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# A Sociocultural-Theory-Based Study of the Impact of Mediation During Post-Observation Conferences on Language Teacher Learning

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A Sociocultural-Theory-Based Study of the Impact of Mediation During Post-  
Observation Conferences on Language Teacher Learning

by

Jane Harvey

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
College of Arts & Sciences and College of Education  
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## **Abstract**

The post-observation conference offers a potentially fecund context for promoting language teacher learning, but very little research has been conducted into how this actually happens. Taking Vygotskian sociocultural theory as its theoretical framework, this study examined the mediational discourse of a series of post-observation conferences between a mentor and two practicing English language teachers to investigate the nature of the discourse and the relationship between the mediational discourse and the language teachers' learning. Features of mediational discourse identified a priori (such as intersubjectivity, graduated and contingent help, and externalization of reasoning) were present in the data, but were found to be inadequate to lead to insights into the relationship between the language of the mediation and the development of the teachers' ability to think conceptually about language teaching. What emerged from closer analysis of the language was how the mentor's discourse prompted the teachers to think conceptually about language teaching and modeled conceptual thinking by encapsulating the lived experience of the classroom through different types of verbal, and therefore conceptual, abstraction. Constructed dialogue was also found to be a salient feature of the discourse, and to have a cognitive function within the mediation. In terms of the relationship of the dialogue to the language teachers' learning, a micro-level analysis of single post-observation conferences revealed the dynamic flow of the mediation and instances of uptake of conceptual thinking by the teachers. A more macro-level analysis which followed mediation on a single topic for each teacher found evidence for the development of conceptual thinking in one teacher's data but less so in the second teacher's, and reasons for this are suggested. The results of the study also constitute a revealing account of the nature of the mediational discourse, suggesting a possible cognitive function for the different types of conceptualizations in the discourse, which has the potential to increase understanding of how verbal mediation interacts with learning, and to inform how post-observation conferences are conducted with a view to maximizing the development of conceptual thinking. The taxonomy of conceptualization



identified within the mediation discourse point towards an understanding of how the idealization of lived experience and subsequent re-concretization reflect the role that language plays in the development of conceptual thinking..

## Chapter 1: Introduction

### Overview and Statement of the Problem

This study investigated the impact of verbal mediation on language teacher<sup>1</sup> learning. The construct of verbal mediation emerges from Vygotskian sociocultural theory (SCT) and the site of the mediation under focus was post-observation conferences between a language teacher and mentor—that is, the discussions that occur after the mentor has observed the teacher in the classroom. In order to provide a background, overview of, and justification for the study, I will first outline some key issues related to the study—my personal interest in the post-observation conference; why SCT offers an appropriate theoretical framework for the study; what is understood by language teacher learning; and why the post-observation conference merits this focus.

For many years I worked as an instructor (tutor/mentor) on Cambridge/ESOL language teacher education programs (see chapter 3, for a description of these programs) and I was regularly involved in observations of teachers and the pre- and post-observation discussions (hereafter called POCs<sup>2</sup>). I have always felt that the POC is an important occasion for the promotion of teacher-learning; it is one of the few opportunities for focus on the teacher's own classroom practice and for overt and explicit

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<sup>1</sup> The term *language teacher* is used throughout this paper to refer to any teacher who teaches a second or additional language. In the case of English language teaching, for example, this could refer to teachers in EFL and ESL contexts—that is, teachers within English-speaking countries and teachers in countries where English is a foreign language.

<sup>2</sup> During the semester of study, the distinction between pre- and post-observation conference became somewhat blurred as occasionally the post-observation conference for one observed lesson became the pre-observation conference for the next. Therefore, unless specification is necessary, POC will be used to refer to both the pre- and post-observation conferences.

linking of teacher education program course content to classroom practice. I became increasingly aware also that sometimes I felt the discussions were successful and sometimes less so, and that the “success” or otherwise was in some way related to the quality of the dialogue with the teacher. However, there is a distinct paucity of research into POCs (Clift & Brady, 2005; Vásquez, 2004; Waite, 1993; Williams & Watson, 2004; Zeichner & Liston, 1985) and to my knowledge, none that examines the impact of the nature of the dialogue during the POC on teacher learning.

The question then arose as to what might be the cognitive or psychological link between the quality of discussion and language teacher learning. As I began to learn about Vygotskian SCT I realized that this theory of learning could offer both an explanation of the relationship between the POC and language teacher learning and, at the same time, provide a framework that could inform the conduct of the POC.

Although SCT was originally developed in relation to child development, there are several reasons why it is entirely applicable in this context. Lantolf and Poehner (2008) regard the fact that “the Vygotskian educational enterprise ...has virtually ignored adult educational settings ...[as] unfortunate” (pp. 2-3). They point to Vygotsky’s student and colleague Luria’s work with the adult population of Uzbekistan and adults with brain injury as support for the application of Vygotsky’s theory to the learning of adults. In addition, as Manning and Payne (1993) assert, “[viewing] the teacher as learner allows theories of learning (including those developed from research with young learners) to be viewed as viable for teacher education” (p. 361). The vast majority of the theoretical works written to explain and expand on Vygotsky’s ideas of concepts and cognitive development focus exclusively on child development. However, as Lantolf and Poehner

point out, there is a distinction between Vygotsky's theoretical writings, which aimed at explaining human consciousness, and his research agenda, which focused mainly on child development. "As he discusses in Vygotsky (1978), in order to research consciousness, it had to be studied while it was in the process of formation and not once it had attained its adult form" (Lantolf & Poehner, p.2). Therefore, it is reasonable to discuss the learning about teaching by language teachers in the same terms as Vygotsky discussed overall development in the child and adolescent.

There are important reasons why studies are needed both into how language teacher learning occurs and the role of the POC in that learning. Language teacher cognition research has been heavily influenced by conceptualizations of teacher cognition developed in general teacher cognition research (Borg, 2003). However, this raises a key ontological issue with regard to how far language teachers are different from other teachers because of the nature of their subject matter. Freeman (2002) suggests that Schulman's concept of pedagogical content knowledge, developed in relation to general teacher knowledge, becomes "a messy and possibly unworkable concept" (p. 6) when applied to language as subject-matter. From a study that investigated if and how language teachers are perceived to be different from teachers of other subjects, Borg (2006) concluded that differences lie in the subject matter—language—the range of materials, methods, and activities available to language teachers, and the especially close relationships between language teachers and learners, among other issues. With language as both medium and content of instruction, the teacher's role becomes far more complex than simply a transmitter of information. Similarly, the range of issues the teacher has to address—for example, pronunciation, grammar, receptive and productive skills, culture,

and so forth—makes the language teacher distinct from teachers of other subjects. Therefore, it is valuable to focus on the learning of language teachers specifically.

There is a growing understanding of how language teacher learning is much more social in nature than had been previously thought (Richards, 2008). This points to a need to move away from a transmission model of teacher education with the idea that teacher-learning involves the application of theory to practice, towards a view of teacher learning as the theorization of practice; “in other words, making visible the nature of practitioner knowledge and providing means by which such knowledge can be elaborated, understood and reviewed” (Richards, 2008, p. 164). What those “means” are exactly has not yet been specified, but investigation into the nature of how teacher “knowledge” is acquired could assist in defining and conducting effective teacher development activities. As Johnson (2009) states, “since L2 teacher education is, at its core, about teachers as learners of teaching, understanding the cognitive and social processes that teachers go through as they learn to teach is foundational to informing what we do in L2 teacher education” (p. 3).

However, the vast majority of research into language teacher learning and cognition has focused exclusively on the products or outcomes of learning often operationalized as changes in beliefs or knowledge (see e.g. Borg, 2003, 2008; Woods, 1996). There is therefore a serious gap in the research; longitudinal studies are needed that investigate cognitive change (i.e. learning) in language teachers, both in pre-service teacher education contexts and in the work of practicing teachers (Borg, 2003, 2008). Similarly, Borg (2008) concludes from an overview of research into language teacher cognition that teacher education has been found to be “a weak intervention” on teachers’

prior cognitions, though “contemporary views are less pessimistic” (p. 40). The implication behind this is that by understanding more about how teachers learn, teacher educators will be better able to create conditions and activities that maximize teacher learning, both in formal language teacher education programs and in more informal development activities.

The POC is a site where the primary instructional means is dialogue between the mentor and teacher. There are often claims made regarding the importance of dialogue in teacher learning (e.g. Bailey, 1996; Freeman & Richards, 1996; Knezevic & Scholl, 1996; Manning & Payne, 1993; Woods, 1996) but no study found to date has investigated the relationship between the nature of the dialogue and its impact on teacher learning. Indeed, in my experience, teacher educators tend to adopt a fairly ad hoc approach to the conduct of POCs, though in fact, in many contexts, it is not teacher educators who conduct the observation cycle but experienced teachers, such as cooperating teachers, who have little if any experience of conducting teacher education activities. Thus, there is clearly a need for theoretically-informed investigations into how teacher education activities, and in particular the observation of a teacher in the classroom and the subsequent POC, impact teacher learning.

### **Purpose of the Study**

In view of the above, the purpose of this study was to investigate the impact of the verbal mediation during POCs on language teacher learning. I sought to discover specific types of change in the language teacher’s discourse emerging from the process of internalization of the concepts of language teaching discussed during the POCs. Thus, I

tried to identify evidence of the process of development in the teachers' verbal and mental control over the concepts of language teaching.

In this study, I adopted a principled and theoretically-informed approach to the analysis of both the mediation and the discourse of the POCs, and an evaluation of their impact on teacher learning. I hope that the findings from this study can be used to help other teacher educators conduct and evaluate POCs, and also design further research that investigates the processes of teacher learning. As mentioned previously, the theoretical framework for this proposed study is based on Vygotskian SCT. In the following section, I outline the main tenets of SCT that are important in this study.

### **Theoretical Framework**

During the early part of the twentieth century, Russian psychologist and psycholinguist Lev Semionovich Vygotsky developed “an elegant and detailed description of the development of human consciousness” (Gredler & Shields, 2008, p. vii) during his all-too-brief career. As discussed by Lantolf and Thorne (2006), the term sociocultural theory (SCT) is used in this discussion to refer to Vygotsky's ideas, though in fact, it is not a theory of the social or cultural aspects of human life, but rather a theory of mind. Vygotsky claimed that in order to understand human processes, the researcher needs to consider “how and where they occur in growth” (1978, p.65)—that is, both the process and product of learning need to be considered. He took issue with the psychological research methods of his contemporaries in that they focused on the product of learning, the static outcomes, which involved mainly description. He advocated focusing on the genesis of a developmental process, and seeking a dynamic, causal explanation (Vygotsky, 1978, p.62) as well as focusing on the outcome of learning. In other words, as

mentioned by Kinginger (2001) “SCT requires a research methodology that can capture the process of change and trace the history of psychological phenomena” (p. 421).

Vygotsky (1978) called this methodology *genetic* because of its focus on the genesis of higher mental functions. There are two main issues that relate to the study proposed here: First, what, according to SCT, constitutes the product of learning, and second, what are the processes involved in learning?

### **The product of learning.**

Wertsch mentions several constructs that relate to the outcomes of learning from an SCT perspective: “mastering the set of cultural tools provided by the setting...skills and intelligences...new improved forms of thought...an ideal outcome of abstract thought [which, through decontextualization,] offer[s] new, more powerful perspectives on reality” (1998, pp. 38-39). These terms imply that the outcome of learning is a more sophisticated way of perceiving and analyzing experiences and ideas, often through abstraction.

Following Piaget and other scholars, Vygotsky distinguished between two basic types of concepts – spontaneous or everyday concepts<sup>3</sup>, and scientific concepts. These two categories differ both in source and in nature. Everyday concepts are developed during day-to-day lived experience whereas scientific concepts are “taught” most often during formal schooling. As Vygotsky explained, “the inception of a spontaneous concept can usually be traced to a face-to-face meeting with a concrete situation, while a scientific concept involves from the first a ‘mediated’ attitude towards its object” (1986, pp. 193-194). In other words, and to take the context of language teaching as an example,

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<sup>3</sup>The terms *everyday* and *spontaneous* are often used interchangeably by scholars writing in the field of SCT (e.g. Bakhust, 2007; Johnson, 2009; Wertsch, 1985) and are used in the same fashion here.



any individual would acquire everyday concepts about classroom procedures, the kinds of mistakes students make, and so forth, simply from their experience in the language classroom. The understanding of language pedagogy would need to come from formal input, be it in a class context, or through reading, for example.

Kozulin (1990) expands on this difference of origin, explaining that though scientific concepts do not necessarily relate to scientific issues (“they may represent historical, linguistic, or practical knowledge” p. 168), their origin is “‘scientific’ in the sense of formal, logical, and decontextualized structures” (p. 168). On the other hand, everyday concepts, emerging as they do from the learner’s own reflection on immediate, everyday experiences, are “experientially rich but unsystematic and highly contextual” (p. 168). This points to another important distinction between spontaneous and scientific concepts. Whereas the former are unsystematic because they emerge spontaneously, scientific concepts form a coherent, logical, hierarchical system (Daniels, 2007), and therefore engender more systematic and logical thinking in the individual. Scientific concepts are abstractions whereas spontaneous concepts are highly contextualized in lived experience. As Wertsch stated, “in spontaneous concepts the [individual’s] attention is always centered on the object being represented, and not on the act of thought that grasps it” (1985, p. 103). This abstraction allows the learner to transcend the physical, visual situation of a particular context, and apply the concept to other situations and contexts (Gredler & Shields, 2008).

Vygotsky was insistent on the importance of the systematicity of scientific concepts, stating that “any real concept must be taken only together with its system of relations that determine its measure of generality” (1986, p. 173). Scientific concepts can

only be fully mastered when they are integrated into the hierarchical system of related concepts; as Gredler (2009) states, “from Vygotsky’s perspective, mastering one’s thinking about a particular concept depends on mastering the mediating concepts that define it” (p. 14). Table 1 offers a summary of the essential differences between spontaneous and scientific concepts.

*Table 1*

*Spontaneous Versus Scientific Concepts*

Spontaneous concepts	Scientific concepts
originate in lived experience	originate in formal instruction
immediate	mediated
unsystematic, not tied to other concepts	part of a systematic, logical hierarchy of concepts
highly contextual	abstractions, decontextualized
not open to inspection	open to inspection

Despite this distinction that Vygotsky drew between spontaneous and scientific concepts, he saw their interaction and interdependence as a prerequisite for the development of higher order thinking skills. Although scientific concepts are verbal abstractions, embedded in theory and closely related to other abstract concepts, their integration within a system of knowledge with everyday concepts facilitates understanding of phenomena in their particularity (Bakhurst, 2007). This interdependent relationship is the key to understanding the mastery of true conceptual thinking. While scientific concepts remain abstractions, decontextualized from lived reality, they exist only as word meanings. However, when they are integrated with spontaneous concepts, they allow the learner to understand and explain the lived experiences of those spontaneous concepts, “to carry out mental activity that is maximally independent of the

concrete context” (Wertsch, 1985, p. 104). Thus, thinking in concepts, resulting from this interweaving of spontaneous and scientific concepts, “leads to the discovery of the deep connections that lie at the base of reality, to recognizing patterns that control reality, to ordering the perceived world with the help of logical relationships cast upon it” (Vygotsky, 1930-1931/1998b, p. 48, cited in Gredler, 2009, p. 7). In this study, the product of learning in the language teacher participants is defined as their developing ability to think conceptually about various aspects of language teaching.

The link Vygotsky made between the *word* and concept formation can help to clarify this. For Vygotsky the use of the *word* as “a means of concept formation is the immediate psychological cause of the radical change in the [child’s] intellectual process that occurs on the threshold of adolescence” (Vygotsky, 1986, p. 108). Thus, it is the ability to use the *word* as a means of forming new concepts that distinguishes the adult’s from the child’s thinking. Adults possess this ability; however, adults are continually learning new *words* and therefore forming new concepts, and developing the ability to think in those new concepts. Thus, the process of concept development that Vygotsky describes in children can also inform our understanding of how adults learn to think conceptually in new areas; what does not apply to adult learning is the actual development of this ability to think in concepts. In the complex environment that is the language classroom, a novice teacher has mastery over fewer concepts than a more experienced and “expert” teacher, and therefore has a more restricted range of concepts to inform her conceptual thinking. One aspect of language teacher learning, therefore, is the mastery of the concepts of language teaching and the consequent ability to think in those concepts. It is this assumption that underpins this study.

### **The process of learning.**

Having identified how SCT conceives of the product of learning, I will now consider the process of learning, which, according to Vygotsky, should be our main focus if we seek to understand any aspect of human cognition. There are two major tenets of SCT that relate to the process of learning under focus in this proposed study—that is, mediation and internalization—and I will discuss each one in turn.

#### ***Mediation.***

According to Lantolf and Thorne (2006), mediation is the central concept of SCT. Vygotsky's fundamental claim was that "higher forms of mental activity are mediated by culturally constructed auxiliary means" (p. 59), so that language, one of the most important culturally constructed psychological tools, is central to mediation. Vygotsky defined mediation as the setting up of "connections in the brain from outside" (1997b, p. 55, cited in Lantolf & Thorne, 2006, p. 60). How, then, are these connections set up? Understanding this involves understanding the way Vygotsky conceived of the interaction between humans and their environment. Instead of acting directly in the social and physical world, human contact with the world is indirect, mediated by physical or psychological tools, the most important of the latter being language (Wertsch, 2007, p. 178). Speaking (and writing) activity can function as a mediational tool to control thinking because of "the reversibility of the linguistic sign" (Lantolf & Thorne, 2006, p. 60). Linguistic tools are directed outward to influence or regulate (i.e. gain voluntary control over and transform) the mental or social activity of other individuals, but they are also inwardly directed with the goal of self regulation. Symbolic tools can thus "radically reconstruct the whole mental operation" of others and of ourselves, and in this way,

“broaden immeasurably the system of activity of mental functions” (Vygotsky 1997b, p. 62, cited in Lantolf & Thorne, 2006, p. 60).

Thus, mediation is seen in SCT as the process of using culturally-constructed means (such as language) to regulate one’s own or others’ social and mental activity. Clearly, the POC, constituted as it is of dialogue between the mentor and the teacher, offers a particularly fecund opportunity for mediation of the teacher’s learning, and in particular, of the development of her mastery of the scientific concepts of teaching. However, as Lantolf and Thorne (2006) point out, “linguaging activity is not construed as the equivalent of thinking; rather it is a means of regulating the thinking process” (p. 79). The concept of *linguaging* differs fundamentally from traditional psycholinguistic views of language and language use. Whereas the latter regard language as the “conveyor of an already formed thought” (Swain & Deters, 2007, p. 822), for SCT language is closely connected with the creation of thought. *Linguaging*, defined by Swain and Deters as “the use of speaking and writing to mediate cognitively complex activities” (p. 822), is key in a learner’s understanding of complex concepts. Unlike the term *language use*, *linguaging* implies dialogic interaction so that the focus is less on the language user as an autonomous entity, and more on the dialogic and intermental nature of verbal interaction. In this study, then I shall use the term *linguaging* to refer to the activity of using language to mediate one’s own and others’ cognition in the dialogic interaction between the mentor and teacher during the POCs and in other written or spoken activity in which the teacher engages. How linguaging relates to the development of higher mental functions is encapsulated in the concept of internalization, the subject of the following section.

### ***Internalization.***

Internalization is the process by which humans bring externally, and socioculturally, formed mediating artifacts (such as language) into thinking activity, in order to gain control over mental functions (Lantolf & Thorne, 2006). Signs, and in particular, language allow for “the idealization of objective activity in the material world and for the objectification of subjective activity in the mental world” (Lantolf & Thorne, p. 154). Thus, through the mediation of language and the activity of languaging we can idealize or make abstract what we perceive and experience, and objectify our mental activity. For Vygotsky, every psychological function in development appears twice, first on the social, interpsychological, level between people and then on the individual, intrapsychological level (1978, p. 57). Gal’perin, a student of Vygotsky, saw three stages of this internalization process: i) making an external action maximally explicit, ii) transference of its representation to audible speech, iii) transference of its representation to inner speech (cited in Wertsch, 1985, p. 66). Thus, what originates as social speech aimed at influencing or regulating others develops into psychological speech, aimed at regulating our own mental and physical activity (Lantolf & Thorne). Clearly, during the POC, the aim of the mentor is to regulate the mental activity of the teacher, with a view to helping her develop self-regulation both in her discussions and analysis of classroom practice and in her classroom practice itself, and one of the mediator’s main tools is her own and the teacher’s languaging.

However, Wertsch (1985) warns against adopting “the transfer model of internalization” (p. 62). He argues that functions are not simply copied from the external, interpsychological plane to the internal, intrapsychological plane. Instead,

“internalization transforms the process itself and transforms its structures and functions” (Vygotsky, 1981a, p. 163, cited in Wertsch, 1985, p. 62). Thus, the relation between external and internal activity is generative and the main issue is how internal mental processes are *created* as a result of exposure to external activity. Therefore, as a result of mediation during the POC, the mentor would not expect the teacher’s discourse and classroom practice to be a carbon copy of her own, but to exhibit unique characteristics related to the sociocultural background and identity of the teacher.

***The zone of proximal development.***

Through internalization, therefore, humans are able to develop the capacity to perform complex mental (and physical) processes with increasingly less reliance on externally provided mediation. However, as Vygotsky noted, the process varies from individual to individual, and indeed, across time periods for specific individuals (Lantolf & Thorne, 2006, p. 266). In order to explain this variation, Vygotsky developed his idea of the zone of proximal development (ZPD). This he defined as “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 [expert] guidance or in collaboration with more capable peers” (1978, p. 86). This concept of the ZPD is generally thought to have been left unfinished and unspecified in Vygotsky’s writing because of his early death (Lantolf & Thorne). This has led to “a proliferation of heterogeneous interpretations” (Lantolf & Thorne, p. 263). For the purposes of this study, I am conceptualizing the ZPD as representing the stage of development of the individual from where she is able to interpret the “goal-directed” (Wertsch, 1979/2008, p. 162) nature of the intervention or mediation provided by the “expert” to where she is able to

take over responsibility for carrying out a task with the support of minimal self- or other-regulation. Such mediation would clearly be effective only if it is conducted within this zone; as Wertsch (1979/2008) found, mediation is not effective if the “novice” cannot recognize the purpose of the communicative moves of the “expert”. During the POC, the mentor should continually strive to open up and work within the teacher’s ZPD and through mediation, assist her in internalizing the professional discourse of the dialogue, developing through the interplay between scientific concepts and spontaneous concepts, a greater understanding of and voluntary control over practical and conceptual aspects of language teaching.

In the study proposed here, through the verbal mediation within the language teacher’s ZPD that takes place during the POC, and using the “cultural tools of the setting” (Wertsch, 1998, p. 38)—that is, the professional discourse of language teaching—I sought to impact language teacher learning and to identify the process and products of learning by examination of the dialogue of the POCs and the discourse of the teachers.

### **Research Questions**

The research questions that informed this study are:

1. What is the nature of the mediational discourse between a mentor and language teachers during a series of post-observation conferences?
2. What is the relationship between the mediational discourse of the post-observation conferences and the language teachers’ learning, as evinced in changes in the teacher’s discourse during the mediation?



## **Limitations and Delimitations**

This study took SCT as a theoretical framework to study POCs. I recognize that there are other theories of learning that could be applied to the same phenomenon. SCT was chosen not only because of its potential to describe the products of learning, but more importantly for its ability to offer a causal, dynamic explanation of that learning through a focus on the processes of learning. In other words, SCT is particularly appropriate to a study of the impact of POCs on teacher learning because the idea of development espoused in SCT fits tightly with the longitudinal and process-orientated approach adopted in this study. Other theoretical frameworks, such as discourse or conversational analysis could offer insights into other aspects of the dialogue during POCs, but would not necessarily be able to reveal the process of learning related to the dialogue during POCs. Similarly, I did not consider all the many constructs and ideas that are involved in SCT or theories developed out of SCT. For instance, I did not focus on the phenomena of egocentric and private speech; while I accept that egocentric speech occurs during the internalization process, I did not anticipate that these would be important features of the data I gathered. My focus was on interpsychological rather than intrapsychological interaction, and I anticipated that the one-to-one, expert/novice nature of the interaction under scrutiny would result in less egocentric speech than in other contexts studies. I was also not concerned with examining POCs from an activity theory point of view, though clearly the goals and motives of all participants heavily influenced their actions and operations.

It could be argued that, given that the context of most observations of language teachers and the subsequent POCs is during pre-service language teacher education

programs, this would provide the most suitable context for studies into their impact on teacher learning. However, within teacher preparation programs, there are many other potential influences on the teacher's discourse and classroom practice. Locating my research within a more teacher-development-orientated, in-service context offered the possibility of suggesting a stronger link between any causal connections that emerge. Also, as Freeman (2002) suggests, "the notion that pre-service teacher education can fully equip a teacher for a career in the classroom is erroneous" and the "one-size-fits-all" approach to [in-service training] is equally inappropriate" (p. 11).

The teacher-participants in the study were both novice teachers, and at the time of the study, I had far more experience both in language teaching and in language teacher education than either of them. I therefore felt justified in relating the dialogue of the POCs that I conducted to expert/novice interaction found in much research into mediation.

Another potential limitation of the study was my own participation in the data-gathering as researcher-participant. Clearly, my own sociocultural background had an impact on both the design and the implementation of the study, as well as the interpretation of the findings. While I took steps to ensure overall trustworthiness of the study (see Chapter 3), the main impetus for the design of the study stemmed from my own personal convictions. These represent only one view of the role of POCs within teacher education and indeed teacher supervision; other equally valid conceptions of and approaches to the conduct of POCs exist.

## **Conclusion**

In this chapter, I have offered a brief overview of the background of the proposed study, the theoretical framework that informs the study, the research questions, an operational explanation of terms, and some limitations of the study. The next chapter addresses the literature and previous research that both informs and is extended by this study.

## **Chapter 2 Review of the Literature**

In this study, I define language teacher learning as mastery over conceptual thinking in language teaching as evinced in changes in discourse. The POC, as an occasion for mentor/teacher dialogue focusing on the teacher's classroom practice, offers a potentially fecund opportunity for teacher learning. In 1985, Zeichner and Liston expressed surprise that so little research had been conducted into the POC in general despite its importance within teacher education, and the situation has not changed drastically since that time. Vásquez (2005) also claims that there have been few empirical studies conducted into the discourse of POCs (see below for a discussion of these studies).

In order to situate this study into the context of research into language teacher learning, and to justify the adoption of SCT as a theoretical framework and the focus on the POC, I first discuss how SCT has been applied to teacher education. I, then, examine research into teacher, and more specifically language teacher learning, and show how SCT offers a theory for explaining specific phenomena of language teacher learning that are often referred to in this research—that is, how to overcome the theory/practice dichotomy in teacher education and the role of language in teacher learning. I briefly examine previous research conducted into POCs, and conclude that this investigation into the impact on the product and process of language teacher learning of POCs has the potential to add to and extend our understanding of teacher learning and to inform how we conduct POCs.

## **SCT and Teacher Education**

The application of SCT to teacher learning is by no means unique to the study proposed here. SCT has been used as a framework for the design of courses within teacher education (Smith 2001; Welk, 2006) as well as the design of the practicum or field experience components of programs (Jones, Rua, & Carter, 1998; Samaras & Gismondi, 1998). However, these studies offer descriptions and evaluations of teacher education activities, but do not attempt to account for how teacher learning occurs. Johnson and Golombek (2003) propose SCT as a lens through which teacher learning can be ‘seen’. They suggest that there is a growing body of research characterizing what language teacher learning is, but no coherent theory of learning on which to ground understanding of how teacher learning occurs. They propose SCT as a theory with “tremendous explanatory power” (p. 730) for understanding this process and moving beyond simple descriptions of teacher learning.

Manning and Payne (1993) also recommend SCT as providing a useful theoretical framework for teacher education in that it could promote the development of higher order psychological processes, and thus satisfy the “seemingly universal goal of teacher education...to go beyond satisfaction with a certified novice in our classrooms” (p. 362). These authors comment on the paucity of literature on support for Vygotsky’s theory applied to teacher education (p. 368). One reason for this may be the fact that SCT was developed as a theory of learning by Vygotsky and his colleagues through their work with children, and that it is often applied to the development of higher mental processes in children. However, there is a great deal of research into adult learning which uses SCT as a framework. As Manning and Payne claim, “viewing the teacher as learner allows for

theories of learning (including those developed with research from young learners) to be viewed as viable for teacher education” (p. 361).

I, therefore, feel justified for this and other reasons in adopting an SCT framework for the study of teacher learning and also for incorporating research with both adults and children into the literature that informs the study proposed here. While it is true that adults can be expected to have a higher baseline in terms of reasoning skills and higher mental functions, still the processes involved in the development of more refined reasoning skills and different higher mental functions are essentially the same in both children and adults. Although not specifically stated, this seems to be an assumption underlying much research into adult learning (e.g. research into SLA), which takes SCT as its theoretical framework. As Mitchell and Myles (2004) state: “Throughout their life, of course, human beings remain capable of learning; and the local learning process for more mature individuals acquiring new knowledge or skills is viewed as essentially the same [as that of children]” (p. 198). In the following examination of studies into learning I make no distinction in terms of weighting between studies with children (of any age) and studies with adults.

### **Language-Teacher Learning**

There has been a great deal of research into language teacher cognition, which has been defined as “the unobservable, cognitive dimension of teaching – what teachers know, believe, and think” (Borg, 2003, p. 81; see reviews in Borg, 2003, 2008; Woods, 1996). Richards (1998) proposed six domains of content that should form the basis of language teacher education: theories of teaching, teaching skills, communication skills, subject matter knowledge, pedagogical reasoning and decision-making, and contextual

knowledge (p. 1). Mann (2005) identified ten different types of language teacher knowledge: content knowledge, pedagogical knowledge, curriculum and materials knowledge, second language acquisition knowledge, knowledge about context, personal knowledge, practical knowledge, experiential knowledge, local knowledge, and usable knowledge (p. 106). He claims that this knowledge is not static but constantly being reshaped through interplay between declarative and received knowledge and personal-experiential and local knowledge. Thus, language teacher knowledge is perceived as a complex and dynamic entity.

Much has been written about the role played by language teachers' pre-existing beliefs and ideas about teaching and learning languages in the quality and transformation of their knowledge and practice brought about by teacher education activities (see Almarza, 1996; Freeman, 1989; Richards, 1998; Pajares, 1992). Research into the shaping and role of pre-service language teachers' beliefs suggests that these beliefs may continue to influence them throughout their professional lives (Borg, 2003). However, the study proposed here does not deal exclusively with the static products of learning, often conceptualized as the existing cognition and beliefs of the teacher, but seeks to investigate the processes that inform that learning.

In a review of research into teacher knowledge and learning to teach, Freeman (2002) traces the changes in the conceptualization of teacher cognition since the 1970s. At that time, a process-product view of teaching (i.e. the examination of teaching in terms of the student learning outcomes it produced) saw learning to teach as the acquisition of a set of behaviors. Later, the focus shifted to a focus on teachers' mental lives, most notably on teaching as a process of decision-making and how teachers' experiences as

both learners and teachers helped shape their cognitions. Today, Freeman (2002) argues, research has brought about more complexity than clarity in the understanding of teacher learning, but these complexities allow for teacher voices to be heard so that the “messiness” (p. 10) of teaching is evident. He concludes that one of the functions of teacher education is to “provide the discourse and vocabulary” (p. 11) that can help participants articulate their experience. He argues also that research into general teacher learning has influenced the conceptualization of language teacher learning and knowledge, and that focus on the process of teacher learning within language teacher education programs will help shape the work of language teacher education in the future. The study proposed here answers Freeman’s calls in two ways; first, it is concerned with the process of teacher learning, and second, it involves a systematic investigation into the link between developing professional discourse in teachers and developments in their understandings and practice.

### **The product and process of teacher learning.**

“Teacher learning is at the core of teacher education” (Freeman, 2002, p. 1) but “scant attention has been paid to understanding how people learn to teach” (Freeman, 1996, p. 351). The study proposed here is not designed to explore the nature of teacher knowledge or cognition, but rather, as Freeman (2002) urges, to focus on the process of teacher learning with a view to informing the delivery of language teacher education. Specifically, the study aims to examine how the POC impacts the process by which the teacher gains mental control over the concepts of teaching, and how her higher order thinking—that is her “memory, attention, rational thinking, emotion, and learning and development” (Lantolf & Thorne, 2006, p. 59)—come under her voluntary control,



allowing her to make more informed and proactive classroom-based decisions. In order better to be able to examine the impact of POCs on the learning of the teacher, it is important to operationalize what is meant by teacher learning in terms of its outcomes.

Richards (1998) proposes three conceptualizations of teaching as the goals of teacher learning. Based on Zahorik's (1986, cited in Richards, 1998, p. 34) paper on the relationship between theories of teaching and teaching skills, he identifies science-research conceptions of language teaching as informed by research into effective teaching practices and the operationalization of learning principles. This views the outcome of teacher learning as the application of knowledge and theories to the development of a set of behaviors and techniques, often identified through a study of what effective teachers do. Theory-philosophy conceptions of teaching emerge from logical, philosophical, moral, political, or other grounds and are based on ideas about "what ought to work" (Richards, p. 39). Outcomes of teacher learning here are seen as more theory-based, and are influenced by the teacher's reflection on her teaching experiences. Art-craft conceptualizations of teaching see the teacher's individual skill and personality at the heart of teaching. The outcomes of learning within this view are seen as a personalized set of skills and techniques that the teacher applies in different ways according to the circumstances. Thus, Richards does not offer a unified account of the product of teacher learning.

More holistic and unified descriptions of the outcomes of teacher learning do exist. Freeman and Richards (1996) define the outcomes of language teacher learning as involving "the development of theories and interpretative skills which enable teachers to resolve specific teaching incidents, creating their own working theories of teaching in the

process” (p. 5). For Richards and Nunan (1990), one outcome of teacher learning is the notion of the “autonomous practitioner, that is, someone who is able to draw on knowledge and skills in making on-line decisions to solve problems that are unique to a particular teaching situation” (p. 2). All of these holistic and more fragmented descriptions of teacher learning find their echo in the Vygotskian view of the outcome of learning in general, in that teacher learning is seen as the gaining of control over higher mental functions in order to be able to be a proactive decision-maker about classroom practice.

Another perspective on the outcomes of teacher learning can be gained through an examination of expertise in teaching. Richards, Li, and Tang (1998) compared the pedagogical reasoning skills of expert and novice language teachers within the context of a reading skills lesson. The expert teacher was able to think about the subject matter from the learner’s perspective, anticipating how the learner might react to and process the content of the reading. The expert teachers were also found to have a deeper understanding of the subject matter, in this case, the features of a text. Similarly, the expert teachers were able to present the subject matter to students in ways that promoted learning of more than simply the content of the text. Thus, the expert teachers could integrate language learning with broader curricular goals. From this perspective, the outcomes of teacher learning can be seen as the ability to take a broader, more holistic and student-centered approach to a lesson, through the integration of many aspects of knowledge and skills.

This ability to integrate different aspects of knowledge during teaching was also found to be a feature of the expert teacher, Marina, in Tsui’s (2003) study of expertise in

language teaching. Marina was also able to relate and react to the specific context of her teaching, transcending the constraints of her context in ways that were integrated and related, what Tsui calls “awareness of the ‘big picture’” (p. 256). Another aspect of the expert teacher’s knowledge identified by Tsui was her ability to theorize practical experience and practicalize theoretical understanding. This was facilitated by Marina’s ability to engage in conscious and deliberate reflection on her practices, and thus integrate “formal knowledge” and personal practical knowledge.

The interaction of theory and practice as an important feature of expertise in language teaching and, therefore, a fundamental outcome of language teacher learning as identified by Tsui (2003) is also reflected in other writing on language teacher learning. In a recent overview of the state of second language teacher education Richards (2008) claims that while traditional views of teacher learning often viewed the teacher’s task as the application of theory to practice, more recent views see teacher learning as the theorization of practice. In other words, teacher learning involves making visible the nature of practitioner knowledge and providing the means by which such knowledge can be elaborated, understood, and reviewed. However, this theory/practice dichotomy is seen as problematic in language teacher education. The idea that simply the transmission of knowledge and skills will lead to effective practice with practicums as the missing link, compelling teachers to “figure out how to act on what they know” is seen as a serious misconception (Freeman, 1989, p. 29; see also Wilson, Floden, & Ferrini-Mundy, 2001). It ignores the complexities of human interaction in the classroom and reduces teaching to a quantifiable set of behaviors (Freeman & Johnson, 1998, p. 399). On the other hand, language teacher education that relies solely on on-the-job learning (e.g.

Wallace's [1991] apprenticeship model) is also seen as inadequate in that it denies the role of any theoretical knowledge (what Tarone & Allwright [2005] have termed the "non-interface fallacy"; see also Ur, 1996). Thus, there is seen to be a powerful disconnect between the "theory" and "practice" elements of many language teacher education programs. How the adoption of an SCT approach to the understanding and fostering of teacher learning can render false this theory/practice dichotomy will be discussed below.

### **The role of language in teacher learning.**

Another powerful influence on teacher learning frequently referred to in literature is language, and in particular dialogue. Using practical reasoning as a framework, Penlington (2008) describes how teacher-teacher dialogue can serve as a catalyst in the development of teacher reasoning. Gebhard (1990) also refers to how chances to talk lead to teacher change and Woods (1996) identifies positive effects on teacher change of "talking about teaching...just having verbalized the issues, the procedures, the problems, and the ideas" (pp. 277-278). Mann (2005) also concludes that it is desirable to collaborate through dialogue in teaching. However, no suggestions are given as to how the process of dialogue contributes to teacher learning, nor indeed if the nature of the talk is influential.

Knezevic and Scholl (1996), in an account of a team-teaching experience during a language teacher education program, remark on the value of dialogue in increasing understanding of language teaching but suggest that the type of language may be influential: "The process of having to explain oneself and one's ideas, so that another teacher can understand them and interact with them forces...teachers to find words for

thoughts which, had one been teaching alone might have been realized solely through action” (p. 79). However, they also point to the role of the ‘expert’ in their dialogue as having a crucial influence on the nature of their interaction: “[The faculty member] spoke using the terms, language, and ideas that the MAT program had been teaching us, and this helped relate our experiences to the pedagogical theories we had been studying” (p. 81). Freeman and Richards (1996) similarly conclude that the development and use of the professional discourse of language teaching “provides particular schemata and metaphors which influence how teachers describe and interpret their teaching experiences. This in turn shapes what they do” (p. 5). Thus, professional discourse is seen to have a role in shaping teacher thinking and action, and this clearly links with the SCT explanation of the role of languaging in learning.

Other researchers into language teacher education have reached similar conclusions. Through an analysis of teachers’ investigations of their own classroom talk, Walsh (2006) claims advantages in teachers’ use of metalanguage in their discussions about their own teaching. These advantages include the facilitation of new levels of understanding, and the promotion, through collaborative dialogue, of changes in practice. Gebhard and Oprandy (1999), in a more theoretical discussion, advocate that teachers and teacher educators should avoid high inference words like *encouragement*, *clear*, and *interested* because of the different meanings they have for different people. Instead, they advocate a common language shared by teachers, with the precision offered by the use of metalanguage and conceptual labels. Using this kind of language, they claim, allows teachers to “describe teaching in such a way that we may more easily generate alternatives in our teaching” (p. 12).

In a more focused study of the role of language in language teacher development, Freeman (1991) investigated how four student teachers' learning was reflected in their language use during an 18-month in-service language teacher education program. His study showed how

participating in the discourse shared by a professional community and thus being able to express their thinking with that community and others enables these four teachers to develop their conceptions of teaching and to control and manage aspects of their classroom practice as a result. The cognitive function begins as a process of naming existing practice in the language of the inservice program. (p. 446)

He goes on to claim that the new discourse allows the teachers to use forethought and planning, and afterthought in analysis and reflection, enabling them to separate themselves from their actions. This clearly echoes the Vygotskian idea of gaining control over higher mental functions through the internalization of mediational means, in this case dialogue with an 'expert' using the discourse of language teaching. In a later analysis of the same data, Freeman (1993) mentions the "pivotal role language plays in the development of new understandings in practice" (p. 486). He concludes that "Teacher education which is oriented towards how teachers understand what they do must enable them to remake the meanings associated with ordinary actions; in short, to reconstruct their practice" (p. 495-6). This too echoes a Vygotskian tenet: that of the interplay of spontaneous concepts (gained through lived, practical experience in the classroom) and scientific concepts (gained through formal instruction and symbolized through the professional discourse of language teaching).

Here then, the role of SCT in elucidating and informing the processes of teacher learning comes to the fore. As mentioned earlier, one problematic issue identified in language teacher education programs is the perceived dichotomy between theory and practice. Also, dialogue, specifically involving professional discourse, is intuitively felt to have an important influence on teacher learning in terms particularly of helping the teacher both make sense of her lived experience and make more informed decisions in the classroom. In the following section, I examine how conceptualizing the outcome of teacher learning as the development of conceptual thinking can both elucidate and inform the process of teacher learning, and make a crucial link between the nature of the mediational means during the POC (i.e. dialogue that involves the use of the professional discourse of language teaching) and its potential impact on language teacher learning, specifically the language teachers' subsequent discourse.

