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"I DON'T BELIEVE THE WORLD IS TILTED": EMOTION, STRUGGLE, AND RELATIONSHIP IN MAKING MEANING WITH TEXTS

A Dissertation Submitted in Partial Fulfillment of the Requirements of the Degree of Doctor of Education

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College of Education and Behavioral Sciences School of Teacher Education Educational Studies

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This Dissertation by: Alison Faye Oddie

Entitled: "I Don't Believe the World is Tilted": Emotion, Struggle, and Relationship in Making Meaning with Texts

has been approved as meeting the requirement for the Degree of Doctor of Education in the College of Education and Behavioral Sciences in the School of Teacher Education, Program of Educational Studies.

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ABSTRACT

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The purpose of this study was to understand how the social and cultural practices of classroom literacy instruction afforded students opportunities to make meaning with texts. Research was conducted from a sociocultural perspective that focused on students as participants in social learning, in a context of interactive relations. This study was responsive to contemporary developments of the sociocultural tradition, recognizing the importance of emotion and other subjective means for constructing understanding.

Two classes of a turnaround school, 18 Second-Grade students and 20 Third-Grade students, were observed as they participated in Interactive Read Aloud and Guided Reading over a period of nine weeks. In both classes 50% of the students were English Language Learners. All instruction was in English and was delivered in hyflex format. Classroom discourse was analyzed using sociocultural concepts, followed by microanalysis that showed communication purposes and patterns of interaction. Students were found to draw upon multiple resources in making meaning: personal subjective experience, emotion, and interactions with peers and teachers in the social context. The findings show the importance of bringing all students into the shared process of making meaning and offer a new perspective on "failing" students as active makers of meaning.

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CHAPTER I

A SOCIOCULTURAL APPROACH TO ACHIEVEMENT

Each fall a familiar problem in education is brought to our attention: achievement gaps persist, and literacy and math scores are flat. The failure of certain groups is declared unacceptable and renewed commitments are made to fix the problem. School and district level administration teams dig deep into achievement data, critically consider curricular materials, pedagogy, and scheduling, and make important changes: every classroom will have a rich classroom library, support for English Language Learners will switch from writing to math, new math interventions will be implemented. While it makes sense to look at all these things, we have failed to pay sufficient attention to students' subjective experiences of school.

With our "data driven" approach to student learning, we know a lot about a student's performance on the discrete "components of reading" such as phonological awareness. We know much less about his/her daily experience of literacy instruction. Yet as González Rey (2014a) put it, the qualitative side of human experience is inherent to any human reality. Our human subjectivity is not peripheral or secondary to some more primary reality, it is a vital part of our lived experience. How do we begin to see students as whole, complex persons? Research suggests that we might begin by paying attention to these findings: cognition is not divorced from emotion (Damasio, 2003; Hargreaves, 1998; Meyer & Turner, 2002; Vygotsky, 1986), relationships are critical to learning (Bingham, 2004; Sidorkin, 1999), and learner identity develops in a community of practice which depends upon language for psychological development (Bartlett, 2005; Halliday, 2007; Johnston et al., 2001). While students' subjective

experience is important for its own sake, research shines a spotlight on its significance in learning. It is something that needs to be included in creative responses to "school failure."

This study shifts the focus from student achievement to students' experience. Following Zittoun (2008) I see students as persons who "need to confer sense on what happens to them" (p. 167) or in my abbreviated term, need to "make meaning." The Introduction presents an overview of the study and state its purpose and significance.

Needing a Theory

The situation of this school, La Montaña, mirrored a larger issue: the educational failure, in terms of overall average achievement, of students who are of lower socioeconomic status (SES) or belong to a non-dominant cultural group. The organizing framework for schooling remains the idea of equal opportunity and within this framework the underachievement of any one group is unacceptable. The "explanation" that emerges, when we look for causes solely in standardized testing results, locates the cause of underachievement in individuals or cultural deficit (Burman, 2008) and overlooks both the child's experiences of schooling and the social context in which learning takes place (Fleer & González Rey, 2017). The deficit discourse is built on a narrow methodological approach that ignores more holistic approaches to child development, including how children "subjectively configure and reconfigure" the ongoing affective, social and material experiences of learning in school (Fleer & González Rey, 2017, p. 165).

Some hold that underachievement is the result of an underlying problem yet to be properly defined (Burman, 2008). Attempts at amelioration flounder when there is no theoretical basis for selecting one course of action rather than another. At La Montaña, Teach for America, International Baccalaureate, Orton Gillingham followed one upon another, but in the absence of an accurately identified problem, incoherence prevailed. The writer Beverly Gage critiqued the process of "Reform" in terms of inadequate prior analysis:

"Reform" these days may purport to fix things, but it tends to evade the hard work of defining either a problem or a situation. It posits a self-evident consensus about failure and what might be preferable, where none exists. (Gage, 2018, p. 9)
The school where this research was conducted had extensive experience of attempts to "fix things." Enrichment programs, an International Baccalaureate curriculum, and a Boys' Town

discipline model were all implemented at one time or another. A Psychological Wellness Team was formed, and the school day was extended. None of the attempts at amelioration led to improved academic results and the school is now in its second year of turnaround status.

Bartolome (1994) criticized reform that construes the problem of underachievement in mechanistic terms disconnected from the sociocultural reality that shapes academic underachievement. Bartolome wrote that the single-minded determination to find the "right" instructional methods is a mistake. What is needed, on this view, is a shift in perspective from a "myopic" focus on methodology to the broad societal context of academic underachievement:

The real question is why in our society, subordinated students do not generally succeed in schools. I argue that a necessary first step is reevaluating the failure ... a shift in perspective from a narrow and mechanistic view of instruction to one that is broader in scope and takes into consideration the sociohistorical and political dimensions of education. (Bartolome, 1994, p. 176)

As well, methods have to go hand in hand with a humanizing pedagogy that creates a certain kind of learning context where students' background knowledge, culture, and life experiences are valued (Lopez et al., 2019).

Before we can value students, however, we need to be able to see them as individuals. Gutierrez and Orellana (2006) argue that the data driven approach prevents us doing that. Data could potentially be a useful tool, but Gutierrez and Orellana argue there is an unwillingness to delve deep enough to uncover the individual student. Not only that, there exists an uncritical readiness to accept generalized group portraits that are often flawed, incomplete, or onedimensional.

I embarked on my research mindful of the danger of obscuring individual students in group accounts that do not reveal the complex realities of students' experience. As I have stated, my purpose was to seek a better understanding of students' experiences in the classroom, in the belief that these experiences have been overlooked in earlier attempts to explain underachievement (Hedegaard, 2009). To do this I used a sociocultural framework, believing that it opens the possibility to seeing students not as statistics but in their full complexity. In the following section I explain why this framework is appropriate.

The Sociocultural Framework

The sociocultural perspective that human development is best understood in the light of the cultural practices and circumstances of communities has informed educational research Maybin and Moss various domains: anthropological (Street, 2004, 2013), sociological (Bernstein, 1971, 1975, 1990; Sadovnik, 1995), linguistic (Halliday, 2007; Heath, 1983) and sitebased classroom research (Nuthall, 2012; Purcell-Gates, 1995). A fundamental principle of the sociocultural perspective is that the realization of our mental powers is achieved through participation in culture (Bruner, 1990, p. 12).

From the sociocultural perspective the classroom is neither a neutral setting nor a mere backdrop to the multiple interactions between teachers and students. On the contrary, the pedagogy that delivers content also shapes consciousness (Christie, 1999; Heath, 1983; Johnston et al., 2001). The social and cultural structures of the classroom, whether actual material tools or the invisible affordances of sanctioned discourses, increase some students' opportunities to make meaning, while reducing others' (Bernstein, 1971, 1973, 1990; Holland & Leander, 2004; Wertsch, 1990). Knowing that the effects of social and cultural practices vary in predictable ways calls for research that closely observes the life of classrooms (Nuthall, 1996, 2012). What should we closely observe?

In Chapter 4 of *Educational Psychology* (1926/1997) Vygotsky provided what must be one of the most succinct descriptions of the educational process. In its brevity it is formulaic (a fact that Vygotsky acknowledged), yet it gives a starting place for observations of classroom life by simply connecting three elements, the student's experience, the classroom environment and the teacher's role: "Education is realized through the student's own experience, which is wholly determined by the environment, and the role of the teacher then reduces to directing and guiding the environment" (Vygotsky, 1926/1997, p. 50). Vygotsky did not mean teaching was of little account, as the immediate context and the larger body of his work makes clear. In the passage immediately preceding he contrasted direct and indirect forms of teaching, warning that "trying to produce immediate effects in the student" is a sure means of showing how powerless the teacher is while the same teacher is "all-powerful" when it comes to producing direct effects "through the social environment" (Vygotsky, 1926/1997, p. 49).

A lecture that was originally given to medical students, entitled *The problem of the environment*, makes quite clear what Vygotsky (1994) intended by "experience wholly determined by the environment" (p. 338). It is very far from a deterministic account. According to Vygotsky we cannot know the effect of environment on a child's development until we know the relation between the child and his environment. The fact that the classroom environment has "certain qualities or features" does not allow us to assume that those qualities or features will amount to conditions of development; their mere presence does not ensure the development of the child (Vygotsky, 1994, p. 338). The material classroom environment may look inviting or austere, the social environment may be more or less formal; these things are in themselves of little consequence. Their effect on the child is entirely dependent upon the emotional experience generated in the child "by any situation or aspect of his environment" (Vygotsky, 1994, p. 339). This emotional experience or *perezhivanie* can be likened to meta-experience, or the experience of one's experiences (Smagorinsky, 2011). Like meta-experience, perezhivanie is a resource for turning socially and culturally situated activity into meaningful texts (Smagorinsky, 2011). The concept of perezhivanie represents a new turn in sociocultural theory, a turn away from the concepts of reflection, internalization, and social determinism towards refraction and individualization.

Neither the concept of perezhivanie nor the different orientation to development it entails are what teachers commonly associate with Vygotsky. Hearing "Vygotsky" many teachers will think of the *zone of proximal development* or perhaps the social genesis of mind. The reasons why this is so are quite complex; here only a short explanation is appropriate. González Rey (2011, 2014b) has made a convincing argument that the usual representation of Vygotsky's thought as social genesis of mind, internalization, and mediation is based on an attenuated version of Vygotsky's work; his complete opus is much larger in scope and more differentiated. González Rey attributes the reduction to a combination of historical factors, political repression and some academic intrigue. In his view, restricting Vygotsky's legacy solely to his middle period accounting of human psychological development is to accept what is itself a social construction of his research, one that ignores early and late ideas concerning subjectivity and the generative, creative possibilities of human mind.

However, it is Vygotsky's work from the middle period that is best known and that has provided the foundation for a sociocultural account of human development, one that has continued to generate important research (Nuthall, 2012; Smagorinsky, 2013). Vygotsky's account is a genetic explanation of human psychological development structured around two claims. First that all individual (intra psychological) higher mental processes begin as social (inter psychological) processes; second that mediation is the mechanism for interiorization of such processes (Wertsch, 1985, 1990).

It is notable that contemporary research in the Vygotskian tradition places increased emphasis on the importance of relationships and emotions in inter psychological processes. Bartholo et al. (2010) have described the teaching-learning process as a relation between teacher and student "in which they live different interactive possibilities, in a process of continuous inter-subjective creation of meanings" (p. 867). Fleer and González Rey (2017) wrote that it is the "emotional richness of (their) communication" that makes the adult a relevant force in the child's development (p. 148). An emphasis on the intersubjective is a prominent feature of research conducted by Barbalet (2006), Bartolome (1994), Herreid et al. (2014), White and Gradovski (2018) and other scholars included in the Literature Review.

As well, contemporary research such as that of Bingham (2004) has suggested that the concept of the teacher as mediator of knowledge is incomplete. Mediation that successfully brings about psychological development happens through the teacher-student relationship, when sufficient trust is established for the student to authorize the teacher as someone deserving a spot in the student's scheme of things.

Essentially such orientations to the personal and the subjective are in accord with Vygotsky's belief that the basis of pedagogical work is nothing other than students' personal experience. As he expressed it in *Educational Psychology*, "Strictly speaking, and from the scientific point of view, there is no other way of teaching" (Vygotsky, 1926/1997, p. 47).

Individual experience is precisely what has been overlooked in data driven accounts of student success or failure. As Gee (2008) correctly observed, the field of psychometrics has dominated the field of education testing (and I would add, thereby teaching and learning) for two decades, resulting in an increasingly narrow view of students. We have all but ceased to wonder about the nature and quality of their experience in school as we have focused myopically on the "gap" filling it with money and technology, covering it in standards and pedagogy, and creating new ways to measure it (Johnson, 2018). A change in perspective is long overdue. Like Johnson, teacher and social activist, I wondered how the narrative would change if I shifted my focus to the students who are experiencing the gap.

Purpose of the Study

The purpose of this qualitative study was to understand how the social and cultural practices of classroom literacy instruction afforded students opportunities to make meaning with texts, drawing on multiple resources: personal subjective experience, the texts themselves, emotion, and interactions with peers in the social context.

Significance

This research increases understanding of the ways participation in classroom literacy activities supports the development of individuals in community. The sociocultural frame redirected the focus from individual, solitary achievement to the social context, revealing what students were able to do together and what they were learning to do in joint activity. This shift is in itself significant. This study reminds readers in an era of excessive standardized testing that the claims of sociocultural theory are neither banal nor trivial. Vygotsky did not argue that a student "did better" when working alongside others, but rather that it was in the context of joint activity that one could get a true sense of what the individual student was capable of (Bingham, 2004).

Spoken interactions were a significant focus of this study. I approached classroom talk from a Vygotskian perspective on language that sees the path from meaning or emergent sense (*smysl*) to articulated speech (*znachenie*) as far from straightforward. Unlike many studies which approach student language from a deficit perspective, this study may allow us to see student talk in new ways. Language was not something students wielded as a fully formed tool, but was rather a tool in the making, developing in the very process of attempting to transform smysl into znachenie. Empirical observations of the process of making meaning in the social context and the data derived from these observations present a significant challenge to current assumptions about developing student language through methods such as prescriptive sentence strips and the use of interventions directed at vocabulary, morphology, and syntax in isolation from meaningful context.

This study is firmly within the sociocultural tradition and at the same time is responsive to significant contemporary developments of that tradition which reconceptualize concepts of environment and mediation. The social context is more than just the immediate environment of the classroom; the social context is also the lived experience of students, the "overlapping histories" that students bring with them to the classroom (Moje & Lewis, 2007; Smagorinsky & O'Donnell-Allen, 2000). Mediation is enacted through teacher student relationships (Bartholo et al., 2010; Fleer & González Rey, 2017; Stengel, 2004). It is the "emotional richness of

communication" (Fleer & González Rey, 2017, p. 148) which makes the teacher a relevant force in the student's development.

A final difference between this study and many earlier sociocultural studies is the inclusion of emotion and other subjective means for constructing understanding within the social context. Learning is shown to be both a cognitive and emotional process. In the vernacular, students learned in the social context by putting hearts together as well as heads.

Problem statement

Education moves increasingly towards narrow profiles of students based on standardized test results. Normed tests tell us something about learners as single, disconnected individuals but they discount the possibility that ability itself may depend on the relational context where such ability is measured (Bingham, 2004). A sociocultural framework that focuses on students' learning experiences in their classroom, joined with an ethnographic methodology that makes visible the processes used to make meaning, repositions "failing" students as developing students capable of success.

Extended Version of Problem Statement

A data driven approach to learning not only leads to an incomplete statistical view of students that prevents us seeing students as competent makers of meaning. The designations "non-proficient" or "partially proficient" also have instructional consequences in the form of interventions that focus exclusively on individual functioning. In literacy for example, "non-proficient" students spend hours working in solitary fashion on a computer program that fractures reading into disconnected components: comprehension distinct from vocabulary, phonics and phonemic awareness plucked from meaningful context.

Both standardized testing and the interventions that are its consequences are based on a conception of individuals functioning and developing in a cultural vacuum. A sociocultural perspective, on the other hand, conceptualizes learning as an essentially social process in which collaboration and peripheral participation are essential to the development of the individual. Vygotsky's concept of the zone of proximal development allows for a reinterpretation of "non-proficient" or "partially proficient" students by uncovering what is within their reach in collaboration with a more capable partner. In this way it focuses on student potential, and by revealing abilities that are in the process of forming, guides instruction. In this study I look for the ways the social and cultural practices of classroom literacy instruction support students in making sense of their experiences with texts.

Statement of Purpose

The purpose of this qualitative study was to understand how the social and cultural practices of classroom literacy instruction afforded students opportunities to make meaning with texts, drawing on multiple resources: personal subjective experience, the texts themselves, emotion, and interactions with peers in the social context.

Research Questions

The overarching question guiding this research was: What is the nature and quality of the experience of school among children identified as in "the gap" (Johnson, 2018) as revealed through ethnographic inquiry into literacy instruction? The three research questions were the following:

Q1 What opportunities to make meaning are afforded by the social and cultural practices of Interactive Read Aloud and Guided Reading in a Second-Grade and a Third-Grade classroom?

- Q2 What opportunities are available in the interaction of those literacy events for students to use language as a tool to generate, explore and challenge ideas?
- Q3 What evidence is there that emotional and other subjective resources, including lived experience are valued as relevant to making social meanings and personal sense in the literacy event?

Overview of Methodology

The methodology of this qualitative study combined sociocultural literacy research methods and interactional ethnography. I selectively used Spradley's (1980) ethnographic methods as I further explain in Chapter III.

Like earlier sociocultural studies which have examined elementary school literacy practices (Del Rio & Alvarez, 2002; Moll & Greenberg, 1990; Moll & Whitmore, 1993), this study used methods consistent with sociocultural principles. The focused observation of whole class and small group interactions reflected the belief that social relations are essential for learning, that opportunities for individual development are found within joint activity, and that it is in the social context of learning that we can truly take the measure of an individual's ability (Bingham, 2004).

Interactional ethnography, grounded in principles derived from anthropology and sociology (Bloome, 2012), was the second strand of my methodology. Three core principles guide my approach to research.

The first principle is that culture is essentially semiotic and human behavior is "symbolic action" (Geertz, 1973, p. 10). An ethnographic researcher tries to discover the meaning of an action, artifact, or occasion for an individual. The second principle is that culture comes into existence in the interactions of members of a group. The ethnographic researcher tries to see and make visible for others culture being created in interactions. The third principle is that the nature of culture is dynamic. Meanings constructed between people can be reconstructed by an

individual as she participates in occasions and performs actions (Blumer, 1969, as cited in Spradley, 1979, p. 6). An ethnographic researcher identifies occasions where an individual remakes the meanings she first took onboard as a member of a group.

Using an interactional ethnographic perspective, I sought to discover the kinds of literacy that students learned to value. Was it, for example, literacy as a sort of race, the goal being to reach higher and higher reading levels? How did the classroom interactions contribute to constructing this as valuable? Or did students learn through their interactions that literacy can help them make sense of their world? If so, how did classroom interactions contribute to establishing this as valuable?

To organize my work in the field I selectively used the methods Spradley (1979, 1980) lays out. From the copious field notes taken during observations, I formed cultural categories, or domains, using "semantic relations" as Spradley (1980) suggests (pp. 73, 100, 128). I used the domains to understand the differences in the literacy practices of the two classes. The strands of the methodology are discussed in detail in Chapter Three.

Brief Overview of Research Setting

Because of the Covid pandemic of 2020 and 2021 which necessitated a move to online and later hyflex instruction, this research could not be conducted in physical classrooms. The research, of necessity, focused on the literacy practices of Interactive Read Aloud and Guided Reading delivered as hyflex (hybrid flexible) instruction to two classes, one Second Grade and one Third Grade of a public elementary school. The school, La Montaña, is in a small town in the western United States. 72% of the school's population (approximately 400 students) are Hispanic and 35% are English language learners. All instruction is in English. The school is an anomaly in a high achieving school district and in the period I conducted research it was in the second year of turnaround status. It was the sole school in the district to be in this position.

The school has received a high level of support from the district for almost two decades. It is materially well endowed and staffed by well qualified teachers who choose to teach there. It has also seen an unusually high turnover of administrators: eight in the last 18 years.

Role of the Researcher

Throughout the research project I was an online participant observer, "attending" via computer, Guided Reading (small group) and Interactive Read Aloud (whole class) literacy lessons, delivered in hyflex format to Second- and Third-grade students. I conducted research using a sociocultural framework and observed student interactions with their teacher and with other students, since it is in the social interactions of the classroom that we see what students are capable of (Vygotsky, 1978, 1981). I scribbled pencil field notes during lessons, and audio recorded classroom interactions. Field notes added significant detail to the audio recordings, giving a more complete picture of interaction.

I participated to the extent that the classroom teachers invited me to do so. I occasionally worked with a small group or a single student. I read to a group of students several times when the teacher was testing and unavailable to teach. On a few occasions, when there was an odd number of students, I partnered with a Third-Grade student for partner talk.

In the role of the ethnographic researcher, I tried to put aside what I knew, as a seasoned teacher, about Interactive Read Aloud and Guided Reading and to see with fresh eyes what was happening. In field notes I jotted down as many details as I could, even if I could not see the importance they might have. In the role of the ethnographic researcher, I learned to let questions

arise from the social situation of the study (Spradley, 1980). Questions prompted me to reread academic articles and books with new curiosity. In my role as a sociocultural researcher who incorporated an ethnographic perspective, I assumed the roles of observer, recorder, analyst, questioner, and finally writer.

Researcher Assumptions

Working within a sociocultural framework, I assumed that learning is social and that students' interactions with peers were important for their development. As Bruner (1990) put it: "It is our participation 'in' culture and the realization of our mental powers 'through' culture that we become what we are" (p. 12). I held that reading is not an autonomous skill but always situated and responsive to context (Street, 1984). I considered reading to be always social, for even the solitary reader engages with the ideas of someone else. I assumed that humans have creative and generative capacities for making meaning. In addition to the external cultural resources available, they are also able to draw on subjective resources of emotion and lived experience.

I assumed that language is more than a means of communication. Language has power to shape our way of thinking and the language of pedagogy has power to shape consciousness by providing the theories children will use to interpret their environment (Halliday, 2003; Van der Veer, 1996). I believed that observation of students interacting in literacy instruction would lead to a new perspective on "failing" students as active makers of meaning.

CHAPTER II

LITERATURE REVIEW

Rationale

Understanding the everyday literacy learning experience of students is essential to any effort to improve teaching and learning. Excellent books have been written about what literacy could look like in an imagined classroom, and countless research studies undertaken to identify barriers to learning (Grant & Wong, 2003; Hattie & Timperley, 2007; Rose & Martin, 2012). I have found fewer empirical studies that describe what actually happens in classrooms by focusing on students' experience. This study focused on two classes, one Second Grade and one Third Grade, receiving hyflex instruction.

In this study I used two theoretical lenses, one more familiar than the other. The first sociocultural lens views learning as culturally, historically, and socially situated. It shifts the focus from the individual as solitary learner to individual as participant in social learning, in a context of interactive relations (Nuthall, 1996). I also used a newer lens, whose creation can be attributed to González Rey (2009, 2014a, 2014b). Gonzalez Rey has restored to sociocultural theory emotion, imagination, and subjectivity, important concepts in Vygotsky's theory that were suppressed through political motives (during the Soviet era) and remained obscured in the West through historical error. This newer lens focuses on the individual, the nature of her affective relationship to the social environment, (Bozhovich, 2009, p. 66) and her ways of making sense of her social experience through her perezhivanie. The two lenses together permitted a more

complete understanding of the individual student, who is situated culturally, historically, and socially in a context which in itself does not define the conditions of development (Vygotsky, 1994).

Using both lenses I hoped to "grasp the child's perspective" (Hedegaard, 2009) and gain a more complete understanding of how students made meaning in collaborative social practices. A more complete understanding of what students do as they construct meaning might reposition "struggling" students as developing students who actively made sense of texts and of their lives.

Thesis Statement

A better understanding of what students experience when participating in literacy instruction will lead to a new perspective on "failing" students as active makers of meaning, supported in their development by the relational context of community but also able to draw on subjective resources of emotion, personal life course and perezhivanie.

Purpose of the Review

The purpose of the Literature Review was to present research that increases understanding of students as whole, complex persons, who are agentive, who are shaped by and shape the learning environment, and use external and psychological tools to make sense of their experience. The Literature Review provides the background of scholarship necessary for responding to the central question with comprehensive understanding of students learning within the social context. The scope of the Literature is wide ranging, including sociological, psychological and linguistic perspectives on learning. Humans are complex, classrooms are complex and multilayered and a simplified version of either cannot contribute much to the research inquiry: "Without a holistic conception of research that takes into account the psychological and affective dimensions ... the aim of understanding learning in educational settings can never be fully reached" (Fleer & González Rey, 2017, p. 149).

Organization of the Literature Review

All the literature reviewed addresses in some form the question: How do students make meaning during literacy instruction? Because sociocultural theory provides the theoretical frame for this study, I begin the literature review with a discussion of a sociocultural theory of learning. Next, I discuss González Rey's amplified theory as a more complete representation of Vygotsky's thought. Beginning in this way clarifies the two lenses used in the study. The remainder of the literature review is organized in four sections: Literacy as a social practice: sociological perspectives; Classroom literacy structures and meaning making; The zone of proximal development: making meaning with more capable others; Emotion in meaning making.

