Like … how students are learning through joyful learning activities? … What**
31. **my colleagues tell about these activities, hmm … from parents and … brothers**
32. **and sisters also I can collect mam. I understood somewhat ma'am now (laughing).**

As can be seen in Figure 1, TR4 lacked clarity on the purpose of writing exploratory research questions because her understanding was rooted in her experience of watching mid-project presentations. However, this learning from lived experiences have not formed in TR4 the kind of conceptual thinking essential for framing exploratory research questions relevant to her topic. In Line 6, the mentor's question about the students' writing skill, served as an implicit prompt to elicit students' understanding of the exploration phase. However, the TR's reply was centred on her everyday experiences of joyful learning in her context and the immediate need for her to concentrate on developing students' writing skill (Lines 9-12). At this point, the mentor modelled the conceptual thinking needed for carrying out the exploratory phase of action research by explicitly teaching about the purpose of writing

exploratory research questions (Lines 14-18 & 20-25). This kind of mediation falls under explicit guidance as the mentor directly explained the need for writing exploratory research questions.

Through this kind of modelling the teacher was prompted to see the need for writing research questions that are relevant to the topic. After listening to the mentor, TR4 responded by paraphrasing her understanding and by acknowledging that she understood it better (Lines 26-29).

**Excerpt 2: Rationalizing**

Rationalizing refers to the mentor's modelling of conceptual thinking about an issue with logical and plausible reasons. The following excerpt (Figure 2) shows how the mentor demonstrated conceptual thinking while editing one of the TR's misrepresentation of participants' responses. During the conversation with TR1 on reviewing a PPT prepared by him, it was observed that the TR1 presented 'Unable to

**Figure 2** *Excerpt from conversation on data representation*

1. M: (Reading from the PPT) …factors hindering them from reading. Did the
2. students give these responses? Did the students say that it is difficult for them
3. to guess the pronunciation of multi-syllabic words?
4. TR1: Inability to guess the pronunciation … it is their response. They mentioned it ..
5. but multi-syllabic words ... actually, they are unable to use the word complex. I
6. have made it into multi-syllabic. I changed their words into multi-syllabic
7. because … they can't read complex words.
8. M: It need not be multi-syllabic words only. Any new word is difficult for them.
9. TR1: Even in new words, what they said is…the pronunciation … uh … breaking is
10. what is very difficult. For that, I told them to … break into small chunks …
11. even the word should be … broken into small, small syllables.
12. M: Ok. That's a good technique. So, you taught them how to break multi
13. -syllabic words into small chunks. The students found that technique
14. also difficult in pronouncing new words because first, they have to
15. break a big word into small chunks of syllables. Then, they have to
16. guess the pronunciation of each syllable and then after this they have
17. to guess the combination of all the syllables. That is a difficult process
18. while reading a text.
19. TR1: Yes. That is not easy for them. But they can't express that.
20. M: You observed that the technique of breaking multi-syllabic words into
21. chunks was also not helpful to develop their reading. That's a good
22. observation.
23. TR1: Okay.
24. M: But while presenting students' responses in research, it may not
25. sound genuine if I say my students can't guess the pronunciation of
26. multi-syllabic words because … you know my students are from
27. regional medium and everyone knows that regional medium students
28. cannot use such subject-specific technical terminology. So, I would
29. just stick to words expressed by students … or if the interview is in L1,
30. I will translate to the nearest … but if we project our ideas as the ones
31. expressed by students, then it may not be helpful in identifying the
32. exact needs of the students. One main issue in this is, it will not help
33. me in selecting the right activities later during the action research.
34. TR1: Ok…What should I do now? Shall I delete it?

pronounce multi-syllabic words' as one of the problems expressed by students themselves. This aspect of the data appeared to be manipulated as the students belonged to regional medium and rural background. In the discussion that ensued, the TR acknowledged that he used the term 'multi-syllabic' himself because he had taught them in the class how to chunk multi-syllabic words and he knew that it is difficult for them to break complex words into chunks. While discussing this issue, the mentor mediated in the mentee's conceptual thinking regarding data interpretation.

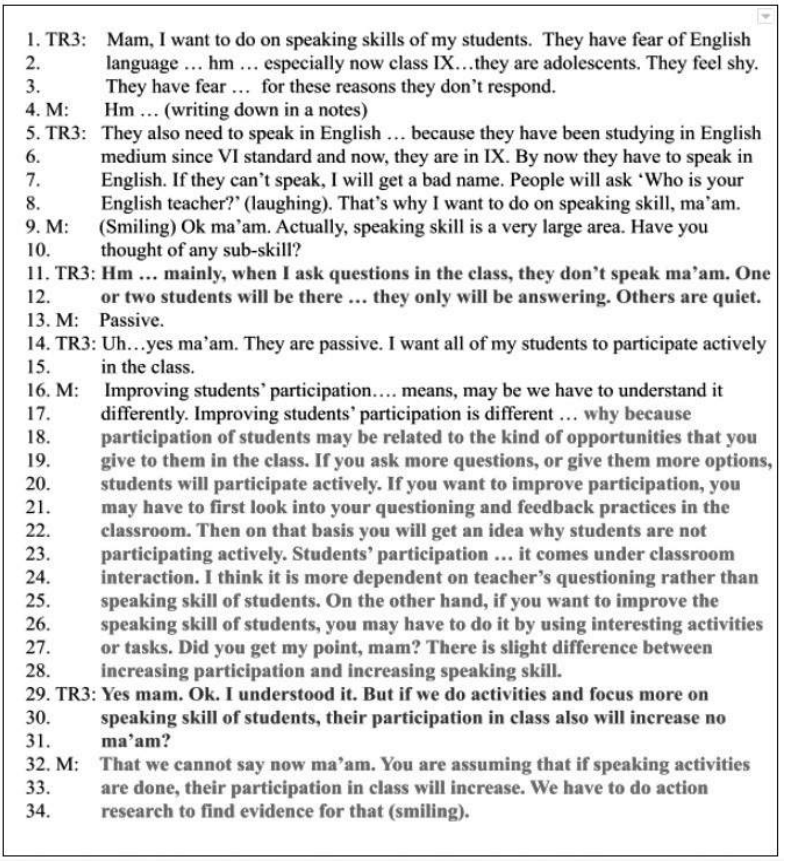
Though the TR acknowledged in Lines 5 & 6 that it was his decision to replace the students' statements with his own understanding of the classroom experience, the mentor felt the need to discuss it further as the issue at hand comes in the ethical domain and such practices can also have an impact on the quality of the teacher's future research. As such, the mentor at first appreciated the TR for teaching his students the technique of breaking a multi-syllabic word into chunks (Lines 12-17). This served as a means to draw the teacher's attention towards the complex meta-cognitive terminology involved in the process of chunking words into syllables. However, the TR's attention was glued to students' inability to use the words 'multi-syllabic' and 'chunks' (Line 18) rather than thinking how beginner students can use such meta-cognitive language. At this point, the mentor mediated by presenting an example of how she would think if she were in the TR's place (Line 22-29). The mentor explained that students' responses may not sound genuine by reasoning why she would avoid such misrepresentation of data if she were the TR. The mentor also decontextualized the issue and connected this particular concrete situation to the larger purpose of research, i.e. finding the actual needs of the students and identifying a suitable action research plan. The mentor's mediated discourse was however followed by a response which did not demonstrate any learning from the TR. The TR at this instance seemed to be more concerned about the PPT rather than learning.