### **Teacher learning as the development of conceptual thinking.**

The theory/practice dichotomy in teacher education has been seen as too simple (Ottesen, 2007; Smagorinsky, Cook, & Johnson, 2003). Rather than viewing expertise in teaching as either the ability to theorize from practice or practicalize theory, or indeed as a combination of the two, Smagorinsky, et al. suggest that the theory/practice binary can be rejected by recognizing the inherent relationship between abstraction and idealization through language and specifically terminology, and the teacher's lived experience in the classroom. Developing the ability to think conceptually about an aspect of teaching involves a complex interplay between scientific and spontaneous concepts so that "scientific concepts grow downward through spontaneous concepts; spontaneous concepts grow upwards through scientific concepts" (Vygotsky, 1986, p. 194) Through

scientific concepts, the learner can understand and manipulate the spontaneous concepts, and the scientific concepts, first encountered through mediated instruction, can become more elementary and concrete, and directly related to lived experience. In their application of these ideas to teacher education, Smagorinsky et al. suggest that “the process of concept development is mediated by activity in cultural practice” (p. 1404) such that to fully master conceptual thinking, the student-teacher must be involved in the practical application of that concept.

Practice is thus central to the interplay between the learner’s conceptual field that integrates scientific and spontaneous concepts and enables one to generate more broadly from immediate experience to new experiences through which a concept may be more formally and discriminatingly defined. (Smagorinsky et al., p. 1408).

They go on to suggest that it is during the practicum experience that the student-teacher has an opportunity to forge links between her lived experience in the classroom and the concepts of teaching presented in the content courses of the program, so that the development of her approach to classroom teaching and her developing conception of teaching are mutually enhanced. Simply through involvement in the lived experience of classroom language teaching, the teacher will develop spontaneous or everyday concepts about teaching, and react instinctively to what occurs. However, through “schooling” in the scientific concepts of teaching, the teacher will develop an ability to perceive and analyze classroom events and, through higher order thinking, become able to act more proactively. These scientific concepts are concretized and decontextualized through the



discourse of language teaching, which implies that learning to teach languages involves learning the professional discourse of language teaching.

***Research into teacher learning as the development of conceptual thinking.***

Recently, some research attention has been given to documenting the development of conceptual thinking in language teachers. Johnson (2009) explains how a language teacher's narrative traces the development of her ability to think conceptually about the constructs of *subjectivity* and *subject positioning* as she reflected on her classroom practice with a 15-year-old ESL student in light of a reading on social identity, investment, and second language learning. Johnson shows how through Sharkey's application of the theoretical constructs to make sense of her lived experiences in the classroom "she uses the discourse of theory (scientific concepts) to rethink, re-organize, and rename her experiences... Thus the theoretical constructs articulated in Norton's [1995] article function as psychological tools (scientific concepts) that mediate her thinking in ways that lead to new ways of thinking about L2 teaching and learning" (p.32). Here then, Johnson reports on how the interplay of lived experience and theoretical knowledge influenced a teacher's thinking.

Dunn (2011) traces the development of conceptual thinking about social inclusion in students on a second language teacher education methods course. He explains the development from the initial imitation of the (scientific) concepts presented with connections made to students' prior knowledge (everyday concepts), through a more sophisticated understanding of the concepts to the stage where the students could envision alternative practices informed by the theoretical concepts. In a similar study of a methods course for TAs, this time focusing on concepts of literacy, Allen (2011)

comments on the need for time, “multiple, sustained opportunities for dialogic mediation, scaffolded learning, and assisted performance” (p. 100). In another similar study, Nauman (2011) found the interplay between a Chinese teacher of English’s existing knowledge, her lived experience in the classroom, and the scientific concepts she was being introduced to, helped her create new classroom practices and exploit the conceptual tools to produce new materials. Like Allen, Nauman stresses the importance of the teacher’s classroom as an important site for learning, allowing her to “link the scientific concepts with her everyday concepts and experiences, resulting in the emergence of a true concept” (p.116). She notes also how this concept development was mediated by the teacher’s interaction with the author and by the responses of her students to what she was doing.

Interestingly, most of the participants in these studies were engaged in teaching during their encounter with the scientific concepts, either through their reading or more formal coursework, and all of the authors point to the role of the interplay between the theoretical constructs and the experiences of the classroom as being crucial to the development of conceptual thinking. However, as Nauman (2011) and Allen (2011) mention, mediation through dialogue also plays a pivotal role in such development. This can be explained through the SCT notion that learning can be seen as the internalization of mediational dialogue—that is, the language of the dialogue. Research into how language relates to learning within an SCT framework is discussed in the following section.

## **Internalization and Mediation**

For Vygotsky (1978), social interaction, especially that mediated by language, plays a crucial role in the development of higher mental functions. He argued that all higher mental functions appear twice; first on the social, or interpsychological plane, and then on the individual, intrapsychological plane. In a much cited article, Wertsch (1979/2008) investigated this process in his discussion of how children performed a jigsaw task in collaboration with their mothers. He sought to show how “social interaction on the level of interpsychological functioning can lead to independent problem-solving at the intrapsychological level” (p. 67). He acknowledged the important role of egocentric speech in this transition, and like Vygotsky, advocated a genetic approach to the analysis of the process. The investigation involved a puzzle-making task with mothers and their 2½, 3½, or 4½-year-old children. The model depicted a truck carrying cargo and the task was for the children to assemble the pieces of the puzzle to make the copy look exactly like the model. The mother’s utterances served to regulate the child’s performance in the task, so that the mother provided other-regulation in the child’s ZPD.

From his analysis of the dialogues, Wertsch (1979/2008) identified four levels in the children’s transition from other-regulation (where they relied on assistance to perform the task) to self-regulation (where they could perform the task independently) within the context of this particular task. (It is interesting at this point to note that Wertsch’s analysis consisted of the transcription of the dialogues and the identification of key excerpts on which he commented to explain his findings; c.f. the data analysis section of Chapter 3.) At the first level, the child was not able to understand the relationship between the

mother's communicative moves and the task, and, therefore, could not use those moves to help himself complete the task. This suggests that the task itself was outside the child's ZPD at this stage. At the second level, the child understood that what the mother was saying was related to the task, but could not always perceive how. At the next level, the child was able to make all the inferences needed from the mother's communicative moves to use them to help him complete the task. At the final level, the child functioned independently to perform the task, but, crucially, using self-directed private speech that exhibited similarities with the mother's communicative moves designed to guide the child. By the fourth stage, the child had "not simply mastered the ability to carry out one side of the communicative interaction by responding to the directives of others. She/he [had] taken over the rules and responsibilities of both participants in the language game" (Wertsch, 1979/2008, p. 76). Interestingly, these four levels echo strongly the more detailed regulatory scale of tutor assistance needed in the study by Aljaafreh and Lantolf (1994), which involved adult expert/novice dyads.

The notion of how the dialogue and discourse of social interaction shape the development of individual thinking was also investigated by Mercer and colleagues (Mercer, 2008). Mercer points to a lack of empirical research into Vygotsky's claims regarding the influence of dialogue on learning and development, despite agreement among researchers on "the importance of the quality of student-teacher dialogue on the development of students' understanding of science and other curriculum contexts" (p. 92). For a decade, Mercer and his colleagues investigated the effects of dialogue on children's intellectual development (see Mercer & Littleton [2007] for a full account of the research). They hypothesized that "through the guided, structured experience of

reasoned argument, children might become better at arguing/reasoning alone” (Mercer, 2008, p. 95), using the term *exploratory talk* to refer to the type of dialogue they felt would be most influential on students’ thinking. Exploratory talk involves student-student dialogue in which partners engage critically but constructively with each other’s ideas, with challenges and counter-challenges being justified and alternative hypotheses offered. Thus, knowledge is made publicly accountable and reasoning is made visible in the talk (Mercer & Littleton, 2007, p. 59). Children who were trained in exploratory talk were found to use it more, were more successful on a test of reasoning, and made greater improvements in content tests than did those children not trained in exploratory talk. One explanation for this offered by Mercer is that “the target children improved their reasoning skills by ‘internalizing’ exploratory talk, so that they became more able to carry on a kind of silent, rational dialogue with themselves” (2008, p. 98). He suggests that it could be that through adult guidance in the use of exploratory talk and peer group practice the children were able to become “more sophisticated users of language as a psychological tool, and their thinking became more ‘dialogic’” (p. 98).

Thus, there is empirical evidence to support the notion that the development of higher order thinking involves the internalization of dialogue. In the study proposed here, I investigate the same phenomenon with adults (language teachers) and in a different context (POCs). Wertsch (1979/2008) claims that his research with the mothers and children also raised another important issue: “What are the mechanisms which make the transition from one level to another possible?” (p. 77). It is to this question of the nature of optimal mediational dialogue that I will turn now.

### **Research into the nature of mediation.**

In his study of mother and child dialogue, Wertsch (1979/2008) identified one aspect of the interaction that was crucial to the effectiveness of the mother's help. This was the shared definition of the task situation; as he says, "an understanding of the communicative context provides the necessary foundation for any transfer of strategic responsibility from adult to child" (p. 73). This means that the child needed to be able to interpret all utterances in terms of the problem-solving situation which was only completely true of children at the third stage. In a later discussion, Wertsch (1985) extends this idea with the concept of intersubjectivity. He claims that the children at the fourth level of internalization in his 1979 study had mastered the situation definition and achieved complete intersubjectivity with the mother. Later, Wertsch (1998) defined intersubjectivity as "the degree to which interlocutors in a communicative situation share a perspective" (pp. 111-112). This notion is important in that it acknowledges the contribution of the child/learner to the dialogue and "redresses the emphasis in some neo-Vygotskian research on the transmission of skills and knowledge from adult [expert] to child [novice]" (Mercer & Littleton, 2007, p. 23). Therefore, an important factor in the conduct of the POCs is this notion of establishing and maintaining intersubjectivity.

Over the past few decades, there has been a substantial amount of school-based research into how teachers can use dialogue to help children learn (Mercer & Littleton, 2007). Some judgments on the effectiveness of certain strategies (e.g. the teacher's use of questions) are now acknowledged to be too simplistic (Mercer & Littleton). More recently, in SCT-informed research, more general and subtle characteristics of effective teacher-led dialogue have been identified. From observations of primary school

classrooms in various countries, Alexander (2004) identified certain features of what he termed *dialogic teaching*:

- questions are structured so as to provoke thoughtful answer
- answers provoke further questions and are seen as building blocks of dialogue rather than its terminal point
- individual teacher-pupil pupil-pupil exchanges are chained to coherent lines of enquiry rather than left stranded and disconnected (p.32, cited in Mercer & Littleton, 2007, pp. 41-42)

This articulates well with what Mercer and his colleagues identified in their studies of schools in the UK and Mexico (see Mercer & Littleton, 2007). They identified these characteristics of teachers' whose students achieved the best scores:

1. They used question-and-answer sequences not just to test knowledge, but also to guide the development of understanding. These teachers often used questions to discover the initial level of pupils' understanding and adjusted their teaching accordingly, and used 'why' questions to get pupils to reason and reflect about what they were doing.
2. They taught not just 'subject content,' but also procedures for solving problems and making sense of experience. This included teachers demonstrating the use of problem-solving strategies for children, explaining to children the meaning and purpose of classroom activities, and using their interaction with children as important opportunities for encouraging children to make explicit their own thought processes.

3. They treated learning as a social, communicative process. ...other research has shown that most teachers make regular use of questions. These teachers (whose students' achievements were the highest) still did so, but compared with other teachers they used them more for encouraging pupils to give reasons for their views, organizing interchanges of ideas and mutual support among pupils and generally encouraging pupils to take a more active, vocal role in classroom events (Mercer & Littleton, 2007, p. 40).

Another field in which the nature of mediational dialogue has been extensively researched is that of second language learning. In their seminal study of dialogue between a writing tutor and individual ESL students aimed at correcting the student's written work, focusing closely on the use of articles, Aljaafreh and Lantolf (1994) conclude that feedback needs to be graduated—that is, move from implicit to explicit—and contingent—that is, offered only when needed. They identified a 12-stage regulatory scale of tutor assistance which extends from the very implicit “construction of a ‘collaborative frame’ prompted by the presence of the tutor as a potential dialogic partner” which results in the student's ability to correct her errors, to the very explicit “tutor provides examples of the correct pattern when other forms of help fail to produce an appropriate responsive action” (p. 471). In a small-scale, follow-up study that investigated whether this type of systematic help was more beneficial to learners than random help, Nassaji and Swain (2000) found that what they deemed “ZPD help” (i.e. graduated and contingent help based on Aljaafreh & Lantolf's scale) led to greater and more consistent accuracy in the learner's use of the articles in English than did “non-ZPD help” (i.e. help that was random). Nassaji and Cumming (2000) examined the exchanges



in an interactive written journal between a young ESL student and his teacher. They found the ZPD to be complementary, dynamic and evolving, with both sustained intersubjectivity and asymmetric scaffolding.

Other studies conducted into peer-peer interaction revealed insights into the nature of mediated assistance. De Guerrero & Villamil (1994) identified fluidity in the role of expert in the peer revision dyads they recorded. One student was more self-regulated in certain aspects of the task, and the other student more self-regulated in other aspects. In other words, the role of expert passed from one student in the dyad to the other at different points in the dialogue. Ohta (2000) found that in the dialogue of the particular student-student dyad she focused on, the sensitivity of one student to the subtle cues from the other allowed him to be able to act in harmony with her ZPD and “provide developmentally appropriate assistance” (p. 52).

Antón (1999) examined learner- and teacher-centered discourse between teachers and learners in two second language classrooms, one where the teacher dominated the interaction and the other where the teacher was able to use learner-centered interaction, albeit through a teacher-fronted activity. She found that the more learner-centered teacher was able to engage students in the process of learning through the use of open-ended questions to encourage learners to reflect on form and invite them to verbalize the “rules” and co-construct explanations and engage in peer-peer interaction. Thus, the teacher was able to pass responsibility for learning from herself to individual learners and to the class as a whole.

Gibbons (2003) focused her analysis on the teacher-guided reporting stages of the science lessons with ESL learners that she studied. These occurred after the experiments

had been conducted and provided students with the opportunity of reporting on what they had observed. She found that teachers mediated students' language learning in several different ways and were able to shift away from the familiar initiation-response-feedback (IRF) pattern of traditional classroom interaction, and toward a pattern of interaction where student were encouraged and scaffolded to express their ideas in gradually more academic terms, thus enabling them to appropriate aspects of the formal academic discourse that is required in schools. This is supported by the findings from Platt and Troudi's (1997) longer-term study of an elementary level ESL learner and her teacher. In line with her beliefs about the importance of socialization over the development of academic (scientific) concepts, the teacher in the study left the responsibility for Mary's learning in the hands of her peers, whose help was clearly adequate for Mary's acculturation and learning of social language, but inadequate for her mastery of the academic language and concepts she needed. The authors advocate direct, structured instruction for this. Thus, while peer-peer dialogue can on occasions demonstrate the qualities of verbal mediation needed to foster learning, of itself it is not sufficient for ontogenetic development of higher mental functions.

Table 2 presents a synthesis of the focuses and findings of this research. As can be seen, studies have focused on both oral and written interaction, and interaction between teachers and individual students, teachers and the whole class, and between student peers, though with one peer clearly more 'expert' than the other. The focus of the dialogues included very "surfacy" (Aljaafreh & Lantolf, 1994, p. 480) areas such as articles and the Japanese desiderative through the development of a type of academic discourse, to the

Table 2

*Mechanisms of Support Identified Through Empirical Studies of SLA*

Author	Interaction	Focus of interaction	Features of support identified
Aljaafreh & Lantolf (1994)	Oral between tutor and individual students	Correction of written work, focusing on use of articles	Intervention should be graduated (from implicit to explicit), contingent (offered only when needed), tailored to the learner's need through continuous assessment), and dialogic
Antón (1999)	Oral between teachers and whole class	Various aspects of L2 grammar	Invitation to learner to verbalize concepts and co-construct explanations, thus passing responsibility for learning to the learner; implicit and explicit help tailored to needs of class
De Guerrero & Villamil (1994)	Oral between peer students	Peer review of writing draft	Fluidity of role of expert
Gibbons (2003)	Oral between teacher and elementary school ESL learners	Development of academic discourse of science	Encouraging students to express their ideas in gradually more academic terms through progression of assistance from mode-shifting and recasts, through signaling how to reformulate, to indicating a need to reformulate (i.e. explicit to implicit)
Nassaji & Cumming (2000)	Written between teacher and young ESL learner	Interactive journal	Reciprocal, complementary, dynamic, evolving; need for sustained intersubjectivity and asymmetric scaffolding
Ohta (2000)	Oral between more knowledgeable student and a peer	Translation task involving desiderative construction in Japanese	Sensitivity to subtle cues of learner to allow the teacher to act in harmony with the learner's ZPD
Platt & Troudi (1997)	Varied, but mostly oral, between an ESL elementary school student, her teacher, and her peers	Varied; both general and academic long-term language development	Need for direct and structured instruction from teacher; cannot be left to peers

development of a learner's second language as a whole. The mechanisms of support that have been shown to foster internalization will be discussed and synthesized below.

### **Scaffolding.**

A metaphor for the support offered by teachers to learners that is often used in conjunction with the SCT concepts of the ZPD, mediation, and internalization is that of scaffolding (see, for example, Nassaji & Cumming [2000] in the above discussion). First used and defined by Wood, Bruner, and Ross (1976), though with no reference to SCT, the concept of scaffolding has appeared in many studies and discussions of assistance by teachers to learners in various subject areas and contexts. Scaffolding, according to Wood, et al., is a process that “enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts” (p. 90). It involves the adult controlling aspects of the task with the assistance being both task and learner dependent. The authors identified a series of “scaffolding functions” (p. 98) that cover logistical aspects such as *recruitment* and *demonstration*, affective aspects such as *frustration control*, and so forth.

However, there is debate as to the extent to which the concept of scaffolding articulates with the ZPD in particular, and SCT in general, despite its appeal as “the quintessential Vygotskian act of pedagogy” (Nassaji & Cumming, 2000, pp. 104-105). As Lantolf and Thorne (2006) point out, because of the separation of the notion of scaffolding from social interaction and cultural tools, the use of scaffolding techniques by a teacher does not necessarily mean that some ZPD-related process is being activated. In other words, simply assisting a novice in the performance of a task does not necessarily provide conditions for the internalization of mediational means during interpsychological

interaction. Scaffolding is a pedagogically useful construct that implies graduated assistance by ‘expert’ and an active role for the learner, but does not consider the fundamental SCT notion that “developmentally fecund social interaction involves the internalization of cultural tools” (Lantolf & Thorne, 2006, p. 275). What research has overlooked is “the quality of social tools involved as an integral part in such interactions” (Stetsenko, 1999, p. 244). Here again, then, we see reference to the idea that the nature of the language fostered during mediational discourse plays a crucial role in the process of learning, the implications for the study proposed here being that interaction involving the professional discourse of language teaching can potentially play a major role in language teacher learning, a phenomenon that can be explained with reference to SCT.

This review of literature has examined research into the process of the development conceptual thinking through the internalization of mediational means. One important aspect of this development in the process of teacher learning is the role of professional discourse. As mentioned previously, this is often cited as an important factor, but exactly how knowing and the terminology and discourse of language teaching can inform, and reflect, language teacher learning has not been problematized. The adoption of an SCT-informed approach to the study of teacher learning can provide an explanation for this phenomenon.

### **Professional discourse in the development of scientific concepts of teaching.**

For Vygotsky, the development of language and knowledge can only be understood if both are analyzed as a whole, as being mutually dependent: “What does word meaning represent? Speech or thinking? It is speech and thinking at one and the same time because it is a unity of verbal thought” (1934a, p 10, cited in Wertsch, 1985, p.

195). In the only article found that investigates teachers' use of language in a teacher education course through an SCT framework, and makes a specific link between the acquisition of professional discourse and concept development, Chernobilsky, DaCosta, and Hmelo-Silver (2004) investigated how student teachers' language and knowledge changed during a semester-long course in Educational Psychology, based on a problem-solving approach. They analyzed written rather than spoken artifacts produced by the teachers in groups and as individuals, and their statistical analysis focused on pedagogical vocabulary with definitions and explanations, theories of learning and teaching, and the relevant theorists. Their results showed vocabulary growth over time in individual logs but not in the group artifacts. However, qualitative analysis showed improvement of group writing from problem to problem as well as improvement in individual writing. They found increased use of vocabulary in all students, more careful explanations, and a greater use of definitions and awareness of appropriate sources. They conclude that "language serves as a conceptual tool in that it helps shape thinking" (p. 340). They also mention that such language analysis is rarely used to investigate student teachers' level of knowledge.

Although this study did not focus on student-teachers but rather on practicing teachers, it is evident that the role of languaging activity in conceptual development found by Chernobilsky et al. (2004) can potentially be true for language teacher learning in general. Indeed, Manning and Payne (1993) claim that "the quality of the verbal dialogue within the teacher education program is the crux of the scaffold [of the teacher's learning]" (p. 364) and that the language of education shapes the teacher's thinking. They propose a model for teacher education programs that includes as one of its goals "to

provide experiences in teacher education whereby prospective teachers come to realize that teachers' self-verbalizations not only direct teacher behavior, but also mediate between teaching situations and teacher responses" (p. 363).

Although not adopting an SCT framework, Tsui's (2003) work on teaching expertise sees a tremendous role for the parallel development of professional discourse and understanding of teaching. Like Freeman (1991, 1993) and Shulman (1988), Tsui conceives of the role of professional discourse in teacher learning as a process of making tacit knowledge explicit. She talks of teachers' "informal knowledge [being] largely dormant or tacit in most teachers, and they often have difficulties articulating it or making it explicit when asked" (p. 353). The notion of tacit knowledge, is reformulated by SCT theorists in spontaneous concepts—that is, concepts and ideas gained through lived experience but not available for scrutiny or analysis, and not under the mental control of the individual. By offering names and definitions for these spontaneous concepts, and by encouraging their use in professional discourse, "experts" such as teacher education faculty or, in the case of the study proposed here, mentors can assist teachers in gaining mental control over those spontaneous concepts by helping them abstract and decontextualize their lived experience and therefore apply their understanding to new situations (Smagorinsky, et al., 2003, p. 1403), thus impacting their subsequent classroom practice. This reflects Stetsenko's (1999) concern with the nature of cultural tools—here, mediational discourse—as being a crucial element in any scaffolding of learning that seeks to foster development through the internalization of mediational means.

There is, therefore, a theoretical and intuitive justification for operationalizing language teacher learning by developments in the teacher's discourse, hence the research questions of the study proposed here. The POC offers a tailor-made opportunity to foster this interplay between spontaneous and scientific concepts, and the development of conceptual thinking, because it involves dialogue with an "expert" about a lived classroom experience.

### **The features of mediation and their application in POCs**

At this point, therefore, I can summarize what this review of studies into verbal mediation and the role of language in the development of conceptual thinking has revealed about the nature of mediation that best fosters learning, and indicate specifically how this can be applied in POCs.

#### ***Shared definition of task.***

It is of crucial importance that both the mentor and the teacher have similar expectations as to the conduct and outcome of the POCs. It was anticipated that this would be achieved initially during the pre-semester interview (see chapter 3) but would also need to be continually negotiated throughout the semester.

#### ***Intersubjectivity.***

This involves ensuring that the mediation is dialogic—that is, that the teacher is an active and vocal participant in the interaction—with acknowledgement of the importance of her contributions to the dialogue. This would no doubt entail shifts in the role of *expert* such that in this study, as the mentor, I should not take on the role of *knower* but be able to learn from the background knowledge and insights of the teacher. This would consequently involve a shift in the locus of responsibility for learning, so that I would not



create a situation where the teacher relied on me to ‘tell her the answer’ but collaboratively we would construct knowledge through dialogue.

***Reasoning is made visible through talk.***

This feature of the verbal mediation during POCs is the most crucial and perhaps lies at the heart of how the POC can impact language teacher learning. The reasoning can be made visible in ways that mirror the transition of interaction and dialogue from the interpsychological to intrapsychological planes, reflecting Gal’perin’s 3 stages of internalization (cited in Wertsch, 1985, p.66; see chapter 1). The mentor can articulate her own thought processes as she is reasoning out how to address a particular issue, thus modeling the process. The mentor and teacher can engage in the dialogic co-construction of a solution to a problem or task, each building on the ideas of the other in ways that reflect the nature of exploratory talk. Also, through strategic use of questions, the mentor can provoke thoughtful answers from the teacher such that she can articulate herself strategies for solving teaching-related problems. Thus, thought processes, such as decision-making for example, would be explicitly articulated both by the mentor as a model, and by the teacher with the help of guiding questions by the mentor.

***Fostering the use of professional discourse.***

The nature of the language of the talk—that is, the quality of the cultural tools employed—has been seen to play a key role in the development of higher order mental functions. In order to promote more sophisticated and higher-order thinking in the teacher, and a deeper understanding of the scientific concepts of teaching, the mentor would need to promote the internalization of more sophisticated and higher-order language. This would involve the mentor using and encouraging the teacher to use the

professional discourse of language teaching through, for example, asking the teacher to relate her classroom actions and decisions to specific theories of language, learning, and teaching. Also, use of vague language by the teacher, such as “we did the vocabulary” (reflecting a spontaneous concept) would need to be probed so that the teacher can articulate the actual processes in terms that are decontextualized abstractions—such as *definitions, eliciting, antonyms*, and so forth—and thus foster the interplay between spontaneous and scientific concepts.

***Graduated and contingent help.***

Providing help that is optimally related to the teacher’s ZPD involves several levels. First, it is important that the mentor is aware of the current state of the teacher’s awareness of a certain issue that arises in the POC. Thus, the mentor has to find this out through questions to the teacher. Second, it is important that the help provided be contingent on the teacher’s knowledge—that is, that the mentor only seek to help the teacher when that help is needed, and that the mentor does not tell the teacher what she already knows, or set expectations of the teacher that are beyond her ZPD. Also, the help provided would need to be graduated in two ways. First, when the teacher needs assistance, the mentor should initially provide implicit help and if that is not successful, move to more explicit help (Aljaafreh & Lantolf, 1994). Second, when explicit help is needed with regard to a particular issue, the mentor should reduce the help from explicit to more implicit on subsequent occasions when help is needed for the same issue (Gibbons, 2003). This would mean that just as the peer in Ohta’s (2000) study, the mentor has to be very sensitive to the subtle verbal and non-verbal cues from the teacher as to the type of help that is needed.

From the above discussion, it can be seen that the POC has enormous potential to impact language teacher learning. However, as mentioned previously, little empirical research has been conducted into POCs in language teacher education, with few focusing on the discourse of the conferences, and none adopting an SCT framework in order to investigate the impact of the POC on language teacher learning. I examine the research that has been conducted in the following section.

### **Post-Observation Conferences**

The teaching internship forms an important part of teacher preparation programs, and is sometimes said to be the part of the teacher preparation program where student teachers feel they most learn how to teach (Kosnik & Beck, 2003; McNay, 2003). Indeed, supervision has been deemed “pivotal to teacher change” (Blanton, 1998, p. 112). As mentioned earlier, observations of teachers and subsequent post-observation discussions during the practicum experience play a crucial role in teacher preparation. Similarly, during in-service teacher education, observations and POCs can impact teacher learning and development (Randall & Thornton, 2001). Several authors comment on the value of the observation/POC cycle in promoting learning in language teachers. Putnam (1999) for example, in a study of an MA TESOL internship, claims that “the interaction between the new teacher and supervisor as they discuss classroom observations and issues related to teaching can have a tremendous impact on a new teacher’s learning” (p. 13). Similarly, in a review of studies focused on the mentoring of beginning teachers of all subjects, Hobson, Ashby, Malderez, and Tomlinson (2009) claim that “numerous studies have found that one of the most valued aspects of the work undertaken by mentors is lesson observation (both of and by the mentee) with subsequent analysis of the processes

involved” (p. 6). However, Clift and Brady (2005), Vásquez (2004, 2005), Waite (1993), Williams & Watson (2004), Zeichner & Liston (1985) all comment on the paucity of research into POCs.

Some studies have explored the nature of participation (Vásquez & Reppen, 2007), the roles of participants (Tsui, Lopez-Real, & Law, 2001), or the structure of POCs (Arcario, 1994). Others studies focused on the language used in POCs. Brandt (2008) and Tang and Chow (2007) investigated how feedback and advice were given and received in POCs. Focusing mainly on the language used by the supervisor, Vásquez (2004) found to her surprise that student teachers felt their expectations of advice and suggestions from their supervisors during the POC were not met, even though her data showed that advice and suggestion were indeed given. She suggests this may be because the attenuated and tentative nature of the advice and suggestions given by the supervisor meant that they were not salient to the student teachers. Kurtoğlu-Eken (1996) investigated the use of modal-imbedded directives in teacher trainer oral feedback to trainees on classroom observations. The findings from her study show that the supervisors made use of modal-imbedded directives more than other types of directives and found their use depended on how direct the supervisor wished to be. These studies differ considerably from the study proposed here in that they investigated teachers’ perceptions of the POC interactions rather than the impact of the dialogue.

Zeichner and Liston (1985) focused both on supervisors’ talk and on student teacher’s talk and used a complex framework to analyze the discourse. However, and perhaps because of the complexity of this framework, their study did not find a high level of reflection during the POC. A study by Williams and Watson (2004) investigated

whether delayed POCs, with a structured journal task, or immediate POCs led to a more reflective approach in the student teacher. They present analyses of three aspects of the POCs that they consider to be important in determining the amount of reflection that occurred: topic initiation, use of modal verbs, and types of reasoning talk, defined as talk in which the speaker gives reasons for his assertions. Their study found more reflection in delayed than immediate POCs.

Here again, there are fundamental differences between these studies and the focus of this study. Rather than examine the dialogue in POCs as evidence of the teachers' existing conceptual development—that is, the product of learning—this study investigated the process of learning, endeavoring to catch “in flight” (Vygotsky, 1978, p. 68) the development of the teacher's understanding of teaching. In fact, only one study found has investigated the POC from an SCT perspective. This is surprising given the clear link that SCT posits between verbal mediation and conceptual development, and the role and nature of the POC in teacher education programs. Blanton (1998) focused on the POCs (which Blanton calls “teaching episodes”) between herself, the university supervisor, and a novice mathematics teacher, Mary Ann, whose classroom discourse she investigated. She examined the interaction for “indications of the student teacher's development within the zone of proximal development” (p. 113). Her analysis centered mainly on the structure of the interaction as evincing features of “instructional conversations” as conceived by Gallimore and Goldenberg (1992, cited in Blanton, p. 119). She concludes very generally that “coordinating classroom interactions observed during Mary Ann's teaching with the instructional conversation of the teaching episodes and Mary Ann's reflections about her practice converged to promote Mary Ann's

development within her zone” (p. 132) and that this “does suggest an avenue for effecting prospective teachers’ development in the context of their practice” (p. 132). Thus, Blanton, too, found value in terms of teacher learning in the fostering of the interplay between spontaneous concepts derived from the lived experience of the classroom and the scientific concepts discussed during the POCs. However, unlike this study, which sought to trace the impact of dialogue during the POC on the teacher’s classroom practice including her classroom discourse, Blanton focuses on how classroom discourse can be used to inform the conduct of the POC.

Thus, no study found to date has investigated systematically the impact of a series of POCs on language teacher learning using SCT as a theoretical framework. Dialogue has been felt and seen to help language teacher learning, but no investigation has been found that focuses on how that process actually works. Without such an understanding, language teacher educators can only adopt an intuitive and ad hoc approach to the conduct of POCs. The findings of this study, therefore, have the potential to add to and extend our understanding of teacher learning and to inform the conduct of POCs in language teacher education.

## **Conclusion**

In this chapter I have discussed how SCT has been applied to teacher education and how conceptualizations of teacher learning focus more on the product than the process. I have offered SCT and the notion of the interplay between spontaneous and scientific concepts as a way of explaining, and therefore framing an examination of, teacher learning. From a review of research into mediation and internalization and an account of how researchers have noted the influence of the use of professional discourse

on teacher learning, I have identified features of successful mediation and discussed how they can be applied to POCs. I have also identified gaps in existing research into the POC and suggested how the study proposed here can contribute to the existing literature and deepen our understanding of language teacher learning and inform our practices in language teacher education. In the next chapter, I account for and outline the methodology proposed for the study.

### **Chapter 3: Methodology**

This chapter addresses the methodology of the study, focusing particularly on the setting and participants, the research design, data collection and analysis procedures, as well as issues of trustworthiness.

#### **Research Questions**

In this study, I adopted Vygotskian SCT as the theoretical framework to inform the assumptions behind the study. I also used Vygotsky's genetic method, albeit adapted, as an approach to the design of the study. The research questions that informed this study are:

1. What is the nature of the mediational discourse between a mentor and language teachers during a series of post-observation conferences?
2. What is the relationship between the mediational discourse of the post-observation conferences and the language teachers' learning, as evinced in changes in the teacher's discourse during the mediation?

#### **Setting**

The study was conducted within the English Language Institute (ELI) of a major Research 1 university in the south eastern United States. The ELI offered non-credit courses in English for academic purposes (EAP) for overseas students, most of whom sought to attend universities in the US. A range of core and elective courses were offered at five levels, level 1 being beginner level. The ELI adopted a content-based instruction approach, with class and homework activities designed around specific topic areas, such



as literature, health, technology, the environment, and so forth; the use of projects for both assessment and instructional purposes was encouraged.

All levels of the three core classes met for five hours per week. These core classes consisted of a Grammar class, an Academic Interaction class focusing on speaking and listening skills, and an Academic Preparation class, focusing on reading and writing skills. At the higher levels of Grammar class (i.e. levels 4 and 5), the ELI was developing a curriculum based on a novel or other authentic text, rather than using grammar books published for ESL learners. Various three-hour elective courses were offered at each level, ranging from such classes as Pronunciation and Music, Vocabulary, Conversational Fluency, and American Culture at lower levels to TOEFL, SAT, and GRE exam preparation, Business, and University Experience classes at higher levels. Students at all levels took two electives, so that the total class time was 21 hours per week. Appendix 1 presents a summary of the courses offered at the ELI in the semester during which the data were collected.

During the semester of study, there were 271 students from 31 different countries at the ELI in 18 classes with between 7 and 17 students in each. Their ages ranged from late teens to early fifties, with the vast majority of students being in their early twenties. Table 3 gives a breakdown of students' countries of origin. As shown by Table 3, over 50% of the students had Arabic as their native language. The majority of students who attended the ELI planned to pursue graduate or undergraduate studies at American universities. Most students were full-time, taking 21 hours per week, with about 8% of students studying part time and taking between 3 and 16 hours per week.

Table 3

*Student Nationalities*

Nationality	Number of students	Nationality	Number of students
Saudi Arabia	93	Mexico	3
Kuwait	29	Bahrain	2
S. Korea	26	France	2
Qatar	15	Italy	2
Colombia	13	Russia	2
Thailand	12	Burkina Faso	1
Venezuela	12	Djibouti	1
China	10	Dominican Republic	1
Japan	8	Germany	1
Vietnam	6	India	1
Brazil	5	Indonesia	1
Taiwan	5	Iran	1
Angola	4	Kazakhstan	1
Libya	4	Peru	1
United Arab Emirates	4	Ukraine	1
United States	4		

There were a total of 33 teachers at the ELI during the semester of data-gathering. Of those 33, six had an administrative or directorial role, and taught between three and ten hours per week; four were full-time senior instructors, teaching between 16 and 21 hours per week with other administrative or curricular duties; four were doctoral

Teaching Assistants (TAs) who taught ten hours per week; and 13 were adjunct instructors, who taught between 3 and 21 hours per week. There were also three MA Applied Linguistic students who were in the final Teaching Internship of the program; they taught five hours per week. Most of the teachers had American English as their first language, but several did not and had been in the United States for a varying number of years. The vast majority of the teachers were women, and all ranged in age from mid-twenties to fifties, with most being in their late twenties or early thirties. Although administrative observations of teachers were conducted for evaluation and appraisal purposes usually by the Academic Programs Director, developmental observations did not form part of the regular teacher development activities at the ELI. However, the Director was willing to allow observations to be conducted as part of this study at the ELI as she believed they would contribute to the professional development of the participants.

### **Participants**

The primary data in the study feature three participants: two teacher participants and myself. I refer to myself by name, and to the other participants, as well as other students and teachers mentioned in the data, by pseudonyms. After receiving approval from the university's Institutional Review Board for the study (Case #108236), I sent out an email briefly explaining the study, and asking for volunteer participants. I received immediate responses from three different teachers, and after I had met with the three to give them more detailed information about the procedures of the study, they all agreed to participate. One of the participants had to withdraw from the study for personal reasons after participating in two observation cycles. Her data are not included in this report. I now present descriptions of the two remaining teacher participants.

Pepa was in her early thirties and a native speaker of Spanish, having been born and raised in Madrid. She came to the United States to gain her undergraduate degree in environmental studies and economics. She then returned to Spain to work for an environmental consulting firm for a few years, but decided that she wanted to teach, having been involved in tutoring high school students during her summers in Madrid as an undergraduate. She then taught English full-time for two years in a business school in the south of Spain, though she had had no formal training. She worked for an insurance company before deciding to return to the US to gain an MA in Applied Linguistics at the university where the study was conducted. During her MA, she worked as a Spanish TA, teaching two or three classes of Spanish as a Foreign Language; this was the first time she had taught Spanish, her native language. During her Teaching Internship as part of the Master's program, Pepa had taught a Business Case Studies elective class in the ELI for three hours a week and tutored students for a further three hours a week. During the semester of study, she was teaching an Advanced Business Topics elective class for three hours a week, and again tutoring for a further three hours.

Rick was also in his early thirties and a native speaker of American English, having been born and raised in the US. He gained a BFA in Creative Writing and then began a Masters in Rhetoric and Writing, but was interested in both library science and ESL, so that when a scholarship was offered at the Library School of the university where this study was conducted, he applied, was accepted, and ultimately gained an MA in Library Science and an MA in Applied Linguistics. He had given private guitar and dance lessons previously, but had not taught English formally outside the ELI. In his Teaching Internship, he taught an Academic Interactions level 5 class, and in the

following semester, he was employed as an adjunct teacher at the ELI. Prior to the semester of study, he had taught a Test Prep Vocabulary level 4 and 5 class, and the Mini-Institute, a 6-week intensive summer program, focusing mainly on conversational and fluency skills. In the semester of study, he taught the following classes: Introduction to Pronunciation, level 2; Academic Interactions, level 2; Academic Preparation level 3; and Grammar level 4.

My relationship with both Pepa and Rick had several layers. As instructor of the MA Applied Linguistics Internship courses, I had played a supervisory role with both of them during their Internships (with Pepa, I was the Internship course instructor when she did both her Observation and her Teaching Internships; with Rick I was the instructor only for his Teaching Internship). As such, I had conducted at least one formal observation cycle with both of them. During the semester of the study, I had just been appointed as Faculty Mentoring and Recruitment Coordinator. However, while I was, therefore, in an administrative role, I did not have a formal supervisory role vis-à-vis either Rick or Pepa. During their pre-semester interviews, both Rick and Pepa said that they had volunteered to participate in the study because they felt being involved again in observation cycles with me would offer them opportunities for learning about teaching and making positive changes to their teaching. Thus, they did see me in an expert though not in a supervisory role. On the other hand, we were working as colleagues and peers, in that we were teaching similar classes in the same institution, and as such had both formal and informal day-to-day contact.

## **Research Design**

### **Research within an SCT Framework.**

As was shown in the previous chapter, research into learning, and especially language learning, that takes SCT as its theoretical framework can adopt a variety of methodologies, from studies that rely on both quantitative and qualitative analyses (e.g. Centeno-Cortes & Jimenez-Jimenez, 2004; Gutierrez, 2006; Mercer, 2004; Nassaji & Swain, 2000), to purely qualitative (e.g. Aljaafreh, 1992; Aljaafreh & Lantolf, 1994; Gibbons, 2003). Most studies used recordings of classroom dialogue as data, focusing either on dialogue between teachers and students, or between pairs of students. Though several studies mentioned in the previous chapter make specific reference to the research methodology that Vygotsky developed in the course of his work, none seems overtly to address or adopt the actual methods involved. The next sections are devoted to an explication of Vygotsky's genetic method and how an adaptation of it informs the research design of this study. I also address the issue of how the methodology fits into traditional research paradigms.

### ***Vygotsky's genetic method.***

Vygotsky took issue with the methods of research into human cognition that existed during his career because of their inability to focus on the processes of learning and the development of human cognition (Gredler & Shields, 2008; Wertsch, 1985). He proposed a new method of research, which has been variously termed the "experimental-genetic method," "instrumental method," "historical-genetic method," "method of double stimulation" (Engström, 2007). In this study, I adopt Wertsch's (1985) less cumbersome term "genetic method." In developing his genetic method, Vygotsky insisted that human

processes can be understood only by considering how and where they occur in growth—that is, to study both the process and the product of development, “for it is only in movement that a body shows what it is” (Vygotsky, 1978, p. 65). In accordance with this, in this study I focus on the process of learning, as operationalized by the relationship between the language of the verbal mediation during the POCs and subsequent languaging activity of the teacher participants (cf. Mercer, 2004).

Wertsch (1985) summarizes the five main tenets of Vygotsky’s genetic method as follows:

1. Human mental processes must be studied by using a genetic analysis that examines the origins of these processes and the transitions that lead up to their later form.
2. The genesis of human mental processes involves qualitative revolutionary change as well as evolutionary changes.
3. The genetic progressions and transitions are defined in terms of mediational means (tools and signs).
4. Several genetic domains (phylogenesis, sociocultural history, ontogenesis, and microgenesis) must be examined in order to produce a complete and accurate account of human mental processes.
5. Different forces of development, each of which with its own set of explanatory principles, operate within the different genetic domains. (p. 55-56)

These basic tenets informed the design of this study. By seeking a relation between the dialogue during POCs and changes in the subsequent discourse of the

teacher, the focus was indeed on the origins of the mental processes of the higher order thinking in the teachers. The origins of the changes to the social processes are assumed to be within the dialogue, and the study would follow their transitions in form—that is, developments in the teachers’ discourse. A related feature of Vygotsky’s perception of the aim of psychological analysis was to reveal “real, causal, and dynamic relations as opposed to enumeration of a process’s outer features, that is, explanatory, not descriptive, analysis” (1978, p. 65). This too is reflected in the design of this study.