A final clarification should be made. The Literature Review does not include research on the topics of imagination or dialogue. There are a few passing references to the term "dialogue" as used by Aukerman (2013), Fecho (2013), and Graves (1990). The simple explanation is that I did not anticipate that imagination and dialogue would emerge as important concepts. Both are addressed in Chapter V.

A Sociocultural Theory of Learning

From a sociocultural perspective, living together in society is the foundation for all mental and psychological development (Moll, 2000). Logically then, if we want to study the ways humans develop problem solving and meaning making skills, the place to start is the sociocultural context (Daniels et al., 2007). The cultural practices of communities are central to a sociocultural theory of human development and to this inquiry. It is through our participation in culture that we realize our higher mental powers (Bruner, 1990); to construct a human

psychology "on the basis of the individual alone" is, therefore, impossible (p. 12). Rogoff (2003) claims that development can only be understood in light of the cultural practices and circumstances of communities.

At first glance this view of individual /social relations seems obvious: a child is born into a culture and formed by it. Yet the question of how the social becomes the individual remains open, as Bruner (1966) pointed out: "It is not plain how a psychological theory of development deals with this fact" (p. 6). Vygotsky posited that participation was followed by internalization, defined as "a process involved in the transformation of social phenomena into psychological phenomena" (Wertsch, 1985, p. 63). Vygotsky's account (as translated by the editors of *Mind in society*) of the social origin or genesis of mind (hence 'genetic') is quite well known:

Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an inter-psychological category, and then within the child as an intrapsychological category ... Social relations or relations among people genetically underlie all higher functions and their relationships. (Cole et al., 1978, p. 57)

As if foreseeing that "external" might be interpreted too literally, Vygotsky (1981) added: When we speak of a process, "external" means "social" (p. 162). As Wertsch (1985) further explained, internalization is not a matter of the external going inwards, a simple transfer of interpsychological processes to an interior "shelf." Rather, participation in "mature cultural forms of behavior" creates the internal plane (Vygotsky, 1981, p. 151).

Two additional points are important. First, participation in the social is not just the context but the source of development. Therefore, in Vygotsky's view, the fully developed "ideal forms" of whatever we wish the child to learn should be prominent in the environment (Van der

Veer & Valsiner, 1991, p. 317). Without ideal forms, such as fully developed adult speech, to guide the child's experiences, development will suffer. Secondly, in Vygotsky's understanding of the social, what we do with the support of others is a more reliable indicator of understanding and ability than what we can do alone (Vygotsky, 1978). It is important to emphasize that Vygotsky does not say we can do more with the support of others; that would be true but trivially so. Rather, Vygotsky's view is that social-external learning, or learning with others, might be where the individual student develops most. It is exactly what Del Rio and Alvarez (2002) found in their research with elementary students, prompting them to advocate that in general, teachers rethink the end goal of any teaching/learning activity regarding which activities should remain culturally distributed and shared, which should remain social-external, and which few should be totally internalized by students.

In this era of high stakes testing which prioritizes individual, independent achievement, the extent to which Vygotsky's insight informs educational practice is an open question. Aukerman et al. (2017) note that although there has been increased attention to the sociocultural dimensions of meaning making "over the past few decades" (p. 485) often social, communal practice has merely instrumental value as a stage on the path to individual mastery. Aukerman et al. (2017) believe collaborative social practices such as dialogue are "under-recognized" and regrettably so, for such practices are not merely the context but the source of understanding (p. 484). Aukerman et al. (2017) strongly advocate reading praxis that "takes seriously" the social aspects of students' textual meaning making and call for research that "seeks to understand how such meaning making occurs" (p. 486).

In this study I explored how the social and cultural practices of two classes, one Second Grade and one Third Grade, afforded students opportunities to make meaning from texts. Within the sociocultural literature two well-established theoretical models of learning suggested approaches to this overarching question. The social systems of development model imagines individuals continuously being recruited as "apprentices" to maintain a system which first shapes them and graduates them when they have been "transformed" from novice to proficient participant (Wells, 2000, p. 56). Proficiency is of course defined according to the different constructions of each system. (In schools, instructional programs for below grade level readers, such as Leveled Literacy Intervention or Orton Gillingham or Wilson Reading could be seen as examples of social systems of development.)

A different model, based on collaboration and peripheral participation, was more apposite to my research. In the collaborative model (Wells & Claxton, 2002) interaction is a matter of give and take among participants; people work with people (not systems) always allowing for individual differences. Individuals contribute to the collaborative venture and benefit from the different expertise of others. The experience of working together leads to development:

In the course of working together towards shared goals and of finding solutions to problems encountered in the process, participants contribute differentially from their existing expertise and take over and transform for their own use the skills, values and dispositions that they find effective in the contributions of others. (p. 7)

In this model, learning may be defined quite straightforwardly as the series of changes in participation over time:

Learning no longer seems so mysterious. It is simply a way of referring to the transformation that continually takes place in an individual's identity and ways of participating through his or her engagement in particular instances of social activities with others. (p. 50)

Two classic studies in the literature illustrate well both the give and take and the change in identity the collaborative model posits. Chang-Wells and Wells' (1993) study was one of the few I found that includes ample data of instructional conversation during collaborative learning. It portrays both the possibilities and difficulties of joint activity, reveals the powerful role that affect plays and supports the conclusion that instructional conversation must go beyond "the academic and the intellectual" (Chang-Wells & Wells, 1993, p. 85). Moll and Whitmore's (1993) account of their research in a third-grade classroom vividly illustrated (with student artifacts) how the sociocultural conditions of a whole language, bilingual classroom were "inseparable" from the learning and development that took place. Both these papers confirmed Del Rio and Alvarez' (2002) conclusion that during elementary years an "adequate educational model" should emphasize social-external activities and individual-external learning (p. 70).

The research that encouraged my undertaking this study adheres to the collaborative model described above. I refer now to three research studies which informed my study. All the authors share a focus on language in learning and suggest paths for future research.

In a naturalistic study of emergent bilingual Second Graders, Aukerman et al. (2017) described Second Graders' emergent, responsive work in dialogue around text. The term "intercomprehending" refers to students using their peers as resources "to help them communicate their ideas and make sense of their worlds" (Aukerman et al., 2017, pp. 489, 483). Specifically, students constructed textual understandings by building on each other's ideas and "positioning their (own) ideas" in relation to their peers' (Aukerman et al., 2017, p. 484). Noting that deficit perspectives continue to dominate research in English Language Learner research, the authors call for research to attend instead to what students are doing. López -Robertson (2012) like Aukerman et al. (2017) was interested in the resources students call on to support their meaning-making. Her study focuses on four Latina Second Graders in a small reading group. Concerned that the emphasis currently placed on text-based analysis often makes reading instruction a barren affair "devoid of opportunities to draw on home knowledge" López -Robertson (2012) used bilingual Spanish/English books as a springboard for discussion, posed only open questions, and created space for students to bring their lived experience to the discussion. Making "safe places and support for the kind of talk that mattered to them" the author found that students told stories about their lives to fulfill specific purposes: to make sense of their own and others' life experiences, to connect with texts, and to connect to each other (López -Robertson, 2012, p. 217). I was inspired by this research which affirms children's right to have their ways of making meaning (in this case story telling) "accepted and legitimate" in school (López -Robertson, 2012, p. 231). I was encouraged too by López -Robertson's (2012) suggestion for future research that explores "the impact of the use of this literature by a monolingual teacher with bilingual students" (p. 230).

Sociocultural Theory Amplified by González Rey

The sociocultural theory of learning outlined thus far was neither rejected nor discredited by González Rey (2009, 2011, 2014a). He did, however, consider it incomplete and there is evidence that other researchers working from a sociocultural perspective also found it so. Nuthall (2012), for example, gives a conventional account of children "acquiring cognitive processes as part of acquiring the culture of the society in which they live, progressively, through constant guided participation in the activities and rituals that make up daily life" (pp. 1-2). There follows an account of internalization, equally untroubled: "through participation, they internalize the goals and purposes, the behaviors and the knowledge and the thinking process involved in the activities" (Nuthall, 2012, p. 2). But then comes the admission that much remains unclear: "What is unknown is how participation in school activities shapes the way the child interprets, thinks about and uses experience" (Nuthall, 2012, p. 2). The unknown piece, I will argue, is the child's affective relationship with the environment; this is the decisive influence on the course of development (Bozhovich, 2009). The affective relationship (variously called emotional experience, meta-experience, or perezhivanie) gives personal significance to social and cultural activities or, in Smagorinsky's words, turns social and cultural activities into "meaningful texts" (Smagorinsky, 2011, p. 295). This is the cornerstone of González Rey's amplified sociocultural theory.

Subjectivity enters the picture, but not as González Rey's invited guest; it was prominent in *Educational Psychology* (Vygotsky, 1926/1997) where Vygotsky declared that the basis of all pedagogical work is nothing other than students' personal experience: "Strictly speaking, and from the scientific point of view, there is no other way of teaching" (Vygotsky, 1926/1997, p. 47). Subjectivity is central in *Psychology of Art* (Vygotsky, 1971) and in his writings on defectology which stress the importance of subjectivity when analyzing the psychological impact of a disability. My task here is to summarize the case González Rey made for a new approach to subjectivity and to state its significance.

González Rey's Argument

González Rey (2009, 2011, 2014a, 2014b) argues convincingly that the usual representation of Vygotsky's thought as social genesis of mind, internalization, and mediation is based on an attenuated version of Vygotsky's work, based exclusively on the middle period. His complete opus is much larger and more differentiated. González Rey attributes the reduction to a combination of historical factors, political repression and some academic intrigue. Here I present the main themes of the case, leaving out of necessity the many supporting details of censorship, repression, intimidation, and hegemony.

After Leontiev, Vygotsky's colleague, abandoned Moscow in 1932, in the midst of the Stalinist repression of academia, Vygotsky remained in Moscow. Because of the nature of his work, his life was in great danger. Shpet, his professor and mentor, was executed. The decree against pedology was passed in 1936 (2 years after Vygotsky's death), pedology was banned from Soviet psychology, and Vygotsky's work fell into disgrace. Leontiev, as Gonzalez Rey tells it, had already criticized Vygotsky, and secured his own ideological safety by steering Activity Theory away from concepts purged from Soviet science: consciousness and personality. González Rey writes that "Unlike Vygotsky, Leontiev lost sight of the person as active subject ... activity replaced consciousness and personality" (González Rey, 2014a, p. 10). Leontiev's academic career was successful. Throughout it he steadfastly remained "blind to the subjective nature of psychical processes" (González Rey, 2014a, p. 10). Ironically, when Bruner and Cole began to communicate with Leontiev and Luria in the 1960s, and subsequently visited the Soviet Union, Leontiev provided them with a lens to view Vygotsky, one that focused on the middle period work and kept out of focus dangerous ideas of subjectivity. The deception (or at least misunderstanding) is summed up: "The picture of Vygotsky given by American authors was drawn through the lenses of his interpreters" (González Rey, 2014b, p. 62). What came to be accepted in the West as Vygotsky's legacy was, according to González Rey, a social construction of his research, one that ignored early and late ideas concerning subjectivity and the generative, creative possibilities of the human mind.

Literacy as a Social Practice: Sociological Perspectives

In this section I look beyond literacy as performed in the classroom to include anthropological and sociological perspectives on literacy as a constructed phenomenon. In the now classic works of early literacy scholars Clay (1991) and Holdaway (1979), we encounter a view of literacy that is rarely expressed today. These scholars conceptualized the growth into literacy as a natural extension of language development: young children continue along the path to literacy that they began when they first started to speak, they have "learned how to use language" (Clay, 1991, p. 26). Oral and literate practices are not opposites, but different stages on a language continuum. These early whole language scholars had confidence in the child as an active learner.

Notwithstanding those views, starting school represents a threshold. Cook-Gumperz (2006) noted that "schooled literacy" is constructed around decontextualized language skills that have little value outside of school, such as answering multi-choice questions at the end of a story, identifying the rising action of a plot, knowing terms such as onomatopoeia. The construction of schooled literacy begins with the earliest evaluation process, and continues in the social context of instruction, in classroom exchanges (Johnston, 2019) learning group formation (Hoffman, 2017) informal judgements, and standardized tests (Cook-Gumperz, 2006). Initial screening testing of kindergarten entrants, for example, determines which "school literacy" skills children have: phonemic awareness, phonological awareness, letter names and sounds. Other literacy skills children may well have picked up at home are not screened for: concentrating on a lap time book and joining in with a familiar story. The institutional context of school henceforth determines what counts as valuable literate knowledge.

Conflicting assessments of schooled literacy have been made. Some scholars refer to reading as a "curriculum bully" because so much of the school day is dedicated to literacy (Cervetti et al., 2006, p. 241). Why not to wood carving, engineering, or biology? Other scholars, however, have made the case that "engaging epistemically" with texts offers unique possibilities for development, providing students opportunities to absorb and subsequently use "literate modes of thinking and communicating" (Chang-Wells & Wells, 1993, as cited in Forman et al., 1993, pp. 62-63). Still others argue that in focusing on surface features of texts and decontextualized skills, we have entirely forgotten that reading is essentially "human interaction in meaning making" (Hoffman, 2017, p. 267). The fundamental purpose of literacy as a tool "useful in solving the challenges we encounter" is obscured by a fascination with the tool itself (Hoffman, 2017, p. 267). In other words, we have lost sight of the wood for the trees.

Anthropological and sociological literature offers different vantage points for assessing and understanding these divergent views of literacy learning. Research over three decades conducted by Street and Street (1991) and Street (1995, 2004, 2005, 2013) showed literacy to be a practice embedded in and responsive to a particular context. Rather than one uniform literacy, multiple literacies exist, each form responsive to its context. Anthropological field work in Iran provided the initial empirical basis for this view, specifically Street's observations of diverse literacy instruction in the *maktabs* (schools). Depending on each school's context and teacher, Iranian students received very different literacies. Some students learned only to recite by rote lengthy passages of the Koran, others learned to recite and also to read the texts, still others were taught to interpret text and critique the existing commentaries, thus, learning a certain intellectual framework that others did not. Literacy cannot be imparted uniformly as an autonomous skill because it is always embedded in some sociocultural set of activities, a phrase Street brings to life using his fieldwork in Iran. Street observed commercial literacy emerge as a practice in response to changing economic circumstances. No one was trained in commercial literacy and indeed it did not exist before, but to meet the needs of a specific social situation (rising urban population meant increased demand for food, which required a cooperative marketing system) graduates of religious schools adapted their maktab literacy to develop bookkeeping literacy. As I write this, a new form of instruction for elementary students is developing online in response to the current Covid 19 pandemic. Literacy is always responsive to its context.

Heath's (1983) decade long ethnographic study *Ways with Words* expanded on the idea of multiple literacies, each responsive to context. Heath (1983) describes children learning language as they grow up in two proximal but different communities, Roadville and Trackton, and shows how learning language also entails learning "the ways of acting, believing, and valuing" of the language community (p. 6). When children enter school, it is not only "ways with words" they bring into the classroom, but identities formed through the cultural practices enacted through language (Heath, 1983, p. 11). Learning language is, for every child, inseparable from growing into the habits and values that the group shares. It follows that sustaining one's identity is met, in large part, through using language.

Heath's point has acute relevance in schools where students are instructed entirely in a second language. Nieto (2010) explored the dislocation and other negative consequences such students experience. The decision to instruct English Language Learners (ELLs) in one language (the language of the group with the greatest power) is unequivocally political, made by the group with the greatest power in order to preserve the social prestige of the language of those with the

greatest power (Nieto, 2010). In her analysis, Nieto develops the central theme of Bernstein's opus: Language policy and associated literacy instruction are "deeply entangled with economic and political privilege" (Nieto, 2010, p. 141).

Research by English sociologist Basil Bernstein (1971, 1975, 1990) covers similar territory to Heath's: the varied linguistic practices learned by different cultural groups, and the influence of those learned practices on educational achievement. In contrast to the vivid quality of Heath's ethnographic account, Bernstein's writing is highly theoretical and abstract. As the title Class, Codes and Control (Bernstein, 1975) suggests, Bernstein made bold declarations of the links between cultural patterns, specifically language "codes," and political and social domination. In Bernstein's account, codes are not merely different habits of speech used by speakers of the same language "as a result of subcultural variation" (Halliday, 1995, p. 131). Rather, codes are "culturally determined positioning devices" that work in a class society to recreate and stabilize the existing social order (Hasan, 1999, p. 23). In Bernstein's account, one code is not better than another, although the terms used early in his research, "restricted" and "elaborated" might suggest otherwise. The kinds of meanings that the elaborated code enables, however, through its emphasis on individuation, precision, and explicitly conveyed information are valued more highly by the dominant class in society (Hasan, 2002). Given that the function of codes is to perpetuate the hierarchy of the class society, it is naïve, according to this view, to think that education can compensate for society (Bernstein, 1973). Freire (1997) possibly echoing Bernstein, also described as naive any expectation that those in power would sow the seeds of change through education or "put into practice a kind of education which can work against it" (p. 36).

Bernstein is sometimes misrepresented as a deficit theorist, a characterization described by his defenders as "grotesque" (Halliday, 1995, p. 133) and "bizarre" (Singh, 2002, p. 37). That he could be misconstrued in this way speaks to the sensitivity around discussions of class, education, and opportunity. Bernstein addressed the complex relations between culture, language, and social positioning, boldly, challenging the belief that democratic education opens opportunity for all. Bernstein's influence on thinking around issues of justice in education is acknowledged by many scholars: Martin (1999), Williams (1999), and Painter (1999). Hasan (2002) argues that Bernstein's concept of code, discomforting as it may be, is an essential construct in forming an answer to the persistent question: How does social location intervene in constraining what is learnt by whom?

One of the twentieth century's towering social semiotic linguists, Halliday, an admirer of Bernstein's creativity and a defender of Bernstein amidst deficit criticism, pointed to the need to move the discussion on from theoretical analysis to the practical matter of texts. If it is true that academic texts are inaccessible to some children because of certain linguistic features, then the obstacles need to be identified and their challenges met. Halliday complements Bernstein's work with attention to the particular linguistic features that characterize written academic discourse, whether they are grammatical, syntactical, or metaphorical. Features such as nominalization, which children may at first struggle with, in time open what Halliday called "multidimensional semantic space" (Halliday, 2007, p. 377). Halliday's (2007) work emphasizes that becoming literate is about "entry into educational forms of knowledge" (p. 367). The "semiotic hurdles" along the path include the increasingly abstract nature of educational forms of knowledge, and the subsequent move from the abstract to the metaphorical: an action such as "shrinking" is nominalized, changed metaphorically into a virtual object: "shrinkage."

Anthropological and sociological perspectives help to make sense of the tensions between conflicting views of literacy as a natural development, a schooled construction, a schooled construction of limited value, a schooled construction of great value.

Classroom Literacy Structures and Meaning Making

Thirty years ago, Donald Graves (1990), father of the process approach to writing instruction, observed that all too often students were encouraged in reading to "leave (their) own voices and interpretations of texts at home" while focusing their attention on "what the author is saying" as if the author said the same things to every reader regardless of her time and place (p. 41). His comment challenged the view of text as having a single authoritative meaning, a view which forms the premise of standardized tests of reading comprehension today (Smagorinsky, 2001). Graves' (1990) contrary position was that reading is a dialogue of sorts: "We read with a double awareness: this is what the author is saying, this is what I think" (p. 42). On this view the reader is active critic who by reading clarifies her own position. A text is the focal but not the sole tool through which meaning emerges for the reader (Smagorinsky, 2001).

If we view texts as human constructions subject to the conventions and limitations of their author's time there is plenty to respond to, question, and critique. The question then becomes how to teach students to question and critique what they read. Entailed in that question is an implicit belief that students should engage critically with text and that their development is furthered by doing so.

On the surface such engagement seems an obvious goal of literacy instruction. The reader draws on the text and brings her own experience and abilities to bear on what she reads. The National Reading Panel in 2000 defined comprehension as just such a co-operative event: Reading comprehension is the act of understanding and interpreting the information within a text. Comprehension is about the construction of meaning more than about passive remembering. It is a form of active and dynamic thinking and includes interpreting information through the filter of one's own knowledge and beliefs ... Successful comprehension requires the thoughtful interaction of a reader with a text. (Shanahan, 2005, p. 28)

The RAND Reading Study Group (2002) also emphasized interaction, describing comprehending as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 91). Is it possible to both construct and extract meaning?

Some scholars claim that attributing an active role to readers makes the notion of extracting meaning problematic. Aukerman (2008, 2013) argued that the position is incoherent, staking her position on the semantic difference between the terms. Construction refers to a process of "creating something new out of available materials" while extraction refers to taking out a "pre-existing object" (Aukerman, 2013, p. A16). If extraction implies that some stable, fixed meaning is to be taken from the text how do we know what is "extractable" and what is legitimately subject to interpretation? The National Reading Panel definition that seemed intuitively sensible requires elaboration and argument at the very least, if it is to be "tenable" (Aukerman, 2013, p. A16).

I found a group of related studies that examined students' meaning making opportunities from the angle of instruction. Research by Santori (2011), Aukerman (2008, 2013), and Smagorinsky (2001), explores comprehension from the angle of teacher-student interaction. Sociocultural concepts of apprenticeship, social genesis of mind, and internalization inform their inquiries into the impact of teachers' pedagogy on students' literate development. All find that whether students are expected to find the answer in the text (Santori, 2011), construct meaning (Aukerman, 2013), or compose a new text (Smagorinsky, 2001) is very much dependent on the teacher's epistemology, as is the matter of the resources students may use in constructing meaning.

Santori (2011) examined three literacy participation structures, Shared Reading, Guided Reading and Shared Evaluation Pedagogy (SHEP) to find which notions of comprehension each imparted. In Shared Reading students proved their understanding by staying close to the text and answering the teacher's literal questions correctly. Students learned that knowledge resides in the text. In Guided Reading there was brief discussion, but the teacher generally "steered students toward a particular interpretation of the text" (Santori, 2011, p. 200). Students participating in the SHEP structure had the greatest textual agency. They could initiate the topic of discussion, change the topic, and "exercise interpretive authority" (Santori, 2011, p. 198). Only in SHEP were students "intellectual and social purposes" (Santori, 2011, p. 198) the driving forces in literacy discussions.

Santori concluded that the teacher's expectations sent unequivocal signals about what counted as comprehension within each participation structure, and students became adept at conforming to those expectations. On a more hopeful note, Santori also found that students developed a metacognitive awareness of the differences in expectations, an awareness which theoretically could be applied to their future reading. A student might find herself selfquestioning: "Am I reading this text for detail or big ideas?"

Aukerman's (2013) view of comprehending was underpinned by deeply philosophical and theoretical reasoning. Her view of making meaning with text differs from established mainstream views of comprehension both in its orientation to text and the expectations for what readers need to do together. The underlying premise of Aukerman's (2013) work is that reading is essentially a semiotic activity, a view that Smagorinsky (2001) will expand upon below. Referencing the Russian linguist Vološinov (1929), Aukerman (2013) made the case that meaning does not reside in the sign or signs themselves. Meaning instead is relational; it emerges when a reader relates text "to another reality" (p. A11) drawing upon her social, cultural, and semiotic resources. As the reader chooses to relate a text to one reality or another, she makes "an active semiotic decision" evaluating whether the relationship she is constructing makes sense. "Sense making" is the reader's decision that a relationship between the text and one reality is "internally persuasive" (Aukerman, 2013, p. A12).

Like Santori (2011), Aukerman (2013) found that students' degree of textual agency depends in part on the literacy instructional structure used, but an even more important influence is the teacher's pedagogy and how it positions students in relation to text. Aukerman (2013) identified three orientations to comprehension pedagogy: comprehension-as-outcome, comprehension-as-procedure, and comprehension-as-sense-making. Comprehension-as-outcome pedagogy aims for readers to achieve predetermined readings of texts; the goal of uniform understanding "makes little or no room for multiple understandings" (Aukerman, 2013, p. A7). The goal of comprehension-as-procedure, on the other hand, is to produce readers who know how to go about reading in a certain way, applying strategies they have been taught and subsequently stored in a strategy toolbox. There is a little room for readers to engage with texts "in divergent ways" (Aukerman, 2013, p. A7) but it is still, in Aukerman's (2008) judgment, a "dogmatic" approach: "The good reader is seen as one who accesses a fixed set of strategies to arrive at the correct outcome" (p. 1). The security of the strategy toolkit, the sameness of its contents, even if they represent "their culture's best kept secrets about how to obtain academic success" (Harris & Pressley, 1991, as cited in Aukerman, 2013, p. A4) has little attraction for Aukerman for two reasons. First, comprehension-as-procedure pedagogy entails an implicit belief that meaning is "affixed within the text" (p. A16) to be revealed by the sanctioned strategies. Secondly, it is an approach that seems to favor predictability, and to undervalue multiplicity of perspectives and individual surprise (Matusov, 2004).

What is unusual about Aukerman's (2013) research is her willingness to take a risk on the value of students getting the "wrong" answer if they are doing the right things, that is, exploring different possible interpretations until they make meaning that for them, fits the text (Aukerman, 2013, p. A5). Comprehension-as-sense-making is "the active exploration of possibilities for meaning" (Aukerman, 2013, p. A5) until one makes personal sense.