**Excerpt 3: Visualizing**

Visualizing was used for the category in which the mentor modelled conceptual thinking through visualization of the future course of action in different situations. The following excerpt (Figure 3) was from a conversation with TR3 that took place at the time of selection of a research topic. During the meeting, the TR expressed her intention to do

action research on developing speaking skills. Later, the TR expressed improving student participation in class as what she meant by speaking skills. It was understood that the TR has been using speaking skills and student participation interchangeably and lacked the clarity to see the difference between the two concepts. In order to reduce this fuzziness in the TR's thinking, the mentor mediated the discourse by visualizing the future course of action in both the situations.

**Figure 3** *Excerpt from conversation on finalizing the research topic*



1. TR3: Mam, I want to do on speaking skills of my students. They have fear of English
2. language … hm … especially now class IX…they are adolescents. They feel shy.
3. They have fear … for these reasons they don't respond.
4. M: Hm … (writing down in a notes)
5. TR3: They also need to speak in English … because they have been studying in English
6. medium since VI standard and now, they are in IX. By now they have to speak in
7. English. If they can't speak, I will get a bad name. People will ask 'Who is your
8. English teacher?' (laughing). That's why I want to do on speaking skill, ma'am.
9. M: (Smiling) Ok ma'am. Actually, speaking skill is a very large area. Have you
10. thought of any sub-skill?
11. TR3: **Hm … mainly, when I ask questions in the class, they don't speak ma'am. One**
12. **or two students will be there … they only will be answering. Others are quiet.**
13. M: Passive.
14. TR3: Uh…yes ma'am. They are passive. I want all of my students to participate actively
15. in the class.
16. M: Improving students' participation…. means, may be we have to understand it
17. differently. Improving students' participation is different … **why because**
18. **participation of students may be related to the kind of opportunities that you**
19. **give to them in the class. If you ask more questions, or give them more options,**
20. **students will participate actively. If you want to improve participation, you**
21. **may have to first look into your questioning and feedback practices in the**
22. **classroom. Then on that basis you will get an idea why students are not**
23. **participating actively. Students' participation … it comes under classroom**
24. **interaction. I think it is more dependent on teacher's questioning rather than**
25. **speaking skill of students. On the other hand, if you want to improve the**
26. **speaking skill of students, you may have to do it by using interesting activities**
27. **or tasks. Did you get my point, mam? There is slight difference between**
28. **increasing participation and increasing speaking skill.**
29. TR3: **Yes mam. Ok. I understood it. But if we do activities and focus more on**
30. **speaking skill of students, their participation in class also will increase no**
31. **ma'am?**
32. M: **That we cannot say now ma'am. You are assuming that if speaking activities**
33. **are done, their participation in class will increase. We have to do action**
34. **research to find evidence for that (smiling).**

The mentor demarcated the difference between 'developing speaking skill' and 'improving participation' by visualizing what would be the course of action in future in these two different situations. The mediator talked about what the TR may have to do if improving student participation was her topic (Lines 20-22) and what she may

have to do if developing speaking was her topic (Lines 25-26). This type of conceptualization was done to enable the TR to see what is more important for her in her context. In response to this conceptualization, the TR responded by asking a very apt question about the relation between speaking activities and participation in the class (Lines 27-28).

**Discussion**

The findings of this study demonstrate the importance of mentoring in promoting the conceptual thinking of novice teacher researchers. The study also highlights the key role of a mentor in construction of knowledge and scaffolding learning. The conceptual thinking modelled by the mentor in this study prompted certain responses which encouraged the articulation of the TRs' thought processes. For instance, the paraphrasing of understanding by TR4 (Fig. 1, Lines 26-29) and questioning by TR3 (Fig. 3, Lines 27-28) indicated that the TRs were able to think at an abstract level about the concepts/ideas under discussion in contrast to their earlier talk rooted in everyday lived experiences. The mediation provided by the mentor involved three different types of conceptualizations, namely: explicit teaching, rationalizing, and visualizing. Explicit teaching was used when the TR was not fully confident with her concepts. Rationalizing was done when the mentor had to provide a logical reasoning for some action, and visualizing was done to enable the mentee to foresee the possibilities of a future course of action in a confounding situation. However, as it is common in any qualitative research, these conceptualizations were based on the mentor's subjective opinions about what is important for the TR as was understood through the conversations.

It is beyond the scope of this article to explicate how far the teachers developed their ability to think conceptually about EAR as a result of the conversations with the mentor. It is also not the intention of the author to claim complete change in the TRs' conceptual thinking as it was seen in the example of TR1 (Fig. 2) that the teacher was more interested in completing the PPT rather than understanding the usefulness of genuine data in action research. The limitations coming from the mentor's background in terms of experience and training could have also had an impact on the mediational discourse.

In spite of all its limitations, the TRs' responses to the mentor's mediation in this study point towards the potential of conversations in bringing

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out the expected change in the conceptual thinking of teachers. This study would help teacher educators and teachers acting as mentors to be more aware of their language and their linguistic choices during conversations and especially during mediational discourse. As such, the study has implications for teacher educators in general and mentors in particular. It underscores the value of informal conversations in enabling the TRs to emerge from their routine contextualized lived experiences and develop an abstract level of thinking which is essential for informed planning and decision-making. The mentor's mediation could be in the form of questioning or prompting a teacher to justify or explain the reason behind a particular choice or it could be in the form of mediation, as illustrated in this study. The TRs' responses would give a lead to the mentor into the conceptual thinking of the TR and the need for change in it. Helping novice TRs develop the ability to think conceptually about research is an important step towards helping them move from dependence on mentors to being experts working on their own and solving their own classroom problems. Encouraging such mentoring programmes that are oriented towards teacher learning is the need of the hour as they would not only contribute to the development of teacher competencies but also to the qualitative development of the entire education system.

## References

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, *36*(2), 81-109.

Burns, A. (2010). *Doing action research in language teaching: A guide for practitioners*. Routledge.

Carr, W., & Kemmis, S. (2003). *Becoming critical: Education, knowledge and action research.* Routledge.

Cochran-Smith, M., & Lytle, S.L. (1999). The teacher research movement: A decade later. *Educational researcher*, *28*(7), 15-25.

Crandall, J.J. (2000). Language teacher education. *Annual Review of Applied Linguistics*, *20*, 34-55.

Delaney, A.Y. (2012). Research on mentoring language teachers: Its role in language education. *Foreign Language Annals*, *45*(1), 184-202.

Elliott, J. (1994). Research on teachers' knowledge and action research. *Educational Action Research*, *2*(1), 133-137.

Farr, F. (2003). Engaged listenership in spoken academic discourse: The case of student-tutor meetings. *Journal of English for Academic Purposes*, *2*, 67-85.

Gnawali, L., Laudari, S., & Shrestha, S. (Eds.). (2021). *Exploratory action research stories of Nepalese EFL teachers*. NELTA.

Harvey, J.K., & Vásquez, C. (2015). Preparing for the complexities of teaching: Modeling conceptual thinking in post-observation conferences. *Ilha do Desterro*, *68*, 91-103.

Johnson, K.E. (2009). *Second language teacher education: A sociocultural perspective*. Routledge.

Johnson, K.E., & Golombek, P.R. (Eds.). (2011). *Research on second language teacher education: A sociocultural perspective on professional development*. Routledge.

Maggioli, G.D. (Ed.). (2018). *Champion teachers: Stories of exploratory action research*. British Council.

National Curriculum Framework for Teacher Education: Towards Preparing Professional and Humane Teachers. (2009). New Delhi.

Penlington, C. (2008). Dialogue as a catalyst for teacher change: A conceptual analysis. *Teaching and Teacher Education*, *24*(5), 1304-1316.