The study examined whether and how changes come about in the teachers’ learning, and therefore their discourse, as a result of participating in verbal mediation during POCs. Therefore, my focus was as much on the “qualitative revolutionary change” occurring moment by moment during the mediational process as on more long-term evolutionary change mentioned in Wertsch’s second tenet. The basic assumption behind the study is that conceptual thinking in the mediational means (the dialogue between the mentor and the teacher) would be internalized by the teacher (Mercer, 2004) and promote both a progression in the teacher’s ability to think conceptually during the post-observation discussions about the classroom teaching and learning of language. The main focus of the analysis was on the mediational means—the language of the dialogue and the conceptual thinking evinced in that language.

With regard to the fourth tenet, phylogenesis relates to the development of a group of organisms—in this context, primates; sociocultural history relates to the development of a group of individuals; ontogenesis to the development of an individual; and microgenesis to the development of a specific process during ontogenesis (Lantolf & Thorne, 2006, p. 29). Vygotsky’s research focused mainly on the ontogenetic level,



seeking to explain the emergence of and transitions within human higher order thinking during childhood and adolescence, though microgenesis was occasionally involved in his analysis (Wertsch, 1985); as mentioned above, Vygotsky felt that the process of interest should be observed “in flight” (Vygotsky, 1978, p. 68) which is why he focused on the development of higher order thinking skills in children. However, he saw as fundamental the need to study the microgenetic processes involved:

Any psychological process, whether the development of thought or voluntary behavior, is a process undergoing changes right before one’s eyes. The development in question can be limited to only a few seconds, or even fractions of seconds (as is the case in normal perception). It can also (as in the case of complex mental processes) last many days and even weeks. (Vygotsky, 1978, p. 61)

In this study, I focused primarily on the microgenetic development of a specific process—that is, the understanding and practice of second language teaching. This relates to ontogenetic development in terms of the long-term effect on the teacher, but the analysis and findings focus on the microgenetic development of specific processes. Also, as suggested by Vygotsky, I sought this microgenetic development on two timescales—that is, both in transcripts of individual POCs and over the course of the semester of data-gathering. In the fifth tenet, Vygotsky referred to biological and social forces - in the “different forces of development”. Here in this study, I am concerned solely with social and not biological forces, so this tenet does not directly apply to the study.

Clearly, then, my adoption of this microgenetic approach to the study of the internalization of the mediational means—the process by which verbal intermental

activity (the post-observation discussion) impacts intramental activity (as evinced by the teacher's discourse)—rooted in Vygotsky's SCT, had fundamental implications for the design of the study. In the next section, I outline an approach developed out of SCT to researching the role of language and dialogue in the process and product of learning.

*Sociocultural discourse analysis.*

Taking a Vygotskian sociocultural perspective, Mercer (2004) proposes a research methodology that he terms *sociocultural discourse analysis* (p. 138) (SCDA) to investigate how spoken language is used as a tool for thinking collectively in both teacher-student and student-student dialogues. This explanation of the methodology post-dates a considerable amount of research conducted by Mercer and his colleagues, and accounts and explanations of the methods are contained within several earlier books and articles (e.g. Mercer, 1995; Wegerif & Mercer, 1997). However, it was not until 2004 that Mercer used the term SCDA. In many ways, Mercer's SCDA, rooted as it is in SCT, reflects very closely the major tenets of Vygotsky's genetic method, although surprisingly, this is not alluded to in Mercer's (2004) explanation of the method. Mercer's research focus is very similar to the one adopted in this study—that is, the impact of a certain type of dialogue on the process and product of learning—and, therefore, I outline the relevant features of SCDA as described by Mercer (2004) and explain how they informed the study proposed here.

1. *A focus on the function of language, specifically dialogue, for the pursuit of joint intellectual activity and a “concern with the lexical content and the cohesive structure of talk” because these can “represent ways that knowledge is being jointly constructed” (Mercer, 2004, p. 141).*

The focus of the analysis of the dialogue during the POCs is on the conceptualization of teaching through language—that is, conceptual thinking about language teaching. Thus, as in Mercer’s studies, this study sought to identify cognitive processes through an analysis of language. This represents the very broad function of the mediational discourse of the POCs. As shown in the previous chapter, it involves joint and reciprocal participation of both the mentor and the teacher, and is focused on intellectualizing—conceptualizing—the processes of teaching and learning language. This reflects the Vygotskian view of the relationship between language and higher order mental functions. In this study language was not viewed as a reflection of cognitive activity, but as cognitive activity itself. Thus, the focus of the analysis was on how the use of language in dialogue informed and was informed by the teachers’ developing conceptual thinking.

2. *The use of selected extracts of transcribed talk commented on by the analyst.*

This is a specific feature of SCDA which has direct relevance to the methodology of this study. In order to elucidate the microgenetic processes involved in the internalization of the mediational means that I looked for in my analysis of the POC data, I needed to focus on the transcriptions of the discussions. This report of the study therefore contains excerpts of the dialogue which I comment on and analyze, as is the case in several other SCT-informed studies into learning (e.g. Aljaafreh & Lantolf, 1994; Blanton, 1998; De Guerrero & Villamil, 1994; Gibbons, 2003; Mercer, 2008; Wertsch, 1979/2008).

3. *The “concern with not only the processes of joint cognitive engagement but also with their developmental and learning outcomes” (Mercer, p. 141).*

In other words, the focus of this study is on both the processes and the product of development, so that the analysis of the interaction during the POCs has a dual focus: on the nature of the dialogue as well as on its influence on the teacher's discourse.

Thus, the main features of Mercer's (2004) SCDA informed the overall approach and design of this study. In conclusion, then, the methodology and methods that I adopted in my study were informed both by Vygotsky's genetic method and by Mercer's SCDA. The issue of overall research paradigm is discussed in the following section.

### **The problem of paradigm.**

Paradigm refers to "a systematic set of beliefs, together with their accompanying methods" (Lincoln & Guba, 1985, p.15). These are usually separated along quantitative/qualitative and positivist/naturalistic lines. However, in 1963, Butler, Rice, and Wagstaff published a book entitled *Quantitative naturalistic research*, which suggests that the correlation of method and paradigm is not so clear-cut. Lincoln and Guba identified several features of naturalistic, qualitative research. Not all of these applied directly to this study. Several (e.g. the naturalness of the setting, the human instrumentation, the inductive nature of the data analysis, the grounded nature of the theory, idiographic and tentative nature of the findings) varied from Lincoln and Guba's definitions, but were nonetheless to some extent features of the study. Miles and Huberman (1994) identify slightly different features of "naturalist" research. Here again, some features are reflected in aspects of the design of this study, such as prolonged contact, lack of instrument standardization, and the focus of analysis being on language. However, whereas naturalistic research, as conceived by Miles and Huberman (1994),

seeks to understand the participants' perceptions of an event or situation, my focus is on the event itself and its impact on teacher learning.

The question of which paradigm reflects or informs the approach and methods adopted in this study is thus inconclusive or, indeed, moot. As Guba and Lincoln (2005) mention, "Geertz's (1988, 1993) prophecy about the 'blurring of genres' is rapidly being fulfilled" (p. 191). Indeed, Aljaafreh (1992) even talks of a "Vygotskyan paradigm" (p. 93). Therefore, it seems that the methods and approach proposed by Vygotsky's genetic method and subsequently Mercer's SCDA supersede the distinction between these two paradigms. Ultimately, though, the clearest and most important similarity between the methods used in the present study and naturalistic research is the nature of the data. Transcripts of spoken interaction constituted the vast majority of data for this study, and were not subjected to statistical analysis. Having identified and described the overall approach to the study proposed here and addressed the issue of paradigm, I can now turn to the identification of the "strategy of inquiry" (Denzin & Lincoln, 2005, p. vi).

### **Case study.**

One important reason why the strategy of case study was appropriate to this study is mentioned by Yin, (2003): "Case studies have a distinctive place in evaluative research...to *explain* the presumed causal links in real-life interventions that are too complex for the survey or experimental strategies" (p. 15, italics in original). This reflects both Vygotsky's efforts to find causal dynamic explanations and the purpose and main focus of this study—that is, to explore the relationship between the "intervention" of the mentor and the learning of the teacher. My study took the form of an instrumental (Stake, 2005) or critical case study which sought to test a theory (Yin). The case itself was of

secondary importance, playing the role of facilitating understanding of something else (Stake). The individual teachers and the mentor were not the focus of the study; instead, the study focused on the processes of verbal mediation and learning.

The question then emerged as to whether the study should focus on a single case or multiple cases—that is, whether the study should involve more than one teacher. Here, there are arguments to support each choice. Documenting and analyzing all the post-conference dialogues and examining other artifacts for more than one teacher/mentor dyad would present a challenge in terms of time and resources, and therefore, the selection of a single case might have allowed for richer data and a more thoughtful, focused analysis. However, Yin (2003) is unequivocal in his assertion that multiple-case study designs are more likely to lead to more robust analytical conclusions than single-case studies, and since the cases are not selected for intrinsic or unique identities, a multiple-case study was the most appropriate design. Similarly, Merriam (1998) advocates the use of more than one case; indeed, she goes further and asserts that the cases chosen should display maximum variation: “The more cases included in a study, and the greater the variation across the cases, the more compelling an interpretation is likely to be” (p. 40). For these reasons, I decided to focus on two teacher-participants in this study. However, there was also the practical consideration of the possibility of one participant dropping out of the study for whatever reason; therefore, I initially recruited three participants. This meant that I avoided having to abandon or reduce the impact of the study if, as indeed happened, one participant was obliged to discontinue participation in the study.

### **Myself as a researcher.**

The other participant in the study was the mentor, myself. Merriam (1998, pp. 100-101) identifies several stances a researcher can adopt within her own study. As a *complete participant*, the researcher is a member of the group being studied and conceals her observer role. As *participant as observer*, the researcher's role as observer is subordinate to her role as participant. As *observer as participant*, participation in the group is secondary to the role of information gatherer. As *complete observer* the researcher is either hidden from the participant or observes in a public place. As *collaborative partner*, the researcher's role is known to the group, and researcher and group are equal partners in the research process, defining the problem, collecting data, and so forth. In this study, my stance was very much *participant as observer*; during the times I was actively involved in both the observation of lessons and the POCs, my focus was solely on the activity at hand, and not on the gathering of data. This primary focus on my role as mentor meant that collecting and engineering quality data was not my main concern during the individual POCs or in my other dealings with the teacher. As will be seen in subsequent chapters, this had a definite impact on the data.

Janesick (2000) points to several requirements of a qualitative researcher when she is also a major participant in research:

The researcher must describe and explain his or her social, philosophical and physical location in the study. The qualitative researcher must honestly probe his or her own biases at the onset of the study, during the study, and at the end of the study by clearly describing and explaining the precise role of the researcher in the study (p. 389).

While this self-declaration by the researcher may be more crucial in more purely qualitative research, where the focus is on the interpretation of the participants' words to reveal their perceptions of a phenomenon (e.g. as in phenomenology) than it is in this study, nonetheless, the pivotal role I played within the study necessitates the same kind of self-declaration.

In terms of my social and physical role within the study, I was at the same time colleague and mentor of the participants, though the mentor role was neither official nor institutional; it was taken on for the purposes of the study. I was teaching classes alongside the teacher-participants, though I did not share either class or students of the classes observed. We were under the same restraints and deadlines in terms of the teaching we did. Thus, in terms of the institution, my perspective was emic; in terms of the teachers' individual classes, I had a more etic perspective.

My sociocultural background and philosophical perspective had a strong influence on the biases I brought to both the design and the execution of the study and perhaps more so to the analysis of the data. For several years and in various countries, I had worked on English language teacher education programs overseen by Cambridge/ESOL. These programs have no direct counterpart in the US; they are offered by a variety of institutions, such as the British Council, private and public universities, language schools, and so forth; they are given at different levels—the Certificate of English Language Teaching to Adults (CELTA) aimed at preservice teachers, the In-service Certificate in English Language Teaching (ICELT) aimed at early in-service teachers, and the Diploma in English Language Teaching to Adults (DELTA), aimed at more experienced teachers; they involve between one and 18 months study (depending on



the level, and on the requirements of the institutions). They differ from MA TESOL programs in the US in that they take an integrative approach so that, for example, any weekly content input session can focus on any topic related to ELT, such as curriculum development, classroom management, language analysis, assessment, and so forth. Supervised teaching takes place throughout the program, with assessed observations beginning at the start of the program. The written assignments and examinations are designed for participants to demonstrate understanding of the theory and principles of ELT but at the same time to show evidence of their practical application in the teaching done by course participants as an intrinsic part of the program.

Thus, as a product of a different general and teacher education system, I had a different perspective towards and also perhaps expectations of the function of the POC in language teacher education and development. POCs assumed a much greater importance with regard to the success or otherwise of the teacher on the Cambridge/ESOL language teacher education program and we teacher educators were very aware of the “teaching” function of the POC. In the US context, observations by mentors of pre- and in-service teachers are rarely formally assessed, and the POC assumes a more peripheral role in the teacher education program.

As Yin (2003) suggests, the role of participant-researcher had both advantages and disadvantages. It allowed me to gain an emic perspective on the processes, and insights into what would not be accessible to an outside observer. Similarly, it allowed me the opportunity to “manipulate minor events” (Yin, p. 94) during the procedures of the study, such as scheduling and recording pre-observation conferences when desired. Schiffrin (1994) claims that, in research that takes an interactional, sociolinguistic

approach, the participant-as-observer has the potential to allow for a broader contextual view of the events under focus than other approaches to discourse analysis, such as conversational analysis, or corpus-based analyses. However, there are also considerable risks of bias in both the collection of observational data and in the interpretation of the data. As mentioned by Wegerif and Mercer (1997), there is the temptation to use excerpts of transcripts in a way that gives “the illusion of proof” rather than reflecting the true nature of the impact of the dialogue. Strategies for reducing the impact of such bias and reducing threats to legitimation will be outlined in the section on legitimation.

Nonetheless, given the nature of the study and my role in it, it was my intention from the outset consciously to affect the data (Vásquez, 2005). I purposefully manipulated the dialogue during the POCs by, for example, “feeding” the teacher, in order to elicit the discourse that I anticipated, because of my belief (based on SCT) that languaging completes thought. I consciously modeled the conceptual thinking that I hoped would develop in the teachers, and I purposefully offered opportunities for the teachers to engage in conceptual thinking. While in more ethnographic research designs, this would be unacceptable in terms of researcher influence, this was entirely compatible with the aims of this study and my role as participant-as-researcher.

### **Ethics.**

In social science codes of ethics developed in the 1980s, there were four major guidelines (Christians, 2005). Firstly, participants must be informed of as many aspects of the research as possible, including risks and benefits, before they are asked to consent to participate. Secondly, there should be no deception of participants during the research. Thirdly, participants have a right to privacy and confidentiality, and finally, data must be

accurate. The first two of these guidelines were followed by the creation of a comprehensive informed consent form that explained the nature, focus and procedures of the research, conducted as part of the Institutional Review Board (IRB) process. I presented the study to each participant in a private interview, and answered the questions they had. In terms of privacy and confidentiality, I used pseudonyms to protect the identities of the teacher-participants and I ensured that any data, in the form of recordings and field notes, were kept secure so that only myself and other authorized persons could access them. Similarly, the accuracy of the data was assured by the nature of the gathering procedures – recordings and field notes.

However, from the inception of the study, I was concerned about the extent to which I could maintain the anonymity of the teacher-participants. Because of the relatively small size of the institution, and the fairly high-profile role I played within it (as Faculty Mentoring and Recruitment Coordinator), most colleagues were aware that I was conducting a study, and, because of the email I sent out in order to recruit teacher-participants, also aware of the nature of the study. All of the observations were conducted within ELI classes and the pre- and post-observation meetings held in rooms on the same floor as the ELI offices. It was, therefore, more than likely that some ELI colleagues could induce the identities of the participants in the study, for example, when they saw me carrying the video-recorder and tripod and walking next to one of the teacher-participants, or overheard the scheduling of a meeting, both of which events were impossible to prevent given the somewhat cramped nature of the shared offices. I was careful to present the potential participants with this caveat during the recruitment process; I explained that while I would take all precautions not to divulge their names I

could not guarantee that colleagues would not surmise their participation in the study. All three participants accepted this and agreed to participate with this knowledge. After the completion of the data-collection, it seemed that whereas some ELI colleagues close to the participants were aware of their participation in my study, the ELI population in general and the management in particular remained unaware of the identity of the three participants. Once I had identified the participants, and gained their informed consent to take part in the study, I could begin the data collection procedures outlined in the following section.

## **Research Methodology**

### **Data collection procedures.**

#### *Stages of data collection.*

The first stage of data collection after the selection of participants was the pre-semester interview. The purpose of this interview was twofold: I needed to gather background information on the participants, but I also wanted to establish expectations in terms of both the conduct and the purpose of the POCs in particular, and the interaction I would have with the teachers in general. The interviews were semi-structured (Frey & Fontana, 1991) in that I prepared a protocol (see Appendix 2), as recommended by Creswell (1998), but was able to ask probing and clarification questions as required during the interview. As can be seen from the protocol in Appendix 2, the background questions focused both on the teachers' educational and teaching background and also on their thoughts and beliefs about language teaching. I also wanted to learn about their understanding of Vygotskian SCT, both to find out what assumptions I could make during the POCs themselves, and also the extent to which the teachers might be meta-

aware of how I was conducting the POCs. As it happened, their existing knowledge was limited and did not prove a factor in either case. The final question asked about their expectations of the mentoring process that would happen during the semester. Through this question, I wanted to make sure that the teachers understood that it was my intention to “teach” them through the observations and POCs, and that I was not simply data-gathering about their teaching. Also, because of the unofficial nature of the observations I was planning to conduct, I felt the need to tease out how they were approaching the process.

I sought and obtained permission from both the teachers to video-record these interviews. The reason for this was primarily in order to begin to familiarize them with being video-recorded. This was intended to go some way towards preempting any possible nervousness and awkwardness during the video-recording of the first POC. Given that my focus was on the development of discourse at later stages of the data-gathering process, even the very first POC with each teacher-participant had the potential to provide baseline data that could be relevant to subsequent discussions, as indeed proved the case. Consequently, the more relaxed the teacher-participants were during the first POC, the more potentially useful the data could be. These interviews were conducted in the first teaching week of the semester

The next stage of the data collection consisted of the classroom observations and POCs with the teachers. I audio-recorded each observed lesson, using a digital audio recorder that I put on the desk in front of the teacher. I decided not to video-record the observed lessons primarily because of the potential for disruption to the class and the teacher with the presence of a camera and operator in the fairly small classrooms that

were used by the ELI. The focus of the study was on verbal mediation during the POCs and the audio-recorded lessons provided sufficient data for cross-checking at the analysis stage.

In contrast, the POCs were video-recorded. As Peräkylä (2005) claims, “video and audio recordings are what provide the richest possible data for the study of talk and interaction” (p. 875). Similarly, because of the sedentary nature of the POC, a camera operator was not required and therefore disruption minimized. Although I was not concerned with the interpretation and analysis of body language and non-verbal communication at the data analysis stages, a video record of the POCs provided a useful check on and extended resource for the verbal data.

In terms of frequency, I decided that I needed to observe the teachers as often as possible during the semester in order to give me enough data for the study as well as in order to offer opportunities to influence their understanding of teaching. On the other hand, however, in no way did I want their participation in the study to become burdensome for them. I suggested, therefore, that I could observe them and conduct the POC every other week throughout the semester. Both teachers agreed to this, and the first observations and POCs were conducted in the first teaching week of the semester. The ELI semester extended over twelve and a half teaching weeks, but for various reasons, including my own schedule and the need for student projects and presentations to constitute the final two weeks’ of teaching, I ended up conducting 5 observations of each teacher. Figure 1 gives a graphic representation of the timeline of observations and POCs. In general, the POCs lasted between 45 and 60 minutes, though some discussions between Rick and myself lasted for only around 15 minutes.

After the first observed lesson with each teacher, I began to consider whether I should observe the teachers in the same class each time or a different one. In Pepa’s case, this was not an issue as she was only teaching one class. In Rick’s case, however, he was teaching three other classes. In the end, it was decided by both Rick and myself that I should continue to observe his Grammar 4 class; he expressed that he was less confident in that class and would appreciate my input, and from my perspective, I felt that the continuity would allow me to offer more beneficial suggestions. Consequently, throughout the semester, I worked with Pepa in her Advanced Business Topics (levels 4

Week	1	2	4	6	8	10	11	
Pepa	PSI	O1 Tu	O2 Tu	O3 Tu	O4 Tu	O5 Th		
		P1 Fr	P2 Tu	P3 Tu Pre Fr	P4 Tu	P5 Th		Post Fr
Rick	PSI	O1 Tu	O2 Mo	O3 Mo	O4 Mo		O5 Mo	
		P1 We	P2 We	P3 We	P4 We, Fr		P5 Mo, We	Post Th

PSI = Pre-semester Interview      O = Observation      P = POC      Pre = Pre-conference  
 Post = Post-semester Interview

Figure 1 Timeline of observation and POC data-collection.

and 5) class, and with Rick in his Grammar (level 4) class. Mention needs to be made here of the actual classes that the teachers were teaching, neither of which were entirely traditional in their curriculum.

The ELI adopted a content-based approach to language instruction, which meant that content and ideas were an important aspect of every class. The Advanced Business Topics elective class taught by Pepa was designed to give students practice in talking,

reading, and writing about business content, with the aim of developing both their business content knowledge and also their ability to use the vocabulary and discourse related to the topics discussed. Topics focused on during the semester included mergers and acquisitions, technology, entrepreneurship, and the Stock Exchange. Projects ranged from PowerPoint presentations, to syntheses and critical reviews of articles read.

The Grammar 4 class taught by Rick was based around the novel *Holes* by Louis Sachar (2000), and grammar focused materials prepared by ELT teachers at a university where some of the management team had worked previously. The procedure anticipated was that students would read around 30 pages of the book per week and then in class discuss the content of what they had read based on worksheets given by the teacher. Subsequent lessons would focus on grammar presentation, analysis, and practice activities, all based on the language and content of the book, and using worksheets given by the teacher. This presented a challenge to Rick, who had never taught a grammar class before, and had no experience of teaching language based on a novel. Usually, novice English language teachers can expect to gain knowledge about English grammar and techniques for presenting and practicing it from the grammar textbooks that they will use during the early part of their careers. For Rick, then, both the methodology and much of the language analysis was entirely new to him, and understandably he relied greatly on the materials he was given. To compound the challenge, however, the materials were not entirely teacher friendly, in that there were some illogicalities and occasional errors, and whereas an experienced teacher would have been able to compensate for these, Rick did not have the strategies or knowledge at his fingertips to help him either anticipate or overcome those difficulties. An example of the materials is given in Appendix 5.



As can be seen from Figure 1, the timing of the POCs in relation to the corresponding observed lesson differed from Pepa to Rick. In Pepa's case, we were not able to conduct the first POC until the Friday after the observed lesson on the Tuesday. This proved unsatisfactory both for Pepa and myself; we both felt that the delay impaired our ability to remember and reflect on the lessons. Consequently, subsequent POCs with Pepa were held on the same day as the observed lesson, though not always immediately after. With Rick, on the other hand, it proved logistically impossible to hold the POC on the same day as the observed lesson because of our schedules; indeed, Rick had to teach another class immediately after the one that I observed. We therefore held the POCs on the Wednesdays after the observation on the Monday.

Other logistical issues developed and were resolved over the course of the semester. After the first observation with Rick, as we left the classroom, he reflected aloud on some aspects of the lesson and asked me some questions. As we were talking, I realized that our discussions would be useful data for this study. Consequently, before the next observation, I asked his permission to audio record these informal conversations to which he agreed. In the end, only after the fourth observation did one of these spontaneous conversations occur that I could record. Another unanticipated event occurred with Pepa. As she was in her first semester of teaching at the ELI, my position as new faculty mentor required me to conduct an official observation of her classroom teaching, and write a report which would be kept in her file. I consulted with both Pepa and with the ELI administration and it was decided that one of the data-gathering observations could serve as Pepa's New Faculty observation. Therefore, her third

observation had a dual purpose. I was careful to ensure that this did not affect my interaction with Pepa, and she assured me that it did not impact her conduct of the class.

Another change to the original plan of observing lessons and then holding feedback sessions emerged from my feelings after the first and second POCs that I was adopting a rather evaluative and critical stance. I felt that if I were able to meet with the teachers before the lesson that I would observe, then I could help them preempt problems and give them input that would help them during the observed lesson. Both Pepa and Rick agreed that this would be helpful. As a result, I held and audio-recorded a face-to-face pre-observation discussion with Pepa before the third observed lesson, and a phoned pre-observation discussion before the fourth which I was not able to record. With Rick, the distinction between pre- and post-observations became blurred after the third observation, with the result that I was able to hold and record two POCs after the fourth observation and a pre-observation discussion before the fifth observed lesson. All of these “extra” discussions were included in the data set.

After the first observation and POC, I began the transcription of the recordings of the POCs. I quickly realized that this had a positive impact on the following observation and POC, because the transcription process familiarized me with the topics of discussion and the challenges the teacher had, and therefore informed the discussion and my input in the following POC. I realized at that stage that my transcribing each POC before the subsequent observation was affecting the data-collection process, and that in order to ensure consistency, I needed to continue the practice. Before each subsequent observation then, I endeavored to complete the transcription of the previous POC, and was generally successful.

Throughout this data collection process, I maintained a research journal. Janesick (2004) advocates the use of writing as a pedagogical tool in the development of researchers (p. 143). She sees the use of journal-writing to refine ideas about and responses to the process of the research as one of its main benefits to the qualitative researcher. In the journal, I recorded my thoughts and feelings during the data collection and transcription process. Most of what was recorded referred to my impressions of my own performance during the POCs, especially the affective aspect of the process. Other logistical issues are referred to such as the timing of the POCs and which classes should be observed. Similarly, I was careful to record my justifications for the decisions I made with regard to the transcription of the data. Most of my journaling, however, did not pertain directly to the focus of this study; it became more of a self-mediational tool.

The final stage of data collection involved a post-semester interview with each of the two participants, which again was both audio- and video-recorded. Again, a semi-structured approach was adopted with a protocol drawn up prior the interviews and follow-up question asked in an ad hoc fashion (see Appendix 3). Here the focuses were retrospectively on the teacher-participants' experiences of the mentoring process, and their perceptions of their learning and development. In contrast to the pre-semester interview, I asked a colleague to conduct the interview rather than conduct it myself. One important reason for this was that the interviewing context required the interviewer to play a neutral role, with no interjection of opinion or evaluation of an answer (Fontana & Frey, 2005). Given the essentially evaluative relationship that I had with the teachers prior to that time, it would have been both difficult and awkward for me to take an entirely neutral stance. Similarly, because of the shared knowledge that we had because

of our association and the shared experiences of the semester's interactions, the teacher would not have felt the need to articulate some ideas, resulting in poorer data. The presence of a person from outside the mentoring experience had the potential to lead to more discussion of the experience and also encourage the teachers to articulate ideas and concepts that would be of interest to the study.

Both post-semester interviews were conducted by the same person, Denise, who at the time was a colleague in the ELI and on the PhD program. Before the first interview with Rick, Denise and I discussed the protocol, and I explained in general what the purpose of the interviews was. Denise asked to know the kinds of issues that had come up in the POCs with the teachers so that she could probe them about these. I felt that if I informed her of the issues, it may result in her leading the teachers to say what I anticipated they would say rather than allowing them to reveal what they believed the focus issues were. The quality and quantity of the issues mentioned in the post-semester interview data suggest it was a good decision not to conduct the interviews myself. However, the relative lack of probing with regard to the issues of focus from Denise suggests both the preparation and training for the interview that I gave her was inadequate, and also that my decision not to apprise her of the issues may not have been a good one. Had she been aware of what classroom issues I had focused on with both teachers, she would have been able to be more purposeful and focused in her probing.

These procedures of data collection comply with Yin's (2003) three principles of case study data collection. There were multiple sources of data to ensure triangulation and "converging lines of enquiry" (p. 98). The data was conserved systematically and appropriately, and thus formed the case-study database which could be reviewed by other

researchers. The data and the subsequent analysis were recorded to ensure that a chain of evidence was maintained, so that all the data could be subject to further analysis after the case-study report was written.

### **Data preparation.**

The first stage of any preparation of spoken data for analysis is the need for transcription in order to “freeze the discourse” (Cazden, 1986). This involves “close, repeated listening to recordings that often reveal previously unnoted recurring features of the organization of the talk” (Silverman, 2000, p. 830). No transcription of spoken language is entirely objective (Green, Franquiz, & Dixon, 1997) and many decisions are made by the researcher at the transcription stage. The initial version of the transcripts differed in several ways from the version of the transcriptions from which the extracts analyzed were taken. With any audio or video recording, the amount of information that can be mined from the data is almost infinite, both in terms of verbal and non-verbal audio data, as well as gestural and physical data. The main basis behind the decisions I made at this, and indeed every stage of my analysis, was to endeavor to present as accurate and detailed an account of the data as would allow me to focus on the research questions, without risking becoming distracted by other interesting but tangential features of the data. Table 4 presents the decisions I made during the transcription process and the rationales and implications of those decisions.

Once I had prepared the transcripts, I could begin the analysis in order to make sense of the data in terms of the research questions. What follows is an account of the stages of analysis which led to the findings reported in the following chapter. It also includes reference to occasions where my planned data analysis techniques proved

inadequate or inappropriate for the features that were emerging from the data. In other words, I make reference during this account to the evolution of the data-analysis process.

Before beginning the analysis of the data, I made a decision to analyze separately the data from Pepa and Rick. Throughout the semester of data-gathering, I felt that there was a perceptible difference between my interactions with the two teachers and that to

*Table 4*

*Decisions made during the transcription process.*

Decision	Rationale	Implications
no punctuation used to indicate phrasing	too much interpretation of the speaker's intention would be required to decide where one idea ends and another begins	results in possible ambiguity of some of the transcribed utterances
no indication is given of pausing by speakers	I did not consider this or other paralinguistic features in the analysis	a consequently restricted/limited analysis
the listener's short verbal and non-verbal utterances during a speaker's turn were included in parentheses within the turn	to include them as separate turns would detract from the reading of a turn as a single turn; not to include them would omit important interactional information	I had to make potentially interpretative decisions with regard to where whole turns began and ended
constructed dialogue (Tannen, 2007) was indicated through the use of quotation marks	constructed dialogue emerged as a significant feature of the data	decisions with regard to where constructed dialogue began and ended became necessary
some gestural data were included in the transcriptions	occasionally, the meaning of the verbal data would have been incomplete or misleading without some indication of the gestural content	only selective use of gestural data used; much of these data remained unanalyzed

merge my analysis of the two sets of data would not allow me to see as clearly as keeping them separate. With Pepa, my role as mentor was more straightforward in that she looked to me for evaluation of her teaching and a greater understanding of how to approach her work. She also tended to be more overtly self-critical. Rick was feeling challenged by the class and materials he was using and seemed to be looking more for specific strategies.

### **Data analysis.**

The data analysis methods, like the design of the study itself, were informed by Vygotsky's genetic method and Mercer's SCDA. The data were examined in ways that revealed the causal-dynamic link (Vygotsky, 1978) between the processes of the verbal mediation and the development of higher order thinking—that is, learning, the product (Wegerif & Mercer, 1997; Mercer, 2004). Vygotsky held that analysis should not involve breaking down an event into its constituent parts because this does not necessarily explain the whole (Gredler & Shields, 2008). He used the analogy of water and pointed out that breaking that down into its constituent parts would suggest a very different relationship to fire than is in fact the case. Instead, because mental events are complex processes that “change before our eyes,” he advocated identifying, through analysis, characteristics and instances that retain the properties of the whole (Gredler & Shields). In this study, I did not analyze aspects of speech separately—that is, rather than dissect the discourse into its constituent parts, such as intonation, lexis, and so forth, I treated the language as a single entity.

In order to address the first research question, *What is the nature of the mediational discourse between a mentor and language teachers during a series of post-observation conferences?* I began by seeking evidence of the features of verbal mediation

I had identified *a priori* from a study of the relevant literature—that is, shared definition of task, intersubjectivity, reasoning made visible through talk, fostering the use of professional discourse, and graduated and contingent help. In order to achieve this, I read through the data set of each participant several times, focusing on identifying instances of each feature in turn. I used the qualitative data analysis software Atlas.ti to assist in this process. I saved each participant's POC transcriptions as .txt files and used the coding function of ATLAS.ti (version 6.2), a qualitative data analysis software, to compile instances of each feature. Following this, I was able to categorize the instances of the features, and provide examples of each. This is reported in the following chapter.

At this point, however, I realized that the *a priori* features did not in fact represent the aspects of the mediational discourse that were most pertinent to the relationship between language and cognition on which I was focusing. Other more interesting and relevant features directly related to Vygotsky's idea of conceptual thinking emerged. I realized therefore that I needed to find a way to analyze how this conceptual thinking was reflected in the discourse, which in turn meant seeking a unit of analysis that could facilitate this. In order to achieve this, I returned to Vygotsky's ideas about concepts, and sought to analyze in my language during the POCs different ways in which I modeled the conceptualization of both the teachers' classroom practice and the various aspects of language teaching in general. For this, the Atlas.ti software proved too cumbersome; it allows for the grouping of quotations within a similar code or theme, and facilitates looking for content themes in a large amount of data. However, the conceptualizations that I was focusing on were often reflected in single words or short phrases that were dependent for their clarity on the surrounding linguistic context. Atlas.ti's coding



function served to separate out the quotations from their context in order for them to be analyzed independently. Clearly then this was not suitable for the analysis of the conceptualizations of language teaching within my discourse. I therefore returned to the qualitative researcher's traditional tools—printouts of the data—in order to identify and classify the conceptualizations in the data. From this analysis, I developed a taxonomy of conceptualizations of language teaching.

Thus far in the analysis of the data that addressed the first research question, I had focused primarily on my own discourse—that is, the discourse of the mentor. However, one very prevalent feature of the discourse of both myself, the mentor, and of the teachers that emerged was *constructed dialogue* (Tannen, 2007), which involves “reporting” real or imagined “speech” of self or others while speaking. In order to investigate this as a feature of mediational discourse and in terms of its relationship to conceptual thinking, I chose one POC of each teacher and extracted all the examples of constructed dialogue from them, and then went through all the POC transcripts and selected examples of the use of constructed dialogue. I found that my use of constructed dialogue during the POCs, while extensive in number, was limited in terms of type and function. In selecting examples from the data set as a whole, therefore, I focused mostly on the teachers' uses of constructed dialogue and based my selection of examples on issues of variety and interest in connection with the idea of conceptual thinking. From this, I identified a total of 150 extracts which contained one or more example of constructed dialogue and used these as the basis for the analysis. This exploratory and heuristic approach to the selection of samples means that, while the results certainly represent features that were present in the data, they do not necessarily reflect the proportional prevalence of those features, nor

indeed do they claim to be a comprehensive analysis of all aspects of constructed dialogue in the data.

The second research question for this study focused on the changes in the teacher's discourse about language teaching: *What is the relationship between the mediational discourse of the post-observation conferences and the language teachers' learning, as evinced in changes in the teacher's discourse during the mediation?* In order to investigate this, I needed to concentrate on the teachers' discourse in the POCs and the post-semester interview, as it related to my own discourse in the POCs. I had originally anticipated the appearance and reappearance in the data of language that could be considered as professional discourse—that is, terminology and expressions that were typical of language teaching and somehow encapsulated the scientific concepts of language teaching. However, as mentioned above, I found that this was not in fact a prominent feature of the data. My plan to use a Key-Word-in-Context strategy to investigate the initial and subsequent appearance of these terms in my and the teachers' discourse was therefore not appropriate.

In order to gain a perspective on the development of the teachers' learning—that is, their developing ability to think in concepts as evinced in their discourse—I decided to adopt both a macro- and a micro-genetic approach. For the latter, I focused on one POC only as this would allow me to follow in more detail whether and how the thinking in concepts of language teaching in my own discourse was reflected or picked up in the teachers' discourse on a moment-by-moment level. In order to facilitate the discussion, I decided to focus on themes I had identified through my own journal and through my developing familiarity with the data as the major recurring areas of our discussions; these

were, in Pepa's case, the idea of "getting students to say it" and task design, and in Rick's case, the exploitation of materials and language analysis. The two second POCs were chosen because they included discussion of each theme, and in their natures were typical of the kinds of discussions over the course of the semester. The tools for this analysis were printouts of the POC transcripts; again Atlas.ti proved too cumbersome for the turn-by-turn analysis required. I read through each POC a number of times, identifying the themes, and annotating my and the teachers' discourse that showed evidence of conceptual thinking on different levels.

For the macro-level analysis, I took a more retrospective approach, using the post-semester interviews as my starting point. I decided to focus on one of the two recurring themes for each teacher. I read through each of the post-semester interview transcripts several times. I identified occurrences of the themes in the transcripts, and specifically of instances in the teachers' discourse that reflected conceptual thinking about those themes. I identified moves and phrases that I believed had previously been used in the mediational discourse of the POCs, and using the "Find" function of Microsoft Word, located and traced the occurrences of these turns and phrases. I transferred the findings to a time-ordered display

Table 5 presents a graphic representation of the data analysis procedures for both research questions. The results of these analyses are reported in the following chapter.

### **Trustworthiness**

In 1985, Lincoln and Guba proposed four constructs to ensure trustworthiness in qualitative research, which replace the positivist, conventional criteria of internal and external validity, reliability and objectivity. These terms are credibility, transferability,

dependability, and confirmability. I will examine how I have ensured each of these in turn.

In order to ensure credibility, Lincoln and Guba (1985) suggest prolonged engagement in the field, which this study involves as the data-collection continued

*Table 5*

*Data Analysis Procedures*

Research Question	Feature sought	Data	Method	Tool
1 The nature of the mediational discourse	a) Mediational features identified a priori	Pre-semester interview and all POCs	labelling occurrences of the features	Atlas.ti
	b) Conceptual thinking	All POCs	identifying and classifying	Printouts of transcripts
	c) Constructed dialogue	POC 3 in detail; all POCs	identifying and classifying	Atlas.ti Printouts of transcripts
2 The relationship between the mediational discourse and the teachers' learning	d) Development of conceptual thinking – micro-analysis	POC 2 for Pepa and Rick	coding using classifications from b)	Printouts of transcripts
	e) Development of conceptual thinking – macro-analysis	Post-semester interview and all POCs	time-ordered display	Printouts of transcripts

throughout a 12 week long semester. Another technique is triangulation which involves, among other techniques, adding sources of data. In this study, triangulation was achieved through the video-recording of all POCs and interviews with the teachers, the audio-recording of the lessons taught by the teacher-participants to supplement my own field notes, and also through my own researcher journal. Peer debriefing is another strategy to

aid in credibility. This involves discussing the research with a colleague “for exploring aspects of the inquiry that might otherwise only remain implicit in the inquirer’s mind” (Lincoln & Guba, 1985, p. 308). This I did with my major professor, committee members, and other graduate students.

With regard to transferability, Lincoln and Guba (1985) claim that it is not the researcher’s task in naturalistic inquiry to demonstrate criteria for transferability of the findings to other contexts, but instead to provide enough data for the reader to make transferability judgments. Given that this study investigated a theory that has the potential to be applicable in a much wider context, there may be grounds for claiming transferability. However, my aim was, as Lincoln and Guba advocate, to provide enough evidence for the reader to make judgments as well as to allow for replication of this study in other contexts. Confirmability of findings can be assured through creating an adequate audit trail of documents including the data themselves, products of data reduction and synthesis, notes, researcher journals, and memos, and any instruments developed. These all formed part of the documents that are available for inspection by other researchers.

In this way, then, I will take steps to ensure the trustworthiness of the findings of my research.

## **Conclusion**

This chapter outlines the methodology of the study proposed here. In it, I reiterated the research questions, described the setting, and gave an account of the research design including the sources of the approach adopted here—that is, Vygotsky’s genetic method and Mercer’s SCDA. I also examined how this study fits into the paradigm of naturalistic research and concluded that in some ways it does not, but that

the question of paradigm is inconclusive, and possibly moot. I described how the strategy of case study is appropriate to the research design, revealed and outlined my role as participant as observer, and discussed the ethical issues involved in the research. I gave an account of the proposed data-gathering and data-analysis methods, and finally, described the steps I took to ensure the trustworthiness of my findings.

## Chapter 4: Results

In this chapter, I present the results of the data analysis for the two research questions.

### **The Nature of the Mediation Discourse**

I begin with a presentation of the results regarding the first research question: *What is the nature of the mediational discourse between a mentor and language teacher during a series of post-observation conferences?* The first stage of the analysis involved identifying the presence of the features of mediation identified a priori from a review of relevant literature. However, as mentioned before, it quickly became apparent that this classification lacked the focus and complexity to identify other emergent features of the mediational discourse that related more directly to the focus of exploration of this study—that is, the relationship between verbal mediation and learning. In this report of the results, I first treat briefly those characteristics of mediational discourse identified a priori. Then the main part of this section focuses on the features of the mediational discourse which emerged during analysis, describing and exemplifying the features in isolation.

#### **Features identified a priori.**

In this section, the results of the analysis of the nature of verbal mediation within the interactions with both teachers are presented. The analysis revealed the presence of all the features of verbal mediation identified a priori. For each feature of the mediation, I

give a brief definition, and then present examples from the mediational discourse of the POCs.