Just when Aukerman seems to have arrived at an expressivist conceptualization of reading, she points out the weaknesses of this position. Reading is social; even when we read alone, we are "social actors" responding to the ideas of another (Aukerman, 2008, p. 56). Just as reading is social, so comprehension is not just about sense making, but "socially purposeful sense making" (Aukerman, 2008, p. 56). Her criticism of the expressivist conceptualization is that it allows all reader-text interactions to stand unchallenged, as equally valuable outcomes of private reader-text interactions: "Sense making is treated as a relation with a text, rather than as a relationship that also centrally involves other readers and other voices" (Aukerman, 2013, p. A7).

The most productive sense making happens not in private reader-text interactions but when students enter into dialogue with each other. Transformation and development occur, according to Aukerman, when students encounter the understandings of others quite different from their own.

A connection can be made between Aukerman's position and Vygotsky's (1987) ideas in *Thinking and speech*. There Vygotsky (1987) describes the limited development that occurs when thought, as inner speech, remains unarticulated and therefore unchallenged by other voices: "We trust ourselves without proof; the necessity to defend and articulate one's position appears only in conversation with others" (p. 243). Aukerman's (2013) position is similarly social: making meaning is "a relationship with text that also centrally involves other readers and other voices" (p. A7).

Two important points follow from Aukerman's account. First, a student's failure to come up with an internally convincing relation between a text and a reality does not mean a student was not engaged in sense making. The student may have considered various possible relations but did not find herself convinced by any of them: "sense making does not, and probably should not, always yield clear resolution for the reader" (Aukerman, 2013, p. A12). Second, while dialogic discourse around text can generate new thinking, it is also the case that the classroom dynamics of social and cultural capital might recognize some readings as more legitimate than others because they are "within the institutional bounds" (Aukerman, 2013, p. A14). What counts as "within the institutional bounds" usually depends on what the teacher judges plausible. A pedagogical orientation to comprehension-as-sensemaking requires, on both the teacher's and the students' part, an openness to meaning as negotiated, socially contingent, and emergent.

Aukerman's work can be seen as a development and continuation of some of the ideas of an earlier prominent scholar, Smagorinsky. Both view text as a tool for thinking, share a trust in the creative abilities of students, and believe that meaning is socially contingent and best negotiated with others.

Smagorinsky (2001) defines a text as any configuration of signs that provides a potential for meaning. Texts may mean nothing at all to some readers and different things to different readers, as Smagorinsky (2001) illustrates using the example of the Confederate Army flag. The flag can variously stand for "honor, courage, and valor" or "oppression, segregation, and slavery" or perhaps have no meaning at all for many non-Americans (and even some Americans; Smagorinsky, 2001, p. 137). Meaning is made, according to Smagorinsky (2001), when readers, in the midst of reading, compose a new text or texts. The process of meaning making is something like this. Reading mediates the associations the reader first experiences. Those associations subsequently change the way the reader thinks about the original text. Thinking about the original text leads to "an act of composition" which may be mental or material (Smagorinsky, 2001, p. 137). The whole process is generative: as readers reflect on and revise those constructed texts, additional new texts are composed. Reading is, thus, primarily a tool for creating new meaning; it is in the generative quality of a reading transaction that the possibility of development is found.

Smagorinsky (2001, 2008) illustrated his conceptualization of reading as composition with empirical research. Students recovering from substance abuse in an alternative school composed texts that drew on their preceding cultural history and the social practices that operated in the immediate environment. Smagorinsky recounted the ways students "emplotted their reading" (Smagorinsky, 2001, p. 141) of William Carlos Williams' short story *The use of force* in the broader narrative of their own life experiences to create new texts, drawn, written, or danced (Smagorinsky, 2001, p. 156). Interview data showed that emotion was a significant factor in the construction of meaning.

For these students, expanding the meditational means by which they could express understanding led to success. The cultural practices teachers draw on most often resemble those of middle-class families, making school success less likely for those whose home cultures "provide them with a different tool kit" (Smagorinsky, 2001, p.140). In advocating for more varied ways of representing understanding, including dance, Smagorinsky does not minimize the value of talk. His data in fact showed that lots of student talk accompanied making artifacts, and making artifacts pushed talk and thinking to new levels. What was striking was that the nature of that generative talk was "half-baked, provisional, tentative, spontaneous" (Smagorinsky, 2008, pp. 10-11).

A notable feature of Smagorinsky's work is that he draws closely on Vygotsky's *Thought and Language* to build the case that unrehearsed speech, especially the unformed, initial stabs at the expression of an idea are a necessary precursor to generating meaning. In Chapter 7 of *Thought and Language*, where Vygotsky (1986) analyzed the relation between thinking and speech "historically," that is in terms of the evolution of each function in the child's development, he stated that thinking and speech are not connected "by any primary bond": there is a "prelinguistic period in thought" and a "pre-intellectual period in speech" (pp. 210-211). Vygotsky rejected the associative principle that words are the "external concomitant of thought" the garments that thought wears when it "goes out." He also rejected the idealist position that pure thought is unrelated to language. Rejecting both positions, Vygotsky theorized that the relation of thought to word is a process of "continual movement from thought to word and from word to thought" (Vygotsky, 1986, p. 218). Thought is not easily expressed by words, because the structure of speech does not mirror the structure of thought. Nor is thought simply expressed in words, but more accurately thought comes into existence through words: "The relationship of thought to word is a vital process that involves the birth of thought in the word. Deprived of thought, the word is dead" (Vygotsky, 1987, p. 284).

Smagorinsky took all these ideas into account. He prioritizes ample time for responding to literature, through exploratory, messy talk about the assigned text, and about the texts students subsequently compose in words, or in dance or painting. Showing the connections between tentative, provisional speech and creative thought, Smagorinsky's research provides empirical illustrations of the relation between thought and word that Vygotsky theorized. Construing the relation as a continual back and forth process calls for revisiting some features of classroom talk such as "cold calls", "no opt out" and sentence frames (Lemov, 2010).

Mercer (1995) looked to the sociocultural principles of learning more generally when writing *The Guided Construction of Knowledge*, a now classic work written to meet the need for a theory to guide classroom talk. Mercer perceived that classroom talk often proceeds without a sound theoretical basis, on the assumption that understanding will be achieved simply by an additive process, with successive students supplementing each other's ideas. But an adequate theory, given the purpose of formal education and the collective nature of classrooms should explain how people help other people to learn (Mercer, 1995). Mercer found in Vygotsky's work the sociocultural principles essential for such a theory: the social origins of cognition, the importance of language for learning, the importance of joint activity with more capable partners. Mercer envisioned a collaborative talk environment built on these principles becoming not merely the context but the source of development as students work with information, select from it, organize it, argue for its relevance. In the following section, *The Zone of Proximal Development: Making Meaning with More Capable Others*, the same principles are invoked as the foundation for learning, and extended, qualified, and critiqued by different scholars. We also see new themes of relationship, emotion, and struggle emerge as additional resources in making meaning.

The Zone of Proximal Development: Making Meaning with More Capable Others

Relevance of the Concept of the Zone of Proximal Development (ZPD) to This Research

The zone of proximal development (ZPD) and the associated idea of the gradual release of responsibility from master to apprentice are central to many accounts of teaching and learning and inform elementary school reading instruction practices such as Interactive Read Aloud, Shared Reading, and Guided Reading. The instructional sequence of teacher modeling, collaborative activity, internalization and independent practice gives children the opportunity to participate in activities and to appropriate ways of understanding they could not achieve on their own. Maybin and Moss (1993) for example, found that text understandings and interpretations collaboratively negotiated were ahead of individual comprehension and led development. In the following decade, Fernández et al. (2001) found that children using exploratory talk in collaborative group learning supported each other and "traveled further, in an intellectual sense" than they would have if working alone or using other kinds of talk such as cumulative or disputational talk (Fernández et al., 2001, p. 42). In the absence of any "self-conscious teaching by a cultural expert" students engaged critically with each other's ideas, justified their thinking, and offered alternative hypotheses (Fernández et al., 2001, p. 53). These findings led the authors

to suggest that the original asymmetrical ZPD should be reconceptualized to take account of the learning such social thinking generates.

So firmly established are the instructional models deriving from the ZPD concept that questioning the assumptions about learning within the models, as Fernández et al. do, is rare (Hoffman, 2017; Johnston, 2019; Lewis, 2017). By contrast, in an earlier time, scholars who were fascinated by the concept also questioned just how it might work. Somehow the ZPD enables the novice to access "the toolkit of concepts and ideas and theories that permit one to get to higher ground mentally" (Bruner, 1986, p. 73). Yet when Bruner (1986) tried to make explicit how access is secured, he was left with a sense of incredulity: "How can the competent adult 'lend' consciousness to a child who does not have it on his own?" (Bruner, 1986, p.74). Bruner's (1986) answer is inconclusive although he is very clear that the "loan of consciousness" depends essentially upon language (p. 76).

The ZPD concept is highly relevant to the question central to this inquiry: How do students make meaning? What kinds of interaction between a novice learner and a more experienced other lead to development? What kinds of interaction with peers lead to development? Within the theoretical framework of the ZPD, the moves and roles of participants, the material, and the symbolic means they access to make meaning are of great significance.

This section begins with a definition of the zone of proximal development. I then review literature that explores how the interaction between novice and more-experienced-other becomes the source of development. It will be seen that, differences aside, four themes emerge: the importance of affective factors, relationship, emotion, and struggle. Vygotsky defined the zone of proximal development as follows: The zone of proximal development of the child is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978, p. 86)

A Range of Perspectives on the Zone of Proximal Development (ZPD)

What distinguishes teaching within the zone of proximal development from any other form of instruction is the process of collaboration: joint activity is the means of development. Without the emphasis on joint activity, it would be difficult to distinguish between Vygotsky's concept and any other form of instruction that "systematically leads children with the help of an adult, through a number of steps in the process of learning some set of skills" (Tudge, 1990, p. 156).

Tudge (1990) appreciates the distinctive feature of joint activity yet has, overall, a critical view of the ZPD. He points out that two conflicting processes are supposedly happening at once. On the one hand, development in the zone is maturational: Vygotsky (2011) wrote of "functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow" (p. 204). On the other, the purpose of collaboration is teleological; it is a means of imparting culturally appropriate "adult meanings, behaviors and technologies" to children (Tudge, 1990, p. 156), the goal being accommodation to the pre-existing social world, which the more competent peer embodies. I note that Vygotsky would not see this as a criticism but a logical necessity in order to reach higher mental functions.

As well as a theoretical concern, Tudge (1990) finds that empirical research that illustrates the "zone in action" is lacking and calls for more classroom-based research into the "particular interactions with others in the zone" (p. 158). Tudge's (1990) own extensive research in the classroom found the effects of collaboration on cognitive development were "less clear-cut ... than has been assumed by Vygotskian scholars" (p. 165). His research focused on peer collaboration between students of differing ability, and showed that unless pairings were carefully structured, with cognitive and affective factors such as confidence taken into account, collaboration might even lead to regression. (I note that this criticism can only apply to a greatly expanded concept of the ZPD, one far different from Vygotsky's original concept of a formal instructional relationship.)

Tudge's research findings stand in contrast to those of Fernández et al. (2001) who found that children using exploratory talk collaborated successfully in an "asymmetrical" ZPD without a "cultural expert." Mahn and John-Steiner (2002), while making no explicit reference to Tudge's work, also focused on the importance for learning of confidence and emotion more generally. While select aspects of Vygotsky's work have received great attention, Mahn and John-Steiner (2002) argue that the essays and lectures on the relationship between affect and thought "central to understanding his work as a whole" are generally ignored (p. 47). Using "an expanded notion of Vygotsky's concept of the zone of proximal development" as a theoretical frame, the authors have researched the affective aspect of learning and teaching in their respective fields of ESL and adult creativity (Mahn & John-Steiner, 2002, p. 47). They found social interdependence, human connection, and caring support to be central to learning, findings which they report alongside seminal, validating quotations from Vygotsky (1987) such as the following: "Thought has its origin in the motivating sphere of consciousness, a sphere that includes our inclinations and needs, our interests and impulses, and our affect and emotions" (p. 282).

As well as making the important connection between emotion and learning, Mahn and John-Steiner expand the ZPD discussion into the area of meta-experience. How does the individual student perceive the learning environment? Does she value her interactions with others? This is a far different question than a narrow understanding of the ZPD as a cognitive zone might form. Instead of measuring how far the student is moving along the trajectory to some higher level of competence, the question now asked is how the student is perceiving all this through her idiosyncratic affective response to the interaction. I found a few studies that take this approach. Fecho (2013), interested in what literacy practices meant to the six working class teenagers in his study, prioritized their perceptions. Asking the kinds of questions Mahn and John-Steiner value, questions about what literacy meant to the students, he found they used literacy "for existential purposes" to explore their individual experience and circumstances (Fecho, 2013, p. 135). The focal student, Isaac, who suffered from bi-polar disorder, in particular used literacy practice "to generate on-going, meaning making dialogue within himself and his various contexts" (Fecho, 2013, p. 130).

Mahn, John-Steiner, and Fecho all valued the phenomenon of meta-experience--how one experiences one's experience--as the means through which people render their socially and culturally situated experience into existentially meaningful texts. It is worth noting that like Meyer and Turner (2002), Mahn and John-Steiner disclose that in their early work, a narrow focus on cognition alone obscured the importance of the subjective experience of learning. In their later work the ZPD is extended to include, along with participants and artifacts, metaexperience (Mahn & John-Steiner, 2002).

Levykh (2008) disputes the need for an "extended" concept of the zone of proximal development, claiming that the ZPD already encompasses both affective and cognitive

dimensions. Levykh (2008) suggests that the misconception may be due to possible shortcomings of translations, and cites, as an example, the erroneous English translation "cognitive tools" for the more expansive "psychological tools" in the original Russian (p. 84). From this initial point of cultural misunderstandings originating at the word level, Levykh builds an argument that a substantial difference exists between Western understanding of emotion and Vygotsky's approach. While the Western view typically locates emotions in the "exclusively personal experience" of individuals (Levykh, 2008, p. 85), Vygotsky located emotional development "in the context of historically and culturally established practices" (Levykh, 2008, p. 85). Furthermore, Levykh argues that Vygotsky believed affect and intellect to be two inseparable mental functions. Levykh cites Kozulin and Gindis (2007) to support his own view that Vygotsky in this respect expresses a major Russian cultural belief that the emotional aspect of learning and teaching "has always been at the center of attention both theoretically and practically" (p. 359). Setting aside the issue of whether the "expanded version" of the ZPD is necessary, the four scholars Tudge, John-Steiner, Mahn, and Levykh converge on the significance of affective factors in learning.

Levykh's (2008) surprising contribution to the discussion is the idea of struggle. Discussions of the ZPD often appear to minimize effort on the student's part, and certainly exclude struggle, while highlighting the naturalness and relative ease of collaboration. Is that portrayal too anodyne? Levykh (2008) focuses on struggle as "an emotionally laden, negative experience of tension, disagreement, and battle between two (or more) opposing forces" (p. 87). In support of his position that intellectual struggle is part of the ZPD, Levykh makes a philosophical connection between Vygotsky's ideas and Hegelian dialectical philosophy: dynamic change occurs as a result of the struggle between the organism and the environment. Therefore, Levykh suggests, dynamic change in learning must also be associated with struggle, recalling Biesta's (2006) view that challenging learning experiences are discomforting.

At first glance, Levykh's advancing the idea of struggle seemed counterintuitive. In the literature, however, Gutierrez' (2008) concept of Third Space stands out as a striking illustration of Levykh's notion. Third Space is a "particular kind of zone of proximal development" where students from non-dominant communities contest the monological narratives, they encounter in school literacy (Gutierrez, 2008, p. 148). "Struggle" is contestation, confrontation, a refusal to acquiesce; it is far different from the passive connotations of "struggling readers." Aukerman (2007, 2013) also envisaged struggling with texts as an integral part of making meaning. Historical support for Levykh's position also comes from a 2009 paper by Veresov, which argues that struggle was a central concept in Vygotsky's learning theory. However, simplified (and inaccurate) English translations of Vygotsky's work have obscured or even removed the concept. (One should bear in mind that Mind in Society is an edited version of Vygotsky's writing. The Editor's Preface states that the editors "have taken significant liberties" and "have omitted material that seemed redundant" and freely admits that "the reader will not encounter a literal translation of Vygotsky" (Cole et al., 1978, p. x). One result of translation and editing liberties is that a distorted interpretation of internalization, based on the famous passage in Mind and Society, is now cemented in "contemporary mainstream psychological discourse" (Veresov, 2009, p. 270). I present the excerpt first as it appears in *Mind in Society* as edited by Cole et al. (1978) followed by a more accurate translation found in Veresov (2009):

Every function in the child's development ... appears twice: first, on the social level, and later, on the individual level; first, between people (inter-psychological), and then inside the child (intra-psychological). This applies equally to voluntary attention, to logical

memory, and to the formation of concepts. All the higher mental functions originate as actual relations between human individuals. (Vygotsky, 1978, p. 57)

and

Any function in the child's cultural development appears on stage twice, that is on two planes. It firstly appears on the social plane and then on a psychological plane. Firstly it appears among people as an inter-psychological category, and then within the child as an intra-psychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts and the development of volition. (Vygotsky, 1983, as cited in Veresov, 2009, p. 272)

The first version omits the word *category* which is in fact essential. In Russian, "category" means collision, or dramatic encounter between individuals. This suggests that the interaction between novice and more expert other is a clash or struggle of sorts, as Levykh has described it, perhaps marked by tension, resistance and oppositional stances. The theatrical terms "stage" and "plane" (an area on the theatrical stage) continue the emphasis on the dramatic nature of this inter-psychological encounter. Moreover, the word category is used twice, to describe the intra-psychological experience as well as the inter-psychological. Veresov's (2009) claim, in brief, is that a child experiences conflict and drama in the process of learning, and when this Vygotskian insight is ignored or obscured (perhaps by inaccurate translation) we are left with a "domesticated" and simplified psychology of learning (p. 289).

Language and the Zone of Proximal Development (ZPD)

It is impossible to overstate the importance of language in learning. In the classroom, language is both the means of instruction and the object of learning (Grenfell et al., 2012). In the course of reading for this literature review, I found that studies that focus on the role of language also necessarily deal with issues of relationship and emotion: when people communicate, they signify what they evaluate as right and wrong, they share evaluations, and seek to influence and persuade. Affectivity is "the substance of communication" (Branco & Lopes-de-Oliveira, 2017, p. 40).

Stone (1993) first focused on the "communicative mechanisms" intrinsic to the adultchild interaction in an asymmetrical ZPD (p. 170). He writes of the need to make allowances for the more rudimentary nature of the student's language, being particularly sensitive "to the child's degree of mastery of various linguistic devices" (Stone, 1993, p. 177). This important but general point was reiterated by Lee and Smagorinsky (2000) who call attention to the asymmetrical language resources of the novice and expert, stating that the onus is on the expert to attend to the novice's conceptions as she communicates them.

Stone then placed the notion of "scaffolding" (Wood et al., 1976), particularly linguistic scaffolding, under the microscope in order to identify the specific linguistic "mechanisms" used to mediate the adult-child interaction. Stone rejects simplistic accounts of the development of intra-mental processes: internalization is not a literal absorption of the words and explanations of the more experienced partner. Stone believes that Vygotsky had in mind a very subtle semiotic process, one which might be captured by "appropriation of meaning." He identifies three linguistic moves that support "semiotic uptake": prolepsis, conversational implicature, and intersubjectivity (Stone, 1993, pp. 171, 173, 175). Importantly, in none of the devices is the meaning evident in the actual words uttered. Instead, "the listener is led to create for himself the speaker's perspective on the topic at issue" (Stone, 1993, p. 171). Most importantly, the linguistic mechanisms in and of themselves are insufficient: their effectiveness depends on the quality of the interpersonal relationship between the participants.

Affective factors play into the success of semiotic mediation simply because, in Stone's (1993) words, "these interactions are not occurring between faceless functionaries" (p. 178). Respect for the other's perspective, and "the degree of mutual trust" both matter (Stone, 1993, p. 178). If a teacher does not value a particular student's learning a skill, linguistic mediation will not compensate for that lack. Interpersonal dynamics play a key role in the ZPD.

Stone gestures to the question of authority in the teaching learning relationship, a topic which is the focus of Bingham's (2004) essay *Let's Treat Authority Relationally*. The key ideas here are relationship, respect, and volition. In the educational world, writes Bingham, authority must be enacted relationally, with due respect paid to students' agency to follow or reject the teacher's pedagogical lead. Without a respectful relationship between teacher and students it is unlikely a learning zone can be established.

The act of learning "depends primarily on the acceptance that the knowledge of someone else deserves a spot in one's own scheme of things" (Bingham, 2004, p. 31). To the extent that they make that judgment, students "authorize" teachers: "When the student accepts the knowledge of the teacher, she has authorized him or her" (Bingham, 2004, p. 31).

Bingham (2004) makes a provocative suggestion that "ability itself may depend on the relational context where such ability is measured" (Bingham, 2004, p. 22). It is Fleer and González Rey (2017), however, who bring that idea to life with a case study of 6-year-old Kevin, a student whose brain was described by his teachers, abhorrently, as "a holed sack" (p. 160). Kevin was found to be capable of learning through González Rey's skill in making emotional contact and maintaining a relationship. New emotions emerged in the context of the relationship; that is not surprising. What was unexpected is that Kevin's emotions were so closely related to the new symbolic processes that emerged, specifically emergent reading. Fleer and González

Rey (2017) give a detailed account of the changes in the child and conclude that the relevance of the adult for the child's development is precisely "the emotional richness of their communication: the adult is never a mere support of operational activity with objects" (p. 148). Johnston (2019) takes up and develops this idea in the context of classroom literacy instruction. Literacy, because it involves language, is "a relationally and emotionally saturated collection of social practices" (p. 79). Experiencing or "living" those literate social practices fosters not just literate development but human development (Johnston, 2019, p. 71).

A Whole Language Perspective on the Zone of Proximal Development (ZPD)

Goodman and Goodman (1990) have an expansive sense of a ZPD activated by collaborative learning between peers, regardless of ability. Writing from a whole language perspective, they reduce the teacher's role to one of "supporting the learning transactions but neither causing them to happen in any direct sense nor controlling the learning" (Goodman & Goodman, 1990, p. 236). The teacher mediates by "asking a question here, offering a useful hint there, directing attention to an anomaly" (Goodman & Goodman, 1990, p. 236). Even in this role of unobtrusive mediator, teachers should still exercise caution: "Too much intervention and direction by others, particularly teachers, can minimize invention and *focus excessively and prematurely on the need for conventionality*" [emphasis added] (Goodman & Goodman, 1990, p. 242). Goodman and Goodman are very specific about the ways teachers can disrupt development in the ZPD, by acting as diagnostician, or as expert, or by simply being too dominant. All such actions have the effect of forcing children out of their "naturally developing" ZPD (Goodman & Goodman, 1990, p. 246).

The perspective that Goodman and Goodman bring is valuable. By adopting a critical view of teacher behavior, they signal a new focus on the child's experience of teacher actions

and decisions. With respect to language, Goodman and Goodman stand apart from many of the scholars referenced in this review. Like Stone (1993), Bernstein (1971, 1975, 1990), Halliday (2007), Heath (1983), and Hasan (1999, 2002), Goodman and Goodman draw attention to the mediating role of language. Their perspective on the roles of the experienced and novice partners is however quite different and is in keeping with the reduced role they accord to the teacher and the augmented role given to the novice learner. Goodman & Goodman place as much importance on language as a personal invention as they do on language as social convention. They do not dispute that eventually the language of each individual must fall "within the norms of the social language" but they foreground human creativity in constructing the semiotic system (Goodman & Goodman, 1990, p. 231). They do not doubt that eventually the way the individual makes sense of the world will be shaped by convention, "the way society organizes meaning and represents it" but they believe that novice individuals are agentive constructors of meaning who make "internal efforts to represent experience symbolically" while actively "seeking sense in the world" (Goodman & Goodman, 1990, p. 231).

Goodman and Goodman share Vygotsky's understanding of development as the individual coming into being by creatively using the resources of the social. This is a dynamic view of the individual and social engagement that takes seriously the meanings the child already has.

The implications of this view for teaching and learning are clear. If all students are actively seeking sense in the world as Goodman and Goodman state, then teachers must find ways to bring all students into the meaning making and sharing processes. Yoon (2007), found that competent teachers unintentionally limited participation to students with mainstream cultural capital, excluding English-language Learners from sharing their knowledge. DaSilva Iddings et

al. (2009), however, who ground their study in the concept of the ZPD, found that even when their teacher does not speak the same language or share their cultural background, linguistically diverse students effectively participate in and learn from text conversations when "proper conditions and opportunities" are in place (DaSilva Iddings et al., 2009, p. 60). These include validating first language use, sharing instructional space and roles, and replacing linear instruction in pre-established skills with "dynamic and fluid" responsive teaching (DaSilva Iddings et a l., 2009, p. 59). Corroborating those findings, Guccione (2011) found that students' sense of subjective well-being and belonging, "being seen and seeing themselves as valuable members of the learning community" was strong when literacy practices focused on constructing and deconstructing meaning and not on "decontextualized skills to be acquired and assessed" (Guccione, 2011, pp. 574, 575).