Poehner, M.E. (2005). *Dynamic assessment of oral proficiency among advanced L2 learners of French*. The Pennsylvania State University.

Severino, S., & Serra, M. (2021). Mentoring English language teachers to use action research in teaching writing. *ELT Research*, *36*.

Smagorinsky, P., Cook, L., & Johnson, T. (2003). The twisting path of concept development in learning to teach. *Teachers College Record*, *105*(8), 1399-1436.

Smith, R., Padwad, A., & Bullock, D. (Eds.). (2017). *Teaching in the low-resource classroom: Voices of experience*. British Council

Smith, R., & Rebolledo, P. (2018). *A handbook for exploratory action research*. British Council.

State of Victoria: Department of Education and Training. (2016). *A reflective guide to mentoring and being a teacher-mentor.* https://www.education.vic.gov.au/Documents/school/teachers/profdev/Reflectiveguidetomentoringschools.pdf

Stremmel, A.J. (2007). The value of teacher research: Nurturing professional and personal growth through inquiry. *Voices of Practitioners*, *2*(3), 1-9.

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the Development of Children*, *23*(3), 34-41.

Vygotsky, L.S. (1980). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wertsch, J.V. (1985). *Vygotsky and the social formation of mind*. Harvard University Press.

Yigit, C., & Bagceci, B. (2017). Teachers' opinions regarding the usage of action research in professional development. *Journal of Education and Training Studies*, *5*(2), 243-252.

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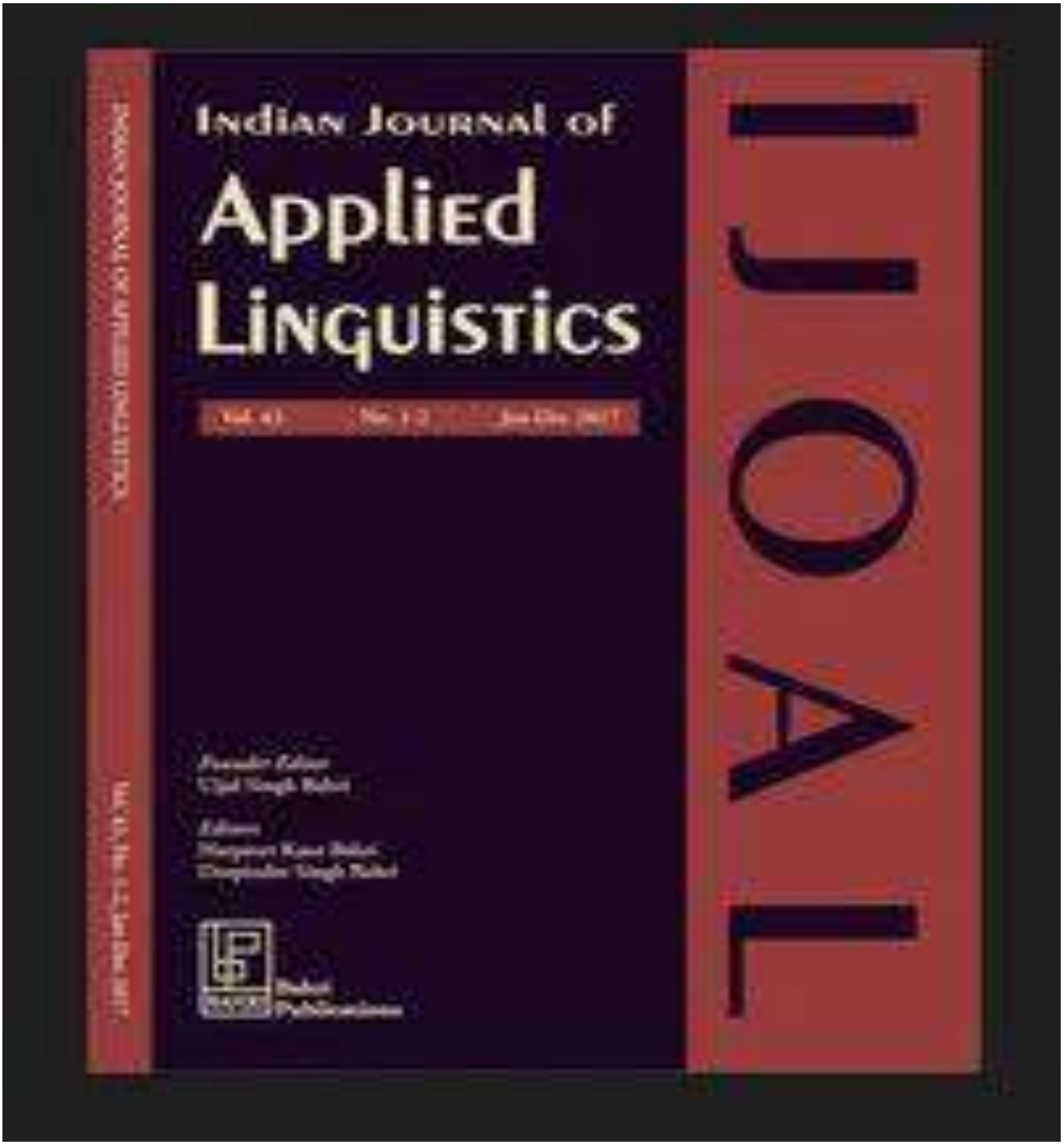
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# A Study of the Effect of Rubric-based Self- and Peer-assessment on the Writing of Beginner Level Learners

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ABSTRACT

*In tune with the growing emphasis on learner-centeredness in teaching, alternative forms of assessment have gained significant attention as means of developing students' linguistic and cognitive capabilities. In consistence with the requirement for more research in alternative assessment in ESL context, the present study intends to explore the effect of self and peer-assessment on the development of beginner level learners' writing skill. It was hypothesized that self- and peer-assessment would have no statistically significant effect on the writing skill of the learners at the level of p=0.01. The research questions attempted to find 1) the significance of the effect of self- and peer-assessment on the skill of writing a narrative and 2) the significance of the effect of self- and peer-assessment on each criterion of the scoring rubrics. For this, sixteen students studying standard IX were given instruction in writing the genre of recount of an event as well as the criteria chosen for evaluation. The study adopted a quasi-experimental pre- and post-test design. Mixed method approach was used for data analysis which comprised students' answer scripts and the scores obtained at various phases of the study. The post-test results indicated that the participants progressed from pre-test (M=2) to post-test (M=7.5). The results indicated a statistically significant difference at the level of 0.01 leading to the rejection of the null hypothesis. The findings were attributed to heightened awareness of the students about the assessment criteria.*

**Keywords**: Self-assessment, peer-assessment, writing skill, reflective experience, scoring rubrics, assessing writing.

## 1. INTRODUCTION

Writing instruction in school educational setup of ESL context is predominantly teacher-centered with the role of the learners slipping into a passive mode once the writing task is completed. The prevailing practices mostly adhere to the traditional notion of testing what student cannot do, despite curricular reforms that foster the formative role of assessment in language classrooms (NCERT 2007). Teachers' preoccupation with scoring and grading leaves them very little time for supporting the learners in their actual developmental processes. In a statement that aptly suits this scenario, Huot (2002) observes that "a crucial missing element in most writing pedagogy is any experience or instruction in ascertaining the value of one's own work" (p. 67). Supporting this stance, Bamberg (1978) and Clark (2003) gave a call for involving students in assessment of writing on the grounds that learners should be trained to hold responsibility for their own writing. Carless (2007) suggests that assessment should be "a formative process of students' active engagement with assessment criteria, notions of quality, and their own and/or peers' performance."