*Shared definition of task.*

This feature of mediation was defined as ensuring that the teacher and the mediator shared similar expectations of both the purpose and the conduct of the observation cycles. My expectations were that the purpose of the observation cycles was for us to focus on and analyze areas of the teachers' classroom teaching where they were both effective and less effective as a teacher and help them make changes and become more thoughtful and purposeful in their approach. This would be done in a constructive and supportive way, and with focus also on areas of strength.

Shared definition of task was found to be present consistently within all elements of the data—that is, the pre- and post-semester interviews, and the POCs. Both teachers showed awareness of the overall purpose of the mediational process. In the pre-semester interview, I explicitly asked both Pepa and Rick what their expectations were. As Extracts 4.1.1 and 4.1.2 demonstrate, both showed that their expectations were in line with mine.

Extract 4.1.1

- 1 J: what- what- what do you expect to gain from it- from what's going to happen
- 2 this semester and how do you think it'll kind of evolve how do you think it'll take
- 3 place
- 4 P: well you know I kind of knew you were going to ask me this question
- 5 [laughter] and I was like "**ok, multiply your mentoring experience in your**
- 6 **Masters program by ten there you go**" (J: so- so and what-) it's like it's going
- 7 to be- I feel like I'm still in my- in my program kind of like having some
- 8 professional- well more like **professional development** (J: right) activity you
- 9 know like I- I'm assuming that what is going to happen is **I'm going to be picked**
- 10 **on things that I need to do better and I'm going to see my strengths what**
- 11 **weaknesses which I don't always see it** (J: mhm) so it's very nice that someone
- 12 can help you see those things, and **hopefully become a better teacher** hopefully



Here we had been discussing Pepa's experience during her MA program internship and I asked her to compare that with what she expected from the mediational process on which she was about to embark. She anticipated that latter process being more intense (lines 5-6, *and I was like ok, multiply your mentoring experience in your Masters program by ten...there you go*). She clearly anticipated the evaluative nature of the process (lines 9-11, *I'm going to be picked on things that I need to do better and I'm going to see my strengths what weaknesses which I don't always see it*) and made specific reference to professional development (line 8). The use of the term "pick" here is an interesting lexical choice and encapsulates the analytic and evaluative nature of the mediational process in this case. Interestingly Pepa sees both herself (*I'm going to be picked* line 9) and her classroom practice (*things I need to do better* line 10) as the object of the "picking".

Rick also showed that his expectations of the whole mentoring process were in line with mine. When asked the question in the pre-semester interview, he showed clearly that he anticipated my taking an evaluative stance and helping him improve aspects of his teaching.

#### Extract 4.1.2

- 1 J: um what- what kind of things are you expecting from the mentoring process?
- 2 you know, what do you expect to gain out of it, how do you think it's all gonna
- 3 take place, you know evolve?
- 4 R: mhm, well you know I've- I remember uh being observed and stuff by you
- 5 before and I- you know it's funny because I- everyone talks about the experience
- 6 [laughs] it's like you know kind of ok you're a little bit **leery** but **in the end** you
- 7 know I think it's always a good experience so I saw this as another you know for
- 8 me personally as you know to- cos I'm interested now as a beginning teacher I
- 9 still want someone to help me **sharpen my skills**, I still want someone to- to you
- 10 know analyze what I'm doing and say "you can do this better because" you know
- 11 I don't- I want to get better, I want to be effective and uh and so I'm hoping that's
- 12 what will happen

Here, Rick referred back to previous experiences of going through observation cycles with me (lines 4-5: *I remember uh being observed and stuff by you before*). He alluded in the word *leery* (line 6) to the potentially threatening nature of the experience, which possibly pertains to the expectation of having his performance critiqued. However, because he saw the previous observation cycles as a good experience (albeit *in the end* [line 6]) he volunteered to participate because of his desire to *sharpen my skills* (line 9). Thus Rick also came into the experience with expectations closely allied to mine.

Clearly then, both teachers and I shared a definition of the task, that is the purpose of the mediational process, in terms both of my evaluative approach, and also in terms of the results with regard to the development of their teaching.

### ***Intersubjectivity.***

Wertsch (1998) defined intersubjectivity as “the degree to which interlocutors in a communicative situation share a perspective” (pp. 111-112). As mentioned in chapter 2, in this study, this is taken to refer to the degree to which the mediator and teacher shared a perspective on an aspect of the teacher’s classroom practice.

On several occasions during our interaction, I explicitly asked both Pepa and Rick how they were reacting to my identification of an aspect of their classroom teaching as problematic, using such expressions as *does that speak to you? would you agree with my interpretation?* This clearly sought moment-by-moment intersubjectivity with the teachers. On other occasions, the negotiation consisted of my pointing out a feature I thought might be problematic, and then the teacher offering a rationale which I then accepted. In other words, we negotiated the problematicity of the event, and decided it was not problematic. Extract 4.1.3 provides an example. In the second POC, I had asked

Pepa to think about drawing the class's attention to the fact that one student had not done his homework although he wanted to offer an opinion on the topic of the homework. She had a good reason why this was not a good idea, so that her allowing him to offer his opinion was in fact appropriate in this situation.

#### Extract 4.1.3

- 1 P: yeah and **I also have to be careful** like making sure- I don't really like like
- 2 maybe saying "oh he didn't do the readings what do you guys think" because **I**
- 3 **don't really know what goes in his personal life** (J: yes yeah yeah) **and I don't**
- 4 **want to** (J: and it and it- yeah) **say something that later I find that something**
- 5 **happened to him personally and I'm going to be like** "oh why didn't I just
- 6 **bite my tongue"** (J: yeah right right) ssoo
- 7 **J: yeah that's a good thought yeah and it's all to do with styles of teaching too**
- 8 (P: mm) **you know which- and if that doesn't sit with your style-**

I was suggesting that this drawing attention might encourage him to do his homework on a future occasion. Pepa demurred (line 1: *and I also have to be careful*) and gave her rationale (lines 2-6: *because I don't really know what goes in his personal life and I don't want say something that later I find that something happened to him personally and I'm going to be like oh why didn't I just bite my tongue*) which I accepted and no longer pursued the point (lines 6-8: *yeah that's a good thought yeah and it's all to do with styles of teaching too you know which- and if that doesn't sit with your style*).

With Rick, the negotiation of intersubjectivity was similar, as exemplified in Extract 4.1.4. We had been discussing the problems Rick had had explaining a grammar point to students using the materials he had been given.

#### Extract 4.1.4

- 1 J: and for this- at this stage it's the concepts behind the grammar forms **and I**
- 2 **think that if- if you're clearer in your mind about that-** I'm assuming you're
- 3 not clear and **that might be a- that might be you know a false assumption** but

4 R: well yeah I mean that's- that's right I mean I think I can tell by this experience  
5 here you know at it **you're better at being critical about the materials than I**  
6 **am** too like I look at this stuff and I'm like oh this must have (J: yeah yeah) a  
7 reason you know whoever designed this may know more than me you know  
8 whatever (J: yeah) and- and and so I you know am still like "oh, ok" I thought- I  
9 thought you know I was engaging with the material ok but now you know of  
10 course (J: yeah) I see you know you're- you're much more- you can evaluate the  
11 stuff and I've been trying to be- you know looking through my books in the other  
12 classes and **I'm looking the activities and I'm thinking about them** (J: mhm  
13 mhm mhm) **ok but I still don't think I'm able to really** [unclear]  
14 J: right right I think- and that's a fair comment and I- and I stand chastised  
15 because you know we are- I do have a certain amount more experience (R:  
16 [laughs]) than you I think what my perspective gives me- my background- what I  
17 know about language allow- **I think this is a great activity** (R: mhm) **per se I'm**  
18 **dubious about the explanations of- you know and even here the- it's the**  
19 **explanations of the language forms that I'm dubious about** but um ..

Here I implied that Rick was perhaps not as prepared in terms of the materials as he needed to be (lines 1-2: *I think that if- if you're clearer in your mind about that*) which I then softened by giving him the chance to reject the criticism (line 3: *that might be you know a false assumption*). Rick then reacted a little defensively, pointing out that I was able to take a more sophisticated view of the materials – perhaps because of my years of experience - (lines 5-6: *you're better at being critical about the materials than I am*) but did acknowledge that he may not have been able to see the underlying language focus of the materials clearly (lines 12-13: *I'm looking the activities and I'm thinking about them ok but I still don't think I'm able to really [unclear]*). I accepted the implied criticism of my reproach and explained that it was not the activity I was criticizing, but the language explanation (lines 17-19: *I think this is a great activity per se I'm dubious about the explanations of- you know and even here the- it's the explanations of the language forms that I'm dubious about*).

Intersubjectivity was then clearly a feature of the mediational process with both teachers. As Wertsch (1985) maintains, the transition of mediational means from an interpersonal level to an intrapersonal level is dependent on the operation of the interaction within the learner's ZPD; without intersubjectivity, the activation of the ZPD becomes severely hampered. Intersubjectivity is therefore a necessary condition for internalization to occur.

***Reasoning made visible through talk.***

This feature of the mediational process was identified at the theoretical stage (see Chapter 2) as perhaps the most crucial in fostering teacher learning, because of the dialogic relationship between language and the development of mental functions. From even an initial and cursory examination of the data, I found firstly that "visible" reasoning was indeed a feature of the mediational discourse. In fact, much of both the mediational discourse (i.e. my discourse) and the teachers' constituted reasoning made visible.

As an example, Extract 4.1.5 shows how through the strategic use of questions, I was able to engage Pepa in reasoning aloud to plan the setting up of a pair work activity.

Extract 4.1.5

- 1 J: I'm just thinking this is an activity (P: right) **what's the task**
- 2 P: the task is for them to come up with at least two!
- 3 J: there you go and when you say come up with **what do they have to do..** (P:
- 4 um) **now think about the feedback do you want a long feedback or a short**
- 5 **feedback** you know
- 6 P: actually I want them to think about like what kind of research what kind of
- 7 research one of the companies uh the buying company the one that buys the com-
- 8 the buyer what kind of research what kind of specific research they did about the
- 9 company that they were going to buy (ok)that specific research
- 10 J: right and **so what's the task with that what do they have to do what are they**
- 11 **going to tell you at the end** do you remember we talked about that last time it's

- 12 like **ask them at the beginning what you want them to tell you at the end** and  
13 then the task can be write down or- or you know remember or whatever

Here, the questions that I asked (line 1 *what's the task*; line 3 *what do they have to do*; lines 4-5 *now think about the feedback do you want a long feedback or a short feedback*; lines 10-11 *so what's the task with that what do they have to do what are they going to tell you at the end*) and the principles I suggested (line 12 *ask them at the beginning what you want them to tell you at the end*) provided a framework for and promoted in Pepa the reasoning that she needed to do at the planning stage for the successful set-up of an activity. On occasions, I uttered the reasoning myself, rather than co-constructing it with the teacher, as in Extract 4.1.6.

Extract 4.1.6

- 1 J: **with relative clauses** which is what I know these as um I don't know reduced  
2 adjective clauses and participial phrases and that is a relative pronoun **they often**  
3 **appear in descriptions** right (R: mhm) **when you're describing something to**  
4 **someone who doesn't know it** (R: right) **you often use relative clauses to tell**  
5 **you which one** and **it's fun actually to use the students themselves** you know I  
6 don't know the people the names of the people in your class you know "Rahim is  
7 the boy who um or is the boy that" you know

Before actually describing the technique I was suggesting, albeit implicitly, (line 5 *it's fun actually to use the students themselves*), I first stated the linguistic rationale behind it (lines 1-5 *with relative clauses ... they often appear in descriptions ... when you're describing something to someone who doesn't know it you often use relative clauses to tell you which one*). Thus again, I modeled aloud the kind of reasoning a teacher would do internally when deciding what kind of practice activity would be appropriate for a particular language form.

As mentioned, so much of the data constituted reasoning made visible, but the nature of that reasoning and how it was made visible proved far more complex and sophisticated than initially anticipated. Because of this, the category of *Reasoning made visible through* talk seemed too broad to shed useful light on the nature of the mediational discourse. It was at this point that I began to feel that the features of mediation I had identified a priori were far too crude and simplistic to serve as a useful framework for any kind of comprehensive analysis of the nature of the mediational discourse. This proved true of the remaining features, as explained below.

***Fostering the use of professional discourse.***

Fostering of the use of professional discourse was also identified at the theoretical stage as an important strategy for encouraging a dialogic interplay between spontaneous and scientific concepts that would promote more purposeful mental control over the spontaneous concepts and a concretization of the scientific concepts and the consequent ability to think in those concepts. I anticipated that I would overtly make reference to, and prompt the teacher to make reference to, the scientific theories and formulations of language teaching and learning, using the appropriate terminology, and that I would probe the use of vague language, thus prompting the teacher to articulate more precisely her thoughts, necessitating the use of professional discourse.

This was indeed a feature of the data, though not at all to the extent anticipated. There are several occasions in Pepa's data where examples of pedagogical terminology were used, terms such as *content* (in the context of content-based instruction), *elicit*, *objective*, *aim*, *scaffold*, *interaction*, *strategy* (as in language skills), and so forth. However, even a cursory count of the occurrence of these words found that the vast

majority of uses were by me, the mediator, with relatively few by the teacher (e.g. *scaffold* 23:7; *objectives* 13:4; *elicit* 9:0; *strategy* 14:1). Similarly, although it was anticipated that as the mediator I would probe the use of vague language, 34 of the 40 uses of the word *stuff* were by me, the mediator, with no occasion where I probed Pepa for more specific language in her use of the word. In Rick's data, too, the terminology of language teaching did occasionally appear, though most of the terms related to language analysis (e.g. *adverbial*, *appositive*, *modals*, *morphological*, *verbalizing*) perhaps because I observed him teaching a grammar class. Again, the vast majority of these terms were used by me. With vague language, the same pattern as observed in Pepa's data appeared: out of the 85 appearances of the word *stuff*, only 22 were uttered by Rick. Clearly then, a focus on individual terms was not at all revealing in the search for a relationship between language and cognition.

#### ***Graduated and contingent help.***

As defined in Chapter 2, this feature involves the mediator activating and working within the teacher's ZPD, offering suggestions and advice that were only given when needed, and moved from implicit to explicit. Again, even a cursory examination of the data found both that this feature was present, but that the nature of the "help" given through the mediational discourse was far more complex and subtle than the implicit-explicit, needed-not-needed continuums identified during the theoretical stage could reveal.

At this point, then, it became clear that for the purposes of this study, the analysis of the data from the standpoint of previously-identified features of mediation would not be adequate to lead to insights into the nature of the mediation, or indeed into the



relationship between language and cognition in these data. What follows therefore is an account of the features of the mediational discourse that emerged during the analysis, after I had abandoned a focus solely on the features identified a priori, and which were deemed to shed more light on the nature of the mediational discourse with regard to the link between language and cognition.

### **Features of mediational discourse related to language and cognition.**

In this section, I present the features of the mediational discourse which I feel pertain most directly to the investigation of the relationship between language and cognition, the main focus of this study. These emerged essentially as features of my own discourse during the POCs—that is, I present an analysis of the mediational discourse I used. How my discourse and the teachers' discourse interacted will be the focus of a following section. Although it may appear somewhat artificial and arbitrary to isolate the features from their discourse context in this fashion, it is necessary in terms of clarity of presentation since the analysis resulted in a categorization of certain features.

Initially, I describe each feature in isolation, before discussing extracts from the data in which the features interact. I do not offer indications as to the exact prevalence of each feature, as many overlap with each other, and would consequently necessitate a fragmentation of categories that might render them meaningless. Similarly, I do not include discussion of the source of the features in terms of my own and the teachers' personality, sociocultural backgrounds, for example; the focus of the section is on describing the nature of the mediational discourse rather than on an explanation of that nature.

### ***Languaging prompts.***

A prevalent feature of the mediational discourse found in the data is a prompt from me for the teachers to “language” about some aspect of their teaching. As mentioned in chapter 2, the term *languaging*, as defined by Swain and Deters (2007), refers to “the use of speaking and writing to mediate cognitively complex activities” (p. 822). Endeavoring to think conceptually about language teaching through reflection on an observed lesson is indeed a cognitively complex task for which the activity of languaging provides a mediational tool for both mentor and teacher.

The term languaging evokes ‘a process rather than a final product’ and ‘reminds us that producing language – that is, speaking and writing – are themselves activities that mediate remembering, attending and other aspects of higher mental functioning’ (Swain, 2008, p. 2). In other words, languaging is a concept that incorporates communication but adds to it the power of language to mediate attention, recall and knowledge creation. (Lenchuk & Swain, 2010, p. 11-12). The data revealed a consistent effort on my part, as mentor/mediator, to prompt the teachers to language about various aspects of the lesson observed or other aspects of language teaching.

These prompts most often took the form of direct questions (e.g. *and did you achieve that did you get that*) but occasionally involved statements from me which acted as invitations to comment (e.g. *so the lesson went very much as we remember it as you anticipated*). There were two main functions of the prompts in the data: The first was for me to gain information from the teacher about aspects of the lesson, class, or students that I did not know, and the second acted as an invitation for the teacher to language, on a

particular topic in a particular way in order to mediate their cognition, especially with regard to conceptual thinking. These will be discussed in the following sections. The first will be described briefly, as it pertains less to the focus of study; the second in more detail as it does pertain to the relationship between cognition and language.

*Informational prompts.*

Informational prompts included requests for information about the students and the class, the processes the teacher went through at both the planning stage and the execution of the lesson, and about what happened in a lesson that was not observed.

Table 6 shows examples of each of these prompts.

*Table 6*

*Informational Prompts*

Type of information	Example
Students and class background	J: so you- that's why you said "good participation there" (P: mhm) when you saw her working and what do you think, <b>do you think the class is too difficult for her</b> J: and <b>who are the kids that are- that are disruptive</b>
Teacher's processes	J: I don't know <b>how much into the tense forms and the meaning of tense forms that you've gone</b> as a sort of in preparation for this or <b>do you kind of rely on instinct</b> to be able to [unclear] the meaning of tenses J: the sequencing of the- the- (R: mhm) <b>did you plan that deliberately</b> consciously you know first this kind of exercise then that then that then that one
What happened	J: when you say you looked at them how did that happen in the classroom you know what- <b>what actually went on</b> J: right and- and in terms of we talked a little bit about the <b>classroom management issues</b> last time and them getting a little bit out of hand <b>how's that going</b>

These prompts elicited mostly narrative responses from the teachers, thus functioning at a fairly low conceptual level. However, requesting the teachers to language about a certain event encouraged them to externalize the classroom events or their perspectives on the events and open them up for conscious inspection, at a level where they begin to think in concepts about the event (Johnson, 2009).

*Invitations to think conceptually.*

The second function of the languaging prompts identified in the data is more closely related to the research question; this was an invitation to the teacher to think conceptually about different aspect of teaching. The types of conceptual thinking promoted by these prompts can be classified as invitations to form idealizations, to analyze, to speculate, to give rationales, and to evaluate. These link very closely with Vygotsky's distinction between the indicative and symbolic functions of speech, with the latter function linked to more sophisticated ways of thinking (Wertsch, 1985). How these appear in the data is described in this section.

There were many invitations for the teacher to form an idealization of different aspects of their teaching. By idealization, I refer to a level of abstraction that is removed from the specific context under discussion – here the specific teaching event or utterance under focus – and is therefore more conceptual and decontextualized. Table 7 presents examples of the different focuses of the idealization prompts.

In all the above extracts, the prompts stimulated the teacher to language in a way that encouraged them to conceptualize ideations and generalizations based on their lived experience of the observed lesson under discussion. This type of mediation promotes a

Table 7

*Focuses of Idealization Prompts*

Idealization focus	Example
Content of lesson	<p>J: how do we do it, how do I know <b>what is a main idea</b> and what isn't</p> <p>J: right absolutely but (P: right) strat- <b>what are the actual strategies for finding the major points</b></p> <p>J: did you- do you have any idea about the <i>as and like</i> difference? how would you <b>distinguish between <i>as and like</i></b></p> <p>J: how- what would you- how would you <b>distinguish between a phrasal verb and a verb plus preposition</b></p>
How students learn	<p>J: <b>is that what you mean by “this really works”?</b></p>
Principles	<p>J: so from this whole experience of designing and- and implementing this quiz <b>what kind of um principles or- or insights</b> you know- basically what would you do differently or <b>what do you now know is a good thing to do um when designing tests</b></p>
Analysis	<p>J: students I think really enjoyed that lesson, wha- wha- <b>why do you think that they enjoy it</b>, you know what- <b>what happens in the class that allows students to enjoy it</b></p>
Speculation	<p>J: <b>would you have set it up as a whole class activity or would you have tried to do the pair work activity</b> (P: I was) which was your original plan with hi- you know if you had it to do again</p> <p>J: right I was going to say <b>how are you going to- what- how are you going to do this what are the stages of this</b> what do you know [...] and <b>how are you going to introduce them to the actual terms</b></p>
Rationales	<p>J: what um <b>what was the learning objective of that</b> what did you want them get out of that activity</p> <p>J: what was- what was- what is- you know whoever designed this um task <b>what is the learning aim of this task</b> would you say [...] what exactly should they notice by doing this activity</p> <p>J: and if you'd allowed them to do that what would have happened in your mind how- <b>why- did you take the decision not to allow them sort of to do that</b></p> <p>J: you read one aloud to them (R: mhm) why <b>what's your rationale for reading aloud</b></p>

conceptual approach to examining the events of the lesson observed.

Another role of languaging prompt found in the data was that of invitations to the teachers to language at the level of evaluation. Table 8 shows examples of these.

*Table 8*

*Examples of Invitations to Evaluate*

Focus of evaluation	Extract
Materials	J: how- <b>what do you think of the materials</b> in the package do they speak to you or
An event	J: and then you explained the rationale of the lesson um any thoughts on that you know did that feel comfortable <b>did you think it was a good idea</b> or J: and <b>were you happy with the level of collaboration</b> in the groups J: when you say it went pretty well, <b>what's your criteria for "it went pretty well"</b> . J: in general I mean this was a new area for you and a whole new thing <b>how do you feel about the- you know your sort of your side of it the students' side of it</b>
Achievement of aim	J: but in terms of language learning <b>were there any benefits</b> J: do you- did you- did the students grasp that? do you think I mean <b>did the students have that as an outcome</b>
Holistic	J: so <b>what were you most proud of</b> for you in that lesson J: so what- <b>what made you happy</b> in the lesson J: yep ok let's look at all the things that did work in that lesson what were you- <b>what were you happy with</b> J: firstly what- <b>what gave you satisfaction from that lesson?</b> J: so what were your thoughts on the lesson did it go- <b>did it go as you- as you wanted it to?</b> you know

Again, asking the teachers to language at this less concrete level, encouraged the type of idealized languaging that promoted more idealized, generalized, and less contextually-bound conceptual thinking.

The function of these two levels of languaging prompts (informational, and invitations to cognize) in the POCs operates within the idea that teacher learning is fostered by encouraging teachers to think conceptually about their lived classroom experience in order to open it up for inspection and reflection. By also asking teachers to language more abstractly at the level of analysis or evaluation, for example, they were encouraged necessarily to think at that level. The ultimate aim of such mediation is that these “patterns of [cognitive/linguistic] activity that had been performed on an external plane come to be executed on an internal plane” (Wertsch, 1985, p. 62) with the teacher ultimately able to perform the conceptual thinking independently and intrapersonally.

### ***Modeling of conceptual thinking.***

In the previous section, I described aspects of the mediational discourse where I invited the teacher to think conceptually. In this section, I continue to focus on my own discourse, but here I discuss the features of the interaction where I model conceptual thinking in response to what the teachers said during the POCs or to what I observed in the classroom. This functions in a very similar way to the languaging prompts, in that it externalizes the kind of conceptual thinking about the lived experiences of the classroom that is an aim of teacher development activities (Johnson, 2009).

One of the main challenges in the categorization and analysis of these examples of my modeling of conceptual thinking was the identification of suitable terms that would encapsulate and best represent the feature under focus. In the end, it seemed necessary to

use existing terms but with a slightly different meaning from how they are used in general literature. I explain my use of each term in each of the sections. I categorized the features in terms of levels of cognition as follows:

- Ideation
- Analytic ideation
- Terminizing
- Generalizations
- Principles

*Ideation.*

The Oxford English Dictionary defines the term *ideation* as “The formation of ideas or mental images of things not present to the senses” (Simpson, Weiner, & Oxford University Press, 1989). In this discussion, I am using the term slightly differently to mean the encapsulation into verbal form of the concept or idea behind a single and context-bound lived experience. There are several examples in the data where I ideated a teaching strategy. This could be related to the materials the teacher was using, as in Extract 4.2.1, or to a specific teaching strategy, as in Extract 4.2.2.

Extract 4.2.1

- 1 J: part B yeah you might you might I mean this is- this is one of these activities
- 2 where it's **kind of like a test** (R: mhm) a little bit like these Holes materials if
- 3 they know it they can do it if they don't know it they can't

Here the words *kind of like a test* (line2) ideated a feature of the materials under focus in a way that abstracted out from the materials themselves, and modeled cognition on a more conceptual level. Similarly, in Extract 4.2.2, Pepa was narrating a conversation with



a student that I had not witnessed. The level of her languaging was very much a narrative of what she had said and what the student had said (lines 1-14).

#### Extract 4.2.2

1 P: yeah and then this student came to me and he's like "oh you know I work  
2 better alone that's in Spanish because it takes me a long time to translate  
3 everything and then if I sit with someone they always know more than me and  
4 then they give me all the answers and then I don't work" I'm like "precisely what  
5 you have to do when you sit with someone like that that knows more than you is  
6 to ask them what they think and then maybe you say 'ok stop' say first 'what does  
7 it mean' and then ask him what he means **because by him telling you he's**  
8 **learning it and then you're learning it from him and not from me because I**  
9 **don't have all the right answers (J: or the time) or the time right"** so you know  
10 he was like "I don't want to work with anybody" and now you know he does (J:  
11 he now he's convinced) yeah yes and I was trying you know (J: how cool is that)  
12 yeah and it was like after class I spent with him ten minutes knowing about  
13 cooperative learning- language learning [laughs] and [unclear] and he was like  
14 "oh" ok cos he's science his education comes from a science background so  
15 J: right but you know sometimes **explaining the rationale** (P: mhm) great instinct  
16 to do that cos it convinces them like instead of just with this class [...] um yeah  
17 instead of saying to them you know you could have just started with the  
18 vocabulary and then done the reading but **you explained to them the rationale**  
19 and they're on board far more with it

I reacted to Pepa's account of her telling him why she used group work (lines 7-9 *because by him telling you he's learning it and then you're learning it from him*) by encapsulating the reported conversation as *explaining the rationale* (line 15). Thus, whereas Pepa's narrative reported an unwitnessed event, my languaging functioned on the level of abstraction and concept formation, thus modeling a more decontextualized way of conceptualizing the lived experience.

Extract 4.2.3 shows more instances of where my ideation through language modeled the kind of conceptual thinking I was looking to encourage in the teachers.

#### Extract 4.2.3

1 J: and the design of the task was phenomenal because it would have been very  
2 easy to just give them that and just ok take notes but actually giving them the  
3 paper (P: right) a masterstroke there it is there- it's this- **it's this defined**  
4 **manageable achievable task** (P: mhm) "take notes" it's unending you have a  
5 small box (P: mhm) "I can fill that small box with big writing and then I'm  
6 successful" or with small writing you know (P: mhm) it's it's yeah so I think- I  
7 think that that's you know good stuff

This extract shows where I ideated the qualities and features of an activity that Pepa had devised for her students in the words *it's this defined manageable achievable task* (lines 3-4). Task design was a topic that arose consistently throughout the POCs with Pepa, and thus on this occasion I was able to encourage the kind of generalized cognizing on the topic of task design through my decontextualized languaging.

In a similar way, Extract 4.2.4 also shows an occasion where I focused the ideation on a single teaching strategy, in this case where Pepa had decided to spend more time than planned on a specific activity in class, to model more decontextualized abstract cognizing.

#### Extract 4.2.4

1 J: no I don't think in any way that you spent too long on that I think that was a  
2 great decision I think you know it's so worthy of you that you didn't think "oh my  
3 god" you know "I need to get through my materials" you were focused- **you were**  
4 **student orientated** you knew what was right for them and giving them the- this  
5 was [nodding head]

Here the words *you were student orientated* (lines3-4) encapsulated the reason why it was a pedagogically sound decision to allow students more time to work on the activity from a more decontextualized and abstract perspective.

The examples of ideation discussed above show an aspect of the mediation where through my language I was encouraging the teacher to think conceptually about the

specific lived events of the classroom in order to promote understanding of how and why events occurred and perhaps should occur.

*Analytic ideation.*

I use the term *analytic ideation* to refer to instances in the discourse where I ideated aspects of the teachers' lived experience of the classroom through conceptualizations of their types or parts. In other words, I modeled a type of conceptual thinking in which a lived experience was opened up for examination through analysis. The first example (Extract 4.2.5) shows how I used analytic ideation to praise a classroom activity by conceptualizing its parts. During the second observation lesson I conducted with Rick, he gave the students a quiz that he had prepared himself.

Extract 4.2.5

- 1 J: I know because my- you know when I looked at this I thought ok that you know
- 2 first it's totally recognition right where **they have to produce no language** the
- 3 secondly **they've got most of the language and they have- just have to change**
- 4 **it a bit** (R: right) the third one **they got the topic** and then they have- and then
- 5 **they have to produce language** and the fourth one is **completely free** so I'm
- 6 thinking that is great sequencing you know from **totally receptive to totally**
- 7 **productive**

Here I identified the structure of the quiz, ideating what students had to do in each section in turn (lines 2-5: *they have to produce no language ... they've got most of the language and they...just have to change it a bit...they got the topic...and they have to produce language...completely free*) and then offer an ideation of the progression as a whole: *totally receptive to totally productive* (line 6-7). This modeled a conceptualization of the lived experience of the quiz that related it to principles of test design. Elsewhere and talking about the same quiz, I ideate analytically with regard to the results of the same quiz and the possible cause of student problems with it (Extract 4.2.6).

#### Extract 4.2.6

- 1 J: right so- so a-s if those students and it sounds like a lot of them couldn't do this
- 2 first task but could do the rest **that tells you that they can use the language but**
- 3 **that maybe the task here wasn't clear**

Here I differentiated between problems caused by the quiz task and problems caused by possible lack of language knowledge (lines 2-3 *that tells you that they can use the language but that maybe the task here wasn't clear*). Again this analytic conceptualization of the parts of the lived experience and concrete material of the quiz was modeling a way of conceptualization of teaching at a higher cognitive level.

Elsewhere, I ideated analytically aspects of language, as shown in Extract 4.2.7.

#### Extract 4.2.7

- 1 J: I agree yeah that these things are not phrasal verbs but um the ones that you are
- 2 going to do like so you've got the preposition with . um. verb plus preposition and
- 3 with words like look and ask the preposition changes the meaning so it's like
- 4 almost like a um **a halfway step towards a phrasal verb I mean it's much more**
- 5 **of a continuum I think than a classification thing**

Rick had been struggling with the idea of what to teach his students about phrasal verbs. I tried to encourage him to think beyond the examples he was dealing with by ideating analytically the different classifications of the verb-plus-preposition combinations he was focusing on, using the terms *halfway step* (line 4) and *continuum* (line 5). Again, this modeled a more decontextualized and conceptual way of languaging and therefore way of thinking.

Another focus for analytic ideation was the actual teaching strategies I witnessed during the observed lessons. Extract 4.2.8 shows an occasion where I focused on the different strategies for dealing with student error in one of Rick's lessons.

#### Extract 4.2.8

- 1 J: yeah and you put that on the board she said “shoes is” and everybody went
- 2 “shoes are” yeah and so there are two very different things one was that very
- 3 **implicit** you know you did the recast correction and the other one was the very
- 4 **explicit** you know nothing wrong with doing them but just thinking about “why
- 5 am I doing this now which is the- how can I\_ yeah which is the most appropriate”
- 6 who knows

In the early stages of the lesson a student had replied *sleep* to Rick’s question about what the students had done over the weekend. Ricks response was to say, *ah you slept*. Later, when a student made a similar grammatical error, Rick put the erroneous utterance on the board and asked the class to correct it. In the post-observation discussion, I ideated these different types of error correction strategy using the words *implicit* (line 3) and *explicit* (line 4). In a similar way, in the same discussion, I ideated analytically when asking Rick to consider the two types of sensory processing students had to do when he read texts aloud to them (Extract 4.2.9).

#### Extract 4.2.9

- 1 J: [...]right when you read it they’ve got two things they’ve got **the audio** and **the**
- 2 **visual** right so that’s immediately **more processing** you’re reading it at your
- 3 speed right

Here the analytic ideation was accomplished through the use of the two terms *audio* and *visual* (lines 1-2) which conceptualized his reading a text aloud to students as the two channels through which students were receiving input.

In all these instances, I encouraged the teacher to conceptualize the events in a way that was more abstract than a simple narrative, thus modeling the type of decontextualized and more generalized cognizing, and the thinking in concepts associated by Johnson with teacher learning (2009).

*Terminizing.*

On several occasions, I achieved the ideation of an aspect of the teaching observed or of the post-observation discussion through an articulation of an accepted term for the phenomenon, part of what Freeman (1991) called the discourse of language teaching. This I have called *terminizing*, the use of an existing scientific or technical term to ideate a lived experience on a more generalized and decontextualized plane. On several occasions I articulated a metalinguistic term for a feature of language that Rick was exemplifying. In Extract 4.2.10, I offered the term *perfect infinitive* (line 4) as an ideation of the form *would have done something* (line 2) mentioned by Rick.

Extract 4.2.10

- 1 P: so then I was like “so how would we say if I had this yesterday I would have
- 2 you know I **would have done something** yesterday” so I was like “we use the
- 3 present perfect”
- 4 J: it’s actually a **perfect infinitive .. would with perfect infinitive** you know

In Extract 4.2.11, I ideated the specific sentence offered by Rick as an example of *the first conditional* or *the real conditional* (line 3).

Extract 4.2.11

- 1 R: there were five uh different ones so like it’s A were all you know if you see
- 2 Tom tell him I have his keys something like that
- 3 J: right what they call **the first conditional the real conditional** yeah

On other occasions, I ideate using metalanguage related more to pedagogy, as exemplified in Extract 4.2.12, with the term *information gap*, and 4.2.13 with the term *form focused controlled practice*.

Extract 4.2.12

- 1 P: I'm going to pair them uh I'm going to try to pair them in different in different
- 2 countries
- 3 J: so they'll- so there'll be **an information gap**

Extract 4.2.13

- 1 R: we'll probably talk about that in class and then I have some um a bunch of
- 2 sentences and stuff and choosing and removing
- 3 J: so really **form focused controlled practice** which they need

On another occasion, I attempted to make an ideational connection between the lived experience of the quiz that Rick had created and the scientific concepts of reliability and validity (Extract 4.2.14).

Extract 4.2.14

- 1 J: but that says a lot your test then the- what is it the **validity** the **reliability** I
- 2 don't know um that it **actually tested what you wanted it to test** (R: mhm) and it
- 3 **reflected you know students' ability** (R: yeah) great

However, my own incomplete mastery of the concepts behind the terms *validity* and *reliability* (line 1) meant that I had to abandon the attempt at terminizing, and ideate through less specific language – *it actually tested what you wanted it to test [...] and it reflected you know students' ability*” (lines 2-3). Here, not only was I encouraging the teacher to conceptualize the lived experience on a more abstract decontextualized level, but I was also creating an intertextual link to the wider professional discourse community. I was also stimulating the teacher to connect the lived experience with the abstract generalization, or scientific concept, that would have been focused on in the content courses of the teachers' Master's program.

In all of the instances above, the mediational discourse involved the ideation of some aspect of the teacher's lived teaching experience—that is, moving from concrete

experience to a more abstract, decontextualized plane. The following three types of conceptualization that emerged from the data represent different and progressively higher—in the sense of decontextualized—levels of cognition.

*Generalizing.*

Another feature of my modeling of conceptual thinking was to abstract out from the event or feature of the lived experience under focus to make a generalization. This type of conceptual thinking demonstrated how through an ability to abstract out from one specific context and generalize to others, the teacher can understand and anticipate better, with a view to better being able to manage and preempt classroom issues. There were two main areas focused on by my modeling of conceptual thinking through generalizations: managing student learning and classroom management.

One generalization about student learning that recurs several times in the data was the idea that the teacher can only be sure of what a student knows or thinks when she or he hears the student talk, an ideation that occurred frequently in the discussions with Pepa. Extracts 4.2.15 and 4.2.16 present two examples of this:

Extract 4.2.15

- 1 J: right and also **when they say it we know that they're thinking it when we**
- 2 **say and explain we've no idea of what's going on, what they're hearing**

Extract 4.2.16

- 1 J: right because we don't know- you know as always you know what I'm- what I
- 2 say that **when we're talking we've no idea what they're understanding** but
- 3 **when they're talking we have an idea about what's going on**

On another occasion, Pepa had been complaining that in her tutoring sessions students were focused almost exclusively on the standardized university entrance exams, such as



the GMAT and GRE. From her comments, I generalized out to conceptualize students as *product* as opposed to *process orientated* (line 4, Extract 4.2.17).

Extract 4.2.18

- 1 P: you know it's so good for them to rewrite things and they just don't show up I
- 2 don't get anybody in the tutoring center I don't get anybody and if I do it's for
- 3 freaking TOEFL or the GMAT or the GRE that's all they care about ahhh
- 4 J: yeah they're **product orientated** aren't they not **process**

Similarly, when Rick had described what he considered to be a successful activity because of the way the students engaged with it, I made the generalization that it was the *intellectual challenge* (line 6, Extract 4.2.18) of the activity to which students responded because it made them feel as if they were learning.

Extract 4.2.18

- 1 R: some of them kind of whipped got through it really quickly and then they went
- 2 back and they were thinking and asking questions about it and I could see that
- 3 they were all working on it and talking about it so
- 4 J: mhm yeah they did they rea- that's why I said at the end of the lesson
- 5 remember you said you know do a game so- they find this kind of think very
- 6 satisfying I think **they like the intellectual challenge of that** they- and when they
- 7 have to think about something they feel they're learning

Other generalizations focused on the nature of students and the teacher's behavior as influences on classroom management. In Extract 4.2.19, I generalized from the discussion about how Pepa could respond to the negative behavior from two of her students.

Extract 4.2.19

- 1 J: right I think right there's a **danger of being too patient** and there's a **danger of**
- 2 **being personally confrontational** you know "don't do that because I'm telling
- 3 you not to" that's never going to work with them **their personalities are much**
- 4 **stronger than ours they're men and they've been brought up to be the center**
- 5 **of the universe**

Here I conceptualized the dilemma of the teacher on a very generalized level – as a dichotomy between being *too patient* and being *confrontational* (lines 1-2). I then conceptualized the behavior of the two students as a type, indeed more as a stereotype: *their personalities are much stronger than ours they're men and they've been brought up to be the center of the universe* (lines 3-5). On another occasion, I generalized about the personality of the teacher himself, and how that might affect classroom management (Extract 4.2.20).

Extract 4.2.20

- 1 J: yeah and it seems to me that your personality is **very laissez faire** (R: mhm)
- 2 right you know it's very much not a control freak like I am in the classroom um
- 3 and which is great and there's absolutely nothing wrong with that at all but it's
- 4 like when they you know when they- it all gets a little bit out of hand **it's hard**
- 5 **for you to step in and be tight**

We had been talking about Rick's issues with classroom management, and keeping control of overly talkative and potentially disruptive students. By generalizing about Rick's personality (line 1 *very laissez faire*), I was able to suggest a reason why Rick was having the classroom management problems (lines 4-5 *it's hard for you to step in and be tight*), thus again modeling the decontextualized conceptual thinking that allows the teacher to function at a higher mental level beyond the context under focus.

Thus, generalizations in the mediational discourse functioned as a way to model thinking in concepts of the teacher's lived experience. This, when internalized by the teacher, would allow more mental control over the teacher's reactions in the future and therefore more purposeful classroom decisions.

*Principles.*

Not surprisingly, perhaps, there are many instances in the data of my modeling thinking in concepts by articulating a principle as a basis for decisions about classroom practice. Examples of principles are given in Table 9. This languaging at the level of principle functions as modeling the transition between the decontextualized and

*Table 9*

*Principles.*

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Principle
J: right now I'm thinking about <b>scaffolding participation</b> [...] I wonder if there's a- again in what way can one <b>encourage participation make them want to participate</b>
J: and maybe that's something that you could do you could <b>take a more maybe purposeful approach to monitoring them</b> when they're doing a discussion like this
J: and Lewis says that there's <b>not much benefit to long elaborate explanations of grammar</b> (R: mhm mhm) that it's <b>much more valuable to take this exploration approach</b>
J: and that's I mean that's a lot of it isn't it I mean <b>being able to anticipate and preempt stuff before it happens</b> (R: mhm) that's huge (R: right) as well you know like (R: so) <b>the more familiar you become with the language the more you're able to preempt</b>
J: you know in terms of their language knowledge I mean there's there's <b>two things</b> , you want to <b>test what you've taught</b> (R: mhm) right (R: mhm) because it's you know otherwise you know [laughing] what are we doing but the- the other thing is we <b>want the test results to reflect really what they can do</b>

---

generalized conceptualization of lived experience and taking mental control of decisions and actions in the classroom – the point of articulation between retrospective conceptual thinking about lived experience and prospective conceptual thinking to inform classroom-

based decisions and actions. Here then I was modeling the type of thinking in concepts that experienced teachers are able to perform when planning and conducting their classroom teaching.