The authors of these papers take a dynamic view of the individual and social engagement. They reinforce that reading teachers must understand English Language Learners' "cultural and social positioning in the mainstream classroom" and adjust or expand their pedagogy so that English language learners are not mere peripheral participants (Yoon, 2007, p. 217).

Calls for Change

The discussions of the ZPD in the literature reviewed have been mostly positive. Tudge had some reservations, Levykh thought it must involve struggle, and many argued the zone is much more than a purely cognitive space. Overall though, the individual is thought to be better off after negotiating her way through the zone. Empirical research by Del Rio and Alvarez (2002) complicates the picture.

Students in their research project failed to follow the conventional path to individual mastery through the normal sequence of shared social activity, individual appropriation of

external actions, and transfer to internal "in the head" activity. A significant number of students refused to substitute artifact mediation for social help from others. The authors were forced to question why students continued to seek the social engagement of the earlier stage, asking for peer and teacher collaboration, resisting the satisfaction of more independent activity. Clearly the external and socially shared activity did not serve as a provisional step on the way to individual mastery; it became instead an end in itself.

In general terms, can teachers be too successful in providing assistance in the social zone of proximal development? Or is it the end goal of individual independent mastery that is in need of review? Is independent mastery not where students are headed? Refining that question, Del Rio and Alvarez (2002) suggest rethinking what kinds of knowledge should remain culturally distributed and shared in the form of social-external activities, and what should become individual-external, that is, the student appropriates the learning via a mediating tool, but does not internalize it. Finally, what learning should be completely appropriated by the student and totally internalized?

In reflecting on their findings, Del Rio and Alvarez (2002) make intriguing links to ideas in evolutionary biology. The helplessness and inadequacy of mere biological humans has obliged us to depend on others and led to a highly developed ability for functional cooperation. After initial disappointment that the classical ZPD model did not operate in the research project, the authors conclude that the extensive need for social mediation, stemming from the limits of our biological endowment, far from being a weakness, is "a powerful mechanism of cultural activity and development" (Del Rio & Alvarez, 2002, p. 69). In educational terms, "the individualistic, rational and cognitive ideal of a unidirectional sequence of development from appropriation to internalization needs to be reconsidered" (Del Rio & Alvarez, 2002, p. 68). Three recent papers call for revisiting the theoretical foundations of the ZPD to correct distortions and drift in current literacy practices. Each scholar reorients practice to the features of the original, theoretical model. Lewis (2017) urges teachers to begin with what students *can* do, to scaffold rather than rescue from difficulty, and avoid excessive teacher talk that can disrupt progress. Hoffman (2017) takes issue with the concept of instructional reading level, arguing that rigid adherence to "just right" reading levels hinders growth that a wider, more flexible ZPD would foster: "ZPD is not just a single level of challenge but a range of levels" (Hoffman, 2017, p. 267). Webb et al. (2019) explain how Pearson and Gallagher's (1983) theoretical model of the gradual release of responsibility (GRR), has in many instances been reduced today to a sequence of moves to be accomplished in the course of a single lesson. The initial idea that teachers should respond flexibly to students at the point of difficulty has been lost, a fact the authors attribute to demands for "quick how-to formats" in an age of accountability (Webb et al., 2019, p. 77).

Together, Lewis (2017), Hoffman (2017), and Webb et al. (2019) make a convincing case that revisiting the theoretical foundations of the ZPD is necessary. As Webb et al. (2019) put it, literacy learners are not served well by narrow implementations of the concept: "reading comprehension and students are too complex" (p. 77).

Emotion in Meaning Making

The Emotion section of the literature review is organized thematically by subheadings: Centrality of Emotion; Findings from Neuroscience: The Interdependence of Cognition and Emotion; and Emotion and Classroom-Based Research.

Centrality of Emotion

In a recent edition of the journal *Cognition and Emotion* Levenson (2019) reflects on the past three decades during which research on emotion has flourished, and what was once a topic

of no account (repressed emotion was an exception) became ubiquitous. There were, according to Levenson, no emotion journals and no emotion textbooks when *Cognition and Emotion* was launched in 1987. There were no emotion research societies, and few scientists who identified themselves as emotion researchers (Levenson, 2019, p. 8). Without a flourishing research community to explore the emotions, it is no surprise that "folk intuitions" remained firmly in place, including the view that cognition and emotion were ontologically distinct categories of experience, "generated by architecturally separate systems in the brain" that competed for control of behavior (Hoemann & Barrett, 2019, p. 68).

There were of course dissenting voices. Damasio (2003) argued against the assumption entrenched in Western culture that emotions are antagonistic to rationality and threaten "the disembodied, detached, and neutral knower" (Zembylas, 2003, p. 106). Hargreaves (1994, 1998) also wrote against the prevailing view of his time and made the case that emotions were central to teaching and played a central role in learning. In general, however, during the period Levenson describes, feeling was considered if not an obstruction to the construction of knowledge, then at best irrelevant (Del Rio & Alvarez, 2002). Traces of frustration with the emotion wasteland of that era are evident in the passionate writing of Hargreaves, two of whose papers I review next.

Hargreaves' (1994, 1998) seminal work affirms the connections between emotion and teaching as an emotional practice that depends upon emotional understanding and involves immense amounts of emotional labor. Hargreaves argues that emotion plays a central role in learning as well and describes how teachers in his study consciously changed their teaching practices in response to what their students needed emotionally as well as intellectually,

increasing their students' sense of basic personal security by ensuring that the classroom was "a safe and comfortable place to express ideas" (Hargreaves, 1998, p. 847).

Hargreaves (1998) called for educational reform to "honor the centrality of the emotions to the processes and outcomes of teaching, learning and caring in schools" (Hargreaves, 1998, p. 850). Hargreaves (1998) extended his argument, holding the discourse of educational reform responsible for the dismissal of emotions in learning: "The emotions must no longer be ignored, still less demeaned as peripheral in the proclamations of policy makers" (p. 850). This interpretation of where blame should be assigned is echoed in recent Australian and New Zealand research (Rouse & Hadley, 2018; White, 2013).

Various philosophers could be summoned to counter the view that emotions belong on the periphery and do not offer any valid knowledge. In the context of a subsection of a Literature Review, it is appropriate to call on just a few.

Nozick (1989) argued that emotions have three components: a belief, an evaluation, and a feeling. Emotion is "much more 'cognitive' than one might think" (p. 89) and can be judged defective or inappropriate if, for example, the belief is false, or the evaluation is wrong, or the feeling is disproportionate to the evaluation. Solomon (1984) defended a cognitive theory of emotions, suggesting that emotions are not something that "happen" to us but are instead "rational and purposive" (p. 306). To the extent that our emotions are intentional, we are responsible for them: "I am responsible for my emotions as I am for the judgments I make: My emotions are judgments I make" (Solomon, 1984, p. 316). Siegel (1997) developed a notion of "felt reasons" which are not different from ordinary reasons but are a "particular kind of presentation of reasons" (p. 52). Siegel, like Janks (2010) later in this review, refers to the extraordinary power of literature to move, and to transform readers in one of two ways: by

portraying characters who are moved by reasons, and by summoning reader responses that are not restricted to the narrowly rational.

The views of Nozick, Solomon, and Siegel briefly sketched above offer philosophical support for the position that emotions are not optional extras but are "implicated in all human action, including thought" (Barbalet, 2006, p. 51). This conclusion is significant for the topic of literacy discussion and the kinds of responses that are valued and disvalued in classrooms.

Findings from Neuroscience: The Interdependence of Cognition and Emotion

A vast amount of research in the field of social and affective neuroscience corroborates the interdependence of emotion and cognition (Duncan & Barrett, 2007; Hoemann & Barrett, 2019; Storbeck & Clore, 2007). As one would expect, many of the research articles, most produced in the last thirty years, require sophisticated scientific literacy in their readers.

A gentler point of entry for non-scientists is the work of Immordino-Yang (2011) whose accessible prose presents essential ideas with a minimum of technical detail. For example, in *Implications of Affective and Social Neuroscience for Educational Theory* (Immordino-Yang, 2011), she offered a simple thought experiment, asking us to imagine a student faced with a physics problem, to illustrate the intertwined nature of cognition and emotion. The reasons why the student decides to tackle the problem in the first place are fundamentally emotional, ranging from pleasing the teacher, receiving peer admiration, experiencing a sense of self efficacy. I would add that the reasons for not attempting it might also be characterized in emotion terms: fear of failure or unwillingness to experience frustration. The student depends on emotion while she works on the problem, to evaluate her cognitive steps: are they leading to a solution or leading her off track? Immordino-Yang connects insights from research to classrooms: positive or negative, the emotional experiences that children have in their particular classroom are braided into an intertwined cognitive emotional resource used for future meaning making.

Immordino-Yang (2011) made the case throughout her work that all learning experiences involve an emotion component: "even the driest, most logical academic learning cannot be processed in a purely rational way" (p. 101). It is at this point when words like "the driest, most logical academic learning" conjure up (for this reader) calculus and inorganic chemistry, that many might wonder how emotion is intertwined with such disciplines, and to satisfy their wondering, demand the kind of scientific technical detail supplied by scholars such as Bell and Wolf (2004), Storbeck and Clore (2007), Duncan and Barrett (2007), and Hoemann and Barrett (2019).

A close reading of these papers reveals much common ground: the accumulating evidence from neuroscientific research does not support a view of emotions and cognitions as ontologically distinct systems (Hoemann & Barrett, 2019). Duncan and Barrett (2007) find that the human brain does not "respect" the affect-cognition distinction and they make the case that "affect is a form of cognition" (p. 1185). Bell and Wolfe (2004) explain that the neural mechanisms underlying emotion regulation may be identical with the neural mechanisms underlying cognitive processes. Different research routes lead to the common understanding that there is no such thing as "an affectless mind" (Izard, 2007, p. 270). Hoemann and Barrett (2019) hypothesized a computational framework through which the brain infers the meaning of a sensation (such as a rapid heartbeat) by reviewing previous experiences of similar sensations and their causes. On the basis of the review, the brain makes meaning of the current sensation (and what action it calls for) through a process of predictive coding. The important point is that Hoemann and Barrett's (2019) predictive coding account shatters folk intuitions about emotions

and cognitions coursing through separate systems in the brain: "What distinguishes between *apparent* [emphasis added] categories of experience is the brain's attentional focus, or which inputs are foregrounded" (p. 69).

A different route to common ground is represented by the experimental research of Bell and Wolf (2004). Bell and Wolf studied infants in the first year of life and added an unexpected finding to knowledge about the caregiving environment. Infants who received appropriate and sensitive support to relieve infant distress, were found to develop better working memory performance than infants who did not receive (or did not need) extra emotional support from caregivers. Bell and Wolf conclude that the same neural mechanisms may underly both emotion regulation and cognitive processes and call for new research into the relationship between the caregiving environment and the development of infant cognition.

Research from neuroscience contributes significantly to this study's inquiry into how students make meaning. Scholars use different terms, some say "intertwined," some "interdependent," some "simultaneous," but if one sets aside those nuanced distinctions, the common perspective is that learning is both a cognitive and affective matter: "emotion and cognition, body and mind work together in students of all ages" (Immordino-Yang, 2011, p. 102). Research Question 3, asking how emotional engagement with text is regarded, is validated.

Emotion and Classroom-Based Research

Research increasingly calls for greater understanding of the nature of emotions within the school context (Hagenauer & Hascher, 2010; Oades-Sese et al., 2014; Schutz & DeCuir, 2002; Schutz & Lanehart, 2002). The majority of research focuses on the instrumental value of emotions as something to be harnessed for academic purposes (Becker et al., 2014; Hagenauer & Hascher, 2010). The personal experience of emotion and what the significance of that experience

might be are on the whole overlooked, with a few exceptions. Bozhovich (2009) posited that emotions resulted from an individual's assessment of her relationship with the environment, and Izard (2007) theorized that "emotion schemas" responsive to individual, cultural and social differences constitute "the source of human motivation" (p. 265). Overall, however, an instrumental view of emotions dominates the literature.

Becker et al. (2014) theorized that emotions include "value appraisals" of the relevance of a learning activity or a content area more generally. Does chemistry matter? Is knowing this formula going to help me get into art school? The sense that students are engaged in something of value naturally leads to positive academic emotions of enjoyment and pride. Value appraisals may be harder for teachers to influence than the "control appraisals" students make as they assess how much mastery they have in the assigned activity. Teacher behavior that includes clear and comprehensible explanations increases students' sense of competence, which leads them to appraise their control positively, which in turn leads to continued learning in a positive frame of mind. Teacher behavior significantly predicts students' emotions in this model.

The instrumental value of emotions continues to be the focus in research by Hagenauer and Hascher (2010). Like Becker et al. (2014), they studied the relationship between positive emotions and motivation but with a shift from the primacy of teacher behavior to the importance of student needs. This is an important shift from a functional "what works" perspective to a focus on what the student is experiencing and what the student needs to experience. (Their empirical research in Austria was undertaken in response to the problem of the decline in motivation during early adolescence, linked to increasing alienation during high school.) Hagenauer and Hascher (2010) approached this problem by first asking what students were experiencing, and then what they needed to experience. The latter was identified using two models, StageEnvironment-Fit Theory (SEF) and Self-Determination Theory (SDT). The next step was to inquire into whether the academic environment was fulfilling students' basic needs, including a need for competence, autonomy, and social relatedness. The overarching idea that students' unhappiness might be due to a mismatch between environment and student needs was tested in the hypothesis "learning enjoyment will be positively linked to the fulfillment of basic needs, while impeded learning enjoyment will be positively associated with learning situations where students' needs are neglected" (Hagenauer & Hascher, 2010, p. 500). The design of Hagenauer and Hascher's research placed students' subjective experience at the center of inquiry.

Levenson (2019), referenced earlier in this section, related that for many years emotion was overlooked in educational research, and is a relative newcomer to the field. Meyer and Turner (2002) reflect on this change in quite personal terms as they tell how their own epistemology developed over time. Early on in their inquiry into motivation, their theoretical assumptions obscured their ability to recognize "the pivotal role of emotions in learning" (Meyer & Turner, 2002, p. 107). Three early studies in mathematics are described and their common conceptual flaw identified: the roles of emotion, volition, and social relationships were placed in the background as if not relevant to the research. They write: "We failed to consider the affective process during instructional interactions and how these experiences contributed to motivation to learn in the classroom" (Meyer & Turner, 2002, p. 108). What alerted the researchers to their error was the interview data; students had not "dispassionately discussed their thoughts or goals" but rather their interviews were "affect laden" (Meyer & Turner, 2002, p. 108).

Meyer and Turner (2002) made a second discovery. It was a mistake to focus on the individual as "the sole source of emotion and motivated action" (Meyer & Turner, 2002, p. 109) even though how individual students perceived and reported their literacy activities was the

focus of the inquiry. It was necessary instead to observe the student in the classroom context, where the crucial components were discourse and student-teacher interaction. This finding seems to confirm Nias' (1996) hypothesis that emotions, rather than individual traits, are "socially grounded" and cannot be separated from the social and cultural forces that help to form them (p. 2).

Meyer and Turner (2002) made a discovery about their own epistemology: they mistook the individual as the sole source of emotion and motivated action. Research in cultural anthropology, however, makes this error reasonable and explicable. In North American contexts, emotion is conceptualized as arising primarily within people whereas in some other cultures, for example Japanese, emotion is understood as between people (Kitayama, & Mesquita, 2006; Uchida et al., 2009). Furthermore, depending on how emotion is conceptualized, agency will be conceived of as individual or collective: "The conceptualization of emotion prevalent in a culture corresponds to the predominant model of agency in that context" (Uchida et al., 2009, p. 1437). Working within the North American context, where agency is individual, and emotions are "inside" people, Meyer and Turner were simply using the dominant cultural model when they focused on the individual.

In that diverse North American context, however, not all cultures conceptualize emotion or relationships in the same way. Recent research by Lopez et al. (2019) explored the experience of non-dominant Latinx students in undergraduate science courses and found the cultural value of *familismo* to be at odds with the culture of hyper-competitive classroom practices and formal professor-student interactions. In an inhospitable educational context, Latinx students created spaces where the cultural values of *recipricidad*, *confianza*, and *carino* could be expressed within the pursuit of scientific knowledge. This research is relevant to my study and to my overarching wondering about what students "in the gap" experience. It reveals what some nondominant students do experience when the affective-cultural self is excluded. One student, Carlos, imagined a learning community as a place where *familismo* and academic achievement combined, creating an experience that would integrate the cultural, emotional and mental resources of its members. In Carlos' words: "Part of academic performance is rooted very deeply in cultural and emotional and mental well-being. I don't think they're exclusive. I think they are very interdependent with one another" (Lopez et al., 2019, p. 106).

This paper represented a major shift in the literature on emotion: it showed that emotion comes into the classroom as an inseparable aspect of students' cultural identities. Yet Lopez et al. (2019) sound a note of caution against "falling into the trap of viewing *familismo* as a fixed construct equally experienced by all "Latinx" members" p. 103). In light of that caution, it is prudent to embrace the cultural insight this paper presents, respond to the practical implications, and at the same time resist reducing the findings to a cultural to do list. Victoria's understanding of *familismo* as "really caring about each other as human beings" (Lopez et al., 2019, p. 104) implies a bigger relational shift in education.

To conclude this section of the review *Emotion and Classroom-based Research* I refer to three classroom-based studies from different countries, Sweden, South Africa, and the United States, which employ different methodologies, and whose participants are of different age groups. The common feature that unites them is the sense that the emotional aspects of learning have been ignored, across literacy instruction at many levels.

Kullenberg and Pramling (2017) conducted a case study of two ten-year-old Swedish boys, one teaching, one learning a song, within a theoretical framework of dialogism, to investigate empirically the way emotional features of learning came into play in the collaborative task between peers. Kullenberg and Pramling (2017) noted that there are few studies that focus on the emotional aspects of dialogicality and observed more generally that emotions in discourse have been largely "disregarded" in many studies of teaching and learning as interactional phenomenon (p. 339).

A study by Janks (2010) argued that affective engagement with text is transformative in a way that surpasses rational critique. Janks (2010) designed the Interdependent Model of Critical Literacy intending it as a tool to develop students' ability to assess content critically. After using the model in her teaching, Janks was newly aware of its shortcomings; she found it wanting, useful but incomplete. The model stymied development, preventing students bringing "all that we now know into play" (Janks, 2010, p. 211). It is not enough, Janks (2010) writes, for South African students (or any students) to learn to deconstruct texts in an intellectually critical way: "What is missing from this model is the territory beyond reason, the territory of desire and identification" (p. 211). Unless students can bring affective engagement with texts into meaning making, they will produce reasoned critiques of many texts without being in any significant way changed by them. Instruction that ends with a reasoned critique, but without any changes in "aspirations or practices" is not in any way transformative (Janks, 2010, p. 214).

Lastly, Smagorinsky and Daigle (2012), using a case study methodology, reported on the thoughts and feelings of high school students writing expository and personal compositions in school. Smagorinsky and Daigle's focus reflects the same gap that Kullenberg and Pramling (2017) and Janks (2010) found: research literature has "all but ignored" student experience (Smagorinsky & Daigle, 2012, p. 293). Quite simply, we know little about how students feel about their work while they are experiencing its demands. In the author's words: "Few, if any, other researchers have looked at real-time writing and its affective dimension" (Smagorinsky &

Daigle, 2012, p. 293). This co-authored article is part of an extended inquiry Smagorinsky has conducted into students' emotions as they composed texts of different sorts, verbal, written, drawn, danced, and dramatic (Smagorinsky, 2001, 2008, 2011; Smagorinsky & Daigle, 2012). Whereas other studies by Smagorinsky showed meaning constructed dialogically with peers (Smagorinsky, 2001) here the focus is on the individual writer struggling to adopt the academic voice required by formal writing. She commented on her own efforts: "I hate this," "I don't want to do this," "I don't want to do it" (Smagorinsky & Daigle, 2012, p. 300). The struggle was not simply a matter of facility with academic language but a larger issue of emotional disjuncture between the student's working-class identity and the demands of the writing task that she speak in a voice far different from her own. Emotional disjuncture (Smagorinsky & Daigle, 2012, p. 297) could be construed in terms of the access dilemma, how to both honor the languages that students bring to school and also develop their access to other genres. Smagorinsky and Daigle, however, moved beyond the access dilemma with both sociological and psychological analysis, linking this particular student's emotional experience to a larger pattern in which marginalized groups (in this case working class college students) learn to conform to the norms of academic discourse, to pass as a member of the academic world, and assume what Wertsch (1990) calls the privileged "voice of decontextualized rationality" (p. 122) but at the cost of a "loss of a sense of self" (Smagorinsky & Daigle, 2012, p. 297). Smagorinsky and Daigle shift the discussion from a simply pragmatic matter of giving access to students in deficit and asks that we consider the sociological perspective and the student's subjective experience.

This section of the literature review has made clear the importance of emotions in education, both instrumentally, as linked to motivation and as intrinsically valuable and inseparable aspects of human experience. The connection that Fleer and González Rey (2017)

make between emotion and symbolic processes represents both a rediscovery and an application of Vygotsky's thought. The zone of proximal development is given, as it were, an affective foundation: a "learning subjective condition" (Fleer & González Rey, 2017, p. 163) that becomes the ground of intellectual operations. In its absence the student's intellect is at risk--of what? Of becoming "an operational-formal system that is unproductive and centered only on cognition" (Fleer & González Rey, 2017, p. 163). The importance of inquiring into the place accorded to emotion in children's meaning making is validated.

CHAPTER III

METHODOLOGY

Introduction

The methodology of this qualitative study combined sociocultural literacy research methods and interactional ethnography. The purpose was to understand how the social and cultural practices of classroom literacy instruction afforded students opportunities to make meaning with texts, drawing on multiple resources: personal subjective experience, the texts themselves, emotion, and interactions with peers in the social context.

The study builds on earlier sociocultural studies which have examined elementary school literacy practices. Like earlier studies this study uses methods consistent with sociocultural principles. The focused observation of small group and whole class interactions reflects the beliefs that social relations are essential for learning, that opportunities for individual development are found within joint activity, and that it is in the social context of learning that we can truly take the measure of an individual's ability (Bingham, 2004).

Consistent with newer trends in sociocultural research, this study emphasizes the importance of relationships and emotions (Barbalet, 2006; Bartholo et al., 2010; Bingham, 2004; Fleer & González Rey, 2017). In many earlier studies the focus has been primarily on the affordances of the environment, on what is readily available for learners to take up. Wells and Claxton (2002) researched the extent to which students take up for their own use others' skills and dispositions. Aukerman et al. (2017) focused on First Grade readers' use of

inter-comprehending, the practice of using peers as resources to make sense of the word and the world. This study expands on earlier studies by including emotion and other subjective means for constructing understanding within the social context. The individual and creative process of drawing on emotion and other subjective resources is not to be thought of as "solipsistic" (Stetsenko, 2017, p. 28) hidden, as it were, inside a person and independent of the social context. It occurs within the social context in a transaction (Dewey & Bentley, 1948) between the student and some aspect of the environment (Vygotsky, 1994).

Interactional ethnography is the second strand of my methodology. It is an epistemological perspective grounded in principles derived from anthropology and sociology (Bloome, 2012). The conception of culture as essentially semiotic and human behavior as "symbolic action" (Geertz, 1973, p. 10) aligns with symbolic interactionism, a theory that looks for the explanations of behavior "in terms of meanings" (Spradley, 1979, p. 6) and has three premises.

First, a person engages with an object according to the meaning that object has for her. A first edition of a novel, the confederate flag, a photograph of Marian Anderson at the Lincoln Memorial will move people differently and lead to different actions: "people act toward things on the basis of the meanings things have for them" (Blumer, 1969, as cited in Spradley, 1979, p. 6).

Second, culture--defined as "the acquired knowledge people use to interpret experience and generate behavior" (Spradley, 1980, p. 6)--comes into existence, and is continually revised in the social interactions of members of a group. A classroom, viewed as a culture-in-the-making (Green & Castanheira, 2012) is a dynamic site where students and teacher construct the meaning of things, occasions, or actions through their interaction. Because the classroom culture is not static but under construction, students have agency to build collective opportunities for learning and to increase possibilities for their own learning (Green et al., 2011).

Third, culture is not a rigid frame of interpretation. The meanings first constructed between people in the intersubjective space can be revised and reconstructed by an individual. As Spradley (1979) writes, people are not automatons. Meanings constructed in social interaction are modified "through the interpretive process used by the person dealing with the things he encounters" (Blumer, 1969:2, as cited in Spradley, 1979, p. 7).

Ethnography is "thick description" (Geertz, 1973, p. 6) that attempts to grasp the meanings that actions, artifacts, and occasions hold for those within the culture. Observation alone yields what Geertz (and Ryle before him) call "thin description." Ethnography builds understanding of culture "from the perspective of those who have learned (it)" (Spradley, 1979, p. 9).

I adopted the stance of interactional ethnographer to focus on each class as a cultural group. As it turned out, during the pandemic hyflex teaching was instituted, and "group" turned into several groups. As the vaccine rolled out, some students returned to the physical classroom while others remained at home and continued learning online. This was the situation in both grade levels, making four groups, which continued to change. New students joined one or other community, and students who had been long term online learners periodically returned to the classroom.