With increasing attention to learner-centeredness in assessment of writing, the effects of self- and peer-assessment on the development of learners' writing skill have been researched across varied educational contexts and proficiency levels. However, the extent to which student-based assessment enhances the quality of a text or performance of beginner level learners in L2 contexts falls short of sufficient empirical evidence. Specifically, scholars question an "average" students' ability to assess or use the feedback for text revision (Harris, 1997). Motivated by the findings in Andrade & Du's (2007) study that students' understanding of the expected assignment quality enhances their engagement with the text, the current paper attempts to investigate if writing skills of beginner level learners can be developed by minimizing the amount of teacher feedback

and teaching them how to assess a performance using rubrics. The study is also in response to the calls for use of self- and peer-assessment to enhance the skills of reflective thinking and learning to learn, considered requisite for one's journey towards 'autonomous learning' (National Curriculum Framework, 2005). The objective of the study is to arrive at some conclusions that motivate good learner-oriented practices in classroom-based assessment of writing.

## 2. THEORETICAL FRAMEWORK

Self-assessment refers to the process in which students assess their own learning. It is defined as a set of skills through which students are encouraged to play an active role in managing, monitoring and improving their learning. Peer-assessment, on the other hand, refers to assessment practices in which learners assess the performance or the learning outcomes of their peers. These practices are grounded in the belief that learners are the key producers and consumers of assessment information and their integration into the assessment process is therefore unavoidable. Another key assumption underlying the faith in the learners' ability to assess themselves or their peers stems from the Constructivist belief that "knowledge is not passively received but built up by the cognizing subject" (Glasersfeld 1995). As knowledge is believed to be a personal and idiosyncratic construction unique to each individual, a teachers' role primarily lies in addressing the need for learner reflection in learning activities. Strike & Posner (1985) point that reflective practices result in learners' dissatisfaction with their current performance, and their subsequent drive for an alternative or better performance. The theoretical framework for this study is thus concerned with how students use self-assessment in reflecting and improving their writing performance.

The second aspect of the theoretical framework is concerned with the ways in which self-reflection and monitoring can be facilitated in the class. Reflective practices are cognitive acts such as thinking, contemplation, mediation or other forms of attentive consideration that can lead to contextually appropriate

changes. This study is based on the belief that self-reflection should be accompanied by feedback from a "more knowledgeable other," a teacher or a peer, for a complete understanding of one's own strengths and weaknesses. Chaiklin (2003) points out that it is not the competence per se of the more knowledgeable person that is important but the understanding of the meaning of assistance in relation to learning that is more crucial. Drawing from the important role assigned to mediation from an external source for better performance, the current study banks on peer feedback as a tool for learning.

## 3. LITERATURE REVIEW

Research on self-assessment provides ample evidence that learners' performance can be improved when provided with the right kind of tools and reflective experiences (Ross, Rolheiser & Hogaboam-Gray 1999; Andrade & Boulay 2003; Andrade, Du, & Wang 2008). For instance, increased awareness of assessment criteria had resulted in increased student attention to content and organization and also enabled them to make judgements that are consistent with those of teacher (Bing 2016). Research on peer-assessment has also highlighted the contributory role of peer-feedback in EFL writing instruction (Behjat & Yamini 2012; Tsagari & Meletiadou 2015; Plutsky & Wilson 2004; Rouhi & Azizian 2013). Interestingly, findings in some studies reveal that students may gain even greater benefits by receiving peer-assessment when compared to receiving only teacher assessment (Lockhart & Ng 1995). Andrade & Boulay (2003) have empirically shown that assessment helps students by supporting "learning and skill development via a process of careful reflection on the quality" (p. 21). However, these studies are representative of the effects of self and peer-assessment individually. Very few studies looked into the effect of the formative process of self-assessment followed by peer-assessment on learners' writing.

Birjandi & Tamjid (2011) investigated the role of self-, peer- and teacher assessment in promoting Iranian EFL learners' writing performance. In this study 157 Intermediate TEFL

juniors were divided into 5 groups. Each group was assigned an assessment technique such as self and teacher assessment, peer and teacher assessment, only self and peer assessment, only teacher assessment and only journal writing. The findings revealed that there was no statistically significant difference between the groups which employed only self- and peer assessment (M=69.31) and only teacher assessment (M=71.66). The results indicate that a formative procedure in which self-assessment is followed by peer-assessment is almost equivalent to assessment by teacher alone. In another study on Taiwanese learners, the researchers report that students experienced maximum improvement in their writing when they adopted self- and peer-assessment alongside tutor assessment in their assignments (Birjandi & Tamjid 2012). The positive effect of integrating self- and peer-assessment into the formative process of instruction can also be witnessed in the success story of Knickerbacker Middle School. Andrade et al. (2009) extended their support to a school that was in danger of being recognized as a "School in Need of Improvement" because of its low scores in English Language Arts (ELA). All that the researchers did was "making improvements in the assessment of writing in the classroom" (p. 3). The researchers designed a rubric for writing and trained teachers as well as students in some of the approaches to self- and peer-assessment. As a result of this intervention the sixth and eighth grade students who were earlier reporting consistently low scores in ELA made considerable progress in the following academic years. This implies that assessment by teachers alone does not suffice in improving learners' standards and restricting to either self- or peer-assessment alone would make learning incomplete.

In another study that explored the relationship between assessment types and text revision, Lam (2013) observed that though self-assessment is likely to improve the quality of the texts, all students may not be able to achieve this. To this end, he suggested multiple assessment types as a plausible option to assist the learners who find it difficult to self-assess. In a similar argument, Brady (2012) postulated that if students self-evaluate and revise, and revise again after peer-evaluation, the assignment

that reaches the instructor will be better edited and this process helps in the development of writing skills as well.

The study hence aims to know the effect of a formative process of student-based assessment on the writing performance of beginner level learners in ESL classroom. Considering the level of proficiency of the learners, it was hypothesized that there would be no statistically significant difference at the level of p = 0.01 between the scores of the pre-test and the post-test. The following research questions were framed to test the hypothesis:

1. What is the effect of rubrics-based self- and peer-assessment on the development of the writing skill of standard IX learners?
2. Is there any difference in students' writing performance after they self-assess their drafts?
3. Is there any difference in students' writing performance after they assess their peer's drafts?

## 4. METHODOLOGY AND PROCEDURE

### 4.1. *Research design and variables*

This study adopted quasi-experimental pretest-posttest one group design to determine the effect of rubric-based self- and peer-assessment on the students' writing skill. A purposefully selected group of learners was instructed and everyone in the group was subjected to experimental manipulation. The participants' skill of writing was measured once before applying the experimental treatment and once again after the treatment. The design was chosen keeping in view the aim of the study i.e., to find the effect of integrating student-based assessment into a formative process of writing. The independent variable was the assessment method the learners used and the dependent variable was the achievement of the learners in the post-test.

### 4.2. *Participants and research setting*

The sample of the study comprised 27 students of standard IX studying in Zilla Parishad High School (ZPHS), Ramanthapur, Hyderabad. The school was selected using convenience sampling

technique. ZP schools were started by the government with the aim of providing free education to children. The schools follow the state curriculum and prepare students for Secondary School Certificate.