### ***Summary.***

In terms of the interactive relationship between language and cognition, which is the focus of this study, the features of the mediational discourse that have the potential to influence the languaging and therefore the cognizing of the teachers are the languaging prompts – particularly those that invited the teachers to cognize – and the different levels of conceptualizing which I modeled during my mediation. The features discussed so far relate solely to my own language—that is, I have focused only on the mediational discourse that came from me. In the following section, I present a feature of the mediational discourse that appeared in both my own and the teachers’ language.

### **Constructed dialogue.**

As mentioned in the previous chapter, one unanticipated feature of the mediational discourse that emerged from the data was the use of “reported” direct speech or dialogue by both the teachers and myself. Vásquez and Urzúa (2009) had also identified this as a feature of their corpus of teacher talk during mentoring conversations. The term *reported speech* in this context is misleading, since, as Tannen (2007) claims, the use of reported speech in dialogue is an act of creativity, rather than of reporting, and is “primarily the creation of the speaker rather than of the party quoted” (p. 103). In the context of this study, then, Tannen’s term *constructed dialogue* is used to refer to instances where speakers represent what they themselves or another speaker or speakers said, would say, or thought on a different occasion. Within the framework of this

investigation into the relationship between language and learning, and given the claim that language creates and enhances thought and cognition which underpins the study, the constructed dialogue in the data is of interest because of its connections with the ideas of language, cognition, and creativity. In this section, I present an analysis of aspects of the constructed dialogue found in the data and relate them to the issue of conceptual thinking.

The prevalence of instances of constructed dialogue in the data was surprising. In the third POC of each teacher, a total of one hour and forty-five minutes of discussion, a total of 85 extracts with one or more instance of constructed dialogue were identified. A search of instances of quotation marks (“”) in the data set of transcripts using the Word Cruncher tool of ATLAS.ti suggested that there were well over 800 identified instances of constructed dialogue in the data set as a whole. Clearly, then, constructed dialogue was a salient feature of the mediational discourse of this study. An analysis of the over 150 selected extracts containing one or more examples of constructed dialogue revealed a number of features with two or more variables within each feature. These are presented and exemplified in Table 10, and discussed below.

The variables within the category of constructor of the dialogue were obviously limited to the two speakers in the interaction—that is, the teacher and the mentor—and because we were talking mainly about the observed lessons, the category of “whose ‘speech’” necessarily included both student speech and student/teacher dialogue also. These features are not in themselves surprising and could easily have been deduced independently, given the participants in the interaction and the topics discussed. However, what is potentially of more interest, particularly within the context of this study, are the variables within the *Nature* element—that is, the regular occurrence of both

Table 10

*Elements and Variables of Constructed Dialogue.*

Element	Variables	Example
<b>Who constructs</b>	Teacher	P: I am very proud of myself when I said you know <b>“bring a piece of paper and a pen out”</b>
	Mentor	J: you elicited you know <b>“what did they talk about what did they research”</b>
<b>Whose “speech”</b>	Teacher’s	R: they still wanted to switch things around and move it I’m like <b>“don’t- don’t make it harder than it is you just have what’s here put them together”</b>
	Students’	R: cos one of the students after he’d turned in his test and the other student was working on the test he was [whispering] <b>“he’s using the sentence from the book for part three no he’s”...</b>
	Teacher/ Student dialogue	P: yeah I think they were um they were all shaking their head like <b>“oh yes yes thank you”</b> and then I asked them <b>“do you think it’s going to be helpful”</b> and they were like <b>“yes yes”</b>
	Mentor’s	J: isn’t this mean to do this right before the class P: no it’s better let’s see what happens afterwards we talk about <b>“you didn’t do that that we said that you were going to do that”</b>
<b>Nature</b>	External Speech	P: but I don’t know if you noticed but I was always going back and be like <b>“oh so what did he say uh huh so do you agree do you disagree”</b>
	Mental speech	P: my understanding at that point was <b>“ok if I read it out loud they’re going to be listening and they’re going to understand it”</b>
<b>Time reference</b>	Retrospective	P: I don’t know if you noticed I was like <b>“ok so to add to this that you already know I’m going to give you new words”</b>
	Future specific occasion	R: uh huh yeah that’ll be good I could put a picture on the screen and I could say <b>“oh that’s the house that I grew up in”</b>
	Future general time	R: yeah I know that I’m going to be learning all their tricks and stuff so I’ll be able to do stuff like <b>“ok get into groups and you’ve got to face your groups”</b>
	General time/Always	J: when one students says <b>“what did he say”</b> a temptation is to repeat what he said
<b>Function</b>	Description of what happened/s	P: I was just reading it to myself very fast and I was like yeah <b>“ok moving on you know foreign and the [unclear] ok I have to do this very quickly so I don’t waste any class time”</b>
	Suggestion	J: and maybe that’s the final stage I would- I would say <b>“all right so the question is the Prius environmentally friendly look at your information and decide yes or no and why”</b>
	Retrospective change	P: right I should have just been more specific I would have- I should have just gone and said <b>“ok let’s um let’s remember the story between Cemex and RMC”</b>
	Self or Other Evaluation	J: it was nice though it just worked didn’t it she kept saying <b>“mistake intercultural mistake”</b> and you elicited answers I mean examples um you- you know and you kept- you asked any- students said <b>“what’s the difference between protocol and deportment”</b> and you said <b>“anybody?”</b> great stuff
	Show of reasoning	R: I just thought <b>“oh I’ll write this on the board and you know that way they’ll know what we’re you know they won’t feel like they’ve been hit broadside by the test”</b>
	Show of uptake	J: is there any way you could you know say “alright these are the assignments that if you sacrifice it won’t affect your grade too much” P: [...]I should sit down and say <b>“you know what if you just do this one and this one and”</b>
	(Un)Desired outcome	R: but I’m a little concerned that even still they won’t- that at the end they’ll be like <b>“oh I didn’t know that we had to keep all that”</b>
	Invitation to comment	J: is there anything else you want to say about the lesson [...] P: umm no J: is that a <b>“I have something but I don’t want to say it”</b> or

constructed external speech of speakers present and not, and constructed mental speech of the constructor him or herself and of other people. This constructed mental speech of self and others is not unusual in dialogic interaction; it has been identified as a feature of spoken narrative discourse (Tannen, 2007), and of teacher talk during mentoring conversations (Vásquez & Urzúa, 2009). Vásquez and Urzúa apply the term *direct reports of mental states* to the instances they identified where the teachers in their study represented their own thoughts. In this present study, the term *mental speech* is preferred because of the focus on language and languaging as a dynamic act of cognition, rather than as a representation of a mental state.

There were also variables in terms of the time reference of the constructed dialogue. Not surprisingly, since much of the discussion referenced a previously observed lesson, much of the constructed dialogue was retrospective, describing past events. Similarly, since one of the functions of the POCs was to help develop the teacher's future practice, there was reference to specific future lessons as well as to more general future practice. There was also reference to general time, "what always happens". The time perspective, therefore, referred to context-bound previous and future occasions, as well as to a more abstract and generalized time frame. This reflects the contextualized-to-generalized nature of the conceptual thinking that I was trying to promote in the teachers, and echoes other aspects of the mediational discourse found within this study.

These different time and conceptual perspectives are also reflected in the nine functions identified from the data. The *descriptions of what happened/s* category lies at the more retrospective (though occasionally general time) context-bound end of the spectrum whereas the categories of *retrospective change*, *evaluation*, *show of uptake*, and

*show of reasoning* lie more towards the more decontextualized and conceptual end. The *suggestion* and *(un)desired outcome* categories suggest a future-bound more speculative conceptualization. In contrast to these, the *invitation to comment* category refers to a procedural aspect of the interaction.

All these categories reflect the mediational nature of the discourse within the theoretical framework of this study. The role of interaction in teaching and learning is reflected both in the actual constructors of the constructed dialogue, and in the parties “quoted”. The “quoting” or representing of mental and external speech highlights the role of language in self- and other-mediation. The different time perspectives and the functions of the constructed dialogue demonstrate how language enables a decontextualization of lived experience to facilitate more decontextualized and generalized conceptual thinking about the events. This then facilitates the application of that conceptual thinking to future contextualizations.

An analysis of the combinations of the variables in the 150 extracts containing one or more example of constructed dialogue identified from the data also showed evidence of this interplay between languaging, lived experience, and various kinds of conceptualization. Figure 2 presents a matrix of these combinations and an example of each combination is given in Appendix 4. Many of these combinations represented in Figure 2 are predictable and perhaps of less interest to the focus of this study. For example, it is unsurprising that when narrating what happened in a lived experience, both participants in the dialogue would represent their own and others’ external speech (boxes 2, 3, 4, 5, 7, 9, and 10). This is also true when the participants were evaluating



		Who constructs			
		Teacher		Mentor	
		Mental	External	Mental	External
<b>Function</b>	<b>Nature Whose speech</b>				
What happened/s	T	1	2		3
	T-S		4		5
	S	6	7	8	9
Suggestion	M		10	11	
	T	12	13	14	15
	T-S				16
Retrospective change (Self) Evaluation	T		17		18
	T	19	20	21	22
	T-S		23		24
Show of reasoning	S		25	26	27
	T	28	29	30	
	M		31		
Show of uptake	T		32		
	S		33		
(Un)desired outcome	T	34			
	S	35			
Question/ Invitation to comment	T	36	37	38	39
	M			40	

Figure 2 Combinations of variables in the samples of constructed dialogue.  
 Note: The grey boxes indicate that the combination was present in the selected data. The boxes are numbered for ease of reference in the discussion.

what happened (boxes 20, 22-25, and 27) and inviting comment (boxes 37 and 39). Some examples of the representing of mental speech are also predictable, especially when participants referred to their own thoughts when narrating what happened (boxes 1 and 11), sought to show or evaluate their thinking (boxes 19 and 28), or asked for comment on thoughts and unexpressed ideas (boxes 36 and 40). Other uses of the representing of mental speech are more procedural or affective in function. For example, I used the representation of my own mental speech to soften a potentially negative evaluative implication of a request to Rick to consider a retrospective change (box 40), as exemplified in Extract 4.3.1.

#### Extract 4.3.1

- 1 J: with hindsight again would you like to have changed the way you did this I
- 2 mean because you know that when I'm doing something I'm thinking "**crap if**
- 3 **only I'd done it that way you know I'd be better**" is there any way that if you
- 4 were to do this again what would you do differently

Here I used constructed mental speech to expose myself as a teacher who makes mistakes, thus attempting to mitigate the expert/novice status difference between Rick and myself. Extract 4.3.2 shows another example of this affective use of represented mental speech (box 38). Here I constructed Pepa's mental speech after sensing her hesitation.

#### Extract 4.3.2

- 1 J: is there anything else you want to say about the lesson or or about this or about
- 2 any questions or requests or whatever
- 3 P: umm no
- 4 J: is that a "**I have something but I don't want to say it**" or

These above examples show an affective or procedural use of constructed dialogue to facilitate interaction. However, other combinations are more revealing of the interplay between language and thought within the context of this study. One interesting aspect of the instances of the representing of the mental speech of others was that, just as with the spoken, external interaction of the mediational dialogue, some of the mental speech represented reflected conceptual thinking and some did not. Clearly, as Tannen (2007) claims representing mental speech is in no way an act of reporting since it is impossible to know the mental speech of others. Thus it is very much an act of creation. Extract 4.3.3 shows an example of where I, the mentor, represented the mental speech of students (box 26) in order to evaluate the design of a handout used by Pepa, in this instance to commend the student-friendly nature of the handout.

Extract 4.3.3

1 J: and the design of the task was phenomenal because it would have been very  
2 easy to just give them that and just “ok take notes” but actually giving them the  
3 paper a masterstroke there it is there- it’s this- it’s **this defined manageable**  
4 **achievable task-** “take notes” it’s unending you have a small box “**I can fill that**  
5 **small box with big writing and then I’m successful**” or with small writing you  
6 know it’s it’s yeah so I think- I think that that’s you know good stuff

In this extract, I first modeled conceptual thinking by articulating a more general principle of task design *it’s this defined manageable achievable task* (lines 3-4) with the mental speech represented as an explanation of the manageability of the task (lines 4-5 “*I can fill that small box with big writing and then I’m successful*”), thus going from an abstract generalization, to a still decontextualized but more concrete level. Other instances of where I represented the mental speech of another also reflect this interaction between an abstract conceptual level and more concrete contextualized level. Extract

4.3.4 is an example of where I offered the imagined mental speech of a teacher (box 14) to exemplify both conceptual thinking and a more concrete classroom application. This was in the context of offering a suggestion about how to implement a grammar activity where students had to analyze a short text and identify examples of a certain language form.

Extract 4.3.4

- 1 J: right and that's a great principle also to all things this idea that **"ok I've got to**
- 2 **set them up to do this activity"** not just plonk them into it **"what am I going to**
- 3 **do for two minutes just to set them up or five minutes or however long"** yeah
- 4 makes like easier too because then you don't get "ok number one" and there's
- 5 dead silence you know

In lines 1 and 2, I stated the principle as constructed mental speech (*"ok I've got to set them up to do this activity"*) and then in lines 3 and 4, I demonstrated how a teacher could conceptualize the actual implementation of the activity (*"what am I going to do for two minutes just to set them up or five minutes or however long"*). Extract 4.3.5 also exemplifies my use of imagined teachers' mental and external speech to show this interaction between principle and action, this time with the function of showing reasoning (box 29).

Extract 4.3.5

- 1 J: you know I think that this is hard material to deal with it's like **"how do I-**
- 2 **how do I make this an opportunity for learning"** I'd be tempted- there there
- 3 you know either spend time on it in class and think about **"how can I get**
- 4 **students to understand something more about language and the way like**
- 5 **humor works here"** or ignore or give it to them for homework and say **"read all**
- 6 **those choose the one that you think is the funniest and tomorrow you can**
- 7 **share with your colleagues and tell us why you think it's funny what makes it**
- 8 **funny"**

Here the modeling of conceptual thinking through teacher mental speech occurred in lines 1-2 *how do I- how do I make this an opportunity for learning* with the principle of exploiting material in a way that maximizes student learning. This was then somewhat more concretized in lines 3-5 *how can I get students to understand something more about language and the way like humor works here* with the idea of focusing on the relationship between language and the humor of the text Rick was focusing on with his classes. I then made a very concrete alternative suggestion through quoting possible externally spoken classroom language in lines 5-8 *read all those choose the one that you think is the funniest and tomorrow you can share with your colleagues and tell us why you think it's funny what makes it funny.*

The instances of constructed dialogue identified also show how the teachers themselves used the construction of their own mental speech to demonstrate their reasoning (box 27) at both the concrete contextualized level and also a more generalized conceptual level. Pepa articulated her rationale for reading aloud to students through constructed mental speech, as shown in Extract 4.3.6.

#### Extract 4.3.6

- 1 P: the problem is that maybe I didn't identify in that specific section of the class
- 2 of the lesson that I- I my understanding at that point was **"ok if I read it out loud**
- 3 **they're going to be listening and they're going to understand it"** see and I
- 4 know that this is what we're working on

Rick also used the representing of his own and of students' mental speech to formulate both desired and undesired outcomes. In Extract 4.3.7 he lamented his lack of understanding of language to help him in his classes.

Extract 4.3.7

- 1 R: I'd feel better about myself if I was like "**oh yeah I can answer any question**
- 2 **they threw at me**" and then of course you know it seems to work out- I- I'm cos I
- 3 did look you know I was like "**ok I'm going to look at these things again let me**
- 4 **look them up**" but it seems like no matter what I look up there's always the
- 5 question that gets asked is the one that I didn't look up you know that I didn't
- 6 think

In *oh yeah I can answer any question they threw at me* (lines 1-2) he referred to a state he desired. In *ok I'm going to look at these things again let me look them up* (lines 3-4), he showed his intentions and by implication his actions. On another occasion, he used constructed mental speech of students to express an undesired outcome. Referring to the content discussion questions based on the novel he was using in his grammar class, he expressed the fear that students may not keep the handouts that he would need to collect at the end of the semester, as in Extract 4.3.8.

Extract 4.3.8

- 1 R: but I'm a little concerned that even still they won't that at the end they'll be
- 2 like "**oh I didn't know that we had to keep all that**" so

Thus, the teachers' use of constructed mental speech refers to both concrete contextualized occasions and to a more general timeframe.

There are also uses of constructed external speech to frame ideas within a non-lived, imagined timescale, either in the future or in a hypothetical past. This occurred when the teachers made suggestions with regard to what they themselves could say in the classroom. In Extract 4.3.9, Pepa used constructed dialogue of both her own retrospective mental speech (box 28) and possible future external speech (box 29) to show her

reasoning behind her declared strategy of how to deal with a student's inappropriate behavior.

Extract 4.3.9

- 1 P: I've got mixed feelings I was walking back and I was like I felt bad about- for
- 2 the way that he felt you know I was like I felt guilty like **"oh maybe I said**
- 3 **something that I shouldn't say"** you know but at the same time I'm like **"oh**
- 4 **I'm just going to give him two days until I see him again and see how he**
- 5 **behaves"** if he still has the same attitude then I- I think I am going to talk to him
- 6 and be like **"what's going on"**

In lines 2-3 (*oh maybe I said something that I shouldn't say*) she represented her own mental speech to express her doubt about the appropriateness of a past action, articulated her decision in the constructed mental speech *oh I'm just going to give him two days until I see him again and see how he behaves* (lines 3-4) and then formulated her future approach through the constructed external speech of what she would say to the student: *what's going on* (line 6). Rick made suggestions about how he could scaffold students' noticing of adjective clauses through rehearsing what he might say to the class, as in Extract 4.3.10.

Extract 4.3.10

- 1 R: yeah and I think that will also again reinforce the idea that they have to notice
- 2 the noun that they're modifying so I think this wou- if they're having problems
- 3 **"oh you know this goes with the noun that you're modifying don't forget"** so

This extract shows how Rick was able to work from the principled idea of getting students to notice language (lines 1-2 *they have to notice the noun*) to a concretization of how he could assist them (line 3: *"oh you know this goes with the noun that you're modifying don't forget"*).

The teachers also used constructed external dialogue of both students' and their own speech to demonstrate their uptake of an idea or suggestion that I gave. Extract 4.3.11 shows Rick's uptake through constructed dialogue of my suggestion that he ask the students if they would like to do an oral assignment rather than a written one.

Extract 4.3.11

- 1 R: yeah so- yeah so maybe in class on Monday or Monday the next class I can say
- 2 **“well how- well if you want to do an oral one how could you design**
- 3 **something yourselves to show what- you know here's the skills that you have**
- 4 **to you know demonstrate”**

In Extract 4.3.12, Pepa shows her uptake of a suggestion by articulating how she would implement the suggestion in her speech to the student concerned.

Extract 4.3.12

- 1 J: is there any way you could you know say **“alright these are the assignments**
- 2 **that if you sacrifice it won't affect your grade too much”**
- 3 P: I told her what she has to do uh like the assignments that she didn't do yet but
- 4 that she has the whole semester to turn them in but I should sit down and say
- 5 **“you know what if you just do this one and this one and”**

We had been discussing a student who was finding the class overwhelming and I made a suggestion through constructed external speech of what Pepa could say to the student (lines 1-2: *“alright these are the assignments that if you sacrifice it won't affect your grade too much”*). Pepa showed her uptake by reformulating my constructed dialogue into a rehearsal of what she could say to the student (line 5: *“you know what if you just do this one and this one and”*).

Constructed dialogue therefore is a salient feature of the mediational discourse of the POCs that formed the data for this study. The analysis of the occurrences identified suggests that a possible role of constructed dialogue in mediational discourse is to



facilitate the externalization of lived experience (through the representing of what was said, heard, or thought), to enable conceptual thinking about teaching to be modeled in a way that is accessible to the teacher (through the representing of reasoning or evaluative mental speech), and to model the application of that conceptual thinking to future practice (through the suggestions and rehearsal of possible classroom language). In other words, just as with other aspects of the features found, constructed dialogue facilitates a progression from the construction of lived experience (i.e. language lessons), through abstract and decontextualized conceptualizations and ideations of that lived experience, back to a more nuanced understanding of and purposeful practice in any future lived experience—that is, the theorizing and envisioning of classroom practice.

### **Conclusion.**

In this section, the features of mediational discourse identified a priori at the theoretical stage were shown to be present in the data, but were found not to represent other features of the data that were more revealing of the nature of mediational discourse as it pertains to the relationship between language and cognition. These latter features, mostly identified in my language—that is, the language of the mediator—included questions and prompts that encouraged thinking at a conceptual rather than narrative level, and the modeling of different types of conceptual thinking. The other feature identified was the very prevalent use of constructed dialogue, and an analysis of the variables involved in its use by both the teachers and myself the mediator suggest a role for constructed dialogue in the development of conceptual thinking.

### **The Relationship Between the Mediational Discourse and Teacher Learning**

This section presents the results of the data analysis with regard to the second research question: *What is the relationship between the mediational discourse of the POCs and the language teachers' learning as evinced in changes in their discourse during the mediation?* The first stage of the analysis involved examining a single POC to identify on a microgenetic, moment-by-moment level the teachers' uptake of my modeling of conceptual thinking in the mediation. The second stage involved a more macro level examination of the changes in the teachers' discourse over the course of the semester in relation to the discourse of the mediation.

#### **Micro-level analysis of a single POC.**

The focus of analysis was on the themes identified as the major recurring focuses of our discussions; in Pepa's case, this included the idea of "getting students to say it" and task design, and in Rick's case, the exploitation of materials and language analysis. Similarly, the data focused on consist of one POC per teacher. The two second POCs were chosen because they included discussion of each theme, and in their natures they were typical of the kinds of discussions over the course of the semester. The POC of each teacher will be examined in turn.

#### ***Pepa: POC 2.***

Table 11 offers a brief overview of the observed lesson which Pepa taught and which preceded the POC under focus. As can be seen from Table 6, the greater part of the lesson was spent with students in groups, first preparing for and then sharing their findings from the different reading tasks and roles assigned them in the previous lesson. The reading tasks given to the groups made individual students in each group responsible for either summary writing, conducting some background research on the article, finding

the meaning of unfamiliar vocabulary, or preparing article-based discussion questions. Some students were absent and some had not completed the assigned tasks, both of which compelled Pepa to reorganize some groups. The students were subsequently asked to

*Table 11*

*Summary of Pepa’s Observed Lesson 2*

Stage	Timing
Ss in pairs share and discuss their homework (Project 1)	5”
Feedback: Whole class sharing of findings from the discussion	4”
Jigsaw activity i) group preparation of reading roles	10”
ii) groups reform to collate information and discussion	20”
iii) whole class feedback discussion: T focuses on procedure of activity; discussion of order of speakers; Ss share interesting ideas from discussion	10”
Discussion of content of articles: <i>mergers, acquisition</i>	5”
T sets up next reading through elicitation;	5”
Ss in groups compare content of article with content of previous week’s article	5”
Whole-class feedback	5”
T sets up homework task	5”

compare the article they had read with the previous week’s article. For most of the lesson students were in groups with some whole-class discussion activities.

During this second POC, both of the recurring themes in Pepa’s data –that is, “getting students to say it” and task design—were present although the issue of task design took up more discussion time. The first instance of this discussion is shown in

Extract 4.4.1. Here towards the beginning of the POC, I asked Pepa to reflect on how the main activities went.

Extract 4.4.1

- 1 J: how do you feel about the activity you know the lesson do you feel those  
2 activities were successful I mean did they go as you wanted
- 3 P: **I was expecting more loudness** [laughs] (J: when?) in- in the- not the first one  
4 not for the projects because you know a lot of people didn't do it or didn't  
5 complete it yet but for the
- 6 J: oh I saw a lot of them did (P: yeah)
- 7 P: we'll see (J: yeah) I'm going to check that but then um just for the - when  
8 they- the first time they get in groups the summaries research there was just a lot  
9 of quietness like they were not talking that much (J: I wonder why) I mean **I told**  
10 **them I mean I said "you all have the same information I want you to take**  
11 **notes from each other and then because that way you can carry that**  
12 **information to the next- to your group to your actual group"** I mean I did say  
13 **almost one by one (J: yeah) within the groups so and some people didn't do it**  
14 **so they- some of them took notes and some of them didn't do it and still**  
15 **didn't take notes and I made sure I told them again when they went back**  
16 **into their groups I said "you know you didn't take notes so now you don't**  
17 **have anything to offer to your group"** (J: mhm)
- 18 J: [hh] did they- **how aware were they of the process of those two groups**
- 19 P: **I told them last week-**

Pepa's comment about the lack of *loudness* (line 3) during the preparation for sharing stage suggests that she was very aware of the desirability of student-student interaction. She then went on to complain that despite her telling the students they had to take notes about each others' ideas because they would need them in the next activity, a lot of the students did not (lines 9-16). She used constructed dialogue of her own speech to students to encapsulate the classroom event, thus functioning at the level of narrative (e.g. lines 10-12: "*you all have the same information I want you to take notes from each other and then because that way you can carry that information to the next- to your group to your actual group*"). I then questioned her as to the extent to which she believed students were

aware of the overall process of the group activities (line 17 *how aware were they of the process of those two groups*). Pepa responded that she had told them the previous week (line 18), which suggests that she still instinctively thought that if she told students something, they would “know” it, a belief that is fairly typical of novice teachers. She was not thinking on the same conceptual level as I was with regard to how teachers ensure students uptake of ideas. In the ensuing exchanges, I also functioned at a contextualized, more narrative level when I gave a suggestion of what she could have done – a retrospective change through constructed dialogue. This is given in the following continuation of the interaction in Extract 4.4.2.

#### Extract 4.4.2

- 18 P: **I told them last week-**  
19 J: **which isn't the same as them being aware**  
20 P: right **but then today we actually did it** [laughs]  
21 J: I know but but- right you're right and now **for the next time they know the**  
22 **process** but I wonder whether it was worth like before you put them in like the  
23 researchers and the vocabulary (P: mhm) say to them “**ok you've done research**  
24 **you've done vocab- what's going to happen now right what do you think-**  
25 **why- what's the next stage” and then someone hopefully will say “ok we're**  
26 **going to go in groups and compare”- “why why am- why are you going to do**  
27 **that”** right because **what you really wanted them is to get the best possible**  
28 **discussion questions to take to the next group the best possible vocabulary**  
29 **the best possible summary and the best possible research** (P: mhm) right? (P:  
30 right) for each of them but they kind of didn't know that because they were just  
31 asked to share right without like an **outcome “so the goal the goal is to get the**  
32 **best possible (P: mhm) right because when you go to your new groups you're**  
33 **going to have to share this and again why are you going to have to share this**  
34 **in your new groups”** I wonder again about **an outcome** what could they- you  
35 know in the new- in the original groups you know (P: mhm) that you had at the  
36 end (P: mhm) they're going to share information why what- **what could they do-**  
37 **have to do with all that information as a group**  
38 P: well that- **the purpose is for them to use the language you know discuss** (J:  
39 right right which is the process) right and then **a better understanding** like **the**  
40 **goal is a better understanding of what they read** (J: right that's-)  
41 **comprehension**

Here I implied the principle of communicating the purpose of an activity to students by articulating what could have been said by both teacher and students to put this into practice (lines 23-26 “*ok you’ve done research you’ve done vocab- what’s going to happen now right what do you think- why- what’s the next stage*” and then someone hopefully will say “*ok we’re going to go in groups and compare*”). This included a concretization of not telling students something, but getting them to say it as in my proposed questions to students: *what’s the next stage* (line 24) and *why are you going to do that* (lines 23-24). I then went on to articulate the learning objective of that stage of the activity which was to refine the preparation they had done (lines 26-28: *what you really wanted them is to get the best possible discussion questions to take to the next group the best possible vocabulary the best possible summary and the best possible research*) and modeled how that might be articulated to the students (lines 30-33). I then referred to a concept that had arisen in a previous discussion—that is, task outcome—referring to the specific context we were discussing in my following question: *what could they do- have to do with all that information as a group* (lines 35-36). Pepa’s next turn showed that she had not fully grasped the concepts that I was talking about—that is, the learning objective of an activity versus the task outcome. It suggests that she was formulating her understanding as she was speaking—that is using the process of languaging to cognize. This is suggested by her reiteration of the idea of purpose in the word *purpose* (line 37) and the word *goal* (line 38), and the idea of understanding in the words *understanding* (lines 38 and 39) and *comprehension* (line 39).

My next turn is given in the continuation of the interaction in Extract 4.4.3 and shows how I continued to exemplify what I was suggesting.

Extract 4.4.3

40 J: absolutely absolutely but I- if we get them to- in order to get them to do that  
41 optimally if we can get an outcome like “I want you to pool your thoughts” you  
42 know and let’s say there’s some poxy little worksheet [laughs] (P: mhm) **I was**  
43 **trying to think while I was watching this “yeah they’re on task they’re keen**  
44 **but it would just be satisfying for them if they could- if there was in the final**  
45 **discussion if there was a task that they had to do and their discussion led to**  
46 **that task” right (P: right) and I was trying to think what- what would be and**  
47 **I came up with a really pathetic idea all right “each person has to think of**  
48 **three new things one new fact the most interesting fact that you found out,**  
49 **the most interesting piece of vocabulary word or phrase and the most**  
50 **interesting opinion”**, I mean that’s pretty pathetic (P: [laughs]) or- or you could  
51 you know maybe even you’re talking a lot about mergers (P: mhm) right (P:  
52 mhm) so maybe you can say “alright we want the ELI to merge with the  
53 engineering department” or something I mean I don’t know “**right your task is to**  
54 **take information about strategies or vocabulary or whatever that you’re**  
55 **going to use in your final essay report proposal that you’re going to do on**  
56 **how the ELI can merge with”**- d- (P: yep) do you see what I mean (P: mhm) and  
57 then I think that the- **the talk that you felt was missing at each stage would be**  
58 **more purposeful if there was a goal that they had in mind “alright I want to**  
59 **hear your discussion questions I want the best discussion questions because I**  
60 **mean”** (P: mhm) right and “**I want your vocabulary because we have have to**  
61 **you know the end- the outcome is going to be something”** [laughs] what do you  
62 think

This turn again contained the construction of possible classroom dialogue when I suggested a possible outcome task (lines 46-49 “*each person has to think of three new things one new fact the most interesting fact that you found out, the most interesting piece of vocabulary word or phrase and the most interesting opinion*”), and also an externalization of my thought processes through narrative and my own constructed mental speech (lines 42-46: *I was trying to think while I was watching this “yeah they’re on task they’re keen but it would just be satisfying for them if they could- if there was in the final discussion if there was a task that they had to do and their discussion led to that task” right and I was trying to think what- what would be and I came up with a really pathetic idea*). I went on to develop the concretization and contextualization of the idea

even more by connecting it to the specific topic of the discussion, and again modeled possible classroom dialogue (lines 52-54: “*right your task is to take information about strategies or vocabulary or whatever that you’re going to use in your final essay report proposal that you’re going to do on how the ELI can merge with*”). In lines 55-58, however, I model conceptual thinking by relating the contextualizations I had just suggested to an overall rationale and principle, linking it to the sense of dissatisfaction Pepa had expressed at the beginning of this discussion (lines 55-57 *the talk that you felt was missing at each stage would be more purposeful if there was a goal that they had in mind*). My final example of constructed dialogue (lines 58-59 “*I want your vocabulary because we have have to you know the end- the outcome is going to be something*” was perhaps less clear and helpful than I would have liked, hence, possibly, my laughter (line 59) and my request for a response from Pepa *what do you think* (lines 59-60). Pepa’s response to this was at a much higher conceptual level than evinced in her previous discourse, as shown in the continuation of the interaction in Extract 4.4.4

#### Extract 4.4.4

- 61 P: that sounds more like **task based** instead of **content based** are you trying to  
62 change me to turn me into a [laughs]  
63 J: that’s interesting **are the two mutually exclusive**  
64 P: no of course not  
65 J: but it it’s like content, **content is there** [gestures: cups hands up in the air]  
66 **unless you actually do something with it** (P: mhm) and um  
67 P: well I don’t know if you noticed at the end **I did ask them to uh relate their**  
68 **findings to what we read last week** (J: yes) and the purpose was (J: yeah that-  
69 great) kind of synthesizing both readings (J: right) and they did have to talk to  
70 each other and like this that and kind of list it (J: right) and I was going to give  
71 them a table that I didn’t finish that I didn’t have time to finish but I will give  
72 them on Thursday



Pepa's comment included the theory-based concepts of task-based teaching and content-based instruction (line 61 *that sounds more like task based instead of content based*) and suggests that while she was endeavoring to interact at the conceptual level that I was modeling, Pepa neither grasped the concepts of learning objective and task outcome I was talking about, nor, in fact, the curriculum approaches of task- and content-based teaching. However, this utterance did show that she was able to abstract out from the specific and concrete instance of the lesson and activity we were focusing on and relate it conceptually to language learning theory and pedagogy. My response to this was to invite her to language about those pedagogical concepts by asking her to consider the relationship between the two approaches – *are the two mutually exclusive* (line 63) and explaining the need to integrate content into task design (lines 65-66: *but it it's like content, content is there [gestures: cups hands up in the air] unless you actually do something with it*). At this point, Pepa showed that she was able to think conceptually about this integration of content by giving a concrete example of how she had asked students to link the content of the current reading text with the one they had read the previous week (lines 67-68: *I did ask them to uh relate their findings to what we read last week*).

Later in the discussion, the issue of the teacher's role as facilitator rather than "teller" came up (Extract 4.4.5).

#### Extract 4.4.5

- 1 J: I was really impressed with the way that they did it **you obviously set them up**
- 2 **well they knew what to do you sold it to them** (P: mhm) **it was really I mean**
- 3 **and them teaching each other** (P: yeah) **they got through so much more**
- 4 **language and talking and thinking and- you know the word *loom* and the**
- 5 **word *shrewd* and all these words that done as a whole class** (P: mhm) **you**
- 6 **wouldn't have got through** (P: oh no) **as much**

7 P: **did you notice that when they asked me the definition I was like “so what**  
8 **does everybody else think do you have that one (J: yes) ok so what does it**  
9 **mean what’s the meaning of this other word” like I didn’t just tell them did**  
10 **you see that I was just like scaffolding [laughter] (J: there you go) “ok so let’s**  
11 **read the sentence you know what’s the beginning of the sentence means**  
12 **what’s the end ok what are we talking about”** bing and they got it  
13 J: and **how does that feel to you** you know is that  
14 P: yeah because **sometimes they explain it better than I do** so [laughs] (J: right)  
15 easier for me  
16 J: right and also **when they say it we know that they’re thinking it (P: right)**  
17 **when we say and explanation we’ve no idea of what’s going on they’re**  
18 **hearing** so (P: mm) wow wow  
19 P: I know and **I don’t always know everything I know that** (J: [laughs])

In this extract, I was praising the overall design and implementation of the activities (lines 1-2: *you obviously set them up well they knew what to do you sold it to them*) and the very student-centered nature of the interaction (lines 2-3: *it was really I mean and them teaching each other*). I referred to the increase in the opportunities for students’ talking that the activities offered (lines 3-6: *they got through so much more language and talking and thinking and- you know the word loom and the word shrewd and all these words that done as a whole class you wouldn’t have got through as much*). This represented a concretization of the concept of the role of the teacher as facilitating learning rather than telling students, which had recurred as a theme. Pepa’s following turn showed that she was clearly able to think conceptually on this idea, because she gave a very concrete instance of how she had followed the principle of scaffolding students’ understanding rather than telling them the answer (lines 7-12). In this turn, then, she showed she could relate the lived experience of the classroom to an abstract and generalized concept. It also suggests that she was not only able to reflect analytically in

this retrospective manner, but that she had been thinking conceptually during the lesson itself, using the concept of *scaffolding* to inform her decisions and practice.

However, when I asked her to reflect on how she felt about this (line 13: *how does that feel to you*), she showed that she was focused more on the specific behavior of the students (line 14: *sometimes they explain it better than I do*) than on the concept of scaffolding behind it. Perhaps reacting to this, I then articulated the pedagogical principle of the teacher's needing to hear students say something before she can know what the student has understood (lines 16-17: *when they say it we know that they're thinking it when we say an explanation we've no idea of what's going on they're hearing*). Again, Pepa's next turn (line 19: *I don't always know everything I know that*) suggested that she was still thinking about this in relation to the teacher as knower, rather than in terms of the pedagogical application.

This idea of the value of getting students to say rather than the teacher telling recurred soon after in the same POC (Extract 4.4.6).

#### Extract 4.4.6

- 1 J: what else um what kind of thing made you happy individual things individual  
2 students doing things
- 3 P: it made me happy the way you know **when they were asking me about words**  
4 **and I was making them find the answer and when I told them "ok what do**  
5 **you think comes next" you know in the article you know "what do you think**  
6 **you have to do next what do you think it's going to be about" and you know**  
7 **instead of like "oh for next week do this and that" you know I was doing it**  
8 and I was like **man this really works** you know **it was like this! that! it was like**  
9 **they were in charge of what they were go- what they were gonna have to do**  
10 **next** you know
- 11 J: **is that what you mean by this really works**
- 12 P: um yeah absolutely because **then I'm not telling them what to do they're**  
13 **telling themselves what to do**
- 14 J: and why is that better

15 P: because they are [uses gesture that I have used on several previous occasions to  
 16 show the idea of speaking, getting it out] letting it ou- they are talking about it  
 17 themselves I'm not telling them so once they wait wait you told me last week  
 18 ([laughs]) and now I'm trying to find the right- wait wait uh when they com- not  
 19 communicate what was it  
 20 J: I think the word begins with A .ar- was the word **articulate**?  
 21 P.: yes yes [laughing] that was it thank you  
 22 J: I know I was listening to that on Sunday [laughs] again and again and again I'm  
 23 talking about articulate  
 24 P: articulate- **when they articulate then they** (J: yeah) **it sticks better and then**  
 25 **they understand it better** and it's not just me always

When asked what she felt happy with in the lesson, Pepa talked about the way she had been able through proleptic questioning to guide students to an understanding of the task and activities they were about to engage in, again, perhaps suggesting that she had been able to think conceptually about the need for scaffolding of understanding (lines 3-9). However, she was only able to speak in very general and vague terms about the effectiveness of this (lines 7-8 *man this really works ... it was like this! that! it was like they were in charge of what they were go- what they were gonna have to do next*). I then offered her an opportunity to language and cognize about what exactly she meant by *this really works* (line 10). Though she began rather vaguely (lines 11-12 *then I'm not telling them what to do they're telling themselves what to do*), through my prompting, she was able to relate this to the concept of the relationship of languaging to cognition, through the term *articulate*, though in far more concrete terms: *when they articulate it then they..it sticks better and then they understand it better* (lines 22-23).

This extract is interesting in that it shows a clear instance of the relationship between the *word* and the development of conceptual thinking, as discussed by Vygotsky (van der Veer & Valsiner, 1994). Pepa's excited exclamation *man this really works* (line 7) suggests that what she experienced was new to her; she had found herself able to

inform her classroom practice by thinking conceptually about scaffolding student understanding. Her conceptual thinking behind this was reflected in her struggle to find the term *articulate* (line 18), a term which I had used in the previous POC when talking about the relationship between language and learning, shown in Extract 4.4.7, taken from the first POC I had with Pepa.

Extract 4.4.7

1 J: but thinking- thinking then about you know **how learning happens** (P: right)  
2 what do students need to learn and if it's just listening- about listening then why  
3 don't we just stand there and lecture to them right paying attention and learning  
4 are not- maybe not the same thing (P: mhm) and if you look at- if you have any  
5 kind of belief in sociocultural theory (P: mhm) it is **you don't know something**  
6 **until you can articulate it** and **articulating** helps you I- know something (P:  
7 mhm) so listening yes of course it has a role in learning of course it does but until  
8 you've had a chance to grapple with those ideas and- and um you know make-  
9 sort of use language- they talk about languaging- I talk about languaging you  
10 know as an activity which is actually- like I'm doing now I haven't got this  
11 thought in my head **I'm formulating the thought as I'm speaking**

This is the only occurrence of the word *articulate* in the data before Pepa's search for the word in the second POC, shown in Extract 4.4.7. Clearly then, in her reflection on how she had elicited the instructions for the activity, she was showing evidence of thinking in concepts in a way that we had discussed in a previous POC.

As a final example from this second POC that shows the interaction of my modeling of thinking in concepts and Pepa's developing uptake of those concepts, Extract 4.4.8 presents an example where the issue of task design was focused on. We had been discussing Pepa's dissatisfaction with some students' lack of application to the discussion task, when the students in groups shared their findings from their roles as researcher, discussion leader, etc. She complained that some of the students would take any opportunity to remove their focus from the group tasks they were engaged in and try

to attract her attention to ask her questions. My response to this was to encourage her to think conceptually about the need for a specific outcome for an activity.

Extract 4.4.8

- 1 J: and I wonder if they're more I mean if it happens if **they've got a concrete**  
2 **task to do maybe they'll be less distracted** you know because they'll be more  
3 confident about what they should be doing you know rather than looking for your  
4 approval all the time which is basically what they are  
5 P: so interesting cos I don't know if you heard one of the questions with the group  
6 that was closer to me when they got together they have different information (J: in  
7 the final) in the original in the final group and then Anna she's um from Brazil  
8 she's like "**so what are we supposed to do**" (J: yeah) I was like "**oo that's not a**  
9 **good question to ask at this point ok so I didn't do something I missed**  
10 **something here**" I was- I was concerned I didn't maybe I wasn't specific about  
11 what I wanted them to do **so not going down to task or the objective or like the**  
12 **goal of the activity maybe yeah and a concrete that's why she was so lost**

I suggested that the lack of specific task outcome for the activity was a possible cause for the students' distraction (lines 1-2: *if they've got a concrete task to do maybe they'll be less distracted*). Pepa's response showed her understanding of the conceptual thinking behind my comments. She formulated through constructed dialogue a question that a student had asked her during that lesson that showed the student had not understood the task (lines 7-8: "*so what are we supposed to do*"). Pepa then formulated her own mental speech in which she expressed her realization that there was something lacking in either the task design or her instructions; at this point she was not clear on which (lines 8-9: "*oo that's not a good question to ask at this point ok so I didn't do something I missed something here*"). However, she went on to clarify, perhaps in her own mind, that it was the lack of task that was the problem (lines 10-12: *so not going down to task or the objective or like the goal of the activity maybe yeah and a concrete that's why she was so lost*). Interestingly, although she echoed in her language the term that I had previously

used (*concrete task* line 1), she used the words among other terms in a way that suggested that she was unclear of the exact concept behind each, or which term referred to the concept she was considering (lines 11-12: *task or the objective or like the goal of the activity maybe yeah and a concrete*). This may well offer evidence of a concept in the process of formation; she was still engaged in relating her new conceptual understanding of task design to her previous system of concepts, and to the lived experience of the classroom.