Conducting research online, I could not use interactional ethnography as I would have in an in-person class. Immersing myself in the research context (Spradley, 1979) meant settling into my chair in front of a computer screen for many hours. I observed the behavior of the at-home students (who were not always visible) sometimes spinning in their chairs, playing with Lego, cuddling with a puppy, and once, driving to Mexico, and all the while tuned in to the sound of their teacher's voice. I noted these details in field notes, careful to record the contexts in which instruction was received. The teacher, as the "presenter" was visible but the students in the physical classroom were rarely observable.

I recorded all the sessions I observed, scratching field notes on paper as I kept my eye on events on screen. Later in the day I began to transcribe the discourse in preparation for analysis using the methods of Kovalainen and Kumpalainen (2005, 2007). At times I found that adopting the sociolinguistic perspective on language characteristic of interactional ethnography (Walker, 2018) was helpful in making sense of the discourse. From the sociolinguistic perspective people who are defined, necessarily, by the event in which they are situated, are also able to define that event through their use of language (Bloome et al., 2005). Adopting the sociolinguistic perspective, I saw how students and teachers, through their interaction, constructed ways of working with texts and how together they constructed what counted as meaningful learning within those given structures.

The two strands of my methodology, sociocultural literacy methods, and interactional ethnography, are discussed in depth in the *Methodology* section.

Organization of Chapter III

First the *Rationale for the Research Approach* is explained and the research questions are restated. This section is followed by *A More Personal Rationale* which explains the personal-professional origins of my desire to pursue this research. It makes transparent my commitment to the children of La Montaña whom I taught for eighteen years, and to finding better ways of using "Literacy" to enrich their lives. The *Research Setting and Context* including relevant sociopolitical factors, and the *Research Participants* are described. *Ethical Conduct of Research*

precedes *Research Methodology*. The data collected are described and represented visually in a *Data Matrix*. The next three sections of Chapter 3 all have to do with data: *Data Analysis*, *Managing Data, Coding Data*. Finally, the issue of *Trustworthiness* is addressed, and I consider the *Limitations* and *Delimitations* of the study.

Rationale for Research Approach

The purpose of this qualitative study was to understand how the social and cultural practices of classroom literacy instruction afforded students opportunities to make meaning with texts, drawing on multiple resources: personal subjective experience, the texts themselves, emotion, and interactions with peers in the social context. The study was conducted within a sociocultural framework that conceptualized the classroom as a community of practice where students learned with and from each other and participated actively using the spaces and tools available for collective meaning-making. How students experienced literacy instruction was my particular area of interest, as the research questions reflect:

- Q1 What opportunities to make meaning are afforded by the social and cultural practices of Interactive Read Aloud and Guided Reading in a Second-Grade and a Third-Grade classroom?
- Q2 What opportunities are available in the interaction of those literacy events for students to use language as a tool to generate, explore and challenge ideas?
- Q3 What evidence is there that emotional and other subjective resources, including lived experience are viewed as relevant to making social meanings and personal sense in the literacy event?

How students experienced literacy was my focus, not students' low reading achievement

(as measured by standardized tests). I selected this focus because I was not convinced by current

accounts that explain underachievement using deficit theories and positing "missing

components" in individual readers. For example, when a "component" such as phonemic

awareness is diagnosed as underdeveloped and held responsible for low reading level, a course

of treatment is prescribed. An intervention such as Orton-Gillingham is one possible remedy. Responses such as this not only overlook children's experience of schooling and the social context in which schooling takes place. They ignore more holistic approaches to child development, including how children subjectively configure and reconfigure their ongoing experiences of learning in school, affective, social, and material (Fleer & González Rey, 2017, p. 165). In Vygotskian terms, deficit explanations overlook the elements of the environment to which students relate in their different ways, including the language of instruction, literacy participation structures, and the texts selected for literacy instruction.

I turned to sociocultural theory for a theoretical frame for my research because I knew the children of the school well. They were smart, capable, and had extensive funds of knowledge (Moll, 1992). Sociocultural theory was a promising framework. It emphasizes the historical and cultural contexts that shape individuals, including the language that mediates development within those contexts. In this era where literacy is so often conceptualized as a neutral skill-based behavior (Lewis et al., 2007, p. 3) sociocultural theory plays an essential role in refocusing attention on the social and cultural practices that affect what kind of literacy is learned, by whom, and how. A sociocultural approach calls for setting aside assumptions about how students learn and replacing them with examination of the micro-level "face-to-face interactions in classrooms" (Gutierrez & Larson, 1994, p. 22).

Sociocultural theory has a deep "field of vision" drawing on ideas from sociology, education, anthropology, psychology, and linguistics (Bernstein, 1975; Bruner, 1990; Gee, 2004; Halliday, 2007; Purcell-Gates, 2010; Street, 2004, 2013). It emphasizes the importance of macro level cultural and social contexts in all learning (Gutierrez, 2001; Pacheco, 2010) but pairs this understanding with attention to the micro level of classroom life. For these reasons it was to sociocultural theory that I turned for a supportive framework as I planned my approach to research.

Expanding My Understanding of the Sociocultural Framework

Sociocultural theory has framed many research studies that examine the relationship between culture and learning. Some recent theoretical studies suggest that sociocultural research take a more critical turn in order to reveal the roles of identity, agency, and power in that relationship.

Research such as that by Moje and Lewis (2007) found that the social and cultural practices of the classroom did not provide uniform opportunities for students to learn. Learning, conceptualized as gaining access to a discourse, is not simply a function of a participant's status as a novice or more accomplished member of the community but has to do with differences of race, gender, language, and economic status "depending on what aspects of difference matter most" in a discourse community (Moje & Lewis, 2007, p. 17).

Moreover, students and teachers may indeed socially construct the norms, roles and relationships that operate in their learning community (Kovalainen & Kumpalainen, 2007) but classrooms are not sealed off from macro-level political policies and ideologies. Underlying the institutional context of school and classroom are the ideologies that characterize the larger societal context (Gutierrez & Larson, 1994; Huber et al., 2018; Rodriguez & Braden, 2018; Schirmer & Apple, 2018) including, today, anti-immigrant policies and neoliberal reform.

Opportunity to learn is inextricably bound up with issues of identity and clearly much more is at play than a student's status as novice or more proficient learner: differences of nationality, immigration status, economic status, language(s) are consequential (Holland & Leander, 2004; Moje & Lewis, 2007). With these concerns in mind Moje and Lewis (2007) questioned whether sociocultural literacy researchers have made sufficiently explicit "how identity, agency, and power matter in people's opportunities to learn literacy" (Lewis et al., 2007, p. 20). Dominant ideologies originating outside of school, such as I have described, exert power within classrooms, including over the micro level of teacher student interaction. Sociocultural research sharpened with a critical edge may reveal how the power of dominant ideologies, including neoliberal reform, influences students' opportunities to learn (Eisenhart & Allen, 2016).

If there is a tension between older and newer iterations of sociocultural theory, it is a productive one. I see the adoption of a more critical perspective as a natural development of sociocultural theory as it seeks to address contemporary problems. Moving beyond the initial theory, according to Stetsenko (2017), is not only necessary, it is what keeps a theory meaningful:

Such "movement beyond" entails entering in dialogue with a given theory through our own active work and struggle that inevitably changes the initial meanings under the contextual realities and imperatives of our own, currently existing challenges (pp. 11-12). A more critical sociocultural perspective that attends to issues of identity, agency, and power in the field of literacy was a promising framework within which to pursue my research questions.

A More Personal Rationale for Conducting Qualitative Research

My research questions about student experience began in my own experience as a teacher. I knew that the student who slammed shut a testing booklet but spent the next two hours conducting her own investigation into motion, slope and friction (using small metal balls she pulled from her pocket) was a learner. I also knew that when the test results came out, she would, like most of her classmates, be designated unsatisfactory. The testing experience would not show the potential that was visible in the community of learners, where the teacher and students shared events from their own experience and found connections between their lives and the books they were reading. In that context, reading was a meaningful experience.

As I teacher I had never felt less authentic than when I invigilated standardized tests. It was not because the test was hard for these students, or because the equipment was barely adequate (it is difficult to view two texts simultaneously for comparison on a Chromebook screen). I felt inauthentic because the task was in its nature inauthentic: answering multichoice questions on disconnected reading passages without support from those who help you learn every day. My earliest research questions were shaped by my experience in Room 19, desks separated to prevent cheating, headphones and privacy carrels in place, *Goldfish* snacks in little piles on each desk. I first wondered about test preparation and how much it had skewed classroom instruction towards the day of reckoning. I wondered whether students were aware of teachers' conflicted emotions as they steered their instruction towards test readiness. Zembylas (2006) says that they are. Then I wondered about the positive classroom experiences students had during literacy, how they made meaning with texts in the context of Interactive Read Aloud and Guided Reading. The research questions I have developed place students' experience at the center of this inquiry: student opportunities, student interactions, the resources to make meaning, and the effect of all these on the identities students are forming. That the questions formed in my own teacher experience is quite explicable when you think of teaching and learning as one, captured by the Russian word obuchenie.

A qualitative research approach was most suitable for understanding what students experienced in the classroom. It imposed no manipulation or control of behaviors or settings (McMillan, 2016, p. 305) and proceeded from the assumption that nothing is trivial, that on the contrary, every detail of the setting might contribute to better understanding (p. 305). Detailed descriptions of setting, participation, and interaction within events supply what is entirely missing from the information provided by standardized tests. The descriptive sketches that emerge from qualitative data reflect the complexity of human emotions, thinking, and behavior (McMillan, 2016, p. 305) and as such they are promising responses to the research questions.

The data generated, like all qualitative data, required interpretation. In the sections Data Collection and Data Analysis, I argue that when analyzed with the appropriate tools, the data yield an interpretation that can indeed offer answers to the research questions.

Research Setting and Context

Heath and Street (2008) wrote that the most productive questions of an ethnographic inquiry spring from "a true curiosity" (p. 49) and that the choice of the research site is often tied "closely and logically" with the desire to satisfy that curiosity. This was certainly true for this researcher although I prefer the phrase "to increase understanding" over "to satisfy curiosity."

This study was undertaken in response to a pattern of declining achievement at an elementary school and the lack of a convincing explanation for its decline to turnaround status. The school in question is a public elementary school where I taught for eighteen years. The school has been positioned as low achieving for two decades, since the No Child Left Behind legislation came into effect and introduced measures and rankings of achievement. There have been on-going attempts by teachers and administrators to form explanations for the continued lack of academic success. I witnessed and participated in many innovations introduced in response to theorized causes. Some were imposed by the No Child Left Behind (NCLB) legislation, such as after school tutoring by more or less qualified tutors. Some were gifted by

outside organizations such as the I Have a Dream Foundation. Others were teacher-initiated attempts to bring change from within, such as months-long, site-based research conducted by a team of teachers using grounded theory. A state department of education team was invited by the principal to conduct an on-site review and make recommendations. An International Baccalaureate Curriculum was adopted and used for eight years; of necessity it was abandoned when the school fell to turnaround status.

Teachers continued to do what "best practice" demanded even in periods when explanations evaded their collective grasp. Though an outside observer, watching highly skilled teachers go about their work, might have interpreted their activity as an avoidance of constructing explanations, from an emic perspective it would be more accurate to say teachers had reluctantly accommodated to the gap between their professional knowledge and efficacy.

The research took place against this historical background, in two classrooms, one Second Grade and one Third Grade in a public elementary school in a small town of the western United States. The town's population is 28,000; the school population is close to 400. 72% of the students are Hispanic, and 35% are English Language Learners. Instruction was in English, with support for English Language Learners provided for one forty-five-minute block per day. The curricular area supported changed periodically from writing to reading to math.

The school was an anomaly in a high achieving school district and was known to be so: only 45% of the children living in the school's enrollment area attended the school. According to the most recent newspaper account of standardized test results "all the rest of the (district's) schools were rated in the top two categories" while this school alone "dropped to the lowest of four categories, earning a turnaround rating." (For reasons of privacy the source is not cited.)

The school has been an "achievement anomaly" for two decades, and throughout has received extra resources and attention, much as one would lavish care and love on a child who failed to thrive. It has benefitted from reduced class size, additional counselors, a behavior support team, and after-school enrichment programs. One noticeable effect on the physical environment is the busyness. There are simply a lot of people in the building, so many that the school feels in some ways like a small town. Workspace is a valuable commodity; additional people need to be given some space in the building and this causes frequent reallocations, adjustments, and space sharing. It also means that students have potentially many spaces they may "visit" during the day: counselor's office, speech room, behavior support, the Zen space (formerly the custodian's office) as well as the usual Music, Physical Education, and Art locations. Hallways, like streets, are rarely empty; individuals, small groups, and whole classes are always on the move. A special educator on her way to find a student for small group instruction, a line of Kindergartners, "bubbles in mouths" making their way to Art. A parent bringing cupcakes for an end-of-day birthday celebration, a Second Grader taking a calming walk supported by a behavior specialist.

The school differs from all the rest of the district's schools in socioeconomic status: 72% of its students qualify for federally subsidized lunch, the highest percentage in the district. The district's public response to the fact of poverty has been delicate, understated in media reports. Since it is no secret that children who are poor lack good medical and dental care, are often hungry, and also move from one place to another frequently, and since it is equally clear that these features of poverty affect their school success, it seemed disingenuous when both journalists and district spokespersons appeared perplexed by poverty's consequences: Why has

one school, the one attended by the district's poorest children, dropped to the lowest category of turnaround status? What are the root causes?

Admittedly, these questions which are asked over and over, may not be disingenuous. They may come from honest incomprehension. If so, the accompanying professions of commitment to "get to the bottom of things" are even more admirable. I choose to believe this is the case, setting aside my attraction to a darker interpretation such as Rothstein (2008) makes when he states that to assume a posture of puzzlement in the face of poverty is not only to feign ignorance but also to abdicate responsibility for publicizing an established truth. According to this line of thinking, it is meaningless to discuss student achievement so long as we avoid confronting the overwhelming social and economic disadvantage poor children inherit. Plainly stated, the horse should pull the cart: a correct analysis of problems should precede the design of effective solutions (Gage, 2018; Rothstein, 2008).

For the district was indeed committed to solutions, through "an ongoing process of looking at root causes and (making) appropriate responses to those root causes." (The source remains uncited to protect participants' privacy.) Recent responses have included the appointment of a principal from a highly successful school, and the recruitment of an experienced national literacy trainer. These changes were made, however, absent any discussion of the voluntary segregation that has followed from a district policy of open enrollment and some support for charter schools. Exit the doors of this school, walk for four minutes and you reach a charter school where 8% of students are eligible for free and reduced-price lunch. Were voluntary segregation taken into account, La Montaña, now cast as a concerning anomaly, would be seen to be in an entirely predictable situation. The school is, thus, set within a confused whirl of ideologies: the idea of equal opportunity, the value placed on competition, and the ideology of free choice. We cannot talk about the setting of this school without also acknowledging the role of these ideologies.

Changed Research Context

I last visited the classroom that was to be the site of my future research on an afternoon in early spring 2020. Students were investigating topics for their social studies health unit and knowing that Matt and Katie could find little on the brand-new coronavirus which they had opted to study, I came prepared to share a digital text, a "comic" designed to reassure and inform in equal measure. Written by journalists Malarka Gharib and Cory Turner (2020), it reported facts in a non-alarming way. The script was in informal marker font, the illustrations in comical Quentin Blake style. Two alarmed children exclaim, in "spooky" font, "He might have the CORONAVIRUS!! OMG! OMG! What is that?" The text works through the contrast of visual and narrative elements: comic images of excessive anxiety stand in opposition to the calm adult narrative voice that states simply: "In some parts of the world, it has made lots of people sick." A considerate text, viewable in Spanish, Chinese, and English and audible in English, it ends reassuringly: "There are a LOT of helpers out there who are working to protect you. It is NOT your job to worry." I shared it with Matt and Katie, confident that its varied modality would engage them, and that was that.

Three days later, school doors were shut statewide in response to the raging coronavirus. March 23rd marked the end of classroom learning as we knew it. The coronavirus pandemic upended schooling nationwide, replacing in-person learning with online learning for students from kindergarten to college. The loss of the taken-for-granted togetherness of learning cannot be underestimated; as the president of Spelman College put it, "the loss of a living breathing community (is) profound" (Campbell, 2020, p. L10). Old certainties and familiar patterns were erased in the spring of 2020. It became increasingly clear that many school districts would not resume in-person learning in fall 2020.

My research would now take place in the midst of a pandemic, and I had to redesign it to fit the virtual learning world. I originally intended to study one in-person class and observe both Interactive Read Aloud and Guided Reading. With online learning, Guided Reading occurred less frequently, and the groupings were less consistent. With fewer regular Guided Reading groups to observe, I opted to observe Interactive Read Aloud in two classes, one Second and one Third Grade. This decision meant I observed one literacy practice across two contexts. Interactive Read Aloud became the primary focus of my research. I continued for a time to watch Guided Reading instruction, but few groups met often enough and with the same members, for reliable observations to be made. The Second Grade "Gabriella" group and the Third Grade "Lexie" group were exceptions to this general pattern.

The pandemic caused other difficulties for research. I had intended to use an interactional ethnographic approach to research, observing the in-person interactions of students and teacher in the classroom. Virtual classrooms were not "living, breathing communities" and did not allow students to engage with peers in all the many ways I had hoped to observe. I expected that some of the spontaneity might disappear from discussion and the energy of Second and Third Graders be suppressed by the controlled kind of participation a Zoom platform affords.

Despite the unforeseen obstacles to research, observing the sociocultural setting of remote learning and finding what worked and what did not proved to be valuable. If remote learning is to be done well, the more information we can gather about students' experience of it, the better. The overarching research question remained important: "How do these students make meaning from texts in a virtual classroom?" The inequalities that have been exposed and exacerbated by the pandemic (Hubler & Goldstein, 2020; Scheiber, 2020) make it all the more urgent that students who are not economically privileged find their strengths in school, use their voice, and experience agency as they make sense of the word and the world through meaningful academic experiences.

Research Participants

The research participants were the Second- and Third-grade students of two classrooms receiving hyflex instruction. 50% of the Third-Grade class are English Language Learners and 59% are Latinx. Fifty percent of the Second-Grade class are English Learners Learners and 64% are Latinx. Confined at home for many months and now learning in a hyflex situation, the students were all in an unprecedented situation. Those still at home were sometimes competing with siblings or other family members for a quiet place to claim as their "school spot." They did not have in their hands the books used in Guided Reading, and instead viewed texts on their computer or laptop screen. In the normal physical classroom setting, a student can informally call on a buddy or team-mate for assistance with a learning task; in the virtual classroom who interacted with whom was much more controlled.

The teachers, Ms. Spencer and Ms. Windsor (all names are pseudonyms), are former colleagues. Ms. Spencer is in her 9th year of teaching and Ms. Windsor is in her 15th year. Both have been at La Montaña for 8 years. A student teacher in Ms. Spencer's class, Ms. Williams, also participated in the study.

Ethical Conduct of Research

Ethical considerations are of utmost importance when conducting research with human subjects. I had a responsibility as the researcher to hold all participants, students and teachers, in high regard (McMillan, 2016). I had a responsibility to safeguard their right to privacy and anonymity and to treat all participants as individual persons first and foremost and not representatives of a cultural, ethnic, or demographic group.

All participants and their parents/ guardians were appropriately informed about the purpose of the research including the audio recording of whole class Interactive Read Aloud lessons. Parental consent was sought for audio recording of small group lessons. The overarching ethical principle was beneficence, which required that all participants be protected from harm and all actions by the researcher should maximize the possible benefits (McMillan, 2016).

I have a responsibility to readers of this research to present findings truthfully and not narrow or distort the data base in order to confirm any personal belief I might hold.

Research Methodology

This qualitative study was designed to examine the experience of Second- and Thirdgrade students as they made meaning with texts within specific learning contexts. To build understanding I combined elements of sociocultural literacy research methodologies and interactional ethnography. I discuss each of these methodologies below.

Sociocultural Literacy Research Methodologies

The sociocultural research tradition has frequently contributed to classroom-based research by highlighting the participatory nature of classroom activity in constructing knowledge and interpreting text (Aukerman et al., 2017; Chang-Wells & Wells, 1993; López -Robertson 2012; Moll & Whitmore, 1993; Smagorinsky, 2001). Research in the sociocultural tradition offers a more rounded picture of students and their emerging capabilities and leads to a more complete and valid understanding of them (Moll, 1992). In this study, however, I also attributed importance to emotion and to the subjective resources students used in making meaning, more than is often done in sociocultural research. This is in keeping with the recent trends in contemporary sociocultural research which understand learning to critically involve relationship, emotion, and subjective resources (Barbalet, 2006; Bartholo et al., 2010; González Rey, 2011, 2014b, 2016; Herreid et al., 2014). A student is certainly situated culturally, historically, and socially in a context, yet the context does not in itself define the conditions of development. Instead, what influence the environment has is determined "by the meaning that the situation has for the child" (Clarà, 2016, p. 287). The emotional experience of a literacy event, or perezhivanie (Vygotsky, 1994, p. 339) like meta-experience, becomes a resource for making meaning, or "turning socially and culturally situated activity into meaningful texts" (Smagorinsky & Daigle, 2012, p. 295). On this view, understanding the meaning a literacy event has for a child requires close observation of her participation in interaction, the kinds of discourse "moves" she makes, and the consequences of her interactions. All these things are clues to children's "affective relationship" to the environment (Bozhovich, 2009, p. 66), indicators of the emotional experience or perezhivanie the literacy event provokes.

In all research, methods must be selected that are appropriate to the theoretical underpinnings of the research endeavor (Bikner-Ahsbahs et al., 2015; Radford & Sabena, 2015). Placing greater weight on students' individual subjective experience in making meaning called for methods that made visible less readily observed processes of making meaning. The challenge for the researcher is twofold. First, to reveal the affective relationship between the student and any aspect of the learning environment (Bozhovich, 2009; Mahn & John-Steiner, 2002; Vygotsky, 1994). This "single and unique relationship between the child and the social reality that surrounds him" (Vygotsky, 1998, p. 198) is what determines the learning opportunities available to him. A second challenge is to see, as well as reflection and internalization, the principle of refraction at work in literacy events. The principle of refraction refers to students constructing personal meaning that is neither a reflection of, nor internalization of group understanding. Vygotsky originally used the metaphor of perezhivanie as a refracting prism to capture this kind of personal meaning making (Vygotsky, 1994) and the concept and metaphor have been further explored by prominent scholars in the sociocultural tradition (González Rey, 2016; Veresov & Fleer 2016; Zittoun, 2010).

The methods used by Kovalainen and Kumpalainen (2005, 2007) offered a promising path in my search for a way of analyzing discourse that was sufficiently detailed to trace the origin, development and uses of emotion and subjective resources in classroom discourse. Kovalainen and Kumpalainen's methods of moment-by-moment analysis reveal the kinds of discourse moves students and teacher make, who initiates a discussion topic or asks a question and when, who responds to whom, who follows up on previous utterances and with what effect. Their methods identify communicative functions, such as sharing or asking for personal experiences or feelings or requiring "evidence." They locate which contributions are discursively elaborated and which are not. The close analysis that Kovalainen and Kumpalainen's (2005) methods permit can reveal when the discursive norms of the classroom are counterproductive, creating obstacles to students' sharing lived experience by bringing "personal histories and experiences as resources for (joint) meaning-making" (p. 213). On the positive side, analysis of the interaction sequences makes visible when and where the integration of students' experiences does occur, and with what consequences. In Data Analysis these tools and methods are explained and illustrated in greater detail.

Interactional Ethnography

Interactional ethnography tells the story "Of a particular place at a particular time" and tells it at a human level (Kozinets, 2015, p. 67), seeking to convey the meaning of social life from the perspective of group members. It is guided by anthropological theories of culture as neither static nor given but always developing (Green & Castanheira, 2012) because the members of the group, who are shaped by the context they inhabit, are in turn shaping their context.

Interactional ethnography has a "sociolinguistic perspective on the study of language in use" (Walker, 2018). This perspective entails the understanding that while people are always defined by the event in which they are situated, they also define that situation, in large part by their uses of language (Bloome et al., 2005). In the context of educational research this means studying how students and teachers jointly construct opportunities to learn, and in the case of this research study, how they constructed opportunities to work with texts and "learn literacy." How did students and teacher construct certain ways of working with texts, recognize (or not) different ways of interpreting texts, and establish purposes for reading?

Examining language in use means going beyond the question: What counts as literacy in this classroom? to ask: How do the classroom interactions construct this as valuable? How do students learn to value this concept of literacy? By examining language in use, I sought to find the ways the language of teaching and learning constructed both the classroom literacy practices that had value and defined expectations for participation in those practices. To achieve my goal, I needed very precise methods for the close examination of language in use, methods that made

visible the forms and patterns of interaction in a literacy event. Kovalainen and Kumpalainen (2007) offer tools and methods that permitted discourse analysis that went beyond what is usual in ethnographic research. Micro analysis of discourse operates at three levels. First it establishes who does what in the literacy event: who initiates, who responds, who follows up. Secondly it identifies the purpose of an utterance through its communicative function. Third, interaction sequences are analyzed to reveal who speaks when, in response to what and whom, and with what consequences. Whose contributions are discursively elaborated and whose fade out as if insignificant? Close examination of discourse also shows when interaction leads to collaborative meaning making, how language is used to generate, challenge, and explore ideas, and when emotion and subjective resources for making meaning enter discussion and with what effect. This kind of close analysis gets at issues of power, status, relationship, and linguistic privilege which are features of any culture and dynamics that in the culture of a classroom, mediate individual student learning in both productive and unproductive ways.