The proficiency of the participants corresponded with the A1 level of the "Holistic Rubrics for Writing Skill" prescribed by the Common European Framework of Reference for Languages[1] (2001). They were capable of writing simple phrases and short disconnected sentences and they could read and understand simple sentences. The use of an alternative assessment method in the context of these learners came with many challenges and complexities. Firstly, since most of them were first generation learners, their use of L2 was limited to the language classroom. Secondly, as English was studied as one of the subjects, the learners did not see any reason for learning to write except for examination purpose. Coupled with these reasons was the fear, negative attitudes and anxiety associated with learning English. These problems were addressed by motivating the students and explaining how the formative process would be useful to them in learning to write.

The regular English teacher of these learners had an experience of teaching secondary school level learners for over 15 years. The teacher had an M. Phil in English Literature and Masters in Education. The teacher has been following the traditional procedure of assigning a written task, correcting the scripts and giving written feedback. She knew about self- and peer-assessment practices but never implemented them in the class due to the belief that it was not possible to implement such practices with low-proficiency learners. The teacher's support was used in this study to rate the participants' performance.

### 4.3. *Procedure*

Keeping in view the basic premise that classroom assessment should always be aligned with instructional objectives, the intervention was categorized into two phases: 1) instruction and 2) assessment. During the instruction phase, students were taught the moves in writing the recount of an event. Students were shown samples of writing to elicit their responses about good and

bad ways of writing a recount. This activity also helped to know the extent to which they had internalized the genre structure. Once the students gained a reasonable control over identifying the features of narrative in a given sample, they were introduced to the rubrics and given practice in assessing a sample draft using it. During the assessment phase, the students were asked to self-assess their first draft, revise the text, switch the revised/second draft between peers for assessment and then revise the draft once again before submitting it to the teacher for teacher-assessment. Self-reflection, peer feedback as well as revision which were missing in regular writing classrooms were incorporated into the intervention design. Figure 1 gives a diagrammatic representation of the design followed for assessment in this study.

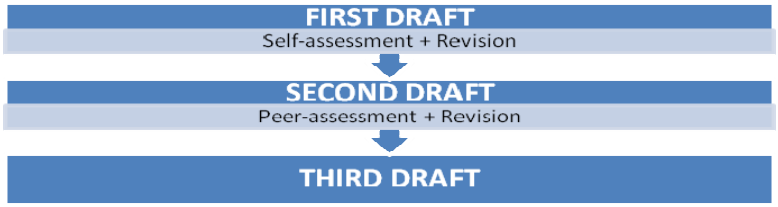


Figure 1. *Procedure followed during intervention phase*

4.4. *Research instruments*

4.4.1. *Writing achievement test*

The main research instrument in this study was the achievement test conducted before and after the study. A pre-test was administered to know the students' entry level performance and a post-test on the same topic to know the quality of their writing after undergoing the experience of assessing writing. The test consisted of writing a 100 word narrative on the topic "Childhood Memory," selected in accordance with the syllabus as well as students' consent. Fifteen marks were allotted for the task. Forty five minutes were given to the learners for completion of the task. Students were provided assistance when they could not get the right word or sentence structure while writing the tests. Similar format was followed for the post-test too, however with a different topic i.e. "an event in which I helped someone." As the purpose of the study was to check learning, the difficulty

level of the post-test task was kept almost similar to that of the pre-test. The test focused on five sub-skills of writing: an attractive introduction, giving sufficient contextual details, sequencing the content in an appropriate manner, giving a proper conclusion and following the conventions of writing. An analytical scoring rubrics consisting of these five criteria categorized on a 4-point scale was used by the researcher and the inter-raters to assess the performance (Appendix A).

4.4.2. *Assignment task*

Another research instrument used in the study was the final assignment task on the topic "A Happy Event in my Life" given to the students during the experiment phase of the study. After the pre-test, students were assigned two writing tasks, both related to the genre of personal narrative. In each task, the students wrote the first draft, and revised their drafts twice – once after self-assessment and once after peer-assessment. The students used the same analytical rubrics consisting of the five sub-skills of writing i.e., Introduction, Content, Sequencing, Conclusion and Conventions, to assess the drafts.

4.4.3. *Assessment guide*

According to Ross (2006) assessment includes reaction to the text along with observation and judgment. In order to enable students to document their observations, feedback or other important points, self- and peer-response guides were provided to students. They consisted of a list of pointers that enabled students to reflect and at the same time jot down their views about the text that they were assessing (Appendix B). The students were instructed to write down their ideas and views about the write-up in the space provided under each question. The students were given the choice to write their observations either in English or in their mother tongue. The students were informed clearly that it was only a support for them to think in detail about each individual criterion and it was not meant for evaluation.

The data attained through all the above mentioned research instruments was used for data analysis. The following section describes the procedures used for data analysis.

## 5. DATA ANALYSIS

Mixed method approach was followed in this study for data analysis. The drafts of 16 students who were present consistently throughout the study were used for quantitative and qualitative analyses. The quantitative analysis included application of descriptive statistics and independent sample t-tests of pre and post-test scores as well as the scores of the three drafts pertaining to the final assignment written during intervention. This helped to determine if the learners made any improvement as a result of the intervention and if so the extent of the gain from pre-test to post-test. The quantitative data was triangulated by qualitative analysis of the scripts using Hyland's (2003) genre analysis for recount of an event. The revision changes made after self- and peer-assessment were analyzed at two stages. Firstly the revision changes were identified and categorized with respect to each of the criterion in the scoring rubrics. Secondly, the revision changes were cross-referenced with the suggestions or comments of the students in the assessment guide to know whether self- and peer-assessment had actually caused the revision changes.

## 6. RESULTS

### 6.1. *Quantitative analysis*

To estimate the effect of self- and peer-assessment on the writing performance of standard IX students, the mean scores of the pre- and post-tests were compared using basic descriptive statistics. Table 1 gives a summary of the mean scores, standard deviation, t-value, degree of freedom and statistical significance of the group's pre- and post-test scores.

Table 1. *Descriptive statistics of the participants' writing performance*

| (n=16) | Mean | SD | t | df | Significance (p=0.01) |
|---|---|---|---|---|---|
| Pre-test | 2 | 1.2 | | | |
| | | | -9.12 | 15 | 0.000 |
| Post-test | 7.5 | 2.4 | | | |

Results show that there was a difference between the mean and standard deviations of the pre-test (M=2, SD=1.2) and the post-test (M=7.5, SD=2.4). The paired sample t-test revealed a statistically significant difference at the level of p=0.01, (t=-9.12, p=0.000) between the entry and exit level performances. The scores indicated that there was an improvement in the performance of the students as a result of assessing and revising texts. The statistically significant difference at the level of 0.01 meant that the null hypothesis was rejected. Students' reflective thinking about their own and others' writing had brought about a considerable development in the quality of their own texts. The results demonstrated that student-based assessment is an unavoidable component of developing the writing skill of the learners.

The pre- and post-test scores in each of the individual criterion of the scoring rubrics were also subjected to descriptive statistics. The mean scores, standard deviations and the resulting values were summarized in Table 2. Paired sample t-test was computed to know the level of significance.