This discussion shows the dynamic interplay of several features of conceptual thinking in the mediational discourse during this second POC as well as how the discourse of the mediation impacted Pepa's ability to think in concepts. Pepa's discourse reflected her ability to think about her teaching at a conceptual level, but that she was in the process of mastery of some of the concepts under discussion. First, there are examples of how Pepa was able to relate the abstract conceptualization in my discourse to concrete examples from her own lived experience. Also, there was evidence of her own ability to think in the concepts that I had introduced during that second and the previous POC. However, there are also examples of where she was unable fully to understand my ideas because of her lack of understanding of the concepts to which I was referring, such as those of task outcome versus learning objective, perhaps because of my lack of clarity and consistency in the use of the terms. There are also instances where Pepa attempted to refer concrete instances and suggestions to which I referred to abstract theoretical concepts, but in a way that suggested a less than complete understanding of those concepts, such as the ideas of task- and content-based teaching.

***Rick: POC 2.***

Table 12 presents an overview of the observed level 4 grammar lesson given by Rick, which was discussed in the second POC. As can be seen from Table 12, the greater portion of the lesson was taken up with social or content oral activities, with only around 12 minutes of actual direct language-related work. During the POC which followed this lesson, the issue of the value of spending so much time discussing the content of the

*Table 12*

*Summary of Rick's Observed Lesson 2*

Stage	Timing
Social chat	10''
T takes in homework	3''
Ss in groups discuss questions related to the novel	20''
T presents jokes in Holes materials	5''
Groups discuss relative pronoun materials	12''

novel came up. The questions on the handout that students were discussing used the content of the novel as a starting point for more personal discussions. One such task was:

1. Elya carried the piglet everyday to the top of mountain, let it drink from the stream and sang to the pig. But he failed to keep the promise that he would carry Madam Zeroni up the mountain.
  - Have you ever broken an important promise? If so, what is it? What made you break the promise?
  - Do you like making promises with friends? Why? (See Appendix 5)

As seen in Extract 4.5.1, I began by prompting Rick to talk about this stage of the lesson.



Extract 4.5.1

- 1 J: right uh yeah so you alright so there was the discussion and then the homework  
2 and then  
3 R: so **we did the discussion** (J: mhm) **which I think was going pretty well**  
4 actually the topics here are good about finding a mate or a partner or getting  
5 married and beauty I think the groups were really talking about and if I remember  
6 correctly they- it was kind of hard to stop them (J: mhm yep) **I think that was**  
7 **good h.. I hated to knock it off** [laughter] and bring it to a close you know try  
8 not to go too long with it which is easy to do (J: yeah yeah) especially when we  
9 when we're starting out the unit here we have the discussion about the book itself  
10 and then not too much about grammar so

Rick's initial evaluation of the class discussion showed that he considered it to have been successful (line 3 *which I think was going pretty well*; lines 6-7 *I think it was good h... I hated to knock it off*). I then asked him to think conceptually in terms of the learning objective of such an activity, as shown in the continuation of the interaction in Extract 4.5.2.

Extract 4.5.2

- 11 J: do- **what do you think the students get out of doing an activity like this**  
12 ..because it's you know **it's not related directly either to the you know more**  
13 **understanding of the content or- or to the language** (R: mhm) so I mean  
14 obviously it's seen as an important part of the whole sequence of activities (R: uh  
15 huh) from your point of view **what do you think is like a learning objective** or  
16 whatever to  
17 R: yeah I mean it's a little bit hard to say I mean other than the fact that **they get**  
18 **the all-important discussion time** so you know **which you know I've been led**  
19 **to believe has magical effect so I go with it you know** (J: [laughs]) does it- does  
20 this discussion help them with the grammar of the like we're talking about  
21 adjective clauses and participial phrases [hhh] (J: yeah) **I don't really think it**  
22 **does anything for that but and it doesn't help them necessarily with past**  
23 **tense which is what we've discussed** but I mean clearly the-

My initial question *what do you think the students get out of doing an activity like this* (line 11) was asking Rick to think conceptually in terms of the aim of the activity. I

proceeded to justify the question by pointing out the peripheral nature of the discussion focus (lines 12-13 *it's not related directly either to the you know more understanding of the content or- or to the language*). I reiterated my initial question in line 15 using the terminology *a learning objective*. Rick's response to this showed that he was not yet able to think conceptually in terms of the relationship between student-student interaction and learning. He talked very vaguely about *the all-important discussion time* (line 18) and its *magical effect* (line 19). His comment *which you know I've been led to believe* (lines 18-19) suggests that he did not accept ownership or responsibility for the concept. He went on to discuss the possible value in terms of students' understanding of the past tense, of the discussions and concluded that there is no clear value (lines 21-23 *I don't really think it does anything for that but and it doesn't help them necessarily with past tense which is what we've discussed*). This turn suggested that Rick had not previously thought conceptually about the materials or the activity in terms of student learning, but he was able to identify what the learning point was not—that is, helping students with the past tense.

My next move was to encourage him to use conceptual thinking to consider how to adapt the material so that it would help students with the past tense, as in the following turn shown in Extract 4.5.3.

#### Extract 4.5.3

24 J: right but I mean it's interesting isn't it that um.. yeah- I mean I don't have an  
25 answer **like you I instinctively feel if they're talking to each other about**  
26 **complex subjects and they're feeling positive about the whole thing, great,**  
27 but you know they can do that in the bar or in the- or in Subway (R: mhm) so I  
28 wonder I yeah that's something to think about **is there any way of tweaking this**  
29 **or making some kind of outcome that um feeds into or reinforces or**  
30 **preempts or whatever the grammar that links somehow to the grammar**

I began by validating his idea of the inherent value of such group discussions (lines 25-26 *like you I instinctively feel if they're talking to each other about complex subjects and they're feeling positive about the whole thing, great*) but I went on to challenge him tentatively to consider a way to adapt the activity so that it more overtly linked to the grammar focus of the class ( lines 28-30 *is there any way of tweaking this or making some kind of outcome that um feeds into or reinforces or preempts or whatever the grammar that links somehow to the grammar*). This was asking him to think conceptually about one of the recurring issues in my interactions with him—that is, how to implement practice activities in a way that maximizes language learning.

Rick's response to this was very much at a concrete, contextualized level, as shown in Extract 4.5.4.

#### Extract 4.5.4

- 31 R: ... yeah... (J: interesting I don't know the answer to that) cos it seems the way  
32 the class is set up and **I do wonder about it you know** and whoever and I guess  
33 **this was set up by people from** (J: Hawaii I think) **University of Hawaii** so you  
34 know I- I like it but it definitely does have a two- the two parts that you're kind of  
35 juggling the reading (J: mhm and the content) and then yeah and the grammar  
36 itself so it- but at least **the last unit you know we talked about the reading for a**  
37 **couple of days** (J: mhm) **and then it was you know for the-** cos each unit is two  
38 **weeks** (J: yep) **so it ends up being a lot more grammar than just content**  
39 they're talking about the bo- the novel (J: yeah right) I mean so I'm- I was- I  
40 wonder about yeah this is only the second unit so far I remember the first  
41 [unclear] **I was thinking "well are we really just stuck talking about the book**  
42 **and not really looking at grammar"** and then I think the students might kind of  
43 like it too **cos they might feel like they're doing something**  
44 **J: what do you mean like the talking**  
45 R: [laughs] like the talking cos **it gives them the feeling that they're**  
46 **accomplishing something and they're doing something and does it occur to**  
47 **them that we're not or I should say are they concerned that they're not being**  
48 **drilled on grammar they haven't really** (J: no no) **seemed to act that way so**

He began by expressing his uncertainty (line 32 *I do wonder about it you know*) and focusing on the origin and design of the materials (lines 33 *this was set up by people from University of Hawaii*). He then shifted to a contextualized account of lived experience with the previous unit of materials (lines 36-38 *the last unit you know we talked about the reading for a couple of days and then it was you know for the- cos each unit is two weeks so it ends up being a lot more grammar than just content*) and of his own mental speech that showed his awareness of the lack of overt link with the grammar (lines 41-42 *“well are we really just stuck talking about the book and not really looking at grammar”*). However, he then switched focus and evaluated the discussion activities in terms of the students’ perceptions that *they might feel like they’re doing something* (line 43). I asked him to clarify what he meant (line 44 *what do you mean like the talking*), and he then evaluated content discussion activities in terms of his experience of student perceptions, rather than of any conceptual understanding of how language learning occurs (lines 45-48 *cos it gives them the feeling that they’re accomplishing something and they’re doing something and does it occur to them that we’re not or I should say are they concerned that they’re not being drilled on grammar they haven’t really seemed to act that way so*). This suggests that at this point, Rick was conceptualizing students as an audience that he needed to engage and entertain, as well as instruct, rather than seeking to understand how he might maximize learning through the design and implementation of practice activities.

Another instance where Rick seemed to work at the level of concrete instances rather than conceptual principles of pedagogy occurred a little later in the discussion. I asked him to recall the social chat at the start of the lesson where he had asked students about their weekend activities, and one student had simply replied “Sleep”. I commented

that this might have been a good time to ask them to attend to the tenses they used in their responses and to give focused correction of their tense errors. The ensuing discussion is given in Extract 4.5.5.

Extract 4.5.5

- 1 J: **even that kind of chitchat can** (R: mhm mhm) **be an opportunity for them to**  
2 **you know just develop some deeper understanding of- you know and link the**  
3 **grammar to actual communication** (R: right)  
4 R: yeah I mean I was like **“oh we’re definitely going to talk about past tenses if**  
5 **we talk about what did you do over the weekend”** (J: mhm) and uh then I’m  
6 like “ok I can listen” but and then **I got to work on my recasting in that**  
7 **situation** too you know I’m like **“ok if I hear an error what am I going to do**  
8 **every time they say something or whatever** (J: yeah) **am I going to you know”**  
9 J: and what- **what do you feel about that you know correcting everything at**  
10 **that stage** cos maybe that’s- I mean that’s my idea I’m brutal [laughter] you  
11 know in a grammar class but you may- that may not sit with your style of teaching  
12 R: yeah I’m not- **I don’t feel like I want to try to correct everything** but (J:  
13 mhm) a good you know **a few good ones** (J: yeah) **here and there I think might**  
14 **work** (J: right) cos **if you said “I- I swim” or whatever and I was like “did you**  
15 **say you swim”** (J: yeah) and you said **“yeah”** I said **“do you mean swam”** or  
16 whatever ok so **that might help the whole class if they’re paying attention** and-

Rick’s response to my conceptual principle that even informal interaction can be used to foster language learning (lines 1-3 *even that kind of chitchat can be an opportunity for them to you know just develop some deeper understanding of- you know and link the grammar to actual communication*) was to show that he understood the language forms that students were going to produce (lines 4-5 *“oh we’re definitely going to talk about past tenses if we talk about ‘what did you do over the weekend’”*). He demonstrated conceptual awareness in his mention of his uncertain ability to recast successfully (line 6: *I got to work on my recasting in that situation*) and of the need for a principle to inform his error correction strategies (lines 7-8 *“ok if I hear an error what am I going to do every time they say something or whatever am I going to you know”*). When I prompted

him to language about his own philosophical approach to error correction (lines 9-10 *what do you feel about that you know correcting everything at that stage*), he mentioned a generalized (line 12 *I don't feel like I want to try to correct everything*) and ad hoc approach (line 13 *a few good ones here and there I think might work*) and then returned to a narrative of a specific instance and context (lines 14-15 *if you said "I- I swim" or whatever and I was like "did you say you swim" and you said "yeah" I said "do you mean swam"*). His final comment in this extract reflected his uncertain grasp of conceptual thinking with regard to error correction (lines 15-16 *that might help the whole class if they are paying attention*). This suggested that Rick could function in a reactive rather than a proactive way to error correction. His limited conceptual thinking meant that he tended to be tied to the concrete context and rather than purposefully directing his actions and decisions based on decontextualized principles and concepts.

Perhaps conscious of this, I went on to model conceptual thinking about error correction as shown in Extract 4.5.6.

#### Extract 4.5.6

- 1 J: yeah right which is a- and again **there's two approaches one is the correction**
- 2 **if they make a mistake and another approach would be the preempting** you
- 3 know um which is **"alright I'm going to ask you about your weekend, it's the**
- 4 **past, think about the past tense" and then when you know** (R: mhm) **"what**
- 5 **did you do at the weekend"** he'd say "swim" you can just say [quizzical
- 6 expression] you know you don't have to vocalize it (R: mhm uh huh) **he can**
- 7 **think about it because he's already primed to be thinking about the past**
- 8 **tense** (R: right) which again **it does detract a little bit from that being purely**
- 9 **"I'm just one human being interested in what you did this weekend"** (R:
- 10 [laughs]) [unclear] it's like "I'm your grammar teacher and we're going to use
- 11 this conversation" so again that might not sit well with what you want to do and
- 12 the purpose of that interaction but it's something to think about
- 13 R: yeah **I do you know wonder about that like how much should I put of it**
- 14 **you know cos I do remember when she said I think there was another**
- 15 **correction she somebody said about the shoes** (J: shoes)

16 J: yeah and you put that on the board (R: uh huh cos that one) she said “shoes is”  
 17 and everybody went “shoes are” (R: yeah lack of concord yeah) ...yeah and so  
 18 **there are two very different things one was that very implicit you know you**  
 19 **did the recast correction and the other one was the very explicit** you know  
 20 nothing wrong with doing them (R: mhm) but just you know thinking about “**why**  
 21 **am I doing this now which is the- how can I- yeah which is the most**  
 22 **appropriate**” who knows  
 23 R: [laughs] I know yeah and I was like “**I don’t want them to feel like I’m**  
 24 **houn- you know like I’m hovering waiting for them to make a mistake (J:**  
 25 **right) and correct them**”

Here, I began by articulating the two conceptual approaches to student errors, one reactive and the other preemptive (lines 1-2 *there’s two approaches one is the correction if they make a mistake and another approach would be the preempting*). I then concretized these concepts through formulating a possible interaction with the student who had made the error through constructed dialogue (lines 3-5 *“alright I’m going to ask you about your weekend, it’s the past, think about the past tense” and then when you know “what did you do at the weekend”*). I went on to give a rationale for this preemptive technique might be effective (lines 6-8 *he can think about it because he’s already primed to be thinking about the past tense*) but then acknowledged that it might detract from the real communicative dimension of the interaction (lines 8-9: *it does detract a little bit from that being purely “I’m just one human being interested in what you did this weekend”*). This modeled conceptual thinking about both pedagogical and affective aspects of classroom practice.

Rick’s response was to narrate an error correction incident from the same lesson (lines 13-15: *yeah I do you know wonder about that like how much should I put of it you know cos I do remember when she said I think there was another correction she somebody said about the shoes*). Again, I picked up that specific instance and modeled

more abstract and generalized thinking by conceptualizing the two specific instances of Rick's correction mentioned as implicit and explicit (lines 18-19: *there are two very different things one was that very implicit you know you did the recast correction and the other one was the very explicit*), and then suggested through constructed dialogue the need for Rick to consider the conceptual rationale for his correction techniques (lines 20-22: *you know thinking about "why am I doing this now which is the- how can I- yeah which is the most appropriate"*). Rick's response again interestingly demonstrated his concern for students' affect rather than their cognition (lines 23-25 *"I don't want them to feel like I'm houn- you know like I'm hovering waiting for them to make a mistake (J: right) and correct them"*). Throughout this stage of the interaction, Rick's discourse was focused mainly on narrative of the lived experience. When he did refer to refer to more abstracted concepts and principles, it was to evaluate his knowledge of them.

On another occasion, however, Rick showed that he was able to think conceptually about other aspects of the implementation of materials, specifically materials that focused on presenting and explaining grammar, but was restricted to focusing on individual instances when it came to explaining the grammatical forms themselves. The POC discussion had reached the point of the lesson where Rick asked the class to focus on the Grammar Study section of the materials he was using (see Appendix 5). The material focused on the conditions under which the relative pronoun can be omitted from an adjective clause and asked students to consider example sentences from the novel, and work out the conditions. A part of the POC discussion of this stage of the lesson is shown in Extract 4.5.7.



Extract 4.5.7

- 1 J: ok and then you gave them that and **what did you think about how that went**  
2 the-  
3 R: uhh this here so **we only got done through condition one and this was my**  
4 **first time explaining this stuff** so (J: yeah) I think uh I'm not sure if it was over  
5 their head the explanation or if it was clear but **we did go back the next day** (J:  
6 yeah) **and we went over the whole thing again and you know I switched the**  
7 **approach** you know using the subject gap you know (J: yes) "is this the subject  
8 of this clause (J: of the clause yeah) or is this"- the clause stands on its own a little  
9 bit has its own subject (J: mhm) and this noun that it's modifying could be stuck  
10 here after the verb so we talked about that a lot and I think we kind of had a better  
11 piece [?] the second time when we talked about it (J: yeah right) then this one we  
12 were just like "aaarrgghh" wasn't- I was- **I didn't have any experience talking**  
13 **about it out loud** and maybe they have had experience or they know about it and  
14 uh and we put a lot of examples on the board yesterday I was like "ok which one  
15 can we remove which one can't" (J: mhm) so then I put two similar sentences and  
16 had them talk about it and we did more activities so and this one- yeah and these  
17 two examples are not really-  
18 J: right I know cos **there's a lot of nonsense around it isn't there** (R: mhm  
19 mhm) **a lot of vocabulary that's- that's less accessible**, with hindsight again  
20 would you like to have changed the way you did this I mean because you know  
21 that when I'm doing something I'm thinking "crap if only I'd done it that way (R:  
22 uh huh uh huh) you know I'd be better" is there any way that if you were to do  
23 this again **what would you do differently**  
24 R: definitely I think I learned and I think I changed even in classes yesterday like  
25 **more of a preface to what we're doing more set up** like ok "we're let's look at  
26 these sentences now let's consider these real quick" yeah cos I switched this even  
27 in my pronunciation class "we're going to learn this before we start talking about  
28 the mechanics let's look at these examples let's consider uh what are we looking  
29 at what's happening here what- what can be changed oh we can change this but  
30 not that" and maybe kind of do some **noticing** of the of what we're getting ready  
31 to talk about instead of just kind of like "let's examine what we have here" so uh I  
32 would definitely do a bit more pre sort of **warm up** stuff

My first comment was an invitation to Rick to evaluate how the activity had gone (line 1 *what did you think about how that went*). Rick's response was to offer a very brief contextualized narrative of that particular lesson (line 3 *we only got done through condition one*). His subsequent comment *this was my first time explaining this stuff* (lines 3-4) focused on lived experience but referred implicitly to his conceptual understanding

of the language form. He then explained how he had changed his approach during the subsequent lesson, which had happened between the observed lesson and the POC (lines 5-7 *we did go back the next day and we went over the whole thing again and you know I switched the approach*) and gave a narrative account of how he and the class dealt with each of the examples in the materials (lines 7-17). It is clear from his comments that in the class, he approached the example sentences as a series of isolated cases rather than thinking conceptually about generalizations about the language form—that is, he did not show control of the overall concepts involved in the use of relative pronouns in restricted and unrestricted relative clauses. He expressed awareness of his own lack of experience (line 12-13 *I didn't have any experience talking about it out loud*) and talked generally about both the grammatical forms and the actual activities. My response was to express a certain empathy and appreciation of the challenge of the linguistic context of the examples focused on in the materials (lines 18-19 *there's a lot of nonsense around it isn't there a lot of vocabulary that's- that's less accessible*) and then to invite him to cognize with regard to how he might exploit the materials in the future (line 23 *what would you do differently*). Here Rick showed that he was able to think conceptually about how to introduce materials, and the need to set students up and prepare them mentally for the tasks (line 25 *more of a preface to what we're doing more set up*). His use of the term *noticing* (line 30) and *warm up* (line 32) suggested that he could also link that classroom awareness with concepts of language teaching and learning theory.

Later in the POC, we turned again to a discussion of Rick's understanding of relative clauses and the use of relative pronouns. My purpose at the time of the POC was to ask Rick to articulate his understanding of language forms in order to help him to

prepare useful and clear explanations for his class. This led me to ask him directly about his understanding of the meaning and use of the three relative pronouns, *who*, *which*, and *that*, as shown in Extract 4.5.8.

Extract 4.5.8

- 1 J: what is- what is the difference here think about ..**what is the difference**  
2 **between *who which and that*** if I had to put you on the spot and say  
3 R: well ***who is for an animate*** (J: mhm) **person object and *that is for either one***  
4 J: so **is there a difference between *who and that*** you know like *Rick is the man*  
5 *that does comedy Rick is the man who does comedy* would there can you kind of  
6 sense a  
7 R: I- I don't know if there's a- **I've never seen something that clearly defines a**  
8 **difference**  
9 J: right but there does seem  
10 R: but it does seem like it I mean even **I guess all of us native speakers even**  
11 **wonder about it sometimes** you know like whaaa

Rick's response to my question (lines 1-2: *what is the difference between who which and that*) showed that he was clear about the category of referent used with *who* and *that* (line 3 *who is for an animate person object and that is for either one*). However, when asked to consider a difference between the use of *who* and *that* on a more conceptual level (line 4 *is there a difference between who and that*), Rick commented on the lack of definition in sources he had read (lines 7-8 *I've never seen something that clearly defines a difference*) and on the fact that even native speakers would wonder at the difference (lines 10-11 *I guess all of us native speakers even wonder about it sometimes*). Rick's comments displayed no movement towards exploring what then nature of the difference might be. This led me in a subsequent turn to explain the conceptual difference to him, so that my aim of eliciting or co-constructing an explanation that he could take into class was not achieved.

Overall, then, Rick tended to focus on contextual and specific instances rather than trying to use conceptual abstractions either to explain or to inform his classroom decisions. However, he did show that he was aware of some very fundamental concepts of language teaching, and could link his classroom practice and analysis to them on occasions. In this POC, his discourse did not show uptake of the conceptual thinking I was trying to model and encourage, either about classroom practice or about language analysis.

### ***Conclusion.***

This analysis of interaction between myself and the teachers presents the ways in which I modeled and prompted thinking in concepts during the mediation. The teachers' discourse showed instances of uptake and of the ability to think conceptually about the issues discussed. In general, Pepa's discourse contained more evidence of conceptual thinking, and of uptake of my modeling. Rick's discourse suggested that he focused more on the moment-by-moment lived experience and relied more on his own intuition to guide his actions and decisions, but that he could link some aspects of his classroom experience to more abstract conceptualizations. Having examined the relationship between the mediational discourse and teacher learning at this micro level, I now turn to a more macro examination of how teachers developed conceptual thinking about language teaching over the course of the semester as a whole.

### **Macro-level analysis of the semester as a whole**

As mentioned in the previous chapter, for this perspective, I took as my starting point for analysis the teachers' discourse in the post-semester interviews. In this report, I begin the discussion with a focus on Pepa's data, and then turn to Rick's.

*Pepa.*

One of the themes that appeared consistently in the POCs with Pepa was that of the need for her to scaffold students' understanding of something rather than her simply telling them. What follows here is first a discussion of how Pepa constructed her conceptualization of scaffolding in the post-semester interview, and then an analysis through a time-ordered display of Pepa's developing control over the concept of scaffolding as evinced in her discourse during the POCs. I next trace the extent to which Pepa internalized the mediational discourse of the POCs by explaining the reappearance of my discourse related to scaffolding in Pepa's language, and also features of my mediational discourse related to scaffolding that did not reappear in Pepa's discourse.

The concept of scaffolding was referred to very early in the post-semester interview when the interviewer, Denise, asked Pepa about what she remembered was discussed in the POCs. Pepa showed her understanding of the concept of scaffolding through an explanation of how she put it into practice in the classroom, as in Extract 4.6.1. In this extract, "she" refers to me, the mediator.

Extract 4.6.1

- 1 P: she brought that up in the meetings a couple of times and then you know finally
- 2 I started doing more **scaffolding** and **not just giving the answer right away**
- 3 **maybe you know giving them time to figure it out first**

At this stage, for Pepa scaffolding involved helping students to figure something out. She referred to this idea later in the interview when she was asked why she thought it was important for her to know that she did not always have the right answer, as in Extract 4.6.2.

Extract 4.6.2

- 1 P: well what it what it means is I- **I don't have to make it easy for the students**
- 2 you know if they don't know the definition of a word or if they don't know what
- 3 something means I don't have to say "this is what it means" **I have to make them**
- 4 **work for it** see "ok I know but I'm not going to tell you I don't know" I'm acting
- 5 like I don't know I don't know everything and then **I'm making them work for**
- 6 **that definition** that's that's what I meant

Here she slightly developed her understanding with the addition of the notion of making students work for a definition or understanding (lines 3-4 *I have to make them work for it*, and lines 5-6 *I'm making them work for that definition*). She gave her rationale for why this was important in language teaching in her following turn in the interview (Extract 4.6.3).

Extract 4.6.3

- 1 P: **because when they work for the answer that's when they actually learn it**
- 2 you know when they get a chance to look for the right answer themselves and
- 3 then **when they actually use that word in context it helps them remember**
- 4 **better** you know what they- when they use that word and what does it mean
- 5 because they used it yesterday in a sentence it's not because I told them oh- you
- 6 know they- **most often than not they are going to say "oh yeah I used that**
- 7 **word yesterday" instead of "oh yeah you said that word yesterday" you**
- 8 **know they're going to be saying "no I used it"** but they probably going to
- 9 remember probably what I said one out of one thousand **so they need to do it**
- 10 **themselves** and that's what I mean by I don't always have the right answers you
- 11 know because I jump into it "I know" and it's like "I know I know the answer!"
- 12 you know like "here it is here it is"

Here, she began with the very generalized assumption that *when they work for the answer that's when they actually learn it* (line 1). However, her subsequent elaboration of this idea did not really show a grasp of the concept of scaffolding. She seemed to limit the idea of learning through scaffolding to the remembering of vocabulary, rather than as a general pedagogical principle (lines 3-4 *when they actually use that word in context it*

*helps them remember better*). Her construction of the supposed mental speech of the students also shows that her conceptualization of how students learn was through recalling their successful use of a word rather than learning because they used the word (lines 6-8 *most often than not they are going to say “oh yeah I used that word yesterday” instead of “oh yeah you said that word yesterday” you know they’re going to be saying “no I used it”*). Her insistence on *I don’t always have the right answers* (line 10) as a rationale for asking questions does not reflect an in-depth understanding of the concept of scaffolding.

However, a little later in the interview, she was able to show through narrative a more focused understanding of the idea of scaffolding students’ understanding. In Extract 4.6.4, she contrasted how she gave students information about the genre of a writing task at the beginning of the semester with how she did it at the end of the semester.

#### Extract 4.6.4

1 P: I didn’t really teach them any writing well I did I actually gave a- one class was  
2 all about how to write summaries and um that was actu- I think that was the first  
3 class that Jane observed [unclear] and **I gave them a handout you know like “ok**  
4 **this is how you write summaries” you know they’re like “ok” they need a**  
5 **little bit more than that** you know so by the time we got to how to write a  
6 synthesis paper .. I didn’t even- I didn’t give them a handout **this time I actually**  
7 **asked them “ok what do you understand for synthesis” you know and I made**  
8 **them tell me “what’s a synthesis how do you think you should write a**  
9 **synthesis what do you talk about in a synthesis”** you know they did not have to  
10 do the research because they already had the readings from the entire semester  
11 they needed to compare two businesses this time around **I asked them “so we**  
12 **already did the research and you already know about the different types of**  
13 **business models and ok what’s a synthesis what do you think a synthesis”**  
14 **and they were telling me you know “oh in a synthesis you are going to**  
15 **compare or you’re going to use synthesis to get the definition of something”**  
16 **you know so I would write it all on the board and then like “ok this is all-**  
17 **these are all good these are all good answers so ok that’s it you already know**  
18 **we know over here what’s a synthesis so this is what I want you to write your**  
19 **four pages” you know instead of you know giving them the handout like “ok**  
20 **do you have any questions no ok moving on”** you know so it was really nice

21 and **the results of the synthesis papers were amazing excellent writing** it seems  
22 like **because they were the ones telling me what they were going to do or how**  
23 **it needed to get done like they understood better** with me making the necessary  
24 adjustments you know like “oh maybe you know that’s not really what it is maybe  
25 more like this”

Here, she described how previously she had “taught” the students to write summaries by simply giving them a handout (lines 3-4 *I gave them a handout you know like “ok this is how you write summaries” you know they’re like “ok”*). She indicated that she realized this was inadequate in the phrase *they need a little bit more than that* (line 5). She then went on, in lines 6-20, to narrate through constructed dialogue, her interaction with students during which she scaffolded their understanding of what is involved in a synthesis paper. She suggested that the quality of students’ papers was higher because she had scaffolded their understanding (lines 21-22 *the results of the synthesis papers were amazing excellent writing*) and that the reason for this was *because they were the ones telling me what they were going to do or how it needed to get done like they understood better* (lines 22-23). Here then, she showed that she was able to put scaffolding into practice, and knew that this would lead to better student learning than by simply telling them, as she had done with the summary handout.

Again, however, when challenged by Denise in the following turn to explain how she felt this helped students, she showed again a lack of conceptual understanding and a confusion with the idea of vocabulary teaching, as in lines 1-2 of Extract 4.6.5 (*the chance to produce to say it themselves so they would be able to use it in context themselves*).



Extract 4.6.5

- 1 P: because they actually have a um a the option **the chance to produce to say it**
- 2 **themselves so they would be able to use it in context themselves** so that's what
- 3 I think helps them learn you know because they make that connection between
- 4 what they said the context and "ok this is the right thing ok so this is I'll keep
- 5 using it then I'll do it again because I did it right" it's like positive reinforcement

Interestingly, in the following turn, she could again provide a contextualized, concrete example, through constructed dialogue of classroom interaction with students, of how to scaffold students' understanding, this time of the purpose of assignments (Extract 4.6.6).

Extract 4.6.6

- 1 P: yeah it's something that Jane suggested me to do over and over again was like
- 2 "ok every time you give them an assignment ask them '**why do you think you**
- 3 **gave that assignment**' you know put themselves in that position ask them like
- 4 '**why do you think I asked you to write a summary why do you think I asked**
- 5 **you to read this article why do you think I asked you to uh you know to do-**
- 6 **to write the answers to the discussion questions at home before you actually**
- 7 **come to class**" you know things like that and they would tell me you know like
- 8 "what do we have to do for tomorrow" you know simple things like that and they
- 9 were like "I don't know" I'm like "think come on what do you have to do for
- 10 tomorrow" and then they would be "oh yeah I have to do this"

Here in lines 2-7, she showed that she could ask appropriate questions to scaffold students' understanding of the purpose of assignments. Perhaps significantly, she constructed this awareness by using constructed dialogue from previous POCs, during which I had indeed modeled such questioning techniques. On at least three previous occasions I had offered questions for students such as *why do you think* or *what do you think* in my modeling of possible classroom discourse (POC 1 *why do you think I couldn't give you an extension; what do you think- why- what's the next stage*; POC 4 *what do you think it means you know ok venture capital; so the first question is "what do you think it means" why do you think you have to write these*).

Pepa showed then that she could think conceptually about the value of scaffolding students' understanding of a range of classroom issues (from the content of the class to the purpose behind assignments) through both a retrospective narrative of her classroom practice as well as through more general and timeless suggestions and modeling of possible classroom questions. However, when asked to articulate her conceptual understanding of why or how this was beneficial to students, she could only refer to vocabulary recall. She seemed to lack a generalized conceptualization of the role of languaging (i.e. getting students to say something in order to mediate their cognition) in learning in general, but she could relate it only in a very contextualized way to language—that is, vocabulary—learning. Interestingly, when pressed by Denise to dig more deeply and articulate why this technique was of benefit to students, she made direct reference to a theory of learning which would explain this (Extract 4.6.7).

Extract 4.6.7

- 1 D: and what is the idea of like what is the benefit of asking them this question
- 2 like why do you think I'm giving this (P: to the benefit to them) what is the
- 3 benefit to them
- 4 P: **because they- they- they see it because they I don't know I said it already**
- 5 [laughter] [unclear] **are we talking about sociocultural theory** because [unclear]

In her response to Denise's question, Pepa showed that she was not able to articulate any coherent rationale (line 4 *they- they- they see it because they I don't know I said it already*). However, she seemed to realize that the answer lay in an abstract theory of learning through her question *are we talking about sociocultural theory* (line 5). Thus, she was aware of the level at which she was being asked to conceptualize, but apart from using the label of the theory, she was not able to apply the theory to explain the pedagogical principle behind scaffolding. This echoes Vygotsky's claim that true

conceptual thinking lies very much beyond just knowing the name of something; only when a concept can be used in connection with and to connect other related concepts, both scientific—gleaned from formal instruction—and everyday—gleaned through lived experience—can a person be said to be thinking conceptually about that issue. Clearly, Pepa’s discourse showed that she could purposefully implement and manipulate a fairly sophisticated teaching technique, but was unable to articulate the rationale for the technique in theoretical terms.

*Reappearance of mediational discourse.*

In order to take a more holistic look at the relationship between the mediational discourse and Pepa’s learning, as evinced in her discourse (research question 2), it is also necessary to identify mediational discourse in the POCs that reappeared in the post-semester interview, and aspects that did not. Appendix 6 presents a time-ordered display of mediational utterances from the POCs which pertained to the idea of scaffolding. There are three main types of mediation that emerged from the utterances represented in Appendix 6 as well as an evolution in the kind of scaffolding that was advocated.

In terms of type of mediation, the first and perhaps most obvious was that of praising instances of scaffolding observed mostly through a narrative of what happened in the classroom. There are several examples of this in the data (the numbers in the following extracts refer to the time-ordered display in Appendix 6):

POC 1:

1. J: I think you asked you know you said to one student “ask him” which was great you was- you began to give definitions and then after a while you said “ask him, if he knows”

POC 3:

1. J: right and and you um you elicit- they gave you a lot of answers you elicited you know “what did they talk about what did they research” and they gave things like “workers management successful merger” they were going all over the place

4. J: there was a lot of explanation from you and you beautifully got the students to explain things to each other too

POC 4:

4. J: and you did some great stuff about that the stakeholder and shareholder you orchestrated that discussion beautifully

15. J: you're asking them "what do you think that's a good question can anybody answer that" I mean you're doing that regularly

POC 5:

4. J: Yuko about sustainability- no subsidize and affiliate again you totally scaffolded "what do you think what does subsidize mean how do you subsidize ok you give help what do you give help with affiliate what's" that's great

The praise featured both specific constructed dialogue of what Pepa said (e.g. POC 1.1; POC 5.4) as well as ideation of what was observed, as in, for example, the notion of "orchestrating a discussion" (POC 4.4).

The data also show how I offered strategies for how to scaffold in the classroom:

POC 1:

2. J: you can get student-student discussion going

POC 3:

2. J: I just get lost in my own explanation so I've now worked out that I stop and I ask for examples

POC 4:

3. J: the next step is "right now how can I scaffold them and how can I help them scaffold each other so that they can produce the answer and know why it's the right answer"

POC 4:

6. J: a student asks me a question I always ask them a question back

7. J: "so what does venture mean what do you think it means" you know "ok venture capital you know what's that talking about is it like London or Riyadh" you know "what does capital mean there money ok venture capital sounds like adventure what might that be"

17. J: I'd be tempted to say "alright you know Ahmed doesn't know what venture capital means any of you guys know" and then you know you could scaffold the whole group instead of just- instead of just Ahmed

POC 5:

4. J: right so you scaffold it basically you don't say "just come up with a bunch of questions" you say "all right let's- a question for this a question for that"

These again ranged from offering specific classroom language through constructed dialogue (e.g. POC 4.7, 17; POC 5.5), to constructing mental speech to show the reasoning involved in scaffolding (POC 4.3) and offering a more generalized approach to scaffolding (e.g. POC 1.1; POC 4.6).

The third type of mediation in the data is that of giving rationales for scaffolding.

Some instances of this were at a very theoretical level. For example in POC 1, I introduced the sociocultural theory notion of "languaging" as part of a rationale:

POC 1.3

3. J: you don't know something until you can articulate it and articulating helps you know something.... sort of use language- they talk about languaging I talk about languaging you know as an activity which is actually- like I'm doing now I haven't got this thought in my head I'm formulating the thought as I'm speaking it's not like thought comes first- language second it's language creates thought

4. J: the more we get students to language to be languaging in the classroom the more they're thinking the more they're engaged the more they're developing their thinking skills and language skills

On other occasions I articulated the less theoretical idea that by only getting students to say things can we find out what they know or what they are thinking. This occurred three times in the data:

POC 2:

2. J: when they say it we know that they're thinking it when we say and explanation we've no idea of what's going on they're hearing

POC 3:

3. J: because we can see what they understand by asking them

7. J: because again when you're talking we have no idea what's going through their heads

Interestingly, in the post-semester interview, Pepa also articulated the same three levels of conceptualization about scaffolding (praise, strategies, and rationales), but with

differences. In Extract 4.5.4 (quoted above) Pepa gave a narrative account, including constructed classroom dialogue, of how she had scaffolded students' understanding of how to write a synthesis paper with the evaluative (praising) purpose of demonstrating how her scaffolding techniques had developed. She also articulated strategies for scaffolding, ranging from the very generalized *giving them time to figure it out* (Extract 4.5.1, line 3) to more contextualized "*what do we have to do for tomorrow*" *you know simple things like that and they were like "I don't know" I'm like "think come on what do you have to do for tomorrow" and then they would be "oh yeah I have to do this"* (Extract 4.5.6, lines 8-10). Other examples of Pepa's evaluation of and strategies for scaffolding are shown in Table 13.

However, when Pepa gave her understanding of the rationale for scaffolding during the post-semester interview, none of the principles or theories that appeared in my mediation were found either in the post-semester interview or in the POCs as a whole. As mentioned above and exemplified in Extracts 4.5.3, 4.5.5, and 4.5.7, her discourse showed a lack of clarity. She did not refer to either the idea of language creating thought (i.e. the theory behind the concept of *linguaging*) or the principle of finding out what students know or are thinking by getting them to talk, both of which appeared more than once in the mediational discourse. Pepa's learning about scaffolding as evinced in her discourse seemed to be limited to contextualized strategies and more generalized principles, but without conceptual thinking at the theoretical and explanatory level.

Another aspect of the mediation on the topic of scaffolding that was found in the mediational discourse during the POCs but that was not found in Pepa's discourse was the developing sophistication of the kind of scaffolding that was advocated. As shown in

Appendix 6, I began by encouraging Pepa simply to elicit more language from students

POC 1.2

J: you can get more student-student interaction going;

*Table 13*

*Pepa's Evaluation of and Strategies for her own Scaffolding*

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Extract

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P: did you notice that **when they asked me the definition I was like “so what does everybody else think do you have that one ok so what does it mean what’s the meaning of this other word” like I didn’t just tell them did you see that I was just like scaffolding** [laughter] “ok so let’s read the sentence you know what’s the beginning of the sentence means what’s the end ok what are we talking about” bing and they got it

P: I’m going to write them on the board write these four terms on the board **and ask them to think if they may just by reading it if they ha- if they’ve ever seen this word before if they have used it before and in what context and maybe come up with their own definitions** and an example definition **I’m not going to tell them right away what it means**

P: **I need to scaffold more** and I need- and **I cannot say “yes” or “no”** all the time I cannot say “yes that’s right no that’s wrong” and I do- I do say it

P: I did find that when I do ask them so yeah “ok you’re asking me but what do you think it is” or “what do you mean” I know **sometimes they actually say key words and I’m like “oh yes there you go I wouldn’t have not-”**

P: yeah and I was- I was **I was scaffolding the whole time and I was containing myself not to say it** and I wanted just to say “this is how it works [laughter] this is how it is” so I let them go and **“you’re contradicting yourselves think about it ok it’s more efficient in the city so why do you think it’s more efficient in the city”** you know they just kept saying “oh well it keeps running” so I think that went well cos finally we figured it out all together

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POC 3.1

J: you um you elicit- they gave you a lot of answers you elicited;

POC 3.6

J: it was nice though it just worked didn’t it she kept saying “mistake intercultural mistake” and you elicited answers.

Later, I began to encourage Pepa to think of how to orchestrate discussions so that students could scaffold each others' learning:

POC 4.3

J: the next step is "right now how can I scaffold them and how can I help them scaffold each other so that they can produce the answer and know why it's the right answer"

POC 4.4

J: and you did some great stuff about that the stakeholder and shareholder you orchestrated that discussion beautifully

POC 4.12

J: if you want this collaborative construction of meaning now either it can be with you or without you so um you know you can orchestrate it like you did so well with some of it

POC 4.13

J: what you're doing is providing space for them to scaffold each other.

Finally, I encouraged Pepa to think conceptually in terms of how a task could scaffold students' learning:

POC 4.14

J: the next stage is to think about constant scaffolding right because what you- what you've done here is produced a task that totally scaffolds

POC 5.1

J: there are lots of great examples of scaffolding of learning there including the design of the task.