Using an interactional ethnographic perspective, I sought to discover the kinds of literacy students learned to value. Was it, for example, literacy as a sort of race, the goal being to reach higher and higher reading levels? How did the classroom interactions contribute to constructing this as valuable? Or did students learn through their interactions that literacy can help them make sense of their world? If so, how did classroom interactions contribute to establishing this as valuable?

Looking for answers to those questions I used Spradley's (1980) methods for finding essential cultural categories. Following Spradley's semantic relationship approach, I used four semantic relationships (is a part of, is a way to, is a means of, and is a reason to) to identify five cultural domains that operated in both classes: Reading; Understanding a story; Responding to text; Speaking up in class; and Teacher's role in reading instruction (see Appendices A and B). Making a domain analysis is but the fifth step in a sequence of twelve steps leading to the writing of an ethnography. My methodology included an ethnographic perspective, but I did not claim to be writing an ethnography. I chose not to go beyond the fifth step and, as Spradley (1980) allows, moved to conduct a thematic analysis. Although I did not follow Spradley's methods beyond step five, forming the cultural categories gave me a valuable organizing framework for interpreting what happened in different stages of a lesson.

Kozinets (2015) states that in any ethnography the researcher must be engaged with the subjects: "personal engagement with the subject is the key to understanding a particular culture or social setting" (p. 65). Engagement is non-negotiable, but the repertoire of methods is diverse: interviews, conversation and discourse analysis, visual analysis, observations, photography are but some of the possibilities. While this study used an interactional ethnographic approach and does not claim to be an ethnography, many of the characteristics of ethnography described above apply to it. I was encouraged, given the pandemic-imposed changes I had to make to my research plan, by Kozinet's description of ethnography as "based on adaptation or *bricolage*" always adapting to suit particular research sites or times, "the story of a particular place at a particular time, inhabited by a particular person who conveys the research" (p. 67).

Data Matrix

The Data Collection Matrix (Walker, 2003) below illustrates the types of data relevant to each research question. Table 1 also gives examples of concepts that guided interpretation of the data: discourse moves, communicative functions, and interaction sequences.

Table 1

Data Collection Matrix

Research Questions	Types of Data	Example concepts
1. What opportunities to make meaning are afforded by the social and cultural practices of Interactive Read Aloud and Guided Reading in a Second-Grade and Third-Grade classroom?	Lesson observations Transcriptions of whole class and small group discourse Students' written and spoken ("Seesaw") responses	Discourse Moves TI (teacher initiation) TR (teacher response) TF (teacher follow-up) SI (student initiation) SR (student response) SF ((student follow-up)
2. What opportunities are available in interaction of those literacy events for students to use language as a tool to generate, explore and challenge ideas?	Lesson observations Transcriptions of whole class and small group discourse Students' written and spoken ("Seesaw") responses	Communicative Functions: EXP (Experiential) VIEW (view sharing) INFO (information exchange) EVI (evidence negotiation) DEF (defining) NEU (neutral interaction) CON (confirming)

Table 1 (continued)

Research Questions	Types of Data	Example concepts
3. What evidence is there that emotion and other subjective resources, including lived experience are valued as resources for making social meanings and personal sense in the literacy event?	Lesson observations Transcriptions of whole class and small group discourse Students' written and spoken ("Seesaw") responses	Interaction Sequences: SIB/T (student-initiated bilateral sequence with teacher participation) SIM/T (student-initiated multilateral sequence with teacher participation) SIB (student-initiated bilateral sequence without teacher participation) SIM (student-initiated multilateral sequence without teacher participation)

Managing Data

All electronically recorded data were stored within a file on a computer with a secure password to which only I had access. Secured data included audio recordings, emails, texts, teacher reflections, interviews, student work samples and transcripts. Written documents were stored in a secured cabinet in my home office. These included my reflective memos and any handwritten observations. All data will be destroyed after two years.

Data Timeline and Collection

Data collection commenced in March 2021 and continued throughout the Spring semester. The data corpus encompassed the observation of sixty-eight Interactive Read Aloud sessions and fifty-six small Guided Reading sessions, as well as the audio recordings and transcriptions of all these literacy events. Additional sources of data were written teacher reflections, six teacher interviews, and students' written or spoken responses to texts on the Seesaw platform. Data also included observations made on two visits to the school garden for harvest and planting.

Data Analysis

A general principle holds across the spectrum of research: the theoretical underpinnings of the research approach determine the selection of appropriate analytic methods (Bikner-Ahsbahs et al., 2015; Gutierrez & Larson, 1994; Radford & Sabena, 2015; Smagorinsky, 2013). The close relationship between theory and methods is succinctly expressed by Smagorinsky (2013) when he states that coding is "the manifestation of theory" (p. 399). In this study the coding processes I used make transparent and explicit my sociocultural theoretical perspective.

Since methods are linked to worldviews about what can be known and are, in a sense, epistemological acts of faith, they are themselves philosophical in nature. The main characteristic of a method, according to Radford and Sabena (2015) is to be "inquisitional and reflective" (p. 159). Although I set out below an organized, logical sequence of coding procedures, I did not consider methods to be instruments of certainty, applied or "followed blindly" (Radford & Sabena, 2015, p. 160) until the truth is uncovered. The methods of analysis that I outline below were "part of a reflective, philosophical practice" (Radford & Sabena, 2015, p. 159).

Theoretical Foundations of Analysis

In my research, I observed, recorded, and coded whole class and, to lesser extent, small group interactions maintaining that social relations are essential for learning: opportunities for individual development were to be found within social relations and joint activity. The methods of coding and analysis that I used "manifest" the sociocultural foundations of this research.

Language is a primary means of classroom instruction (Nuthall, 1996) and discourse analysis an appropriate method for examining what students do with language in social learning experiences. Sociocultural theory has shifted the emphasis from individuals as solitary learners to group members engaged in a situated activity. Analysis of learner interaction traces the nature of students' engagement and shows the relationship between utterances or turns at talk. Kovalainen and Kumpalainen's (2007) coding processes are valuable means for analyzing the chain of meaning making that reveal how an individual turn is enabled and constrained by prior turns (Saxe et al., 2015).

The coding processes used also support the uncovering and examination of emotion as it emerged in interaction and became a resource for making meaning. As I have stated earlier, I assigned to emotion and other subjective resources more importance than is usually the case in sociocultural research. I have cited developments in more recent sociocultural research to validate my doing so (Barbalet, 2006; Bingham, 2004; Fleer & González Rey, 2017; Herreid et al., 2014). My third research question focuses on emotion in interaction. Q3 What evidence is there that emotion and other subjective resources, including lived experience, are valued as relevant to making social meanings and personal sense in the literacy event?

How do the methods of coding and analysis relate to Research Question 3? More bluntly put, what's interaction got to do with emotion?

Scholarly research cited in the Literature Review identified the long neglect of emotion in educational research (Levenson, 2019; Meyer & Turner, 2002) and the difficulty in erasing folk intuitions of emotion as antagonistic to rationality, an obstruction to the construction of knowledge, and at best irrelevant (Del Rio & Alvarez, 2002; Zembylas, 2003). Research has increasingly showed emotion to be none of these (Barbalet, 2006; Lopez et al., 2019; Meyer, 2014; Siegel, 1997; Solomon, 1984). As well, research has increasingly showed emotion as "between people" (Kitayama et al., 2000; Kitayama & Mesquita, 2006; Uchida et al., 2009). Research from Scandinavia especially has focused on the emergence of emotion within the flow of interaction "as a contextualized, multiparty process" (Goodwin et al., 2012; Peräkylä, 2012). DuBois (2007) is in accordance with this view when he rejects the concept of subjectivity as a "purely internal, solipsistic state of the individual psyche" (DuBois, 2007, p. 157) and argues that just as one cannot form an epistemic position on one's own, so affective and evaluative stances depend on the to-and-fro talk between people who are "in the process of meaning making" (Bloome et al., 2005, p. 5). If rather than having their "primary locus" in the individual, (Goodwin et al., 2012, p. 24) emotions arise in part from the social event or literacy event underway, it makes sociocultural sense to look at individuals not in isolation but at the sequences of interaction between individuals "in which one party is responding to, or in some other way performing actions on, actions produced by another" (Goodwin et al., 2012, p. 25).

First Cycle Coding

The first cycle of coding had three phases. I first analyzed discourse using initial coding (or open coding), the units of analysis being joint activity, transformation through joint activity, mediation, and perezhivanie. I analyzed the transcript a second time using in vivo coding. This gave prominence to participants' voices and was in keeping with my desire to capture students' experience. I analyzed the transcript a third time using tools derived from Kovalainen and Kumpalainen (2007) that revealed how an individual turn was enabled and constrained by prior turns. I refer to this method of analysis as "formal" coding.

Before embarking on these steps, I followed Saldaña's (2016) call for a period of "digesting and reflecting" on data (p. 115).

Initial Coding

The units of analysis used for initial coding derive from the theoretical underpinnings of this study in sociocultural theory. Specifically, three axioms operated:

- the central importance of culture and the social context in intellectual development
- the transformation of individuals through participation in joint activity
- the mediation of learning

These theoretical understandings guided my selection of three analytic units: joint activity, transformation through participation, and mediation. From the amplified sociocultural perspective, the concept of perezhivanie gave an additional and equally important analytic unit: subjective resources and emotion.

In Vivo Coding

In vivo coding of the transcripts brought to life the participants and their voices, giving prominence to their words precisely as used. Using in vivo coding was especially appropriate in

a research study that sought to understand the experience of the participants. It is sometimes called, rather dryly, "literal coding" or "verbatim coding" (Saldaña, 2016, p. 105); I prefer to think of it as letting the transcript breathe.

Unlike formal coding, in vivo coding is a more intuitive process. I began by highlighting words or phrases that simply struck me as important in the context of literacy. A teacher might say "I want you to be enjoying books" or "What do you feel like reading today?" I noted and highlighted words that were used repeatedly: "Remember," "You have to remember," "Who can remember?" I noticed a teacher consciously and explicitly state her emotions after reading: "I loved," "I began to tear up a little." Later during formal coding, I asked what followed from her saying this, or what consequences it had for students.

In vivo coding of student language proceeded in a similar way. I highlighted first what struck me intuitively as significant in the context of literacy, perhaps a student making a connection between the story and his own life, or a small group eager to hypothesize: "Maybe ..." "Maybe ..." "Maybe ..." I highlighted when a student "rewrote" part of the story: "The mother should have said ..." indicating her sense that she too had authorial power over text. *In vivo* coding of children's actual words, as Hedegaard (2009) noted, helps the researcher to grasp the child's perspective on what literacy is about, and her role and agency in any literacy event.

In vivo coding was particularly valuable in researching the experience of students who were categorized as "struggling" or "non-proficient." While labels may prevent us seeing through to the students' experience, prioritizing students' actual words can have the opposite effect and deepen understanding of their experience.

Formal Coding of Discourse

Step 1: Coding Discourse Moves. I used Kovalainen and Kumpalainen's (2007) protocol of discourse moves to name the form of a message unit as an initiation, a response, or a followup and to locate its origin in teacher or student action. The discourse moves were coded as follows: Teacher initiation (TI), Teacher response (TR), Teacher follow-up (TF), Student initiation (SI), Student response (SR), and Student follow-up (SF; Kovalainen & Kumpalainen, 2007, p. 145).

Step 2: Coding Communicative Function. Using Kovalainen and Kumpalainen's (2007) categories of communicative function (p. 146) I coded discourse moves by function or purpose. What was the speaker doing with language? What was she achieving with words? Some possible moves are sharing personal experiences, asking for definitions or elaborating. Coding by communicative function told me something about the speaker's purpose. Ten communication functions were derived from the data Kovalainen and Kumpalainen (2007) gathered: Evidence negotiation (EVI), Defining (DEF), Experiential (EXP), View sharing (VIEW), Information exchange (INFO), Orchestration of classroom interaction (ORC), Non-verbal communication (N-VERB), Neutral interaction (NEU), Confirming (CON), Evaluation (EVA). For clarity, each communicative function is explained in greater detail in Appendix C.

The communication functions were derived inductively by Kovalainen and Kumpalainen (2007) from their data and are not intended to be used as a checklist. From my data I derived inductively seven additional communicative functions: Emotion (EMO), Imagination (IMAG), Clarification or Elaboration (CL/ELAB), Changing or developing a view or opinion or perspective while speaking (REVIEW), Return to text (RT), a Return to text that truncates a

speaker's turn (RTT), and sharing elements of oneself (SUBJ) that are singular to an individual. These are listed in Appendix D.

What was missing in the coding process thus far was an understanding of how each student's turn contributed to the evolving communication event. The next step was to analyze the flow of talk (or of *message units*) in a way that showed the relationship between one turn and another.

Step 3: Coding for Interaction Sequence. Coding for *interaction sequence* found the connections between turns at talk, contributing to a more dynamic account of the literacy event. Classroom interaction is sometimes orderly and predictable; mostly it is not. A teacher initiation (TI) might elicit just one student response (SR), or, more likely, it might elicit several (TI, S₁R, S₂R, S₃R) and they in turn elicit student-to-student responses. The later responders might not be directly responding to the teacher but to peers. Gaining clarity about the multiple connections between students and teacher was an important step in uncovering how interactions supported making meaning.

The coding system Kovalainen and Kumpalainen (2007) devised to represent the sequence of classroom interaction identifies eight types of interaction sequences. Four are student-initiated, two are teacher-initiated, and two are "solo interactions" that do not bring about any response and are "not discursively elaborated" (p. 146).

Student-initiated sequences are of four kinds. A student-initiated sequence between only the initiating student and the teacher is, in Kovalainen's and Kumpalainen's (2007) terms, a student-initiated bilateral sequence. This sequence was coded SIB/T. A student-initiated sequence involving multiple students as well as the teacher is a student-initiated multilateral sequence with teacher participation, and was coded SIM/T. The code SIB referred to only two students interacting. When more than two students engaged, again without the teacher, the sequence was coded SIM.

Teacher-initiated interaction sequences are of two kinds. A teacher-initiated sequence involving only one student is a teacher-initiated bilateral sequence. This sequence was coded TIB. A teacher-initiated sequence that involves several students is a teacher-initiated multilateral sequence and was coded TIM.

A solo initiation is a turn at talk that "goes nowhere" is a solo initiation, hence, STI (solo teacher initiation) and SSI (solo student initiation). All the kinds of interaction sequences are clearly listed in Appendix E.

Interaction in most classrooms is marked by excitement and curiosity, disagreement and humor, as well as uncertainty. Visually it might be represented not by a straight line but a circular, jagged, looping pattern or perhaps by a maze. Coding for interaction sequence followed the complex interactions in any literacy event and "flagged" the interaction patterns that supported students' meaning making. Unpacking the specific language and emotion within those interactions suggested what constituted support.

Second-Cycle Coding

Second-cycle coding is about establishing relationships between categories of data through reorganization and reanalysis of the data coded through first cycle (Saldaña, 2016). The language describing second-cycle coding emphasizes linking, fitting together, synthesis, coherence, merging (Saldaña, 2016, p. 234).

Saldaña (2016) noted that second-cycle coding may not always be necessary ("if needed" p. 234) but for those cases where it is needed, offers a helpful analogy for the relation of first cycle and second-cycle coding. Imagine, suggests Saldaña, the prefabricated desk you ordered

has arrived and you are excited to assemble it. Inside the large box the various components are already organized for you in smaller packages, conveniently labeled. The instructions for assembling your table recommend that you take out all the packages and then organize them again on the floor, placing next to each other parts that you know will ultimately fit together, desk side rails and back rails together, drawer runners and guides together, drawer front, back and sides together. Saldaña's analogy suggests that first cycle coding has organized into separate "packages" the multiple data gathered from observation, in this case organized by three coding steps. Initial coding has plucked from the wealth of data instances of joint activity, transformation, mediation, and perezhivanie. In vivo coding has pulled from data striking uses of language that I sense are significant. Formal coding has detected patterns of interaction.

Second-cycle coding, like the reorganization of packages in preparation for assembling the table, reorganizes these "packages" or coded sets of data according to the researcher's sense of what might go with what. Or so the analogy suggests.

Saldaña (2016) pointed to the obvious flaw in his helpful analogy: the prefabricated desk comes with a set of instructions for assembly, and if you deviate from the instructions, you will not get a desk. In research, not only is there no prescriptive set of instructions for making something out of qualitative data, but interpretive freedom is also vital: "Imagination and creativity are essential to achieve new and hopefully striking perspectives about the data" (p. 235). It is at this point that the perspective of Radford and Sabena (2015) on analysis is most significant: "A method's main characteristic is to be inquisitional and reflective, that is, a philosophical practice" (p. 159). Second-stage coding, rather than a sequence of actions to be followed, is perhaps better thought of as a reflective period where one suspends all certainty

regarding the meaning of data, re-engages with theory and begins an open quest for the intersections between the two. Simply put, assembling and creating are two different things.

Trustworthiness

Unless research exudes the quality of trustworthiness, readers will not consider the findings worth paying attention to (Lincoln & Guba, 1985, as cited in Elo et al., 2014). Yet despite its unquestioned importance, researchers differ as to what counts as an indicator of trustworthiness, whether it is evidenced in certain objective features of the completed study (Maxwell, 1992) or made manifest in researcher practices (Merriam, 1995).

I begin with Merriam's and Maxwell's criteria and how I met them. I met three of the five strategies that Merriam (1995) considers necessary to ensure trustworthiness: triangulation, disclosure of researcher identity, deep submersion in the research situation.

I met the criterion of triangulation by setting data obtained in one setting or through one means against data obtained in a different setting or through different means. This meant, for example, comparing the discourse of a lesson that prepares students for a district literacy assessment with the discourse of a lesson where teacher and students negotiated the course of the lesson. The purpose of checking one source against another was to allow for complexity, admit the nonconforming detail (Heath & Street, 2008) rather than discount it, and not allow "hunches" to take hold uncritically.

I disclosed aspects of my identity in *A More Personal Rationale for the Research Approach* and admitted in that section to reservations about standardized testing and the effects it has on classroom practice. To conceal or erase one's subjectivity is impossible; I believe that it is better to give readers an understanding of the author that will allow them to judge to what extent interpretations were influenced by my background. Therefore, I additionally disclosed that I am a retired teacher, a mother of adult children, a grandmother, white, a naturalized U.S. citizen, middle class and originally working class. My teacher education took place in England, and I have taught in three countries. I am critical of certain aspects of educational practice in the United States, including what I see as excessive testing and the intrusion of corporations into education. I am concerned that the labeling of students whether by ethnicity, demographics, or proficiency can lead to the subjugation of individuality.

I claimed deep submersion in research context on two counts. I conducted a pilot study over a six-month period, and for eighteen years I taught at La Montaña. I am familiar with the history of the school, and I understand the experience of the teachers and hold them in high respect.

Maxwell (1992) argues that trustworthiness resides in discernible, objective features of a completed study: descriptive validity, interpretive validity, and theoretical and construct validity.

I aimed for descriptive validity through a neutral record of observations (so far as that is possible) leaving interpretation to the analytic phase of the study. An observational record can become interpretive at times, as the example (from the pilot study) illustrates below. In my field notes, I interpreted Isabelle's attitude as lonely and discouraged ascribing emotions and attitudes that I could not be sure of. I wrote in my field notes: Isabelle looks lonely and discouraged. Head on arms, resting on table. Isabelle puts both feet up on adjacent vacant chair. Then knees up on her own chair and rests arms and head on knees. Seems to be reading screen but no keyboard action. Isabelle looks lonely and discouraged. Head on arms resting on table.

Descriptive validity also pertains to what is left out of an account. Pauses, intonation, volume, and pitch are meaningful details important to note in a transcript. Omitting them compromises the standard of descriptive validity. A closely related criterion, interpretive

validity, refers to the importance of conveying the perspective of the subject, grounding the account "in the language of the people studied and relying as much as possible on their own words and concepts" (Maxwell, 1992, p. 290). Striving to meet the criterion of interpretive validity helped me to meet the goal of capturing what students were experiencing. In the following excerpt, Matt's astonishment and excitement were conveyed by incorporating the student's own words as he shared information from Solar System, a book he had read independently.

(The book is called) *Solar System*. The universe is actually made out of one little thing: star dust! *You're* made out of stardust, the Rocky Mountains are made out of stardust! And there's one more thing. This guy said the earth went around the sun and everyone said he was NUTS!

Theoretical validity refers to the theoretical constructions that the researcher brings to, or develops during the study (Maxwell, 1992). The constructs from sociocultural theory that I used are respected terms within the literature: the social genesis of mind, the importance of joint activity, the zone of proximal development, mediation. The term "perezhivanie" is not common in research conducted in English but is a concept well established in Russian and Eastern European thought and is defined and explained in the context of its use.

In this chapter, to further establish theoretical validity, I showed the connection between theoretical principles and data collection and explained in detail the linguistic tools used to analyze discourse. This was done so that the reader would understand why certain data were collected, and how I conducted analysis. Knowing the tools and procedures used, the reader has the means to contest my interpretations. However, Whittemore et al. (2001) suggested that achieving trustworthiness may go beyond study features and researcher behaviors. It may be that the unusual nature of qualitative research as both "highly creative" and "analytically rigorous and explicit" presents a challenge to trustworthiness (Whittemore et al., 2001, pp. 526, 522). Unlike an artist, a researcher is not the sole creator; research is a "joint creation of inquirer and inquired about in a given context and at a given time" (Whittemore et al., 2001, p. 526). Researcher creativity must therefore be balanced with "reasonable claims, presentation of evidence and the critical application of methods" (p. 527). Whittemore et al. offered criteria or "ideals" (Whittemore et a 1., 2001, p. 528) and techniques that maximize trustworthiness. Below, I offer brief explanations of how I met three of the primary criteria: credibility, authenticity, and criticality.

To assure credibility I made a conscious effort to build reader confidence in the interpretation of data, not to convince the reader that the essential truth had been uncovered, or that another interpretation was impossible, but rather to show that the interpretation was sound within the theoretical framework and that the tools of analysis were appropriate to the theoretical framework.

Authentic research includes in its portrayal "the meanings and experiences that are lived and perceived by the participants" (Sandelowski, 1986, as cited in Whittemore et al., 2001, p. 530). The descriptor "authentic" is applied to research that remains true to the phenomenon under study, representing the emic perspective (Hammersley, 1992, as cited in Whittemore et al., 2001, p. 530). I could assume, for instance, that I knew what students were experiencing during any literacy event. It was important to foreground the data of their words and actions and written responses. Authenticity in research depends to an extent on the criticality of the researcher. This requires a critical awareness of one's own background and a conscious attempt to set aside assumptions, biases and premature interpretations. In a sense, the work of researchers has to be "as much a study of our own views vis-a-vis cultural communities and positionality ... as it is of the phenomenon at hand" (Gutierrez & Orellana, 2006, p. 507).

Criticality also requires an openness to alternative hypotheses, an attitude of healthy skepticism towards certainty and a willingness to explore negative instances and disconfirming data. I aimed for criticality by adopting a double gaze, focusing on the interaction of the classroom and at the same time "self-consciously analyzing (my) own framing and interpreting of the events" (Bloome et al., 2005, p. ix).

I have discussed various ways in which this study exhibited trustworthiness. In making my case I have kept in mind Eisner's (1993) criterion of worthwhile educational research: the improvement of educational practice "so that the lives of those who teach and learn are themselves enhanced" (p. 129). By conducting research that respected the various criteria of trustworthiness (Maxwell, 1992; Merriam, 1995) or ideals (Whittemore et al., 2001) I hope to have attained the larger goal of worthwhile educational research that will benefit the participants.

Transferability

How might the findings be meaningful to others? Some scholars in the Literature Review suggested that the practices of Interactive Read Aloud and Guided Reading were so firmly established that their implementation in the classroom was seldom scrutinized, and their effectiveness rarely questioned (Del Rio & Alvarez, 2002; Lewis, 2017; Webb et al., 2019). This study used discourse analysis to uncover the patterns of interaction between teacher and students and among students, finding the ways students supported each other, and the kinds of teacher

initiations and follow-up that encouraged students to generate, challenge and support ideas. Through close analysis of discourse this study contributes fresh empirical findings concerning the learning opportunities the practices of Interactive Read Aloud and Guided Reading offer.

This research has opened a window onto the abilities that students are in process of developing. In the turnaround school there is an urgency about change, but change is measured all too often as change in ability to accomplish challenging tasks alone. The sociocultural perspective of this research valued learning as a social process, and the ethnographic methodology revealed the small developments that occurred as students interacted with one another. These are the transforming moments (Shor & Freire, 1987) that a teacher might overlook under pressure of securing the measurable academic growth that turnaround status demands.

The Literature Review presented a variety of research investigating how the zone of proximal development works. This study has contributed to that ongoing investigation and suggested the importance of relationship and emotional connection in creating the zone. In an era where teachers are often reduced to technicians, it may encourage some readers to learn that the "how" crucially includes an adult whose role transcends enabling proficient test performance (Fleer & González Rey, 2017).