Table 2. *Descriptive statistics in each criterion of the scoring rubrics*

| **Criteria** | **Mean** | | **SD** | | **t** | **df** | **Sig (p=0.01)** |
|---|---|---|---|---|---|---|---|
| | **Pre-test** | **Post-test** | **Pre-test** | **Post-test** | | | |
| Introduction | 0.2 | 1.8 | 0.44 | 0.54 | -8.88 | 30 | 0.000 |
| Content | 0.6 | 1.75 | 0.47 | 0.57 | -6.25 | 15 | 0.000 |
| Sequencing | 0.1 | 1.3 | 0.34 | 0.95 | -5.37 | 15 | 0.000 |
| Conclusion | 0.3 | 1.4 | 0.5 | 0.81 | -4 | 15 | 0.001 |
| Conventions | 0.75 | 0.81 | 0.4 | 0.89 | -1 | 15 | 0.33 |

Statistically significant difference at p=0.01 was observed in four criteria i.e., introduction (p=0.000), content (p=0.000), sequencing (0.000) and conclusion (0.001). The mean in the criterion of conventions rose by only 0.06 with the significance level equaling 0.33. On the basis of the results it can be interpreted that there was a significant level of progress in the global features of the genre.

The scores of the second assignment task during intervention phase revealed that the formative process of writing, assessing and revising texts had positively influenced their writing

performance. The drafts used for the analysis were: Draft 1 which was written immediately after instruction on personal narrative and discussion on rubrics, Draft 2 the revised version written after self-assessment, and Draft 3, the final revised version written after peer-assessment. Table 3 gives a summary of the descriptive statistics of the scores obtained by the students in the three drafts.

Table 3. *Descriptive statistics of scores after self- and peer-assessment*

| | **Mean** | **SD** | **Significance (p=0.01)** |
|---|---|---|---|
| Draft 1 | 3.8 | 1.72 | |
| Draft 2 | 5.8 | 1.82 | 0.005 |
| Draft 3 | 7.8 | 1.75 | 0.002 |

The mean score in Draft 2 (M=5.8) increased when compared to that of Draft 1 (M=3.8) and t-test showed a statistically significant difference between the two drafts (p=0.005) at the level of p=0.01. Similarly, the mean score in Draft 3 (M=7.8) increased further when compared to Draft 2 (M=5.8) with a statistically significant difference of 0.002 at the level of p=0.01. The statistical significance was less than the assumed level of significance (0.01) in both the instances. This implies that both self- and peer-assessment had considerable impact on the learners' performance.

6.2. *Qualitative analysis*

The qualitative analysis of the pre- and post-test drafts in each of the criterion coincided with the quantitative findings. In contrast to obscure introductions which had a major share in the pre-test performance of the students (81%), the post-test narratives started with the details of the setting (62%), theme (25%) and an interesting detail (12%). In the area of content, factual details marked the writing of the students in the pre-test. However, the post-test scripts were characterized by variety in the content provided. Especially six patterns were identified in the students' writing in post-test. They were details related to factual information (66%), sensory perceptions (5%), emotions (10%),

descriptions of persons and places (5%), dialogues (6%), and reflective thoughts (9%). Organization was another criterion in which students made considerable progress. In this study, organization was analysed using two criteria 1) paragraphing and 2) use of transition markers. While introduction and conclusion were absent in a majority of the drafts of the pre-test, there was a very clear paragraphing i.e., introduction, body and conclusion in the post-test scripts. In the case of the use of transition markers, remarkably, 60 instances were found in post-test scripts while there were only 7 of it in the pre-test. Overall revision changes affecting conventions were very few and little focused by the students during assessment.

The qualitative analysis thus revealed that revision changes mostly comprised of adding the content, editing the introduction, giving a proper conclusion, inserting paragraph breaks and using cohesive devices. However, these revision changes can be considered as an indication that the student had learnt from the experience of self- and peer-assessment only when they can be linked to a reflective statement or a comment made by the learners. Table 4 gives a representative sample of changes in students' drafts that can be linked to their comments made after self-assessment.

Table 4. *Revision changes linked with self-assessment*

| S. No | Criterion | First Draft | Self-assessment | Second Draft |
|---|---|---|---|---|
| S12 | Introduction | I went to my friend house. Why because Sunday was my friend birthday party. | Introduction is not good. I should write in an interesting way to the reader. | Happy event in my life is my friend birthday party. My best friend name is Kavya. |
| S25 | Content | We went to Agra see Tajmahal. The weather was pleasant. | to I can write how The we enjoyed in picnic. I want to write clearly. | I went to Tajmahal with my cousins. We enjoyed happily in train singing songs and playing cards. The weather was pleasant |
| S3 | Sequence | First we went to drill. We play in ground. Afternoon lunch tasty. | No sentence connectors. No sequence between sentences. | First, we practice drill. Next, speech give by Major. He told about discipline and good habits. In afternoon we ate lunch. Lunch is tasty. Next we play in ground. |

| | | | | |
|---|---|---|---|---|
| S16 | Conclusion | In this Science exhibition got a sartificate and gift. | Conclusion normal. It would be nice if I write more. | I learn many new things in exhibition. I got a sartificate and gift. All teachers and village people praise me. |
| S21 | Conventions | One day We went Vizag beech. Ther wheder very nise. | Spelling mistakes. nice, weather | One day We went Vizag beech. There weather very nice. |

Note: S=Student. Students' comments were translated by the researcher.

Table 5 gives a representative sample of the revision changes made by the learners after receiving peer feedback.

Table 5. *Revision changes linked with peer-assessment*

| S. No | Criterion | Second Draft | Peer-assessment | Third Draft |
|---|---|---|---|---|
| S3 | Introduction | On Wednesday, N.C.C. cadets went to a camp. | Introduction is not interesting. You can write about what happened in the camp. What good habits you learnt. | Attending NCC camps is my happy event. I That camp was state-level camp. I learn disiplin and social service. |
| S11 | Content | All my friends praised me. | Write more about your feelings | All my friends praised me. My Parents feel very happy. I feel like hero. Very great. From that time I want to help more people. |
| S16 | Sequencing | I attended inter-school Science exhibition. Teachers told me to go. I made project vegetable robot. | There is no sequencing in 2nd para | My teachers encourage me to attend inter-school science exhibition. So I attended. I register my name. My project name. Vegetable robot. |
| S25 | Conclusion | That is my happy incident. | Conclusion not good. | I learnt a lot about Tajmahal. I want to know more about great people and monuments |
| S21 | Conventions | We go in a train. | Many grammatical mistakes. We go in a train (X) We went in a train. | We went in a train. |

The revision changes made by students in their drafts were thus in accordance with their own observations during self-assessment and feedback received during peer-assessment. The quantitative

and qualitative findings both support the use of self- and peer-assessment in developing writing skill of beginner level learners.

## 7. DISCUSSION AND IMPLICATIONS

In the current study, students' performance in each of the individual criteria of the scoring rubrics was measured and analyzed in order to investigate the effectiveness of using self- and peer-assessment with low-proficiency learners and to draw pedagogical implications for developing writing skill. As the paired sample t-test revealed a statistically significant difference ($p=0.000$) at the level of 0.01 between the pre- and the post-test mean scores, it was inferred that the intervention had a positive effect on the writing performance of the participants. The participants exhibited poor awareness of the genre of recount in the pre-test. In contrast to this, the post-test performance showed considerable improvement in the writing skill of the learners. The findings are in line with earlier research studies, which showed that assessment experience has significant impact on students' writing performance (McDonald & Boud 2003; Lam 2013; Lindblom-Ylanne, Pihlajamaki & Kotkas 2006; Ross, Rolheiser & Hogaboam-Gray 1999; Andrade, Du & Wang 2008). The findings also provide strong empirical evidence to Cooper and Odell's (1999) suggestion that students need to be provided with opportunities to reflect on their writing as "some sort of assessment of strengths and weaknesses in a piece of writing occurs before a final draft is written" (p. x).