As mentioned above, Pepa showed that she was able to think conceptually in terms of how scaffolding helped students learn vocabulary and understand tasks, but she did not evince more nuanced and flexible conceptual thinking about these more sophisticated applications of the concept of scaffolding.

There is therefore evidence in the data of the internalization by Pepa of conceptual thinking about the concept of scaffolding, as well as instances of her using



features of the discourse of mediation in her own discourse. Her internalization was evinced in both her discourse at the conceptual level and in her developing classroom practice. However, Pepa was clearly in the process of developing conceptual thinking about scaffolding in terms of its more nuanced application.

***Rick.***

This section includes an examination of Rick's data in terms of the macro level development of conceptual thinking and its relation to the mediation of the POCs. Whereas with Pepa, identification of both theme and the mediational discourse during the POCs that pertained to that theme proved fairly straightforward, with Rick it was more challenging. The themes that I identified during my readings of Rick's POC data were that of materials exploitation and language analysis. However, although both of these ideas are alluded to in the post-semester interview, Rick's discourse does not show evidence of conceptual thinking with regard to these themes. For example, in Extract 4.7.1 he talked about how his approach to materials had changed over the course of the semester.

Extract 4.7.1

- 1 R: Jane would look at the material and she was better at coming up with things to
- 2 do with that material that I didn't think of **I was just kind of going along with**
- 3 **the materials as they were** but she you know was thinking about what **she mod-**
- 4 **would modify their use to maybe be more effective**

Rick used very vague terms in this extract to describe how he had been using the materials at the beginning of the semester (lines 2-3 *I was just kind of going along with the materials as they were*) and when mentioning how I was able to adapt the use of materials (lines 3-4 *she mod- would modify their use to maybe be more effective*).

Similarly, when the interviewer, Denise, prompted him to be more specific about what he felt the inadequacies of the materials were, he used vague terms, as in Extract 4.7.2.

Extract 4.7.2

1 R: I thought I was also following the ideas about the design but then the materials  
2 would just keep being **confusing** or ... you know they would be **out of synch**  
3 **with the pace of the class** or something we would do these parts and then find  
4 out there was even more later on like of the ex- like there- they- part where like  
5 they'd show you and you were thinking about why is there a difference in these  
6 forms what's the difference and then there was just some you were supposed to  
7 have you know real authentic input from the text itself or the novel which I  
8 question that's- I mean it's authentic but you know but then they give you these  
9 examples in this- I this- in these **warped forms** and stuff and I think it just really  
10 got to be **untrustable** so-

Here he used terms such as *confusing* (line 2), *out of synch with the pace of the class* (line 2-3), *warped forms* (line 9), and *untrustable* (line 10). Later too when describing what he had learned by the end of the semester, his language referred mainly to a very general approach—that is, that he can use, change, or abandon materials as he sees fit, and not to any more specific principles of materials exploitation, as shown in Extract 4.7.3.

Extract 4.7.3

1 R: ok I can look at ma- I should look at materials before and **I don't necessarily**  
2 **have to trust that they were designed like to be the most effective** "ok I can do  
3 that" or **I need to think about how they fit into the grander scheme** they're not  
4 an end in and of themselves they're just a part and **they can be abandoned or**  
5 **altered or changed at any whatever** it's my decision on how to be the most  
6 effective

Rick's discourse on what he had learned in terms of language analysis evinced a similar level of generality that meant that tracing the development of his understanding of that theme too would not shed light on the impact of mediational discourse on his learning.

However, during the post-semester interview, Rick's discourse does show some evidence of conceptual thinking on the topic of how students learn, and this was certainly a topic that we had discussed on occasions during the POCs, and indeed during the pre-semester interview. It is on this theme, therefore, that the analysis was focused. As with Pepa's data, I first describe how Rick constructed his conceptualization of how students learn in the post-semester interview and then present an analysis of the extent to which the mediational discourse of the POCs reappeared in Rick's discourse on the topic during the post-semester interview.

The first idea mentioned by Rick during the post-semester interview related to the idea of how students learn was his agreement with my assertion that students needed to be the ones who "do the work" in the classroom, as shown in Extract 4.7.4.

Extract 4.7.4

- 1 R: and Jane's definitely about keeping the students doing the work as she says
- 2 you know **they should be the ones doing the work** and you should be just
- 3 facilitating and stuff so I try to you know keep that in mind although I'm still not
- 4 satisfied that I do that you know like "am I doing all the talking and they're just
- 5 nodding their head and acting like they're learning or what" so I- that sticks with-
- 6 sticks with me trying to make sure cos I agree you know **if they're working in**
- 7 **their head then they're working it out** if I'm just talking they may understand it
- 8 and then later on they'll I remember we talked about this but still "**uh now that**
- 9 **I'm trying it I'm finding out I don't understand**" so **if they're trying it in**
- 10 **class finding out they don't understand in class that's good** you know not "I
- 11 think I understand" and then go out and then try it and they don't understand so I
- 12 wanted it- I definitely think about that when I'm trying to lead any class and
- 13 that's- it's still a challenge for me

He explained his understanding of why students' doing the work is conducive to learning in lines 6-7: *if they're working in their head then they're working it out*. He elaborated this with the idea that students simply understanding what he, the teacher, said would not guarantee that they could use the language independently (lines 8-9 "*uh now that I'm*

*trying it I'm finding out I don't understand*"), so that students need to be given the opportunity to find out if they understand the language point or not in class (lines 9-10 *if they're trying it in class finding out they don't understand in class that's good*). He went on in his next turn to elaborate on this idea when asked by the interviewer, Denise, to explain what he meant by "doing the work" (Extract 4.7.5).

Extract 4.7.5

1 R: doing the- yeah they're the ones **negotiating meaning or altering and**  
2 **developing an understanding** instead of um- you know **coming up with**  
3 **language rules of their own or something** you know **instead of me saying you**  
4 **know "I tell you when this when to use this tense you use this tense in this**  
5 **situation"** and they nod their head "ok I understand" they can picture the  
6 situation the timing they can see the form you know how it is **you can**  
7 **understand it right but that doesn't mean it becomes part of your cognition**  
8 **or something it doesn't mean that it you know it's usable** so **if they're out**  
9 **there practicing and working with it with each other it will probably get a**  
10 **little bit more woven into their ability to unite the form and the**  
11 **understanding with actual usage** you know what I mean

His explanation of his understanding of this concept contained language that reflected his level of conceptual thinking over this idea. He began with the scientific term *negotiating meaning* (line 1). His next words *altering and developing an understanding* (lines 1-2) and the subsequent elaboration *coming up with language rules of their own* (lines 2-3) take a slightly different focus and together suggest that he did not have the terminology of the scientific concept he was trying to explain. He went on to reiterate the distinction he made in the previous turn between simple understanding and true learning (lines 7-8 *you can understand it right but that doesn't mean it becomes part of your cognition or something it doesn't mean that it you know it's usable*). The result of this student-student interaction for Rick is that the language *will probably get a little bit more woven into their ability to unite the form and the understanding with actual usage* (lines 9-11). His

conceptual thinking at this stage showed he made a clear link between interaction and learning, and also had an understanding of the idea of learning that went beyond simple memorization. However, the level of abstraction was such that it seemed too far removed from lived experience—perhaps too generalized—to have been useful to inform his future classroom practice.

In his next turn, he reflected on his own skill at integrating this understanding into his classroom practice (Extract 4.7.6).

Extract 4.7.6

- 1 R: ... and it's easy to fall into that **I find you know it's easy just to do that and**
- 2 **so I have to um you know that's my- a personal thing with myself** of course I
- 3 have to not just fall into this and **just explaining and them "ok we understand"**
- 4 but you know **keeping it out there for them to work with and use** you know I
- 5 guess

Here he showed his understanding of teaching as not *just explaining and them "ok we understand"* (line 3) but rather as *keeping it out there for them to work with and use* (line 4), but explained that he found this principle difficult to adhere to during his teaching (lines 1-2 *I find you know it's easy just to do that and so I have to um you know that's my- a personal thing with myself*). Clearly then, his conceptual understanding of how students learn through interaction did not remain at the theoretical level; he was able to conceptualize how it might work in practice, but was not always able to regulate his own classroom practice to that ideal. However, later in the same turn, he demonstrated that he had a fairly clear understanding of the kind of student interaction that suggested that learning was happening, as shown in Extract 4.7.7.

Extract 4.7.7

- 1 R: I know that they're learning usually if you hear them talking to each other and
- 2 that's what I like and **they'll tell each other the- "it should be like this it should**
- 3 **be like that" or- and they're like "what" and you can hear them questioning**
- 4 **and challenging each other** and if they really get stuck then they ask you know
- 5 the teacher so um I- I have had some you know feedback like that or like when I
- 6 overhear them talking to each other and I think **"oh ok maybe that is working**
- 7 **maybe they are negotiating and uh and processing and- and that stuff"**

Here he showed that he could both label and exemplify the nature of the interaction that he understood to be conducive to learning. The constructed dialogue "*it should be like this it should be like that*" or- and they're like "*what*" and you can hear them *questioning and challenging each other* (lines 2-4) exemplified the *negotiating and uh and processing* he mentioned later (line 7).

Later in the interview, there were instances of Rick trying to explain these same concepts and articulate his conceptual thinking but struggling with terminology. He defined an effective activity as one *where I know that they're talking and processing in their brains something*. He reiterated his understanding of learning as *you don't really integrate it into your consciousness or whatever cognition until you use it and you challenge it*. Here his *or whatever* reflected his uncertainty as to terminology. The same uncertainty is evident in a subsequent reference to the same concepts: *when you think about something when you have to process it in your brain you're I don't know how you're putting your brain resources to it and instead of just accepting or declining*.

Later in the interview Rick showed again a fairly sophisticated understanding of learning. Extract 4.7.8 shows his response to Denise's suggestion that he saw learning as a result of or equated with thinking.

Extract 4.7.8

- 1 R: I mean I guess it's possible to learn things on a more superficial level you
- 2 never know I mean you can just put data in there maybe nothing gets done with it
- 3 you know trivia something like that but I you know I think the more .... I think
- 4 it's important you know to have things in there but **the more that they get used**
- 5 **the more that they are put into a context the more rich network a person**
- 6 **builds in any topic any subject you know and then of course I think the**
- 7 **ultimate success comes from someone's ability to integrate a large number of**
- 8 **things into something that they can use**

Here Rick contrasts superficial *data* learning with learning that results in understanding and change in practice or behavior. This latter explanation of learning is notably similar to the idea of developing conceptual thinking; there is reference to the understanding of a concept within the web of related concepts (line 4-6 *the more that they get used the more that they are put into a context the more rich network a person builds in any topic any subject*) and to the idea of conceptual thinking informing practice (line 6-8 *the ultimate success comes from someone's ability to integrate a large number of things into something that they can use*). Again, then, Rick's construction of his conceptualization of learning went beyond his knowledge of the scientific terminology.

This absence of terminology to encapsulate and describe how students learn is also evident in the mediation on this topic from the POCs. Appendix 7 presents a time-ordered display of some of the mediation related to the topic of how students learn. There are three main themes in the mediation, not all of which are reflected in Rick's discourse in the post-semester interview. One theme that clearly was picked up by Rick is the benefits of active learning—that is, getting students to “do the work” rather than having the teacher more active than the students. This appeared mainly towards the end of the semester of mediation, in POC 4\_2 and POC 5\_1 in such utterances as *they're doing the work and you're doing the minimum work* (POC 4\_2 1), *getting them to do the work*

(POC 4\_2.2), *get them to do as much work as possible* (POC 5\_1.1). The mediation also gave a rationale for this idea: *at the moment you're doing all the work you're doing the explaining and stuff and they're not engaged* (POC 5\_1.1). Some of Rick's discourse in the post-semester interview clearly echoes the mediational discourse: *Jane's definitely about keeping the students doing the work as she says you know they should be the ones doing the work* (Extract 4.7.4, lines 1-2)

Another theme that was picked up by Rick and formed part of his conceptualization of how students learn is the idea that learning happens during student-student interaction. This occurred in the mediational discourse both at the beginning and the end of the semester: *when we really learn it is when we say it when we explain it when we kind of crystallize that- that idea and articulate it* (POC 1.1); *because the learning happens during the discussion* (POC 5\_1.2). However, an element of the conceptual thinking about how to maximize student learning through their interaction that was brought up both towards the beginning of the mediation and towards the end, but did not reappear in Rick's discourse. Extracts 4.7.9 and 4.7.10 from POC 1 exemplify this.

Extract 4.7.9

(POC 1.1)

J: so if we take that and put that on the students they don't know something and understand something until they can say it right and I'm not just talking about language forms you know that they can say "I have been to Paris six times", but they can say why *have been* is the correct form there because it's time up till now right so that comes back to what I'm- what I'm talking about um here with this idea of they need to be- **they need to have to say something explicitly about grammar before they understand it**



Extract 4.7.10

(POC 1.2)

- 1 J: **it's that articulation of the- of the concept that they need to have** and so
- 2 putting them in groups isn't enough, putting them in groups and making them say
- 3 why you know "why is *had* there why is *was sitting* correct there" right and so
- 4 that talking about- that exa- actually **explaining the grammar to each other is**
- 5 **where they learn** right

The idea expressed in these extracts is that in order for students to be able to learn grammatical concepts from their interactions, they need to be able to explain those grammatical concepts to each other, with the implication that they need to be given the language of the concept in order to accomplish this, as made more explicit in Extract 4.7.11 which occurred in POC 4 during a discussion of how to help students understand the meanings of conditional sentences.

Extract 4.7.11.

- 1 J: for something like this I think concise and consistency you know the idea of
- 2 "*it's fifty-fifty it's quite possible it's real it's impossible it's imagined impossible*"
- 3 I don't know but "*it's much less possible it's an imagination thing*" right and then
- 4 you know **once you get that language out there the students can pick it up** and
- 5 you can check them "ha why have you said that here why did you use the past
- 6 tense there" and the student hopefully will be able to say "because I'm imagining
- 7 it" [...]so it's I think **the idea of when we explain grammar is we give them the**
- 8 **language that they can use to do the reasoning themselves and then we can**
- 9 **ask them to do that reasoning out loud** you know with words like "*imagined*
- 10 *real fifty-fifty past result present result different past*

Here not only did I offer the principle of giving students the means to explain the language to each other (line 4 *once you get that language out there the students can pick it up*) and a rationale for why this is important (lines 7-9 *the idea of when we explain grammar is we give them the language that they can use to do the reasoning themselves and then we can ask them to do that reasoning out loud*), but I also gave explicit and

specific examples of such language to use with conditionals (lines 9-10 *imagined real fifty-fifty past result present result different past*). One reason why this was not reflected in Rick's subsequent discourse may be that as a novice English language teacher he himself was struggling with many of the grammatical concepts that formed part of the syllabus he was asked to teach.

From this analysis, there is less evidence of the uptake of conceptual thinking about how students learn over the course of the semester in Rick's post-semester interview data than in Pepa's, although his understanding of the concept was evident in his discourse. However, there is little evidence that his ideas emerged from the mediation during the POCs.

## **Conclusion**

In this chapter, the results of the analysis of the transcripts in light of the two research questions are presented. In terms of the nature of the mediational discourse (research question 1), it was found that although the features of mediation identified a priori were all present in the data, they did not provide a framework for analysis of the mediation that could highlight or indeed identify those aspects of the mediational discourse that most pertained to the main focus of the study—that is, the relationship between language and cognition. Other features of the mediational discourse emerged during the analysis and were described in this chapter. These features showed more clearly how conceptual thinking can be both promoted (e.g. languaging prompts) and modeled (e.g. through ideation, analytic ideation, terminizing, generalizations, and principles) through mediational discourse. An unanticipated yet related feature of the discourse that the analysis revealed was the use by all participants of constructed

dialogue, which seems to have a role in the development of conceptual thinking through its potential to externalize inner thoughts and open up lived experience for inspection and analysis. Thus the analysis goes some way towards explaining how mediational discourse has the potential to influence cognition, in this case the cognition of the two language teachers.

With regard to the relationship of the mediational discourse to teacher learning (research question 2), the analysis of the interaction during one POC revealed some microgenetic uptake of the modeled conceptual thinking by each teacher and some instances where there was none. In terms of the semester-long macro-level analysis, the data revealed some development in Pepa's conceptual thinking about the idea of scaffolding students' learning, some of which can be linked to the mediational discourse. Rick's data too showed occasional instances where his discourse suggested internalization of the mediation of the POCs, but certainly less than Pepa's.

## **Chapter 5: Discussion**

This chapter contains five main sections: a summary and discussion of the findings with regard to the two research questions, a discussion of the theoretical implications with regard to mediational discourse, a discussion of the contributions of the study to the methodology of studying language and cognition, a presentation of the implications of this study for teacher education activities, and a discussion of directions for further research.

### **Results for the Research Questions**

#### **Research question 1: The nature of mediational discourse.**

The first research question aimed at investigating the nature of mediational discourse: *What is the nature of the mediational discourse between a mentor and language teachers during a series of post-observation conferences?* One of the findings of the analysis of the POC data in light of this question was that the features of mediation identified a priori from the literature (i.e. shared definition of task, intersubjectivity, reasoning made visible through talk, fostering the use of professional discourse, and graduated and contingent help), though all present in the data, did not emerge as the most pertinent aspects of the discourse with regard to the relationship between language and learning. One reason for this may have been that any analysis of interaction based on this taxonomy would focus more on the nature of speech acts and moves rather than on the nature of the language itself, and, as was seen from the results of the analysis, it was an

examination of the actual nature of the language as it represented levels of abstraction and idealization that proved more enlightening within the focus of this study.

One of the features of the language of the mediational discourse—an analysis focused mainly on my speech, because I was acting as mediator—that emerged through the analysis was the invitations to language. Prompting a learner to speak (or write) is a feature of any teaching context, and in this analysis, I was able to show how in the mediational discourse of the POCs, this manifested itself as prompting the teacher to give me information that I did not have (about the students' and class's backgrounds, about the teacher's processes, and about events that occurred in my absence) as well as invitations to think conceptually, in the form of idealizations, analyses, rationales, and evaluations. This echoes clearly the many occasions where the literature on teacher education in general and teacher supervision in particular has advocated the use of questions to promote reflection on practice (e.g. Bartlett, 1990, Crandall, 2000).

Within the theoretical framework of this study, the two types of invitation to language can be seen as both similar and distinct in their purpose. The first clearly had a transactional function—I was enquiring about information that I did not have, but perhaps needed in order to mediate effectively. However, at the same time, these informational prompts encouraged the teacher to idealize his or her experience through language which consequently opened this experience up for inspection (Johnson, 2009). The second was more cognitive in its function; my aim was to encourage the teacher to generalize and abstract out from the lived experience through asking him or her to articulate the various types of idealization. Thus, within both types of languaging prompt,

whether as a purpose or as a consequence, the teacher was encouraged to cognize at various levels.

At this level, the mediation within the POCs took advantage of what Lantolf and Thorne (2006) called the “two sided nature” of signs—that is language. Language is two-sided in that it allows for the “idealization of objective activity in the material world and for the objectification of subjective activity in the mental world” (Lantolf & Thorne, p. 154). Idealizing the material and objectifying the mental world are very much processes within the development of conceptual thinking, and, as was seen in chapter 4, were found to be features of the mediational discourse at every level.

The mediation of the POCs not only encouraged conceptual thinking in the teachers through languaging prompts, but also featured the modeling of conceptual thinking in my language. I categorized the various types of conceptualization of the lived experience as ideation, analytic ideation, terminizing, generalizations, and principles. As seen in chapters 1 and 2, true conceptual thinking about language teaching involves the ability to abstract or idealize out from lived experience (either in the classroom or other contexts) to generalizations and principles which relate in a complex network to other scientific concepts, and are transferable to many contexts. These generalized concepts can then inform or regulate the teacher’s thoughts and behavior in the material world—that is, the language classroom. Thus, the modeling of conceptualization within my discourse during the POCs demonstrated the abstraction out from lived experience to the conceptual level, and reflected the kind of intrapersonal reasoning that an experienced teacher would perform independently. This is indeed reasoning made visible through talk,

a feature identified a priori, but what the analysis from the emergent perspective shed light on was the nature of the talk that evinced that reasoning.

Another feature of the mediational discourse that emerged from the data analysis was that of the prevalence of constructed dialogue. Whereas previously, constructed dialogue had been seen to have a role as an involvement strategy in interpersonal interaction (Seidel Horn, 2010; Tannen, 2007) and in self-presentation (Vásquez & Urzúa, 2009), the analysis of this mediational discourse revealed a possible cognitive role as well. I identified a range of variables within the use by both the teachers and myself of constructed dialogue, noting that both external and mental speech of the various participants in the lived experience, including the students in the classes observed, was constructed for a variety of purposes. Constructed dialogue was seen to be a vehicle for the interplay between lived experience and conceptualization, and between language and thinking. The data showed several instances where for example I formulated a principle, functioning on an abstract conceptual level, and then concretized or *practicalized* it through articulating through constructed dialogue what the teacher might say in the classroom based on that principle. This clearly modeled the kind of conceptual thinking that I was trying to encourage in teachers, and has been suggested as the basis for expertise in teaching (Johnson, 2009). Indeed, the analysis reports on instances where the teachers showed internalization of this modeling through their ability to formulate possible classroom discourse through constructed dialogue, based on a generalization or principle that we had discussed.

The results of this analysis of the POC data in response to the first research question thus provide an in-depth and revealing account of the nature of the mediational

discourse as it pertains to language and cognition. Through this analysis of the type of language within the discourse, the possible cognitive function of the types of language has also emerged, so that these insights not only shed light on the relationship between language and cognition, but also have the potential to impact the way that mediators can use language more purposefully at the various levels of conceptualization in order to promote conceptual thinking in learners. This obviously has relevance within the realm of teacher education, but may also be generalized to any teaching context that involves mediation and interaction.

**Research question 2: The impact of the mediational discourse on teacher learning.**

The analysis of the data that addressed the second research question (*What is the relationship between the mediational discourse of the post-observation conferences and the language teachers' learning, as evinced in changes in the teacher's discourse during the mediation?*) was on two levels, one micro-analysis of a single POC, and one semester-long macro-analysis. The analysis of the individual POC for each teacher attempted to show how far on a moment-by-moment basis the mediational discourse affected the teachers' language. Pepa's data displayed some instances of how my prompts for and modeling of conceptual thinking encouraged her to abstract out from lived experience and generalize in a way that could inform her future practice. On the other hand, in Rick's data, there is very limited evidence of internalization of conceptual thinking in relation to the mediation. In response to an invitation to conceptualize at an abstracted or generalized level, Rick's comments tended to remain at a more context-bound, narrative level. However, that is not to suggest that Rick was not able to think



conceptually about language teaching; indeed, there is strong evidence in his data that he could. Similarly, he consistently showed that he understood my mediation at its conceptual level through his concretization of some of the concepts we discussed.

The macro-level analysis also evinced this difference in internalization of conceptual thinking between the two participants. Rick's conceptualization of how students learn in the post-semester interview showed evidence of both sophisticated conceptual thinking at a very abstract level, but without the terminology that would have helped him articulate his ideas, as well as abstractions that were too vague and generalized to have been useful to inform his future practice. Thus, whereas he showed that he understood conceptually how students learn, the level of abstraction seemed too high for him easily to relate to concrete lived experience of the classroom. The macro-level analysis of Pepa's data, on the other hand, showed evidence both of a development in her conceptual thinking about scaffolding, and her ability to use that conceptual awareness to analyze and inform her classroom practice. Her discourse evinced the interplay between idealizations of practice and concretization of concepts. There was also evidence of specific features of the mediational discourse reappearing in her discourse, such as the terms *task outcome*, *learning objective*, although she did not show complete understanding of the distinct concepts behind the two terms.

It was not within the scope of this study to seek explanations for this difference between the two participants. One influential factor may well have been that Pepa was relatively familiar with the content of what she was teaching as she had taught a similar course the previous semester, and could therefore focus more attention on the methodology. For Rick, on the other hand, not only was the content of the class—

grammar at level four—new for him, but also the use of a novel as the vehicle for grammar input was very unfamiliar. This clearly placed far more demands on his attention. It may well also have been that aspects of my mediation with Rick and Pepa differed in critical ways, or that some element of mediation that would have prompted more evidence of conceptual thinking in Rick’s discourse or enabled him to make firmer connections between his conceptualizations and his classroom practice was missing from my interactions with him. Issues of gender or affect may also have played their part. Similarly, Pepa had just begun a doctoral program, and perhaps approached the whole experience on a more intellectual level. Rick was in his first semester as a full-time teacher at the ELI, teaching three other classes, and was consequently far more pressured in terms of his classroom focus.

Overall, then, the study revealed interesting and potentially useful features of mediational discourse in POCs, which have the potential both to increase our understanding of how verbal mediation interacts with learning, and to inform our conduct of that mediation, as will be discussed below. However, whereas the results show that there is a relationship between that mediational discourse and language teacher learning in that there was evidence in the data of the internalization of both conceptual thinking and of the discourse of the mediation, the nature of that relationship is more difficult to ascertain and may be influenced by factors outside the scope of this study.

### **Theoretical Implications**

In this section, I first present a discussion of some of the implications for the theory of the relationship between language and learning. I then move on to discuss the methodological implications, in terms of insights into the study of this relationship.

### **Conceptualizations and thinking in concepts.**

One of the theoretical contributions made by this investigation is the development of a taxonomy of types of conceptualization found in the mediational discourse of the POCs. Whereas the previous research reviewed focused more on the functional nature of the language of mediation (e.g. Aljaafreh & Lantolf, 1994; Mercer & Littleton, 2007; Ohta, 2000) this study focused on the nature of the language as it related to the cognizing of experience and concepts. Figure 3 presents this taxonomy of conceptualization.

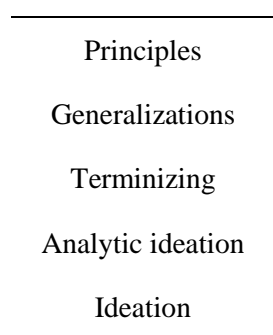


Figure 3 Taxonomy of conceptualization

The vertical presentation of this taxonomy reflects the intuitive idea that there is indeed some kind of hierarchical progression through levels of conceptualization from ideation which serves as the “idealization of objective activity” (Lantolf & Thorne, 2006, p. 154)-- that is, the idealization of lived experience—to generalizations which are relevant across lived experiences and contexts. However, at the level of principles, there is a return of focus to objective activity or lived experience, in that principles are directed towards regulating behavior in lived experience.

There is clearly a function for these levels of conceptualization within conceptual thinking. As has been described, conceptual thinking involves the process of conceptualizing the concrete lived experience in terms of a network of abstract concepts

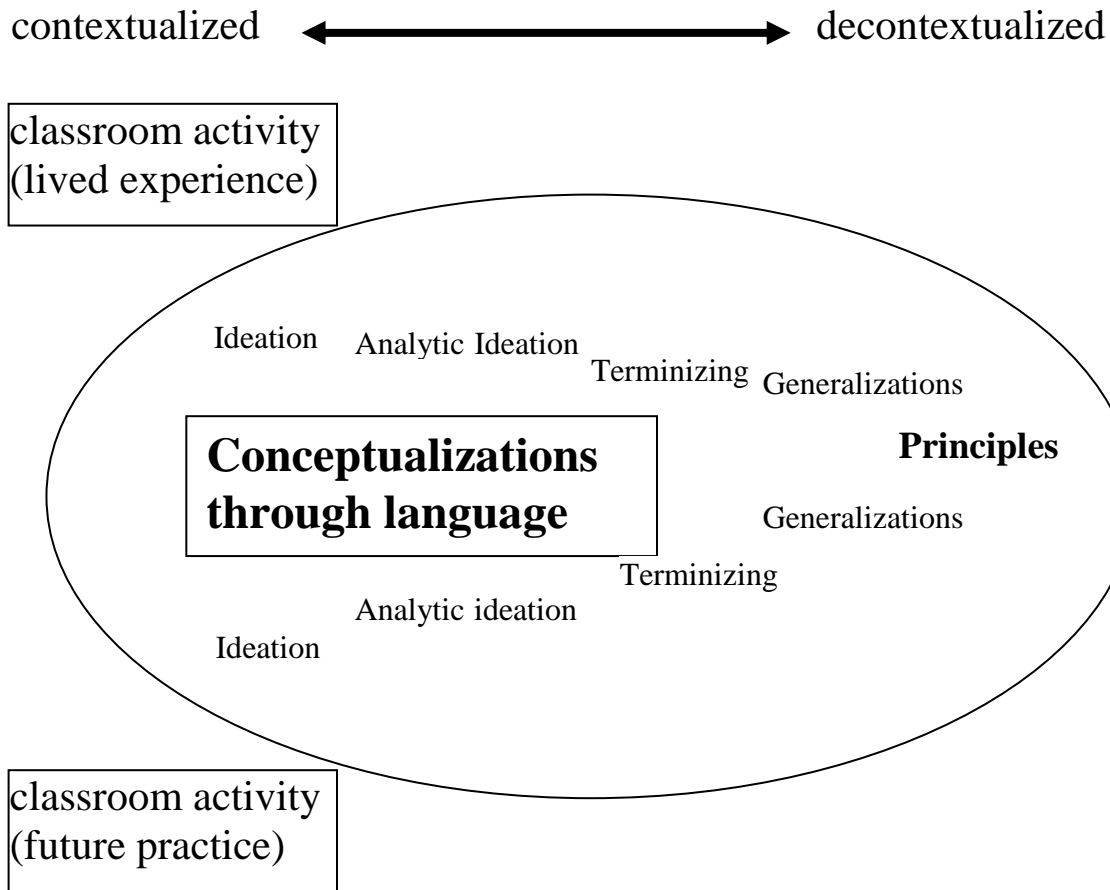


Figure 4 The function of conceptualizations within conceptual thinking

and regulating one’s own and others’ behavior in light of the conceptualization. Thus, in terms of their function within conceptual thinking as reflected in the data analysis of this study, this taxonomy could be represented by a diagram such as Figure 4. Here there is a horizontal continuum which runs from the very contextualized nature of lived experience to the very decontextualized nature of generalizations and principles. Through language, we conceptualize the objective activity that is our lived experience by means of one or more of the different levels of conceptualization found in the data—that is, ideation, analytic ideation, terminizing, generalizations, and principles—and then re-concretize

that conceptualization again to inform, envision, and plan objective activity, this time, future practice. The vertical axis in the model could be said to represent time.

One aspect of conceptual thinking as described in the literature that is missing from the representation in Figure 4 is the idea of the scientific concept, and indeed the idea of “scientific” theory as level of explanatory conceptualization. In fact, the level of theory was mostly absent from the data of this study, and therefore does not form part of the model of conceptual thinking as represented in the data of this study. It is attractive to envision the idea of scientific concepts and theory within the representation in Figure 4 on the more decontextualized side of the conceptualization level of generalizations. However, in the context of this discussion that is problematic. As seen in chapters 1 and 2, Vygotsky and other scholars have made a very clear distinction between everyday, or spontaneous, and scientific concepts, the former arising from lived experience and the latter from formal schooling. If the types of abstraction developed from this study do indeed represent levels of conceptualization, then it should be possible to decide whether these different levels are examples of everyday or scientific concepts. A concept that is ideated from lived experience can easily be seen as an example of an everyday concept, but the distinction between scientific and everyday concepts becomes more blurred through the levels, so that it would be difficult to say whether or not a generalization is an example of a scientific or an everyday concept. Thus, the findings from this study suggest that certainly within the context of this study, there is room for regarding the distinction between everyday and scientific concepts as a continuum more than as a simple dichotomy.

### **Constructed dialogue.**

Another theoretical implication of this study for the understanding of the relationship between language and cognition is the emergence of the use of constructed dialogue as a salient feature of the data. As Tannen (2007) claims, constructed dialogue is very much an act of creation by the constructor rather than simply a reporting of words uttered. This is certainly borne out by the data analysis of this study; not only is retrospective external speech uttered, but also utterances that were never and never would be spoken are also constructed, such as when we constructed the mental speech of students.

As mentioned above, there appears to be a cognitive role for the use of constructed dialogue in mediational discourse. In the data, constructed dialogue was used both retrospectively to facilitate the externalization of lived experience and also prospectively to facilitate the externalization of envisioned future practice. It was also used in a mediational function to facilitate the externalization of reasoning and conceptual thinking, as when I, the mediator, externalized the decision-making rationalization that teachers do, or when the teacher-participants were prompted to externalize their own rationalizations. Constructed dialogue then emerges as a very specific languaging tool that can be seen to facilitate the interplay of the idealization of objective activity and the concretization of mental activity.

### **Professional discourse.**

The final theoretical implication relates to the identification of what constitutes professional discourse. At the outset of the study, and from the review of the literature (especially Freeman, 1991, 1993), I anticipated finding the use of language that was

clearly identifiable as the professional discourse of language teaching. What exactly would constitute the professional discourse of the mediation was not specified at that stage, as I was confident that it would emerge from the data. As reported in chapter 4, it did not. There were instances of vocabulary that related directly to language teaching (e.g. *strategies, scaffold, interaction, adverbial, modals*, etc) but I was unable to identify a type of discourse that merited the term professional discourse.

Interestingly, in other studies that looked at teachers' discourse as indicators of learning, what was deemed professional discourse was the use of specific terms and the ability to explain those terms. Chernobilsky, et al., (2004) specified "professional jargon...as well as the discussion of theories or theorists" (p. 326) and the ability to explain or define terms from the field of educational psychology as indicators. Freeman (1991) did not explicitly define professional discourse but also seemed to use terminology (e.g. "a non-threatening atmosphere...student investment" p. 448) and the ability to explain certain classroom procedures, as in this quotation from one of his participants "the importance of practice and paying attention to individuals and how each person needs to practice maybe differently, having faith in them being able to do a lot. What's the phrase? 'What am I doing that my students could be doing?'" (p. 449). These same features were found in the data of this study.

However, unlike the studies quoted above, this study sought not to identify the outcome of learning, but the process of learning in terms of the internalization of discourse. The data for the study was mediational discourse and displayed a very wide range of moves and speech acts, which are as much characteristic of other discourse contexts, so that it could not essentially be termed the professional discourse of language

teaching. Similarly, though language teaching terminology was present in the discourse, its presence alone was not taken as indicative of learning; as Gredler (2009) points out, words are only cognitive tools “when they function to restructure one’s thinking” (p. 5). Only when the teachers’ discourse reflected the ability to think conceptually about the construct referred to in the term they used were they considered to have mastery over that element of discourse.

The issue of the variability of discourse types between professionals may also render difficult the specification of what is meant by the professional discourse of language teaching. Not all discourse between professionals will display the use of technical, specialist terminology. Because of the amount of shared knowledge between colleagues in any teaching context, the use of vague language may be prevalent whereas more specific terminology would be required if they were talking to an outsider. With the data of this study too, there was a greater use of vague language during the POCs than had been anticipated perhaps because of the shared knowledge the teachers and I had.

However, the findings of this study suggest that the discourse of the two novice teachers was very different, and it is likely that the discourse of experienced teachers would also vary; for example, in terms of the level of generalization within the discourse, one teacher’s discourse may focus on contextualized narratives whereas another might display more conceptual-level language. The issue, therefore, of what exactly constitutes professional remains moot, although it could be argued that perhaps the professional nature of discourse lies more in the levels of conceptualization evident in the discourse rather than in the use of specific professional terminology. In this way, a great deal of the language of the POCs could then be said to constitute professional discourse.



## **Methodological Implications**

One of the methodological implications of this study is to confirm Vygotsky's genetic method of research as a valuable tool for investigating the relationship between language and learning. As mentioned in chapter 3, Vygotsky claimed that human processes can be understood only by considering how and where they occur in growth—that is, to study both the process and the product of development, “for it is only in movement that a body shows what it is” (Vygotsky, 1978, p. 65). In this study, through the examination of the process of mediation, some aspects of the nature of mediational discourse have been revealed, and links between the processes of that mediational discourse and learning have been hypothesized. This also supports the assertion by van der Veer and Valsiner (1994) that “the only way of ever discovering the key to understanding the process of concept formation [or conceptual thinking] is to study the functional use of words and their development” (p. 207). Taking the use of language by the participants as indicative not of the outcomes of learning (cf. Chernobilsky, et al., 2004; Freeman, 1991) but of the process of learning has led to insights into the interaction of language and cognition.

Another methodological implication of this study is the innovative use of level of conceptualization as a unit of analysis of mediational discourse. As mentioned above, most previous research into mediational discourse, especially within the field of SLA, has focused on the functional use of language in generally interactional terms. In this study, the cognitive use of language has been operationalized by level and type of conceptualization, as indicative of the development of conceptual thinking about language teaching—that is, the learning of conceptual content. It may be interesting to

apply the same or a similar unit of analysis to mediational discourse between second language learners, or between second language learners and their teachers—that is, in the context of the learning of linguistic content.

The goal of ensuring the trustworthiness of the results and the conclusions drawn from them was problematic throughout the analysis process, specifically with regard to dependability. Throughout the analysis, I was conscious of what Guba (1981) referred to as “instrumental shifts stemming from developing insights on the part of the investigator-as-instrument” (p. 86). As I identified patterns and drew conclusions at one stage, my growing understanding of the issues involved necessarily influenced how I approached the analysis of data at following stages. This could be regarded as a limitation of the study, in that the recruitment and training of a colleague to confirm my findings through a search for inter-rater reliability would have been difficult if not impossible. On the other hand, it could be regarded as a strength of the study. From the outset, I was an integral part of and player in the data and my insights are therefore unlike those that a researcher with a more etic perspective would make. This, as Gee (2011) points out, is the nature of research that takes discourse as its data: The analysis will be informed by the theories held by the analyst, the goal of the study, and the method of analysis adopted, and as such, discourse is always subject to multiple interpretations.

### **Implications for Language Teacher Education**

One obvious significance of the findings of this study in terms of language teacher education lies in its implications for both the design of teacher education programs, and for the conduct of POCs themselves. The POC offers an ideal occasion for fostering the interaction between the teacher’s lived experience, and the (scientific)

concepts of language teaching, and thus for promoting conceptual thinking about language teaching. However, the POCs as conducted for the purposes of this study lacked one important element in this teacher learning equation – the discussion of scientific concepts. Johnson (2009) claims that

conceptual thinking serves as the basis for expertise in any professional domain.

Teachers demonstrate their expertise by thinking in scientific concepts, not just by holding them; thus the goal of L2 teacher education is to expose teachers to relevant scientific concepts while at the same time assisting them to make everyday concepts explicit and thereby using them as a means of internalizing scientific concepts. (p. 64)

As reported in a previous section, there was evidence of the use of far less “scientific” terminology during the POCs of this study than had been anticipated. This does not mean that the discourse did not refer to or reflect scientific concepts, but very few overt references were made to the theoretical explanations of language learning. This reflected the fact that the POCs were conducted more or less in a theoretical vacuum—that is, there was no explicit connection made during the discussions with any literature or theory of SLA, methodology, and so forth. There were logistical reasons to explain this, such as the fact that I conducted the POCs solely for the purposes of this study, and although Pepa was in her first year of a doctoral program, she was not taking classes that focused on the theory or methodology of language teaching. Rick was no longer in any kind of formal teacher education program. Even if they had been in methodology or SLA content classes, I would not have been party to the input of the classes.

Thus, there was no shared knowledge base between the two teachers and myself of the content of a specific theory-based class. On several occasions during the semester of study, I felt that having some kind of shared theoretical reference points would have facilitated both my mediation and the development of conceptual thinking in the teachers. This is reflected in this journal entry that I wrote towards the beginning of the semester when transcribing Pepa's second POC:

Both our frustrations (hers at my pickiness and mine at my inability to lead her to say oh yes and tell me the issue) stem from the fact that rather than our ability to start from the principles and theory (sc concs) and use them to analyze her practice, we are starting from practice and I am unable at the moment to raise the level of our discussion to the principles and the theories and the scientific concepts of teaching. (Journal entry, Sunday, October 11)

I was reluctant to start teaching the participants some of the theoretical concepts and terms of which I felt the lack, because of my feeling that this would turn our interaction into a one-sided lecture.

The implication of this then is that to be maximally effective in helping teachers develop conceptual thinking, observation cycles, including POCs, should be directly linked to theory- and research-based content classes, whether as part of a formal program or not. This suggests that POCs can be more effective if they are conducted by instructors of content classes, so that the scientific concepts of both SLA theory and methodology can be overtly linked with the teachers' classroom practice—lived experience—during the mediational discourse of the POCs, thus more effectively fostering the development

of conceptual thinking. Thus this study has implications for the design of programs in which observation cycles are featured.

In terms of the conduct of the POCs themselves, the findings of this study suggest that it is beneficial for the mediator actively to seek opportunities for encouraging and for modeling conceptual thinking. The POCs of this study were conducted without any explicit understanding of how language used in mediational discourse reflects and promotes different levels of conceptualization about lived experience. Now that this aspect of mediational discourse has been identified, and its role in fostering teacher learning has been explained, future POCs in which I am involved can be conducted in a more purposeful manner. Just as the POCs encouraged the conceptual thinking about language teaching in the teacher participants, so this study has fostered my own conceptual thinking about the conduct of POCs. There are also implications of these findings for the training of others involved in language teacher education activities, specifically in observation cycles, but also for those who design programs and specific courses.

### **Directions for Further Research**

As perhaps with many studies of human interaction in naturalistic settings, this study has posed as many questions as it has answered, and there are several areas not addressed in this study that would merit further research. With regard to the learning of the two teacher participants, it would have been enlightening to seek to confirm the findings through examination of their classroom practice. Similarly, a follow-up interview could have been conducted during the following semester with questions related directly to the areas of teaching identified as recurring themes with the teachers

during this study to ascertain the extent to which the mediational discourse had been internalized and could regulate their practice.