Finally, by focusing on students' experience, this study has reasserted the human status of students as persons who need to construe their experience as meaningful (Zittoun, 2008) or in my abbreviated term to "make meaning." Understanding students' experience of the classroom matters; their experience of classroom events is not peripheral or secondary to some more primary reality. By emphasizing student experience in an era where education is routinely pathologized, this study may encourage the reader to see students as whole, complex persons and

may contribute to re-visioning children as successful learners (Fleer & González Rey, 2017) Such a re-visioning of learners is applicable or transferable to many educational contexts.

Limitations

This study was situated in two hyflex classrooms of a turnaround school, one Second Grade and one Third Grade. The findings emerged from virtual classroom settings that were atypical of normal elementary education. It seems highly probable that the same research questions, addressed in a physical classroom, would yield different answers.

The online context-imposed limitations on the ethnographic approach itself. The cultural and social setting were experienced by the researcher virtually, on-screen. Privacy concerns, rightly protected by district policy, prevented video recording, and the classroom community that was formerly intact from 9:00 till 3:00 became fragmented into virtual "rooms."

Delimitations

I have limited the focus of inquiry to literacy, and within literacy, to Interactive Read Aloud and Guided Reading. Independent Reading and Shared Reading were not included in this study. Limiting the focus of inquiry to two areas made the study manageable but has obvious implications for the findings. Questions concerning how students construct understanding together relate only to the literacy context, and similarly any findings pertain only to the literacy context. A different study that included math instruction might reach different conclusions.

Review and Preview

A restatement of purpose began Chapter Three, followed by an explanation of the chosen approach to research. Three research questions were restated, and the research setting and context were described. Relevant sociopolitical factors were included. In *Changed Research Context* I discussed the changes to the conduct of research imposed by the coronavirus pandemic. I then gave a brief account of the research participants. The kinds of data to be gathered were explained in the section *Data Collection*, and the concepts and tools for analysis were described in *Data Analysis*. The detailed section *Research Methodology* was followed by two shorter sections addressing the issues of trustworthiness and transferability.

In Chapter IV the findings are presented. Chapter IV begins with a restatement of the purpose of the study. The methodology is reviewed, and the results of observation and data collection are shared.

CHAPTER IV

CLASSROOM FINDINGS

The purpose of this qualitative study was to understand how the social and cultural practices of classroom literacy instruction afforded students opportunities to make meaning with texts, drawing on multiple resources: personal subjective experience, the texts themselves, emotion, and interactions with peers in the social context. For the nine weeks of this study I observed children daily via my computer screen and listened to their voices as they participated in Interactive Read Aloud and Guided Reading. I listened to them again and again, for while video recording was not allowed by the school district, audio recording was permitted; the audio recordings were something I could revisit time and again. The research questions guiding this study were:

- Q1 What opportunities to make meaning are afforded by the social and cultural practices of Interactive Read Aloud and Guided Reading in a Second-Grade and a Third-Grade classroom?
- Q2 What opportunities are available in the interaction of those literacy events for students to use language as a tool to generate, explore and challenge ideas?
- Q3 What evidence is there that emotional and other subjective resources, including lived experience are valued as relevant to making social meanings and personal sense in the literacy event?

To find answers to these questions, I followed the sociocultural tradition and focused on the participatory nature of classroom activity, seeking a more rounded picture of students and their emerging capabilities. I used an interactional ethnographic perspective to discover the kinds of literacy students learned to value and how classroom interactions contributed to constructing this as valuable. A useful tool, initially, was Spradley's (1980) methods for finding essential cultural categories through a domain analysis. The cultural categories provided a framework for interpreting what happened in different stages of a lesson. However, establishing the categories was but the fifth in a sequence of twelve steps leading to the writing of an ethnography. I chose not to go beyond the fifth step. While my methodology included an ethnographic perspective, I did not claim to be writing an ethnography. As Spradley (1980) allows one to do, I moved to conduct a thematic analysis.

When I began observations in March, hyflex teaching (the simultaneous teaching of students online and in person) was newly in place. Teachers were vaccinated and in-person teaching had just resumed for students whose parents trusted it was safe. My screen view therefore showed students in one of two places: either in the physical classroom, wearing masks more or less correctly, or in their home learning space. Usually this was a bedroom or kitchen table and occasionally outside in the yard on a rope swing. Seeing students in the privacy of their homes creates an unprecedented connection. Ms. Windsor explained: "I couldn't believe how intimate it was ... I mean with their parakeets and the baby brothers and the cats and the dogs running through the screen, and it was, so it was this like intimate connection" (teacher interview, May 14, 2021).

Teachers noted that having unaccustomed access to their students' homes and family life, as they had initially during the pandemic, had added to their sense of responsibility. Ms. Spencer reflected: "I think I felt such responsibility this year to not lag, to not let them fall behind" (teacher interview, May 14, 2021). With the hyflex split into two communities, teachers, now masked, felt they no longer had quite the same connectedness with their online learners. "Students can't see my face," Ms. Spencer said, noting the loss of closeness she had felt when "you're staring into their faces ... and they're looking into our faces" (teacher interview, May 14, 2021).

Hyflex teaching meant other changes too. With the mix of at-home and in-class students came new technological challenges. Previously, when everyone was online, everyone encountered technical problems at one time or another, but everyone encountered the same problems. Hyflex learning in effect made two communities whose experiences were different. At-home learners could not clearly hear the voices of their peers in the classroom, so teachers revoiced for them. This same problem impacted Guided Reading groups when they consisted of a mix of online and in-class students and also affected participation in Interactive Read Aloud. Although things were not yet back to normal, the students who returned to the classroom were happy to be together with at least some of their peers. In Ms. Spencer's words, they were "thrilled to be not like, hanging out on their bed all day" (teacher interview, May 14, 2021).

I have mentioned some of the challenges of hyflex learning because they are an integral part of the research context. As well as challenges I also observed occasions when students helped each other work through technical problems, and when students helped their teacher. Ms. Spencer spoke of the sense of collaboration with her students as they worked through technical problems together:

I feel almost more, even more like a team with them, you know? "Ms. Spencer, Ms. Spencer your camera's not on!" You know, those kind of things, where in the past I feel like I had more, it was more like "I'm in charge" and this year it feels like they're helping me. (teacher interview, March 19, 2021)

At the end of 9 weeks of observation, I had recorded 68 Interactive Read Aloud lessons and 46 Guided Reading lessons. Additional data included six teacher interviews, email and text messages, informal conversations, student responses on the Seesaw platform, Ms. Spencer's weekly written reflections, and observations made on two visits to the school garden for harvest and planting. The findings presented in this chapter emerge from that data.

I began by reading and re-reading copious fieldnotes, studying the transcriptions of Interactive Read Aloud and Guided Reading lessons, and listening to the recordings of lessons. I focused on one grade level at a time and one lesson structure at a time. I noted that in each class different predictable patterns recurred in the three phases of a lesson: the opening, the closing, and the body of the lesson. For example, Third Graders were invariably told at the beginning of Interactive Read Aloud what the subsequent individual assignment would require. In Second Grade no explicit connection was made between the reading experience and a subsequent assignment; frequently there was no assignment. In Third-Grade Interactive Read Aloud lessons the teacher kept the text front and center during discussion. In Second-Grade Interactive Read Aloud lessons, by contrast, discussion often went in unforeseen directions following student interest.

To get beyond mere description of the many different features I noted, I followed Spradley's (1980) methods for finding essential cultural categories or units of meaning. Spradley (1980) makes a distinction between the social situation, as "the stream of ... activities carried out by people ... in a particular location," and the culture, as "the meaning given by people to ... activities" or "the patterns of behavior ... that people have learned or created" (p. 86). Establishing the cultural categories helped me understand the meaning of literacy events for the teachers and their students.

I established five cultural domains in each grade level: Reading, Responding to text, Understanding a story, Teacher's role in literacy instruction, and Speaking up in class. I used four semantic relationships to identify the cultural domains: is a part of; is a way to; is a means of; is a reason to.

The cultural categories gave me an organizing framework for interpreting what happened in different stages of a lesson. The question "What is your evidence that the dog is like a brother to the boy?" was culturally meaningful given that finding evidence in the text was a means of understanding a story, as it was in Third Grade. The question "Why do you think Big Guy is scared when the family leave the house?" was culturally meaningful in Second Grade where thinking about what characters feel was a way to understand a story. Figures 1 and 2 show the cultural domain of Understanding a Story in Second and Third Grade. The representations of all the cultural domains can be found in Appendix A and Appendix B.

Figure 1

Cultural Domain of Understanding a Story in Third Grade

UNDERSTANDING A STORY
is a means to
Remembering details of the story
Using picture 'support'
Finding evidence in the text

Figure 2

Cultural Domain of Understanding a Story in Second Grade

UNDERSTANDING A STORY
is a means to
Thinking about characters' feelings
Imagining what I would do
Looking at illustrations for clues
Locating the story in place and time
Talking with other students
Wondering aloud
Thinking about the author's moves (e.g., 'But one day
')
Comparing with other stories

Spradley (1980) conceived of the role of a participant observer as ensconced in a research context, surrounded by activity, ready to "observe the activities, people, and physical aspects of the situation" (p. 54). The COVID-19 pandemic, however, changed teaching and learning, and the way this research was done. It was the pandemic-imposed difficulties for teaching, for learning, and for conducting research that were most apparent at first. However, despite these strictures, valuable findings have emerged through a concentration on the language of the classroom. Because I conducted my research virtually, I worked less with details visually observed and predominantly with the details of discourse heard. I found my most valuable tool to be the audio recordings. These formed the primary data sources, and I use them extensively in presenting my findings in this chapter.

In Chapter IV I include students' voices as much as possible to give the reader a sense of the participants as real children, and so that my interpretations are not the only narrative. Chapter four is in two parts. Part 1 presents the findings from Third Grade. Part 2 presents the findings from Second Grade. By organizing the findings in this way, I hope to give a vivid sense of each class as a distinct culture, with unique teachers and students. In both grades all the extracts come from hyflex lessons.

Part 1: Making Meaning in Third Grade

In Third Grade, the teacher's central, authoritative role in shaping and directing the form of Interactive Read Aloud was evident. Ms. Spencer shaped students' involvement during the literacy event with explicit directions that also prepared them to successfully complete the assignment that followed. She asked questions and evaluated answers; the kinds of meaning making students engaged in depended, to an extent, on the questions their teacher asked. Ms. Spencer planned the opportunities for student talk. The amount of time for partner talk, the topic assigned, the talk structures that framed how students would talk to each other--all these decisions influenced the opportunities students had to make meaning from texts.

The extracts in Section 1: Explicit Directions illustrate how explicit directions focused students' attention on the teacher's lesson objective and how her in-the-moment management helped to maintain that focus. The extracts also show the limits of an explicit lesson objective. In each extract a few students, at least for a short while, steered the lesson in a different direction, with the infusion of emotion, or by suggesting alternative interpretations of text, or by bringing their lived experience to the text. In the *Prince William* (Rand, 1992) lesson, emotion and imagination together led students to consider possibilities beyond the margins of the text. By various means, students created learning opportunities for themselves beyond the parameters of the lesson objective.

The extracts in Section 2: Questions and Opportunities illustrate how the kind of meaning making students engaged in was contingent, at least initially, on the kind of question the teacher asked. Microlevel analysis of the extracts showed that the communicative functions available to

students were similarly contingent on the kind of question posed. Even so, students were able to turn the discussion to a question that was of greater interest to them, as Lexie did in *Ming Lo Moves the Mountain* (Lobel, 1982). Additionally, as the discourse from one memorable lesson--*The Legend of the Lady Slipper* (Lunge-Larsen & Preus, 1999) --made clear, students might want to think more deeply than the question required and make meaning beyond the conventional boundaries of a genre.

The extracts in Section 3: The Limits of Evidence reveal some consequences of an emphasis on "sticking to the book," finding answers or "evidence" solely in the text. Such an emphasis reduced the various reasons why a student might wish to speak, narrowing the range of communicative functions to providing evidence or justification (EVI). The communication functions excluded include sharing experiences from one's own life (EXP), sharing how something makes one feel (EMO), and expressing opinions or perspectives (VIEW).

A related finding concerns the possibilities for deeper meaning making when texts are contextualized socially and politically. *Nothing but Trouble: The Story of Althea Gibson* (Stauffacher, 2007) and *Soccer Star* (Javaherbin, 2014) both tell the characters' stories without social and political context. In the case of *Nothing but Trouble: The Story of Althea Gibson*, the narrative omitted the racial injustice of Gibson's era and the strict segregation of Black and white tennis players until 1950. The emphasis on finding answers "in the text" led to partial and incomplete understanding because the text itself was a partial and incomplete narrative.

In the final extract of this section, discourse from *The Paperboy* (Pilkey, 1996) lesson shows the tension between the call to use textual evidence and the natural turning to lived experience to construct meaning.

Section 1: Explicit Directions

Few would disagree with the importance of teachers giving clear directions so that students know what is expected of them (Mercer & Littleton, 2007). But the context of learning, as teachers know well, is not static. The context changes because it is more than place and time. It includes "the social and emotional understandings and feelings of the participants who create the interaction" (Lindfors, 1999, p. 7). As much as the directions mold the context initially, the understandings and feelings that students bring alter its evolving shape. Students' roles also undergo subtle shifts. In the lesson that begins this section, students ste<u>pped</u> out of the somewhat passive role of listeners to Berger's (1994) *Oil Spill*, a non-fiction picture book account of the 1989 Exxon Valdez disaster. Extract 1 is an example of the explicit directions that opened the lesson.

Extract 1.

Ms. Spencer: There's some oil spilled into the ocean and some animals are hurt. That ... that makes me very, very sad. So we are going to read this book together and then you will have a Seesaw assignment. The Seesaw assignment is to think about the author's point of view ... so I want you to think about what is the author's opinion, what's his point of view.

Ms. Spencer went beyond telling her students what the assignment would be; she directed their thinking during the Interactive Read Aloud so that they would be able to successfully complete the assignment. Although the teacher herself felt "very, very sad" about the content of the book, and allowed that students will too, warning that "some of the stuff we're gonna learn maybe doesn't feel great," the learning goal for this lesson was strictly academic: determining the author's point of view. Despite the explicit directions to think about the author's point of view,

on hearing how the Exxon Valdez caused the deaths of thousands of marine animals and seabirds, students did not suppress their reactions but voiced their shock verbally and non-verbally. Extract 2 is a record of their reactions--disgust, incredulity, shocked silence--upon hearing that "the Exxon Valdez spilled out eleven million gallons of oil" (Berger, 1994, p. 8). In Extract 2 and throughout this document, the words of the text being read aloud are italicized and the teacher's words are in regular font.

Extract 2.

Teacher reads: The sticky oil soon covered 11,000 square miles of ocean water. The oil stuck to the feathers of many ducks, geese, and other seabirds. The birds couldn't swim or fly. Over 300,000 died.

Multiple students: Aaaaaw.

Student: Is this real??

Teacher resumes reading: Oil got into the bodies of fish, shrimp, and crabs. Nobody knows how many of them were killed.

Silence.

The students had strong emotions of disgust and incredulity at the magnitude of the disaster, feelings which the learning goal did not take into account. Students continued to express strong opinions and emotional reactions during the reading, responding with non-verbal expressions of dismay as they heard that each solution scientists came up with entailed other problems.

The repeated return to the text after students expressed emotion and the restatement of the learning objective: "Remember we're thinking about facts we're learning" appeared to assert the primacy of the text and the inflexibility of the instructional purpose. However, this was only party true. When Aaron passionately interjected, his tone conveying a sense of felt urgency, his

direct question "How do we not use oil?" lifted the topic of disastrous oil spills out of the abstract and into the living present, replacing the question of author's opinion with a question about what "we" can do (Extract 3). As a participant in the event he exerted agency to change the course of the event.

Extract 3.

Aaron: How do we not use oil?

Ms. Spencer: So. How do we not use oil?

Student: Use ah cooking oil?

Ms. Spencer: Use, we use ...

Student: Vegetable oil.

Ms. Spencer: Well, you can't use cooking oil in our car but what could we do instead? What can we do?

Student: Get an electric car!

Ms. Spencer: We could get an electric car, we could get, we could ride our bikes we could not we could not be so dependent on oil. Xenia.

Xenia: You can get oil from plants.

Ms. Spencer: They could, can use plants, they can use corn now to make fuel and soybeans I think to make fuel. Lexie.

Lexie: Power from the sun and wind power.

Ms. Spencer: Yeah, we could use solar power and wind power, uh, these are great ideas and I saw so many nice hands.

Aaron shifted his position in relation to the text, from a somewhat passive listener to a "change maker" disputing the inevitability of another disaster like the Exxon Valdez oil spill. His action

changed the learning context for his peers. They joined in the search for solutions that Aaron started with his straightforward question "How do we not use oil?" There was a change in the teacher's role too (see Mercer & Littleton, 2007). Whereas before she was the director of the literacy event and the upholder of the text's authority, subsequently Ms. Spencer worked with the children to come up with ways they could help prevent future disasters.

At the end of the lesson (after Jorge had suggested writing to the president) the learning objective came back into focus as the Seesaw assignment was restated: "What was the author's point of view and do you agree with them and why?" The lesson began and ended with the learning objective the teacher had chosen. In the middle, Aaron's strong emotion and sense of urgency became a resource for finding hope and making some positive meaning from a grim text.

All reading is social. Even when we read alone, we engage with the ideas of another. We make meaning in dialogue with the text (Graves, 1990) and clarify what we think because we are exposed to another's ideas. Likewise, comprehension is social (Aukerman et al., 2017; López-Robertson, 2012; Santori, 2011) and when "private" reader text transactions are brought into dialogue with other readers' understandings, all readers benefit.

The interaction initiated by a student in the lesson *Pinduli* (Cannon, 2004) can be interpreted as a reader actively seeking dialogue. As in *Oil Spill* (Berger, 1994), the objective of the *Pinduli* lesson was determined ahead of time and was explicitly stated at the beginning of the lesson: "We are going to name character traits of a fictional character, Pinduli." The objective was focused and concise. "Name" rather than "decide upon" suggested that minimal discussion would be necessary. Jorge, however, three times initiated interaction that showed the importance for him of dialogue about character traits and the larger meaning of the story *Pinduli*. Jorge's actions illustrated, in my view, Aukerman's (2013) position that making meaning is "a relationship with text that also centrally involves other readers and other voices" (p. A7).

In Extract 4, while the teacher was "thinking aloud," weaving her own thoughts into her reading of the narrative, Jorge made a "student initiated" move to share a different perspective on the character Pinduli. The Interactive Read Aloud event at this stage had not been structured to incorporate student voices, and so Jorge's move indicated his strong desire to share his perspective in dialogue. The symbol [] indicates overlapping speech and = indicates no pause between speakers.

Extract 4.

Ms. Spencer: So, I am already I'm thinking about this character and I know that she's not shy, she's not scared, I might call her *adventurous* [emphasis added], I might call her *brave* [emphasis added] she doesn't seem worried. Jorge? Do you want to add something?

Jorge: Um it's like the snake ... she is ... curious [or].

Ms. Spencer: [Yeah] she's curious, kind of like Verde was, right? Yeah, very good. So we're remembering these words, because these are some character traits of our character.

Jorge was the only student to add to the traits that Ms. Spencer sees in Pinduli. When he initiated a second interaction, suggesting character traits based on connections to previous texts and characters, that interaction too remained a bilateral sequence between Jorge and his teacher. No other students contributed. Turns at talk, or "utterances" that are subsequently referred to are numbered to facilitate the reader's locating them in context. The symbol [] indicates overlapping speech and = indicates no pause between speakers

Extract 5.

01 Ms. Spencer: So now, all of a sudden I'm noticing ... Pinduli, she's starting to think about what she looks like and what other people think about her. Jorge? Jorge was that you?

02 Jorge: Um, it's like Verde, she's getting bullied.

03 Ms. Spencer: A little bit, she's feeling a little bullied, right, yeah.

04 Jorge: It's like um the book we saw that we read =

05 Ms. Spencer: = Yesterday. Yeah, I agree, there's a good connection.

This interaction was bilateral, but the partners were not equals. When Jorge at 04 started to elaborate on the connection to Verde: "It's like, um the book we saw that we read" the teacher finished his turn for him ("yesterday") and confirmed ("Yeah, I agree"). This positive evaluation and the commendation--"there's a good connection"--concluded the interaction and prevented Jorge from expanding on the comparison.

As the plot of *Pinduli* developed, Ms. Spencer and Jorge made different meaning of the text. Jorge's teacher expounded the theme that bullying is self-perpetuating: "Sometimes when people are mean to us it's because people have been mean to them. I have a feeling that these animals have been treated badly too." But in Jorge's reading, the central meaning of the tale was that Pinduli acted on her family's behalf (Extract 6). A brief plot summary will give some necessary context.

At the center of the story is Pinduli, a young hyena teased about her "stripy fur and straggly coat." When she rolls in the dust to cover at least some of her defects, her dust covered appearance strikes the other animals as nothing less than godlike. Playing along, Pinduli (in the persona of the "Great Spirit") imposes two acts of contrition. The animals must first find their own tormentors and make peace with them. Second, they must always "leave a bit of every meal as an offering" to the Great Spirit (who is of course Pinduli). And so, goes the story, hyenas have no need to hunt because other animals leave them "delicious treats" of fish, eggs, and berries.

Jorge challenged his teacher's interpretation in the following interaction.

Extract 6.

Ms. Spencer: So she's tricked them into now bringing food to her family in order to make up for being mean. And that's the end. So I want you thinking about what kind of character is Pinduli and that will be what you do for your Seesaw activity for today. Jorge?

Jorge: Um, what I realized ... like ... is ... she was, she was, she was trying to get ... she was helping her mother find food so they don't um starve to death.

Jorge, with an uninvited student initiation, reopened the question of meaning after his teacher had clearly signaled that it was time to move on to the assignment. The teacher briefly acknowledged Jorge's view that Pinduli "was helping" but reiterated her own interpretation at length.

If we think of a text as a configuration of signs that provides the potential for meaning (Smagorinsky, 2001, p. 141) and the work of a reader as "an act of composition" (Smagorinsky, 2001, p. 137) then Jorge and Ms. Spencer both composed a text, but the lesson ended, unfortunately, without dialogue between them. In this case, the student's view was not treated as a "thinking device" (Nystrand, 1997, p. 9) and interpretive authority (Santori, 2011) rested with the teacher.

Wangari Maathai and Aaron's Connections

In Extract 2, an emotional response to *Oil Spill* (Berger, 1994) led to greater student participation in the literacy event. Several students, shocked by the environmental catastrophe, expressed their dismay and even changed the direction of the lesson for a short while. In the lesson *Wangari Maathai* (Prévot, 2017) I observed a different sort of emotional response as a student responded to the narrative as a reflection of his own lived experience. I sensed his desire to share the significant connection between the text and his personal world. The text was a biographical account of the Nobel Prize winner Wangari Maathai (1940-2011) whose environmental work was a political lever in Kenya's emancipation from colonial rule.

During the Interactive Read Aloud, Aaron, a student who was born in Africa and spent his first years there with his birth family, shared that like Wangari, English was not his first language (Extract 7). When the narrative told how Wangari was forced to take a Christian name, Miriam, Aaron shared that similarly he has not always been "Aaron"; he once had an African name. Aaron's very individual process of making meaning was personal yet occurred in the social context, in response to a cultural artifact. Aaron's sharing alluded to another text, Aaron's life story, and perhaps it prompted other students to reflect internally on their own stories, whether or not they were as dramatic as Aaron's. Turns at talk, or "utterances" that are subsequently referred to, are numbered to facilitate the reader's locating them in context.

Extract 7.

01 Ms. Spencer reads the text: Those who care about the earth as Wangari did can almost hear her speaking the four languages she knew--Kikuyu, Swahili, English, German--while she carried out her important work with important people.

- 02 Aaron: Ms. Spencer, in the place I grew up in, well like in the town I grew up in in Africa we spoke Swahili.
- 03 Ms. Spencer: Swahili is one of the languages of Africa, you're right, Aaron. So that is pretty cool, you have a connection. Um, Sebastian.
- 04 Sebastian: I speak three languages.
- 05 Ms. Spencer: That's incredible. Right ... you speak Mandarin right? A little bit of Mandarin?
- 06 Sebastian: Mandarin, Spanish, English.
- 07 Ms. Spencer: That's amazing. Yeah, and she spoke four, it's just incredible to me.
- 08 Ms. Spencer resumes reading: Wangari encouraged many village women ...

In analytic terms, Aaron initiated a turn to share personal experience (02), Ms. Spencer responded (03) with a fact, made an evaluation, and by acknowledging Sebastian orchestrated the end of Aaron's turn and the start of Sebastian's. Table F1 (see Appendix F) represents this data with coded interaction sequence, discourse moves, and communicative functions. Soon after, Aaron made a second personal connection to the text. He initiated a move that became a solo student initiation (SSI) because without teacher uptake it was not elaborated. In Extract 8 and throughout this document, the words of the text being read aloud are italicized and the teacher's words are in regular font.

Extract 8.