By reading different texts of their own level and by evaluating them against a specific set of criteria, students got sensitized to the strengths and weaknesses in a given text. This understanding of the merits and demerits of a text seemed to have guided their writing in the next draft. The increased awareness of what works and what does not work had ultimately showed its mark on the overall performance of the learners. In contrast, the poor performance in the pre-test could have been due to the fact that prior to this they were not actively involved in judging the quality of their own writing. Thus it can be claimed that rubric-based self- and peer-assessment is crucial for students' active

engagement with assessment criteria and evaluation of the quality of a performance (Carless 2007). Besides assessment experience had also made the learners feel confident that they know what exactly teacher expects from them. The fact that the students are taking decisions to modify their compositions and working towards improving the quality of their draft indicates that self- and peer-assessment process is an indispensable phase in developing writing skills.

The significant difference in the results of the current study can be attributed to the consistent use of the scoring rubrics during assessment. The students also had a copy of the scoring rubrics in their hands while making revisions. Recurring exposure to the pre-determined set of evaluative criteria and descriptors for good and bad performance within each criterion increased the students' awareness of the expected level of performance. With a proper understanding of the scoring rubrics, students could identify on their own the defects in their writing and make revisions in their write ups. The findings thus add further support to Andrade, Du & Wang's (2008) claim that the quality of a students' writing would be positively related to their use of a rubric. By reflecting over the text with reference to a set of pre-determined criteria, learners realized the gaps in their performance and made their own little efforts to overcome them. In addition to this, the learners also got a chance to learn by reading their fellow students' drafts and identifying certain areas which can be fixed. It was found that this external stimulus had led to constructive discussions between peers in the class.

With respect to the improvement regarding each of the assessment criteria, the findings revealed that students had improved in all the global features of writing a recount i.e., content, organization, introduction and conclusion. The finding falls in line with Hantouleh & Jadiri's (2014) finding in a study on standard IX learners wherein students' awareness of the criteria as well as of the varied levels of performance in each criterion made them to think of the ways of improving their texts. This finding also coincides with the results in Andrade & Du's (2007) study in which assessment lessons had an important effect on scores for the individual criterion of the rubrics. Specifically,

the finding coincides with the results in studies by Berggren (2014) and Bing (2016) where students made highest additions to content after assessment. In the current study too, the learners made the highest changes in the area of content. One reason for this could be the genre chosen for the study i.e., recount of an event. The findings suggest that the tasks for beginner level learners should be related to their experiences in life. The students' increased attention to content and interest in adding a variety of details to the text means that assessment experience had brought increased awareness in the learners of what is acceptable and also what fetches them more marks. In the criterion of organization, it was found that though the learners had kept to their original framework, there was a clear paragraphing of the text in the form of introduction, body and conclusion and increased use of cohesive devices. The findings prove that students' writing can only be developed when they take up the responsibility and learn to ascertain the value of their own work (Huot 2002).

As far as the surface level criterion i.e., Conventions is concerned, self- or peer-assessment failed to make any significant impact on students. This finding is similar to the findings of the study by Andrade, Du & Wang (2008) wherein punctuation, grammar and spellings were some of the aspects that were least influenced by student assessment. The present finding also reiterates Ortega's (2003) argument that it generally takes up to 12 months of instruction to develop students' vocabulary complexity and grammatical accuracy. Hence it is not recommended to expect students to pick out the grammatical errors during correction. Perhaps it also implies that L2 teachers have to do away with the notion of writing skill as grammatical accuracy especially in the context of beginner level learners.

### 7.1. *Implications of the study*

The findings of the study provide several pedagogical implications. Primarily, the study advocates a process-oriented approach to second language writing instruction. There is a need to follow a recursive process of writing multiple drafts. In a product-oriented approach to writing students are neither

completely aware of the gaps in their writing nor the means to overcome them. In the present study, students revised their drafts twice with the aid of the scoring rubrics and the students have a clear understanding of why and how a text needs to be revised.

Secondly, process-oriented approach can be employed in conjunction with self- and peer-assessment as they involve the learners completely in the teaching-learning process. Involvement in the assessment would serve as a guiding force for the learners to explore the gaps in a text. However, it is essential to make the learners well aware of the genre and the assessment criteria before involving the learners in the assessment process. The idea of involving the learners in determining the assessment criteria can also be explored after subjecting the learners to varied assessment activities. With regard to the type of rubric, analytic scoring rubric in which the criteria are clearly demarcated into different levels is preferable in the context of beginner level learners as it would better help the learners in judging the quality of a text.

The implementation of student-based assessment in regular classrooms poses a number of challenges to teachers. The first and the foremost is the time a teacher needs to devote to planning and implementing the idea. Imparting training in assessing drafts is another area which the teacher needs to plan. The teacher should serve as a model for learners in the application of assessment criteria. Learners should be exposed to different samples of writing, probably of students belonging to other sections or lower classes. This practice helps them in determining good and bad ways of writing before they actually start assessing their own writing. Once the learners gain control over the expected criteria, the teacher can focus on giving specific feedback which would really benefit the learners. Besides, involving learners in the assessment process is the only way to help students become independent writers.

## 8. CONCLUSION

The findings of the current study provide further evidence in support of Constructivist's assumption that individuals actively

construct new knowledge based on their present knowledge and understanding. Most importantly, the findings revealed that assessment experience can improve the writing of the beginner level learners as well. This answers the doubts of many that the defects in writing may not be detected by students with low language proficiency. Results also demonstrate that mediation by a peer is useful stimulus to learners in realizing their strengths and weaknesses. Thus it can be concluded that student-based assessment provides learners with a rich experience of engaging in a higher level cognitive activity, an advantage which traditional forms of teaching or assessing writing do not have.

The present study does not advocate complete removal of teacher assessment but argues for increased use of student-based assessment for improving learners' writing skills. Although, the present study found that the effects of student-based assessment are positive, there are certain limitations. For instance, the study compared the drafts written only across two revisions i.e., self- and peer-assessment. Teacher assessment has also not been made a part of the assessment cycle. The subjects involved in the study were only sixteen. Finally, the study lasted only six weeks in which a major portion was consumed by training in the genre features and assessment criteria.

Despite limitations, the study does not only have a strong theoretical support but also the foundation of real-life situation. However, the results need to be affirmed by studies in different micro and macro genres for generalization (Bouwer et al. 2014). A large scale study in ESL context perhaps is essential to find solutions to the challenges involved in implementing student-based assessment in regular classrooms. Attitudes and perceptions of teachers and learners towards self- and peer-assessment is an area that could reveal further interesting evidence about learner roles in writing skills. Many decisions are largely imposed on practicing teachers due to which teachers tend to implement them as an administrative necessity rather than with genuine interest. A study that looks into teachers' attitudes towards using students in the process of assessing language skills study would help in planning future training sessions and programme of action.

## NOTE

1. This decision was arrived at by reading the scripts of the students written for their classroom tests and summative examination I of the academic year during which the study was conducted.

## REFERENCES

Andrade, H. G. & Boulay, A. B. 2003. Role of rubric-referenced self-assessment in learning to write. *The Journal of Educational Research*, 97/1, 21-34.

Andrade, H. L., Buff, C., Terry, J., Erano, M. & Paolino, S. 2009. Assessment-driven improvements in middle school students' writing. *Middle School Journal*, 40/4, 4-12.

——. & Du, Y. 2007. Student responses to criteria-referenced self-assessment. *Assessment & evaluation in higher education*, 32/2, 159-181.

——., Du. Y. & Wang, X. 2008. Putting rubrics to the test: The effect of a model, criteria generation and rubrics-referenced self-assessment on elementary school students writing. *Educational Measurement: Issues and Practice*, 27/2, 3-13.