Another question not addressed directly in this study is the reasons for the differences of learning between Rick and Pepa. Closer examination of the existing data could reveal differences in mediational strategies, and factors related to these differences could be identified. Results of such research could inform the conduct of POCs with regard to less cognitive issues than focused on in this study, such as interpersonal communication, influence of learning style and sociocultural background. Research into POCs conducted within the framework of activity theory would also have the potential to shed very important light on the actions and interactions of the parties involved. Activity theory “attempts to tie together individual development and the social-material conditions of everyday life” (Johnson, 2009, p. 77) and as such could prove an interesting lens through which to observe POCs. As an extension, further research into teacher learning in general could focus on how teacher development activities that set out purposefully to encourage different levels of conceptualizations by teachers impact teacher learning.

The relationship between discourse and expertise in language teaching hinted at in this study is also a potentially useful area of research. The discourse of teachers who have been identified as expert teachers could be examined in light of the levels of conceptualization identified through this study, to explore the idea that expertise is directly related to the ability to thinking conceptually within a professional domain (Johnson, 2009). The levels of conceptualization identified in expert teachers’ discourse could be compared with levels in novice teachers’ discourse. This may shed light on the relationship between years of experience and expertise, and address the issue of why not

all experienced teachers can be called expert teachers. If a direct link between nature of discourse and expertise is established, then there are potential implications in terms of the design of recruitment instruments that can identify expertise through an examination of discourse during the recruitment process.

There are many other areas of teaching and learning where the findings of this study could be taken as a springboard for further investigation. One example is the relationship between teaching conceptual thinking and second language development. Many Intensive English Programs take a concept-based approach to language instruction. If the idea that teaching content involves teaching conceptual thinking is accepted, then the question arises as to how teaching students to think conceptually through the second language fosters development of that second language. If this is more clearly understood, then both curriculum designers and teachers who deliver that curriculum could take a more informed and purposeful approach to their work.

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## **Appendices**

## Appendix 1: Courses offered at the ELI during the Fall 2009 semester

Table 14

### *Courses Offered at the ELI During the Fall 2009 Semester*

Required Core Classes	
<b>Academic Interactions</b>	
<b>Level 1</b>	This course develops basic academic listening and speaking skills through short conversations, discussions, and presentations on social and academic topics.
<b>Level 2</b>	This course develops and improves academic listening and speaking skills through discussions, short discussion excerpts and mini-lectures, written responses, and presentations on academic topics.
<b>Level 3</b>	This course improves academic listening and speaking skills through lectures, discussions, writing, and a presentation on academic topics.
<b>Level 4</b>	This course improves academic listening and speaking skills through lectures, discussions, extended research, and a lecture presentation using a formal lecture format.
<b>Level 5</b>	This course improves academic listening and speaking skills through lectures, discussions, extended research, debates, and a presentation on any one topic from varied academic disciplines.
<b>Academic Preparation</b>	
<b>Level 1</b>	This course helps students at the beginning level develop basic reading, writing, and research skills needed for university study. At this level, the focus is on expanding academic vocabulary; increasing fluency and clarity of writing; using the narrative writing structure; beginning development of paragraph structure; and developing active reading strategies.
<b>Level 2</b>	This course helps students at the advanced beginner level develop basic academic reading, writing, and research skills needed for university study. At this level, the focus is on expanding academic vocabulary; increasing fluency, clarity, and accuracy in writing; using descriptive and compare/contrast organizational formats; beginning development of essay structure; and developing active reading strategies.
<b>Level 3</b>	This course helps students at the intermediate level develop reading, writing, and research skills needed for university study. At this level, the focus is on expanding academic vocabulary; writing accurately at the essay level; using persuasive and argumentative organizational formats; analyzing short-story literature, developing active reading strategies; and using information from multiple sources to support original ideas and opinions.
<b>Level 4</b>	This course helps students at the advanced intermediate level expand their reading, writing and research skills needed for university study. At this level, the focus is on expanding academic vocabulary; writing accurately at the essay level; analyzing a poetry selection; using the problem/solution organizational format; developing active reading strategies; and developing critical reading and critiquing skills through summary, response, and reaction writings.
<b>Level 5</b>	This course offers students at the advanced level focused attention on the reading, writing, and research skills needed for university study. At this level, the focus is on developing active reading strategies and writing accurately at the university-level. Literature-based material will be analyzed and critiqued. The university-level research process is the main component of this course and will help develop students' abilities to

	read, incorporate, cite, and reference a variety of academic resources into their writing. (This course is a requirement for students that want to take the ELI CLEAR exam.)
<b>Grammar</b>	
<b>Level 1</b>	This course focuses on producing basic grammatical forms in oral and written language. Targeted forms at this level include basic knowledge of the use of nouns, simple present, past, past progressive, modifiers and questions.
<b>Level 2</b>	This course focuses on producing grammatical forms in oral and written language. Targeted forms at this level include knowledge of irregular verbs, simple past, past progressive, future tenses, modals, and comparatives.
<b>Level 3</b>	This course focuses on producing grammatical forms in oral and written language. Targeted forms at this level include knowledge of sentence types, perfect and progressive tenses, passive, gerunds and infinitives.
<b>Level 4</b>	This course focuses on producing grammatical forms in oral and written language. Targeted forms at this level include knowledge of complex clauses and modifying phrases, conditionals, and articles.
<b>Level 5</b>	Through the reading of a novel, students will analyze grammar in an authentic context and learn to effectively use it in both writing and speaking situations. Targeted forms at this level include knowledge of complex clauses and modifying phrases, conditionals, and articles.

<b>Elective Courses</b>	
<b>Level 1 (only)</b>	
<b>Conversation Fluency 1</b>	This <u>required</u> course for level 1 will help you develop your speaking and conversation skills.
<b>Building Vocabulary 1</b>	This <u>required</u> course for level 1 will help you to increase your vocabulary in English.
<b>Level 2 (only)</b>	
<b>Communication 2</b>	This <u>required</u> course for level 2 will help you to develop your overall communication abilities.
<b>American Culture 2</b>	Increase your understanding of American culture by reading about various topics from newspaper articles and essays, poems, short stories, charts and graphs. You will discuss issues in American culture as well as your own culture and improve your reading strategies and vocabulary.
<b>Intro to Pronunciation 2</b>	This course is designed to introduce students to basic concepts in pronunciation to include word stress, word endings, rhythm in sentences and intonation. Students will receive feedback on their individual strengths and weaknesses in pronunciation and will apply what they have learned to real life speaking tasks.
<b>Level 3 (only)</b>	
<b>Business English 3</b>	You will learn the principles of effective communication in business, both written and oral. This course focuses on the communication process, including listening, speaking, and writing. As you complete tasks and projects, you will build and develop skills for being strong communicators at work.
<b>Creative Writing 3</b>	In this course, students will explore various genres of creative writing, both fiction and non-fiction, including short stories, poetry, and memoir. Class activities and projects are designed to help students develop their knowledge of figurative language, use of descriptive vocabulary,

	process writing skills, and ability to express ideas creatively.
<b>Idioms &amp; Slang 3</b>	This course focuses on noticing, understanding, and using idioms in everyday life—in daily conversations and lectures, on television, and in newspaper and magazine articles.
<b>Pronunciation &amp; Music 3</b>	This course focuses on improving pronunciation and comprehension of vocabulary, idioms, grammar, and culture through the use of songs in English.
<b>TOEFL iBT Vocabulary 3</b>	This is an intermediate course for the TOEFL iBT exam study. This course focuses on vocabulary learning for the TOEFL iBT exam. Students will learn vocabulary study strategies and practice using words while completing TOEFL iBT tasks.
<b>Level 4 (or higher)</b>	
<b>Academic Vocabulary 4+</b>	This course focuses on learning and practicing vocabulary widely used in academic settings across many disciplines, including business, humanities, and science.
<b>Advanced Business Topics 4+</b>	In this course, students will explore selected business topics through readings, discussions, and written responses. Students will learn business-related vocabulary and development of critical thinking skills by engaging in tasks and projects related to real-world business issues and practices.
<b>Culture thru Movies 4+</b>	This course focuses on learning and improving vocabulary, listening comprehension, writing, and knowledge of American culture through the viewing of different movies on a variety of cultural and social issues.
<b>Current Events 4+</b>	This course examines current events as they are found in newspapers, magazines, Internet, radio, and TV. Students will develop English language skills used in reading, listening, and discussion through class activities that target grammar and the development of writing in various news genres.
<b>GRE Verbal 4+</b>	In this course, students will become familiar with general information about the verbal section of the GRE: test format, commonly asked questions, and registering for the test. Students will also take verbal ability practice tests under time pressure and apply test-taking strategies to vocabulary and reading comprehension questions as well as writing essays.
<b>iBT Reading/Writing 4+</b>	This is an advanced course for the TOEFL iBT internet based exam. The course focuses on becoming familiar with test taking strategies for the independent and integrated writing sections as well as the reading section of the iBT exam.
<b>iBT Speaking/Listening 4+</b>	This is an advanced course for the TOEFL iBT internet based exam. The course focuses on becoming familiar with test taking strategies for the independent and integrated speaking sections as well as the listening section of the iBT exam.
<b>Pronunciation &amp; Drama 4+</b>	Improve your pronunciation, speaking, vocabulary, and idioms through the use of dramatization, improvisation, body language, and acting practice. Classroom projects and activities include singing songs in English; reciting poetry; narrating stories; discussing main ideas and themes found in plays, stories, and poems; and producing an original mini soap opera or drama.
<b>University Experience 4+</b>	This course familiarizes students with the expectations, policies and resources associated with university study in the USA. Students learn

	<p>about the system of higher education in America, how to apply to colleges, and how to utilize strategies for time management, goal setting, studying, and test-taking in order to become a successful college student. (This course is a requirement to be eligible to take the ELI CLEAR exam to obtain a TOEFL waiver at USF.)</p>
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## Appendix 2: Pre-semester interview protocol

### Pre-Semester Interview Protocol

Name/Pseudonym: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

Notes:

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1. Could you tell me about your educational background?
2. Please tell me about your previous teaching experience.
3. How long have you been teaching at the ELI?
4. What levels and classes have you taught here?
5. How do you think you have changed as a teacher since you started teaching?
6. Could you describe to me how you think students learn language?
7. What do you consider to be the most important aspects of classroom teaching?
8. Is there a theory of learning, or language or teaching that you feel best reflects the way you think that language learning happens?
9. What do you know about Vygotsky and sociocultural theory?
10. Tell me about your experiences as a Mentor or Mentee.
11. What are you expecting from this mentoring process? Please tell me about what you expect to gain from it as well as how you think it will take place/evolve.

## Appendix 3: Post-semester interview protocol

### Post-semester interview protocol

*For the whole of these interviews, Denise, I'd like you to probe the participants about what they mean about some of the things they say and the words they use. "You said that ..... Can you explain what you mean by that? What do you understand by .....? What do you think Jane meant when she said.....?"*

*You can begin if you like with something about you and your role – you are interested in some of the areas of my study. You can also say that I wrote the questions but that you and I have discussed them and talked about what the kind of data that I hope to get out of the interviews. I've put "we" in the questions/directions. You can go with "we" "she" or "I", whatever feels natural.*

In the first part of this interview, we would like you to talk about what happened during your involvement with this study.

1. Could you describe how the process evolved over the semester?
  - a. How many observation / post-observation discussions did you have over the semester?
  - b. Did you have any pre-observation conferences? Did that make a difference? How?
  - c. Did being video and audio recorded affect the discussions at all? How about the audio recordings of the lessons?
  - d. How did you find the process in terms of your time?
  - e. (I'd love to ask something like: Did you look forward to the observations and discussions or did you dread them?)
2. Did you notice any changes in your approach or attitude to the observations and discussions?  
(If no answer, prompt with: Did you look forward more or less to them? Did you enjoy them more or less as they continued? Etc.)
3. Did you notice any changes in Jane's approach or attitude?  
(If no answer, prompt with: Did she change at all in the way she asked questions, or how much you talked or she talked?)

In this next section, we'd like you to talk about the content and outcomes of the discussions.

*Again lots of prompts like: Can you explain that? What do you understand by.....? Also, when they say something like "It's better to ...." get them to talk about **why** it's better (i.e. I want them to link the practical with their more theoretical understanding).*

4. What are some of the things you remember discussing during the process?
5. What, if anything, do you feel you have learned about language teaching from the process?  
Maybe prompt with specifics like: materials, classroom tasks, classroom management, lesson preparation.
6. What, if any, other things do you think you have learned?

This is the final part of the interview and here we ask you to be more evaluative of the whole process.

7. If Jane were to do this again, what advice would you give her?
8. Is there anything else you would like to add to what you have already said?  
*Thank them sincerely for giving up yet more of their time, and for allowing me to have you do it.*  
*And thank you, Denise!*

#### Appendix 4: Examples of constructed dialogue analyzed in Figure 2

Box 1: Teacher formulates mental speech of teacher; Description of what happened/s  
P: yeah they started yeah I was so concerned too like **“oh come on come on come on (J: [laughs]) you know what to do do it! (J: right) just do the best that you can”**

Box 2 Teacher constructs external speech of teacher; Description of what happened/s  
R: yeah so I- you know I tried to tell the tell them like **“he had promised to write her at least once week [emphasis and slowness on subject+verb form] you know [unclear] something else is going on yet promised before something else you know he had done that and now his situation’s changing he’s going to this camp now so before that”** you know and trying to talk about that

Box 3  
J: I know and then you dec- you- you they were quiet you said “get out a piece of paper” and the atmosphere of the class changed

Box 4  
R: right and then they just kept asking questions like **“well can’t I just say you know the dog that is barking is brown”** and they’re like **“well can’t I just say the barking dog is brown”**

Box 5  
J: right because it was- the question was like- it set them up to think there was a right answer and then when there was conflict it was like “ok well what’s the right answer” and it’s as- you said “it doesn’t matter what the right answer is”

Box 6  
P: yeah cos when I told him ask Mazime he was like “huh” like **“yeah but you’re there you know why do I have to ask her”** so

Box 7  
when she was leaving she was like “oh I have to do the journal I have to do this I have to do that it’s just too much”

Box 8  
J: they finished so they could start doing the activity the others are like **“oh my god she’s moving on let’s hurry”**

Box 9  
J: wow but their spoken English is phenomenal I mean Nader is phenom- the way he was explaining stuff to that girl was just incredible you know giving gifts and he said **“yeah nothing too flashy”**

Box 10

P: yes I completely went my own way [laughter] remember we were having that discussion **“ok so what are we going to do we don’t know”**

Box 11

J: from my perspective I was looking at it **thinking “god you know they have to think about the content and the (R: mhm) you know and the language maybe this is difficult for them”**

Box 12

R: I’ve got to really look at it I’m like **“oh what am I going to do with this”**

Box 13

J: maybe you can- you can say to them one day **“alright I’m going to take an approach where we’re really going to try and correct everything that you say and then how do you feel about it you know at the end what would you prefer”** because it may be that they- and students do love correction because they- they feel that they’re learning

Box 14

J: right and that’s a great principle also to all things this idea **that “ok I’ve got to set them up to do this activity”** not just plonk them into it **“what am I going to do for two minutes just to set them up or five minutes or however long”** yeah makes like easier too because then you don’t get “ok number one” and there’s dead silence you know

Box 15

J: and at that time you didn’t have any time to you know to deal with it because they were so involved and engaged in the activity but maybe later in another class you know **“ok here are some things that I heard in”**- especially those first five minutes when nobody’s coming in you know **“here are some things I heard”** put them up on an OHP or something or give them a handout

Box 16

J: well it’s hard to explain it’s hard to explain but- and- and you want to know if they understood check their understanding and you do it by saying **“you understand? that make sense?”** right they’re always going to say **“yes”** right so it- it’s not really a check whereas **“all right give me an example of good deportment on a bus”** that’s a real check of understanding asking for examples so

Box 17

P: or doing the reading yeah I was just reading it to myself very fast and I was like yeah **“ok moving on you know foreign and the [unclear] [laughter] ok I have to do this very quickly so I don’t waste any class time”** I should have just go one by one **“ok read that for me”**

Box 18

J: you did you said it was informative right that was that was a good thing but you know (P: but still not an actual) it's still a language class you know **"look what you guys just did in English difficult topic trying to understand each other look at the notes you took you really communicated"** right making it explicit again we talked about that a little bit before

Box 19

R: I wonder about yeah this is only the second unit so far I remember the first [unclear] I was thinking **"well are we really just stuck talking about the book and not really looking at grammar"** and then I think the students might kind of like it too cos they might feel like they're doing something

Box 20

P: yeah and then you know I was- I am very proud of myself when I said you know **"bring a piece of paper and a pen out"**

Box 21

J: my instinct was to say **"oo you know maybe we should give them a topic"** (R: mhm) but I'm obviously trying to control them too much and you know the class and the creativity better and that worked and that's great good

Box 22

J: right and and you um you elicit- they gave you a lot of answers you elicited you know **"what did they talk about what did they research"** and they gave things like workers management successful merger they were going all over the place

Box 23

P: I wasn't too happy about the way they completed the activity you know as soon as I gave them the cards **"ok let's divide and then"** **"what do you mean divide no no no no you're supposed to all read the cards together this is what I envisioned you're supposed to get the cards together and then- and then talk to each other about what does it mean what each word means"** but obviously they wanted to divide the work and then

Box 24

J: it was nice though it just worked didn't it she kept saying "mistake intercultural mistake" and you elicited answers I mean examples um you- you know and you kept- you asked any- students said **"what's the difference between protocol and deportment"** and you said **"anybody?"** great stuff

Box 25

J: and then actually at the end of the class I have the Brazilians, those two student came to me and said **"oh I'm so glad we spent time on this and the words because it make- it really does make it easier for us to read it afterwards and this is an interesting topic and it was really good that we spent time on this on this new vocabulary"**

Box 26

J: they finished yep so they could start doing the activity the others are like **“oh my god she’s moving on let’s hurry up”**

Box 27

J: and when one students says **“what did he say”** a temptation is to repeat what he said but you didn’t you got him to say it again

Box 28

R: so of course you know when I’m planning my vision’s like **“oh they’re going to be able to talk about you know this this is what we’re you know really focus on”**

Box 29

R: um no I mean especially in grammar I’m like “ok [unclear] did they understand that or did they just look blankly at me and do I feel like they made progress on that” (J: yeah) and yesterday when we went over again I felt more like “ok (J: yeah) this made some sense”

Box 30

J: I think that this is hard material to deal with it’s like **“how do I- how do I make this an opportunity for learning”** I’d be tempted- there there you know either spend time on it in class and think about **“how can I get students to understand something more about language and the way like humor works here”** or ignore or give it to them for homework and say **“read all those choose the one that you think is the funniest and tomorrow you can share with your colleagues and tell us why you think it’s funny what makes it funny”**

Box 31

P: you told me to play it by ear you know **“once you’re in the classroom see what you want to do next”**

Box 32

R: yeah so- yeah so maybe in class on Monday or Monday the next class I can say **“well how- well if you want to do an oral one how could you design something yourselves to show what- you know here’s the skills that you have to you know demonstrate so”**

Box 33

J: is there any way you could you know say **“alright these are the assignments that if you sacrifice it won’t affect your grade too much”**

P: I told her what she has to do uh like the assignments that she didn’t do yet but that she has the whole semester to turn them in but I should sit down and say **“you know what if you just do this one and this one and”**

Box 34

R: it does make me- I want to look at them and say **“ok what really is going to happen with this you know in ok no they’ll be able to choose ok yeah”** and in my view I see it a little bit more shallow like **“oh but I could really tweak this around and and go deeper with this than you know I had detected”** so

Box 35

R: it’s not something like a transitory thing and we did and now they’re going to crumple it up and throw it away you know but if they want it for future reference you know and- but I’m a little concerned that even still they won’t that at the end they’ll be like **“oh I didn’t know that we had to keep all that”** so

Box 36

P: yeah so I was thinking about doing that and then ahhee I didn’t I ran a little bit out of time and also (J: yes) I wasn’t feeling I didn’t feel um confident (J: mhm) you know I was like **“ahhh I don’t know if I want to do this”** so I changed my mind

Box 37

P: but I don’t know if you noticed but I was always going back and be like **“oh so what did he say (J: mhm) uh huh so do you agree do you disagree”**

Box 38

J: is there anything else you want to say about the lesson or or about this or about any questions or requests or whatever

P: umm no

J: is that a **“I have something but I don’t want to say it”**

Box 39

J: when you- when you say **“we talk about”** um wha- you know as par- as like a lesson activity you- you do that often you say you know **“we talk about this and we talk about that”** wh- what’s actually happening in the classroom?

Box 40

J: you know that when I’m doing something I’m thinking **“crap if only I’d done it that way (R: uh huh uh huh) you know I’d be better”** is there any way that if you were to do this again what would you do differently



## Appendix 5: Example of materials

### RULE SUMMARY

In Part I on p. 1 and 2, you learned that we can sometimes delete the relative pronoun when the relative pronoun is the **object** of the relative clause as long as the relative clause is \_\_\_\_\_.

Now in Part II you have just learned that we can also delete the relative pronoun when the relative pronoun is the **subject** of the relative clause, but be careful! This is a **different** kind of deletion known as reduced relative or reduced adjective clauses. Make the rule clear below.

*In order to reduce a relative clause in which the relative pronoun is the **subject**, you have to **two** things. You have to \_\_\_\_\_ the relative pronoun and you have to \_\_\_\_\_ the be-verb if there is one, or **change** the verb to the \_\_\_\_\_ form if there is no be-verb.*

Does it matter whether or not the relative clause is restrictive or nonrestrictive when you reduce a relative clause that has a subject relative pronoun? \_\_\_\_\_

Use your rules from Exercise F above to find the errors in the sentences below. Fix the sentences that have mistakes (not all of them are wrong but most of them are).

Elya went to see Madame Zeroni, an old Egyptian woman lived on the edge of town.

Next to it was another sign which declaring that it was a violation to bring guns onto the premises.

X-Ray had his own special shovel, no one was allowed to use.

Two boys, each carrying a shovel, were coming across the compound.

They were crammed in a tiny apartment smelled of burning rubber and foot odor.

The sack lunches which brought by Mr. Pendanski consisted of a baloney sandwich, potato chips, and a large chocolate-chip cookie.

Reduction Practice. Reduce the relative clauses with subject relative pronouns in the sentences below.

He looked at the guard who sat slumped in his seat and wondered if he had fallen asleep. (p. 7)

“I’m worse than a pig thief,” he said. “You should leave me and find someone who isn’t cursed.” (p. 38)

Clyde Livingston, who had once lived at the shelter when he was younger, was going to speak and sign autographs. (p. 24)

Zero scooped out a shovelful of dirt and dumped it on a pile that was already almost a foot tall. (p. 26)

“I prefer to use the names that society will recognize them by when they return to become useful and hard-working members of society.” (p. 18 – 9)

### Participial Phrases

Read the sentence below. Are the words in bold part of a reduced relative/adjective clause? Why or why not? Discuss the sentences with a partner.

“*Barf Bag* slept here,” said X-Ray, **kicking at one of the beds**. (p. 18)

How about these phrases below? Are they reduced relative clauses? Why or why not?

1. Stanley was sitting about ten rows back, **handcuffed to his armrest**. (p. 6)

2. Once Stanley’s father started a project he would work on it for years, **often going days without sleep**. (p. 8)

Why do you think the phrase in bold in sentence 1 above has a past participle, while the phrase in bold in sentence 2 has a present participle?

---

In sentence 1, who was handcuffed to his armrest? \_\_\_\_\_

In sentence 2, who often went days without sleep? \_\_\_\_\_

## Appendix 6: Time ordered display of mediation on scaffolding; Pepa's data

Table 15

### *Time-Ordered Display of Mediation on the Topic of Scaffolding; Pepa's Data*

POC #1	1. J: I think you asked you know you said to one student “ask him” which was great you was- you began to give definitions and then after a while you said “ask him, if he knows”
	2. J: you can get student-student discussion going
	3. J: you don't know something until you can articulate it and articulating helps you l- know something.... sort of use language- they talk about languaging I talk about languaging you know as an activity which is actually- like I'm doing now I haven't got this thought in my head I'm formulating the thought as I'm speaking it's not like thought comes fir- language second it's language creates thought
	4. J: the more we get students to language to be languaging in the classroom the more they're thinking the more they're engaged the more they're developing their thinking skills and language skills
POC #2	1. J: it was really I mean and them teaching each other they got through so much more language and talking and thinking
	2. J: when they say it we know that they're thinking it when we say and explanation we've no idea of what's going on they're hearing
POC #3	1. J: right and and you um you elicit- they gave you a lot of answers you elicited you know “what did they talk about what did they research” and they gave things like “workers management successful merger” they were going all over the place
	2. J: I just get lost in my own explanation so I've now worked out that I stop and I ask for examples
	3. J: because we can see what they understand by asking them
	4. J: there was a lot of explanation from you and you beautifully got the students to explain things to each other too
	5. J: right because we don't know- you know as always you know what I'm- what I say that when we're talking we've no idea what they're understanding but when they're talking we have an idea about what's going on
	6. J: it was nice though it just worked didn't it she kept saying “mistake intercultural mistake” and you elicited answers
	7. J: because again when you're talking we have no idea what's going through their heads
POC #4	1. J: they coconstruct the meaning coconstruct the answers you know with little involvement from you that's the ideal thing I think

2. J: you want stuff to come from them right but um and it did a huge amount did come from them and they did negotiate the answers a lot and it was there was a lot of good stuff
3. J: the next step is “right now how can I scaffold them and how can I help them scaffold each other so that they can produce the answer and know why it’s the right answer”
4. J: and you did some great stuff about that the stakeholder and shareholder you orchestrated that discussion beautifully
5. J: and that- I mean my god when Pietro said you know “a stake- a shareholder’s a stakeholder but the opposite is not true” whoa [laughing] and he wouldn’t have been able to say that five minutes previously but because of the way you orchestrated that discussion he was able to say that great right it was such a good thing you made the others say “did you hear did you hear”
6. J: a student asks me a question I always ask them a question back
7. J: “so what does venture mean what do you think it means” you know “ok venture capital you know what’s that talking about is it like London or Riyadh” you know “what does capital mean there money ok venture capital sounds like adventure what might that be”
8. J: you know scaffolding them all the time you know instead of all or nothing
9. J: you you know don’t know what ‘it’ is what he needs right when he says “what does venture mean” you’ve no idea where he’s coming from so you’ve no idea how much information he needs so the first question is “what do you think it means”
10. J: um in terms of strategies for scaffolding that would be my first strategy “tell me what you know already what do you think it means what do you understand”
11. J: you let them discuss it there you go the meaning came out
12. J: if you want this collaborative construction of meaning now either it can be with you or without you so um you know you can orchestrate it like you did so well with some of it
13. J: and that’s not really scaffolding except what you’re doing is providing space for them to scaffold each other
14. J: the next stage is to think about constant scaffolding right because what you- what you’ve done here is produced a task that totally scaffolds right and it’s now your interaction with them
15. J: you’re asking them “what do you think that’s a good question can anybody answer that” I mean you’re doing that regularly
16. J: I’m making that logic you know that reasoning external so that you can take it and understand in a way me just telling you the right answer doesn’t
17. J: I’d be tempted to say “alright you know Ahmed doesn’t know what venture capital means any of you guys know” and then you know you could scaffold the whole group instead of just- instead of just Ahmed

POC #5	1. J: it- what- you scaffold learning and there are lots of great examples of scaffolding of learning there including the design of the task
	2. J: right now I'm thinking about scaffolding participation [...] it seemed to me it was either "do it you know because I'm telling you to" or "have you finished" right or nothing and I wonder if there's a- again in what way can one encourage participation make them want to participate
	3. J: even though it may have taken longer than- than it might have but it's so much more powerful for them than you telling them
	4. J: Yusko about sustainability- no subsidize and affiliate again you totally scaffolded "what do you think what does subsidize mean how do you subsidize ok you give help what do you give help with affiliate what's" that great
	5. J: right so you scaffold it basically you don't say "just come up with a bunch of questions" you say "all right let's- a question for this a question for that"
	6. J: inputting language scaffolding you know you're not giving them questions but you're making them have to process this in order to be able to do that

## Appendix 7: time ordered display of mediation on how students learn; Rick's data

Table 16

### *Time-Ordered Display of Mediation on the Topic of How Students Learn; Rick's Data*

Pre-sem int
<p>R: uh I guess basically I- I think they need .. good .. modelling and a lot of practice (J: mhm) you know a lot of challenge, keeping them going so they're thinking and using the language and not getting stuck you know in a rut or some kind of routine where they're getting by (J: ok) so so you know..the input, the modeling, the you know.. or the target and then trying to get them to do it [unclear] going</p> <p>J: right ok and what would you consider to be the most important aspect of classroom teaching? so that's that's- what we talked about is what students need as learners, what do you need to be doing as a teacher?</p> <p>R: well, I'm always concerned about making sure that whatever we're working on is...the whole class- I'm trying to think of the class in a way that I'm keeping them awake and paying attention and active (J: mhm) so that the activities have some sort of you know are arranged in a way so they don't get bored or you know it involves the different sense, seeing things, listening to things, and then speaking, and talking to each other the groupwork , so you know I'm trying to you know make I guess each class into like a program so it flows in a way that I- you know will keep them alert (J: right) I guess, and uh I- also I've come to appreciate including some- some games and some down time, uh some things that don't seem like class work but (J: but actually are) but which keep them- keep them going yeah, so I'm- I'm starting to incorporate a lot more and ah just some fun things you know at least (J: yeah) every week or you know maybe at the end of every class if possible</p>
POC #1
<p>J: wh- what yo- I was transcribing your- um the interview we had this morning and one of the things you said on that was you want to be ab- thinking about um why um how the way we do something in the classroom (R: mhm) fits in with the way that students learn right (R: mhm) and not do it just because, right and I'm hearing you saying I did it just because . right just because I wanted variety I wanted a change.. OK</p> <p>R: well I mean that's not I mean ... the- the I wanted to- I guess as far as like we were working on this one- the same we're switching the same we were talking about their homework or whatever and then you know of course I always want to use the group work so that they can talk to each other and (J: yeah why why is that better than than) do that the negotiation of meaning and that stuff and uh and I think it did work out (J: mhm) but- but also.. for the- for the purpose of kind of reenergizing their brain you know as well so um... instead of just continuing on doing it the way we were doing it so and they also did this as- as a group (J: yeah) and- and so yeah I definitely think that- that- for that homework assignment and maybe even in grammar class in general it's better when they- they really probably benefit from working together because they ask each other questions and they get each other thinking about (J: right) the same things</p> <p>J: right and .. how does that fit in with how they learn, you know thinking about- because as a teacher right and as a native speaker and as a linguist maybe you've got more um.. clarity in your ideas and certainly more knowledge in your ideas about language (R: mhm) right so a non-teacher would think you know you lecturing them (J: right) for an hour and a quarter about language surely that's going to give them more than them struggling themselves to find out stuff, right, it doesn't though does it (R: no no it doesn't) why</p> <p>R: well it's like you say a teacher doesn't learn until they start teaching (J: right and and) because that's when they get the challenge</p>

J: right but what is it about te- what do we have to do when we teach .. right that helps us learn  
R: well I think that's where I'm going, is we get- we think we know stuff and then someone challenges what we know and we have to think and we have to come up with ways of explaining (J: right right) or new new frameworks and paradigms and everything (J: yes and new ways of thinking) so we' we're making new connections (J: right) in a teacher I guess so when they're working together they're challenging each other it's the same thing for them  
J: that's exactly it, but I think that the – that the stage that maybe is the crucial stage where you know when we're teaching something that this is when we really learn it is when we say it, when we explain it (R: uh huh) when we kind of crystallize (R: right) that- that idea and articulate it (R: right) ok so if we take that and put that on the students they don't know something and understand something until they can say it (R: right) right and I'm not just talking about language forms you know that they can say "I have been to Paris six times", but they can say why (R: why) have been is the correct form there because it's time up till now (R: mhm) right so that comes back to what I'm- what I'm talking about um here with this idea of they need to be- they need to have to say something explicitly about grammar before they understand it .. (R: mhm..ok) right and in order to get them to say explicit things about grammar we need know and be able to lead them to say- we need to know what those explicit things are therefore we [laughing] need to know the words (R: right ok) that- that- ok? so when you- you know your instincts as a teacher are so great you know that they work better in groups and it's better for them, you know that- that mm enjoyment and that affective filter thing is crucial you know and- and you- you're very aware of what's going on in the classroom and- and that's great I've always said that that's the you know the stuff you can't teach someone (R: [laughs]) you're instinctive there- and I think your- it's not a coincidence that you work as a comedian as well which is all about language and timing and sensitivity to what's happening with the people in front of you, you have all that (R: uh huh) right? what- what I think is ..is- is if you like the next stage is this idea of ok ..students talking and having fun . is great but it's that articulation of the- of the . concept (R: uh huh) that they need to have and so putting them in groups isn't enough, putting them in groups and making them say why you know "why is had there why is was sitting correct there" (R: mhm) right and so that talking about- that exa- actually . explaining the grammar to each other is where they learn (R: right) right and having said that maybe you know you can think about alright "why- when I want to be in groups what do I want them to be saying to each other and why" right so that when you're setting up this as a group activity you say to them "alright what you want to do is decide is it A B or C or D or E and then at the end I'm going to ask you to tell me why" (R: ok) right "so how do you know that that's C how do you know that that's D" (right) and honestly because they've been language learners perhaps longer than you've been a language teacher they might come up (R: [laughs]) with really good explanations, I learned so mu- you know when students explain stuff, I have used that for the whole of my career because they have a way of seeing things (R: uh huh) that we don't .. you know (R: ok yeah wow) it's worth thinking about,

POC #2

R: so we did the discussion which I think was going pretty well actually the topics here are good about finding a mate or a partner or getting married and beauty I think the groups were really talking about and if I remember correctly they- it was kind of hard to stop them (J: mhm yep) I think that was good h.. I hated to knock it off [laughter] and bring it to a close you know try not to go too long with it which is easy to do (J: yeah yeah) especially when we when we're starting out the unit here we have the discussion about the book itself and then not too much about grammar so  
J: do- what do you think the students get out of doing an activity like this ..because it's you know it's not related directly either to the you know more understanding of the content or- or to the language (R: mhm) so I mean obviously it's seen as an important part of the whole sequence of activities (R: uh huh) from your point of view what do you think is like a learning objective or whatever to

R: yeah I mean it's a little bit hard to say I mean other than the fact that they get the all-important discussion time so you know which you know I've been led to believe has magical effect so I go with it you know (J: [laughs]) does it- does this discussion help them with the grammar of the like what we're talking about adjective clauses and participial phrases [hhh] (J: yeah) I don't really think it does anything for that but and it doesn't help them necessarily with past tense which is what we've discussed but I mean clearly the-

J: right but I mean it's interesting isn't it that um.. you- I mean I don't have an answer like you I instinctively feel if they're talking to each other about complex subjects and they're feeling positive about the whole thing but you know they can do that in the bar or in the- or in Subway (R: mhm) so I wonder I yeah that's something to think about is there any way of tweaking this or making some kind of outcome that um feeds into or reinforces or preempts or whatever the grammar that links somehow to the grammar

R: ... yeah... (J: interesting I don't know the answer to that) cos it seems the way the class is set up and I do wonder about it you know and whoever and I guess this was set up by people from (Hawaii I think) University of Hawaii so you know I- I like it but it definitely does have a two- the two parts that you're kind of juggling the reading (J: mhm and the content) and then yeah and the grammar itself so it- but at least the last unit you know we talked about the reading for a couple of days (J: mhm) and then it was you know for the- cos each unit is two weeks (J: yep) so it ends up being a lot more grammar than just content they're talking about the bo- the novel (J: yeah right) I mean so I'm- I was- I wonder about yeah this is only the second unit so far I remember the first [unclear] I was thinking "well are we really just stuck talking about the book and not really looking at grammar" and then I think the students might kind of like it too cos they might feel like they're doing something

POC 4\_1

J: yeah do you I mean to me working with this stuff must take a huge amount of preparation time (R: yeah I've got too many other things) because if you do walk in with it (R: uh huh uh huh) you know trusting it ([laughs]) you're going to get right you're going to get clobbered absolutely clobbered

R: {I've got to really look at it I'm like "oh what am I going to do with this" (J: mhm) you know kind of use it just as a starting point for discussion and then I find that I've kind of like I just end up doing a lot of talking so so I've been kind of worried about that I'm like "oh I'm doing a lot of talking" and I take this and I start talking and then you know you write illustrations and you're writing on the board (J: and you've no idea what's [laughs] going on in their heads) and they're just sitting out there so yeah that's lately what I've been thinking about so like well I don't know I need to ... I need to take a step back and reanalyze what I'm doing here

J: that's a wonderful creative explanation (R: uh huh) right but it could go well go (R: yeah go over there) over students' heads you know (R: uh huh) and you have that wonderful entertaining way that you talk and this breadth of thought some- and that's great (R: [laughs]) and don't quash that because that adds so much to the students' experience of the classroom but for something like this I think concise (R: uh huh) and consistency you know the idea of it's fifty fifty it's quite possible it's real it's impossible it's imagined (R: uh huh) impossible I don't know but it's much less possible it's an imagination thing (R: mhm mhm) right and then you know once you get that language out there the students can pick it up and you can check them "ha why have you said that here why did you use the past tense there" and the student hopefully will be able to say "because I'm imagining it" and isn't sort of clouded by the cosmic forces (R: [laughs]) do you know what I mean don't lose that cosmic forces thing because it's fun but there's a place for it and there's a place (R: mhm) where it shouldn't be .. right (R: right) so it's I think the idea of when we explain grammar is we give them the language that they can use to do the reasoning themselves (R: mhm) and then we can ask them to do that reasoning out loud you know with words like imagined real fifty fifty (R: mhm) past result present result different past ..... and I think you'll find yourself doing a lot less talking if you give them the language to do the talking themselves [R is writing



now]
POC 4_2
<p>J: do you think um you know this kind of challenge might engage them or do- I mean I'm thinking classroom management issues often stem from them (R: not [unclear]) yeah being frustrated in some way whether it's too difficult or too easy or something you know maybe the Holes they obviously haven't gelled with the whole Holes thing so it's- you know think about- another you know layer to think about but think about how to if you know when you're planning what to do today to set it up so that they're getting challenged and on task as much as possible (R: mhm) and if you like they're doing the work and you're doing the minimum work because you know it's less exhausting (R: right yeah) but um</p> <p>R: yeah those guys I don't know cos I [gave?] out a thing they didn't even look at it they were looking at- they were talking about Hennessy or something (J: yeah) and blah blah blah so I was like look at- at least look at it you know what I mean and (J: yeah) so they're</p> <p>J: yeah if the task- with a task like just have a look through this they- they they it's kind of a vague task (R: mhm) if- something like I mean students really respond to gap fills in my experience (R: right) and so- and maybe you could think about how to show them what they don't know that they need to listen to you too (R: mhm) so getting them to do the work and showing them that they're learning something I think might help who knows</p>
POC #5_1
<p>R: I mean I could just go down and say this is the answer</p> <p>J: why are you doing the work</p> <p>R: yeah yeah I was just saying that's what I could do to make it go quicker [laughs]</p> <p>J: no no but then you're telling them the answer right so the ones that get it wrong don't know (R: mhm mhm) one possibility is- I mean I think the idea is to get them to do as much work as possible "compare with the person next to you" (R: ok) you know "have you all got the same answer" and then just one two three four five six seven eight on the board number one in you know whole class ask for number two and then if there's any disagreement "why why" and you get them to explain to each other "what does that mean what does that mean do you agree duh duh duh" so they're doing all the work cos at the moment you're doing all the work you're doing the explaining and stuff and they're not engaged because most of them already know it (R: mhm) you know they got the answer right but you did a lot of stuff I mean the- you did often get them to explain stuff which was- you know instead of explaining yourself (R: yeah) which is- and they do once they start discussing the answer they ask questions they ask each other you know</p>
<p>J: well who- who you know the people who need the help where can they get the help from</p> <p>R: the people who know</p> <p>J: right which isn't you (R: right [laughs]) so group work is going to do that (R: uh huh) and the people that don't know like Jung- Jung Yueng (R: Jung Yeung yeah) she got the first one wrong you know and if she'd had an opportunity to talk with the other people around her who'd probably got it right (R: mhm) and the same with Jaysun you know everybody else knew it was <i>care for</i> and not <i>care on</i> or whatever he said you know so if- if- once they've done it on their own "all right compare with the people next to you make sure you have the same make sure you agree" and then at the end "any questions" bom bom bom very quickly the eight answers on the board because the learning happens during the discussion if they get it wrong if they know it already they don't need to learn it but if they get it wrong it's during the discussion "well why is it like that what does that mean what's the difference" that's when the learning happens yeah (R: yeah) and they're much more likely to learn in a little one to one interaction with a peer than from us (R: right) giving big explanations</p> <p>R: right I agree with that ... it's yeah ok ok I could have- cos I was thinking oh if they work together then they did that but then you know I was still surprised like "oh well didn't you talk to" you know</p>

J: yes well yeah I mean obviously (R: [laughs]) one can't forecast but ..yeah so but I- you know if we want to talk on Wednesday we can talk about this- think about tomorrow tomorrow's lesson when you're planning it think about "how can I get them to do the work" (J: right) right and- and is that room empty Sung (Sung: no) and think about you know setting up activities a little (snaps fingers) a little bit more "ok first you do this then you do that" (R: right) to make sure they actually do compare answers (R: uh huh ok) but I think a lot of it is you're right it is the holiday um (R: [laughs]) and stuff but ok thank you (R: thank you Jane) and I'll see you Wednesday morning