Bamberg, B. 1978. Composition instruction does make a difference: A comparison of the high school preparation of college freshmen in regular and remedial English classes. *Research in the Teaching of English*, 12/1, 47-59.

Behjat, F. & Yamini, M. 2012. Self- vs. Peer-editing: one step forward from assessment to building EFL students' writing skill. *Journals of Studies in Learning and Teaching English*, 1/1, 65-85.

Berggren, J. 2014. Learning from giving feedback: insights from EFL writing classrooms in a Swedish lower secondary school. *ELT Journal*. doi: 10.1093/elt/ccu036

Bing, XU. 2016. A study of the effect of student self-assessment on the EFL writing of Chinese college students. *Journalism and Mass Communication*, 6/2, 91-107.

Birjandi, P. & Hadidi T. N. 2012. The role of self-, peer and teacher assessment in promoting Iranian EFL learners' writing performance. *Assessment & Evaluation in Higher Education*, 37/5, 513-533.

Bouwer, R., Béguin, A., Sanders, T. & van den Bergh, H. 2015. Effect of genre on the generalizability of writing scores. *Language Testing*, 32/1, 83-100.

Brady, B. 2012. Managing assessment in large EFL classes, CG to SLA. *The Cambridge Guide to Second Language Assessment* 291-298.

Carless, D. 2007. Learning-oriented assessment: Conceptual basis and practical implications. *Innovations in Education and Teaching International*, 44/1, 57-66

Chaiklin, S. 2003. The zone of proximal development in Vygotsky's analysis of learning and instruction. *Vygotsky's Educational Theory in Cultural Context*, 1, 39-64.

Clark, I. L. 2012. *Concepts in Composition: Theory and Practice in the Teaching of Writing*. New York: Routledge

Cooper, C. R. & Odell, L. 1999. *Evaluating Writing: The Role of Teachers' Knowledge about Text, Learning and Culture*. Urbana: National Council of Teachers of English.

Glasersfeld, E. V. 1995. *Radical Constructivism: A Way of Knowing and Learning Learning.* Bristol: The Falmer Press

Hantouleh, B. A. & Al-Jadiri, H. A. 2014. The effect of rubric-referenced self-assessment on developing the writing skill of ninth grade students in Jordan. *Journal of Education and Practice*, 5/15, 162-172.

Harris, M. 1997. Self-assessment of language learning in formal settings. *ELT journal*, 51/1, 12-20.

Huot, B. 2003. (*Re)articulating Writing Assessment for Teaching and Learning*. Logan: Utah. State University Press.

Hyland, K. (2003). *Second language writing*. Cambridge: Cambridge University Press.

Lam, Ricky. 2013. The relation between assessment types and text revision. *ELT Journal*, 67/4, 446-458.

Lindblom-Ylanne, S., Pihlajamaki, H. & Kotkas, T. 2006. Self-, peer- and teacher-assesssment of student essays. *Active Learning in Higher Education*, 7/1, 51-62.

Lockhart, C. & Ng, P. 1995. Analyzing talk in ESL peer response groups: Stances, functions, and content. *Language learning*, 45/4, 605-651.

McDonald, B. & Boud, D. 2003. The impact of self-assessment on achievement: the effects of self-assessment training on performance in external examinations. *Assessment in Education: Principles, Policy & Practice*, 10/2, 209-220.

NCERT, T. 2007. *National Curriculum Framework 2005*. No. Id: 1138.

Ortega, L. 2003. Syntactic complexity measures and their relationship to L2 proficiency: A research synthesis of college-level L2 writing. *Applied Linguistics*, 24/4, 492-518.

Plutsky, S. & Wilson, B. A. 2004. Comparison of three methods for teaching and evaluating writing: A quasi-experimental study. *Delta Pi Epsilon Journal*, 46/1, 50-61.

Ross, J. A. 2006. The reliability, validity and utility of self-assessment. *Practical Assessment, Research and Evaluation*, 11/10, 1-13.

——., Rolheiser C. & Hogaboam-Gray A. 1999. Effects of self-evaluation training on narrative writing. *Assessing Writing*, 6/1, 107-132.

Rouhi, A. & Azizian, E. 2013. Peer review: Is giving corrective feedback better than receiving it in L2 writing? *Procedia-Social and Behavioral Sciences*, 93, 1349-1354.

Strike, K. A. & Posner, G. J. 1985. A conceptual change view of learning and understanding. *Cognitive Structure and Conceptual Change*, 211, 231.

Tsagari, D. & Meletiadou, E. 2015. Peer assessment of adolescent learners' writing performance. *Writing & Pedagogy*, 7/2, 305-328.

## APPENDIX A

| Category | 3 | 2 | 1 | 0 | Marks |
|---|---|---|---|---|---|
| **Introduction** | The introduction starts with an interesting detail about the incident or the theme. | The introduction gives clear details about the scene. | There is an attempt to write an introduction. | There is no introduction. | |
| **Content** | The narrative gives a very clear picture of the incident along with details of sensory perceptions, emotions and description of characters. | The narrative is interesting to read. | The narrative has many gaps. The content is not enough to give a clear picture. | The narrative is not related to the topic. | |
| **Sequencing** | The details are arranged in a sequence with appropriate use of cohesive devices. | There is sequential arrangement of ideas but little use of cohesive devices. | The ideas seem to be arranged in a sequence but there is no use of cohesive devices. | The details are arranged loosely without any order. | |
| **Conclusion** | The conclusion gives the writer's views about the incident or its importance in his/her life. | The conclusion sounds truthful and original. | The conclusion is just a climax of the incident. | There is no proper conclusion. The narrative ends abruptly. | |

| | | | | | |
|---|---|---|---|---|---|
| **Conventions** | No mistakes at all in grammar, spelling or punctuation. | Few grammar, spelling and punctuation mistakes. | Many grammar, spelling and punctuation mistakes. | Full of grammar, spelling and punctuation mistakes. Very difficult to understand. | |

## APPENDIX B

**Assessment Guide**

Name: _____ Date: _____

| **Guiding Questions** | **Comments** |
|---|---|
| 1. Are the details sufficient to give a clear picture to the reader? | |
| 2. Are there any details missing? What are the specific details that would make the next draft interesting? | |
| 3. Is the opening interesting? Why? | |
| 4. How can the opening be made more interesting? | |
| 5. Are the details organized in a sequence? | |
| 6. What are the errors in conventions? | |
| 7. How to make conclusion more effective? | |
| 8. What do you like in this write-up? | |
| 9. Other things that I want to remember for the next draft? | |
| 10. Are there any spelling and grammatical mistakes in the text? | |

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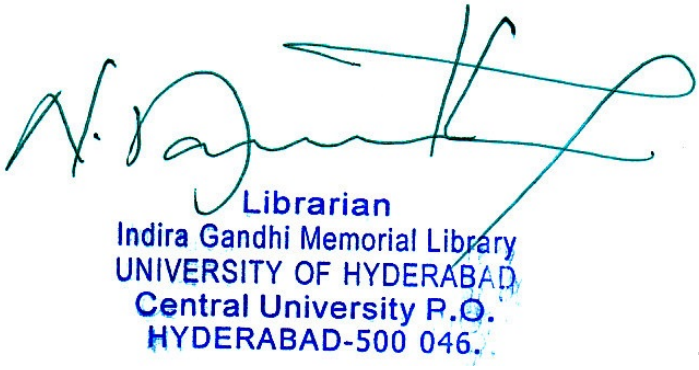
*by* B. Salomi Snehalatha

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