01 Ms. Spencer reads from the text: *The British claim the best land for themselves and insist that Kenyans take Christian names. As a result, Wangari is called Miriam during her childhood.*

- 02 Ms. Spencer: So they don't want her to have a Kenyan name or an African name they want her to have a British name so they give her the name Miriam.
- 03 Aaron: I have an African name.
- 04 Ms. Spencer: I don't think she likes that. No. Um ... *The British grew richer by cutting trees to plant more tea*.

One important feature is not represented: the rising intonation of "I have an African name" which gave the utterance an invitational quality, as if to say: "Want to know more?" Without teacher uptake, Aaron's personal connection to the text remained undeveloped. Table G1 (see Appendix G) represents this data with coded interaction sequence, discourse moves, and communicative functions.

Vygotsky's (1994) concept of perezhivanie adds to our understanding of Aaron's experience. Perezhivanie, understood as a concept, as a "refracting prism," challenges the notion of reflection, suggesting instead that the influence of the environment is refracted through the prism of the child's perezhivanie, or how the child "interprets and emotionally relates to a certain event" (p. 341). The event here was the reading of a Kenyan activist's biography, *Wangari Maathai*, to which Aaron stood in unique relationship.

Students do not experience a book in exactly the same way and that diversity can be a source for rich learning, about the book and about each other. Mandated standardized tests, however, resting on the premise that there is a single meaning to a text (Aukerman & Schuldt, 2017) make scant allowance for such a view. Teachers face the double task of preparing students for standardized reading tests and creating literacy lessons where there is space for dialogue between different points of view. On the view that reading is essentially "human interaction in

meaning making" (Hoffman, 2017, p. 267) there will also be space within literacy lessons for sharing different life experiences, as Aaron began to do.

The Tree Lady

Both transcripts and field notes revealed that meaning making in some cases happened through an accretion of reading experiences across time. During the story of *Wangari Maathai*, for example, Lexie had little to say. Three days later, however, she called on her knowledge of Wangari's experience in Kenya to draw a contrast with the life of another historical character, Kate Sessions, known as the "Mother of Balbao Park" in San Diego. Lexie achieved this in a context where the class was developing understanding together, building on partial insights to jointly create new knowledge. Sessions' life's work transforming the landscape of San Diego is celebrated in *The Tree Lady* (Hopkins, 2013).

The interaction sequence of Extract 09 shows how the opportunity to construct new meaning opened up for Lexie. Her teacher first created a space by inviting students to compare the two characters, Maathai and Sessions, "saying what's the same and what's different." Her instructions for responding to the open question were characteristically clear.

Extract 09.

01 Ms. Spencer: So your Seesaw assignment today is to compare Wangari Maathai with Kate Sessions, and so when you compare you can say things that are similar and you can also say things that are different. So would anyone like to share something they might say. So, um, Martina do you have a similarity or a difference?

02 Martina: Um, they both, um, were kind people?

- 03 Ms. Spencer: Okay, so both Wangari and Kate are kind. Can you say more? What do you mean? Were kind to whom?
- 04 Martina (tentative and thoughtful): They were kind to trees and animals?
- 05 Ms. Spencer: Okay, they're kind to trees and animals, I like that.

Ms. Spencer's short, follow-up questions at 03 helped Martina develop a more explicit answer.

Next Rafael spoke (Extract 10), differentiating his idea from Martina's by stressing that Maathai and Sessions liked trees. His teacher met him where he was, and beginning with his initial comment, helped him to develop more insight.

Extract 10.

01 Ms. Spencer: Rafael?

- 02 Rafael: I actually have a similarity.
- 03 Ms. Spencer: Okay.

04 Rafael: That they both *liked* [emphasis added] treeees?

05 Ms. Spencer: Okay ... So they both *liked* trees, that's absolutely right, yeah. Do you have a difference?

(There's a five second pause.)

- 06 Rafael: Yeah, because in Wangari Maathai she did not live in like ... a sand town
- 07 Ms. Spencer: Oh yeah, she didn't live in the desert, it wasn't a desert. Actually, that's interesting. Why was Wangari planting trees?
- 08 Rafael: Because she liked ...
- 09: Ms. Spencer: But what happened to the trees, what had happened to the trees in Kenya?
- 10 Rafael: They, um, they cut them down.

11 Ms. Spencer: Yes! So she was planting trees because they had been cut down and *Kate* was planting trees because there weren't any, because it was a desert. Yeah!Good! That's interesting.

Rafael's meaning making was a process that depended on the moves his teacher made, which included a five second pause after 05. When Rafael recalled the picture of early San Diego as a desert, "a sand town" (06) and made the contrast with Wangari's Kenya: "she didn't live in a sand town," his teacher pushed him to articulate why Wangari needed to plant trees; after all, she didn't live in a desert. Rafael began with the easy response "because she liked …" (08) but his teacher pushed him to go beyond this: "But what had happened to the trees in Kenya?" At that point Rafael recalled the destruction of the forests: "They (the British colonists) cut them down" (10). This moment was important for Rafael's own understanding and was also significant for what Lexie would accomplish in the interaction that followed. When Rafael recalled the political strife between Kenyans and the British colonists (who cleared the forests to plant lucrative crops) he supported Lexie's understanding that when Wangari began her tree planting campaign she was indeed taking a risk.

The analytic representation of Extract 10 (see Table H1 in Appendix H) shows that both the productive teacher moves (07 and 09 in the above extract) are enacted through the same pattern of communicative functions: first a revoicing of the student's words, next a positive evaluation, then a request for clarification or elaboration. This is a contrast to the pattern in *Pinduli* where a positive evaluation served as an end move.

Ms. Spencer orchestrated the continuing discussion: "Lexie was it you next?" Lexie's meaning making grew out of the interaction of Extract 10. She made probably the most sophisticated contrast between Wangari Maathai and Kate Sessions: "Wangari was taking risks

for peace." She was supported in reaching that insight by Rafael's prior interaction with the teacher, as Extract 11 shows. Lexie abandoned, with an emphatic "no" (02) the contrast she appears to have had in mind initially and made a leap to express her new thought: one woman, politically active, put her life in danger; the other did good work without encountering any danger.

Extract 11.

- 01 Ms. Spencer: Um, Lexie was it you next?
- 02 Lexie: Um I think it's a difference, because Wangari was planting trees because um, no--Wangari was taking risks for the peace and um--what was her name?
- 03 Ms. Spencer: Kate.
- 04 Lexie: Kate was not taking risks and she was just planting them because there was none.
- 05 Ms. Spencer: Yeah! Did Kate get into any trouble for planting the trees?

06 Lexie: No.

- 07 Ms. Spencer: No, but Wangari went to prison, right? She went to jail and ...
- 08 Lexie: uh huh
- 09 Ms. Spencer: That's a great difference Lexie, good thinking. Um, can we get one more similarity or difference? Anna?
- 10 Anna: A difference is that Man ... /K/ ... Katie?
- 11 Ms. Spencer: Kate, uh huh ...
- 12 Anna: She did not fight with nobody or nothing she just planted them.

Finally, Anna grabbed onto Lexie's idea and expressed in her own words that Kate's admirable work was free of risk: "She did not fight with nobody or nothing she just planted them."

Extracts 10 and 11 are examples of the class developing understanding together, building on partial insights and through their interaction creating new knowledge. Ms. Spencer's opening invitation to compare Wangari Maathai and Kate Sessions was fundamental to this process: the kind of question was itself generative. Shortly after this session, a more literal question, asked in rehearsal for the district's "short constructed response," led to a contrasting outcome. Those findings are presented next.

As preparation for an approaching district literacy assessment, students were asked to write a short-constructed response based on the texts *Meadowlands* (Yezerski, 2011) and *Almost gone* (Jenkins, 2006) two Interactive Read Aloud texts recently read. Both texts delve into the effects of pollution on the environment and the resulting decline of animal populations. Students were to answer the question: "How have humans negatively affected animals?" The instructions read to students used impersonal language, notably the shift from "we" to third person "they":

Students will write a response to a prompt about two books we have read aloud. The books are *Meadowlands* and *Almost gone*. They will use complete sentences, correct spelling, capital letters and punctuation. They will also use evidence from the texts to support their ideas. (Ms. Spencer)

Would constructing a written response to this question also open an opportunity to make meaning? Or would this assignment largely be an effort in literal remembering?

Significant findings came first from students' written responses to the prompt, some of which I present below. A second data source was the interaction of one of the small groups formed to prepare students for the assignment. Those findings follow.

Written Responses to the Prompt: Some Examples. Antonia, Xenia, and Aaron knew that clear opening and closing sentences were required. They also knew to provide "evidence."

People have been hurting Mother Nature. And in *Almost gone* and *Meadowlands* people have been killing the animals and in *Meadowlands* people throw trash into the water and it kills the fish and other things. And that wraps up all that I want to teach you of *Meadowlands* and *Almost Gone*. (Antonia)

Humans hurt animals by ruining the habitats of animals. The book *Almost Gone* said farmers hunt birds that they think will kill their livestock, and in *Meadowlands* people throw trash into the lakes. People hunt for rhino horns. That's why I think people hurt animals. (Xenia)

Humans have negatively affected animals, in *Almost Gone* the book people hunt animals for their skin or feathers. Humans have also affected animals by bringing in things that might hurt them. In *Meadowlands* people polluted rivers and oceans. In *Almost Gone* people ran over animals on accident or purpose. I think you should think secondly about throwing trash on the ground. I hope you stop poaching and be a more careful driver. (Aaron)

All three writers provided evidence of humans' negative impact on animals, listing actions remembered from the books: humans kill animals, throw trash, ruin habitats, hunt birds, hurt animals, hunt animals, pollute rivers, run over animals. These actions were narrated without comment, as was appropriate since the question asked for no evaluation of humans' behavior. They were also narrated with little emotion on the writers' parts. This too was appropriate, since the question did not seek the writers' response to the dire state of affairs recounted in *Meadowlands* and *Almost Gone*.

However, the prompt did refer to "support(ing) their ideas." Students might have ideas but apart from Aaron's urging the reader "to stop poaching and be a more careful driver," in these writing samples students did not express ideas. This is the first finding. A second finding is a simple matter of fact: the absence of ideas was accompanied by the absence of emotion.

In the Literature Review I cited research by classroom researchers conducting empirical studies, neuroscientists, and philosophers, all unanimous in concluding that learning is both a cognitive and affective matter. As Duncan and Barrett (2007) put it, the affect /cognition distinction "is not respected in the human brain." Considering that scientific background, responses to the question "How have humans negatively affected animals?" could certainly include emotions, and not just "evidence from the texts." The ancient assumption that emotions are antagonistic to rationality and threaten the "detached, neutral knower" (Zembylas, 2003) may be alive and well in this era of "scientifically based reading research."

I will briefly note that when Antonia, Xenia, and Aaron chose their topic, their writing was quite different from the affectless prose above. There was a voice behind their words, greater fluency, and an assumed relationship with a reader. The contrast with the responses above was stark. Writing as such is not my focus and has entered this narrative only via the responses to two related Interactive Read Aloud texts. My observations of that contrast are therefore necessarily brief. As an illustration of the contrast, I include part of Aaron's informational writing about Uganda, in which Aaron gives us information and does so with some emotional vitality:

I'm going to teach you about Uganda. I will tell you about Uganda's foods, animals and culture. Now it is time for you to learn about Uganda. I hope you have fun learning.

If you live in Uganda they do a lot of farming. They grow foods like sweet potatoes, yams, beans, peas, groundnuts, peanuts, cabbage, onions, pumpkins, tomatoes,

cooking bananas. I know you might be wondering how to cook a banana. Well, *I* don't even know! My next topic is animals.

There are a lot of different animals in Uganda. There is a thing called a kaab. What is a kaab, you might ask? The kaab is an antelope found across Central Africa and parts of West Africa and East Africa. There are also animals like the citadee or marsh buck. The citadee or marsh buck is a slow-moving antelope found throughout Central Africa. Lastly there is the grey crowned crane. Did you know the grey crowned crane is on the Ugandan flag?

Preparing for the Prompt: Small Group Discussion. The written response proved to be an exercise in memory more than making meaning. Could small group discussion offer greater opportunity to make meaning of *Meadowlands* (Yezerski, 2011) and *Almost gone*? (Jenkins, 2006) The sociocultural perspective I adopt throughout this inquiry emphasizes the essential role of social interaction for constructing understanding. Ms. Spencer set up small discussion groups for this exact reason, to support students before they tackle the assignment, for she was fully aware of the challenges it entailed for eight-and nine-year-old students.

Ms. Williams, a student teacher, supported Cassandra, Carina, Rubi, and Stephan. Stephan read at a pre-Kindergarten level, Carina and Rubi were above grade-level readers, and Cassandra read at end of First Grade level. In the interaction of this small group, students were taught by repeated reminders to anchor their responses in the text, using only examples from the books read (Exttract 12). Three times Ms. Williams questioned the admissibility of students' ideas, with noticeable effect on Carina's and Rubi's participation:

Extract 12.

- 01 Carina: People keep ... hunting down animals.
- 02 Ms. Williams: You say they hunt animals? Yeah ... Was that something you read about in the books, Carina?
- 03 Carina: I dunno, I thought ...
- 04 Ms. Williams: I think that's a really good point, Carina, about ... humans do hunt animals, and remember we want to pull really specific examples from the books that you read, okay? Because that's what the question's asking you, okay?
- 05 Rubi: Also I think that if ... people ... also kill um animals to *eat* them, then ... it's different.
- 06 Ms. Williams: Yeah, people do kill animals to eat them. Was that in the book or no?07 Rubi (in a very quiet voice): I don't know ...
- 08 Ms. Williams: Yeah ... you're totally right.

Rubi's voice quietly trailed away after her point was not taken: "I don't know..." Carina faded similarly: "I dunno, I thought ..." The teacher's skepticism about the legitimacy of Carina's and Rubi's comments had a negative effect and Carina and Rubi withdrew from the discussion.

In all literacy events, students are continually "acquiring a sense of what is normal in reading" (Johnston et al., 2020, p. 60). I noted in my field notes that the girls seemed discouraged, and I jotted down my thoughts at the time: "They are learning more about the authority of the text than their own ability to create meaning. A dichotomy is set up between legitimate and illegitimate answers."

The finding concerning teaching students to anchor responses "to the book" and use "evidence" will be taken up again in the last section of Part 1 of Chapter IV.

The Findings So Far

As the discourse extracts from *Oil Spill*, *Pinduli*, *Wangari Maathai*, and *The Tree Lady* showed, students created opportunities for making meaning with texts, both for themselves and the group. They were not always limited to the opportunities which were set up for them by the teacher. Aaron's recoiling from the overwhelming details of an environmental disaster led to a search for positive actions. Jorge's determination to share his alternative interpretation of *Pinduli* added possibilities of meaning beyond the "teacher script" (Gutierrez et al., 1995). Aaron's public sharing of his lived experience and its connection to the text modeled for his peers a new orientation to text: meaning is relational and emerges when a reader relates a text to "another reality of subjective and cultural experience" (Aukerman, 2013, p. A11). These three ways of making meaning might be called, respectively, response and action, counter interpretation, and relational meaning making.

Data from the short-constructed response led to the finding that when students' responses were restricted to the text alone, opportunities to make meaning were similarly limited. Those data suggest the importance of emotional engagement in responding to texts, whether fiction or non-fiction. That suggestion is supported by data from the *Prince William* (Rand, 1992) lesson presented next. While the text was read, students' emotions were fully engaged and expressed. An additional finding from this lesson concerns readers' use of imagination, not to reproduce the text, but to create another text based in possibility. After the reading, students reached beyond the confines of the story to project the characters into the present, wondering where they might be and imagining what they might be like.

Since the findings from this lesson resulted in part from my own action, I should disclose that I had located the text *Prince William* and given it to Ms. Spencer for her classroom library.

I had searched for a book to pair with *Oil Spill* (Berger, 1994), a text I found so depressing that it warranted a companion text, one that told of human action in the face of the Exxon Valdez disaster. I had given the book to my former colleague, continuing our long practice of sharing ideas and resources with one another.

When I checked in for the lesson, classroom students were crowded together in a corner of the room, chattering excitedly around an incubator. Ms. Spencer delayed the start of Interactive Read Aloud for three or four minutes, allowing students to enjoy the small miracle in the corner--finally their chicks were hatching. Once the excitement had settled down, Ms. Spencer introduced the book as "a narrative--it's a fiction book, but it's based on the real thing that happened, the oil spill but it's written more like a story."

Prince William: *The Story and the Assignment*

Based on "the real thing that happened"--The Exxon Valdez disaster--*Prince William* (Rand, 1992) doesn't shrink from the unpleasant details of a major environmental disaster. The author tells of "Millions and millions of oil gushing into the clear waters, dead and dying birds and other creatures littered the shore." The animal rescue center is described as a place where "death, dying, and sickness seemed to be everywhere." At the same time, Rand tells a story of human action to counter the consequences of the disaster. The main character, Denny, defies her parents' rule to stay away from the oil-smeared beach, finds a baby seal covered in oil and takes it to the animal rescue center where its rehabilitation begins. She "proves that one child can make a difference" in the estimation of the School Library Journal quoted on the back cover. But to make a difference, Denny must break her parents' rule that she stay away from the polluted beach. This is the moral question that Ms. Spencer had students think about. Ordinarily, students were told at this early stage of the lesson what their assignment would be. On this day they were

not. They were to think about a moral question. Ms. Spencer's instructions were: "So this little girl in the story, I want you to think about the rule she breaks, and why she breaks it, and whether you agree ... that it was the right thing to do."

She began to read the narrative of birds and mammals rescued, cleaned and cared for, and eventually released back to their natural habitat. As she read, Ms. Spencer did nothing to stop the expressions of emotion that regularly punctuated her reading. These were varied emotions of concern, delight, sadness, worry, and joy that the story elicited. Concern for an oil-smeared animal, delight in its beauty, sadness at the "dirty, filthy oil' that covers the beach, worry that the seal might not survive, joy when he recovers and is released back to the ocean. Even though the emotional responses were not always coherent verbal utterances, their *communicative function* was clear.

The words and images of the text were certainly vital to student engagement, but Ms. Spencer's part was critical in creating opportunities to make meaning. In Extract 13 Ms. Spencer first makes an affective connection between the text and the world of the classroom (04, 07), and then creates a space for students to share their own experience. The narrative context is Denny's arrival at the rescue center, where she hands the seal over to the doctor and receives a measured reply to her question: "He's not going to die, is he?" Words of the text are italicized; the teacher's words are in regular font.

Extract 13.

01 Ms. Spencer reads: "Not if we can help it," the doctor replied. "But you've certainly had a rough start in life, haven't you, Prince William?" The tiny seal answered with a weak whimper.

02 Student: (inaudible comment, non-verbal whimper)

03 Student: He's so young!

04 Ms. Spencer: Maybe we could name one of our chicks "Prince William"! Cheers erupt.

05 Students: Yay! Yay!

06 Ms. Spencer: I'm taking Prince William to our animal hospital, the doctor explained. He's very ill, and needs to be put in an incubator for a few days--just like our eggs are in the incubator--just like a human baby--So sometimes human babies are born too early and have to be put in an incubator--it's a nice warm place where he'll find it easier to breathe.

Ms. Spencer finished the page in a short 10 seconds and opened the floor up to student voices. Students were eager to share accounts from their lived experience. Audrey and Jorge both shared personal stories of younger cousins who were born premature and needed incubation. This was unusual behavior on Audrey's part. Jorge was a confident student who frequently contributed to discussion. Audrey, on the other hand, was reticent in class and rarely shared. On this day, Audrey shared 20 seconds, an unusually long contribution for her.

In many Interactive Read Aloud lessons students were for the most part silent during the reading, listening but rarely commenting, and preparing internally to answer the assigned question. In this lesson a steady rhythm of comments and voiced feelings, ran alongside the read text. Ms. Spencer made no moves to stop them. Students seemed to me to be engaged throughout. Their expressions of concern as well as happiness, the cheer that went up, suggested that *Prince William* made for an emotionally rewarding experience that was also complex, engaging various emotions. In addition to the qualities of the text, the teacher's role was vital. Ms. Spencer opened spaces during the narrative for students to share their lived experience. They

were not hurried or constrained by sentence frames, and Audrey and Jorge took ample time to share their family experiences with their peers.

Following this complex emotional engagement in the Interactive Read Aloud lesson, students engaged in wondering inquiry, reaching beyond Rand's story. Collaboratively they created an imagined life, in the present, for the seal of the story. Leaps of imagination were required, but students also evaluated the possibility responsibly, using an online informational text and the original text ("When did the oil spill happen?" Rubi asked). The interaction began as Ms. Spencer finished reading, described the book as "pretty cool," and Xavier raised his hand. Extract 14 presents the beginning of the interaction. Table I1 in Appendix I contains an analytic representation.

Extract 14.

- 01 Ms. Spencer: Alright, do you have a comment or a question? Go ahead.
- 02 Xavier: Where is he now?
- 03 Ms. Spencer: Where is he now? Oh, well, I'm guessing, I guess we don't know, but probably dead ... Lexie?
- 04 Lexie: I'm wondering if maybe the mother of Prince William got rescued at the center and they didn't know and maybe she found him like, later in the ocean.
- 05 Ms. Spencer: It is possible that she also got rescued but they weren't together and they could find each other again in the water but we don't know for sure. Rubi?
- 06 Rubi: When did the oil spill happen?
- 07 Ms. Spencer: So, 1989 was ... I was in college so it was it was twenty, thirty, about thirty two years ago.
- 08 Rubi: Maybe he, do you think he might be alive?

09 Ms. Spencer: Oh good question. Rubi's question is: "Do you think Prince William is still alive?"

A general definition of inquiry is a "language act in which one attempts to engage another in helping him go beyond his present understanding" (Lindfors, 1999, p. 4). Inquiry acts encompass other communication purposes as well, including seeking to engage others in wondering, taking a "stance of openness to (a world) of possibilities" (p. 4). Ms. Spencer and the students adopted that stance in Extracts 14 and 15. In the analytic representation of Extract 14, (Table I1 Appendix I), since none of the codes Kovalainen and Kumpalainenen (2005) employ denotes imagining, I used a new code, IMAG, here and whenever participants discussed hypothetical possibilities or when they imagined.

Extract 15.

- 01 Ms. Spencer: So here's what I'm going to do ... look up lifespan ... of ... an otter ... sea otter.
- (The students immediately exclaim in response.)
- 02 Students: Sea otter?? It's not a sea otter!
- 03 Ms. Spencer: Oh sorry! I said sea otter--of a *seal*--lifespan of a seal. So it says seals live 25 to 30 years so there's a slight possibility that he's there, he'll be very old if he's alive, he's an old, old man.
- 04 Students: He's a grandpa seal, he's a grandad!
- 05 Student: He's swimming around in the ocean.
- 06 Student: Maybe but we don't know.
- 07 Student: A grandpa.

08 Ms. Spencer: He might be a grandpa seal. Alright, friends. Friends and scientists come back.

Together Extracts 14 and 15 provide insights into students' meaning making activity after the story was over. Four observations are worth making. Students' activity, rather than reproductive, was imaginative: the teacher and students discussed a possibility. They could not know for sure that their seal was alive (and they knew that). But they thought the possibility was worth considering, and they contemplated it, using language like "might," "a slight possibility," "maybe." Second, this was imaginative work that at the same time drew on students' current study of animal life cycles, so their activity was also culturally based (Vygotsky 2004). Their meaning making was obviously collaborative, but less obvious is that each student's contribution was quite different. Xavier initiated the inquiry. Lexie developed the story, building on the possibility that Xavier raised (when he imagined the seal swimming somewhere). Rubi prompted the teacher to check the possibility using an informational resource. After checking the seal life cycle, the teacher, weighing up probabilities, cautiously concluded: "There's a slight possibility that he's there." Four different actions preceded students' imagining that the rescued seal was now "a grandpa seal."

The interaction of Extracts 14 and 15, in the context of the whole lesson, illustrates the importance of emotional engagement and imagination in making meaning. The meaning students made was not reproductive or merely repetitive of the original text. Rather, it was a "creative reworking of the impressions (they) have acquired" (Vygotsky, 2004, p. 11) combined with "elements of (their) past experience" (p. 9) as Third-Grade scientists. At the very least, a modest observation can be made: emotional engagement with the story was followed by imagining.

Ms. Spencer refocused on the moral question, asking: "What do you think about her breaking the rule?" When it turned out that everybody thought Denny was right to break the rule, Ms. Spencer probed for reasons. Rubi made a point about consistency and Lexie made a logical point about time but compassion played a part in all the students' thinking. Students responded with "felt reasons" (Siegel, 1997), rational positions backed up with strong emotions. Here too imagination played a role, as students envisaged a very different outcome had Denny not broken the rule. Extract 16 shows "thinking" that blends emotion, imagination, and reason.

Extract 16.

Xenia: The seal might have died because he was only ten hours old.

Rubi: She was doing what her parents were trying to do, save the animals.

Aaron: I was gonna say if she didn't save the seal he would have had a very um short life.

Ms. Spencer: Would have had a really short life, yeah.

Student: Not one day of life.

Ms. Spencer: That would have been a very short life and very sad. Lexie?

Lexie: If she had gone to get her mother he might have died.

Discussion of the moral question came to an end when the teacher shifted decisively to the assignment that students must complete: "Alright, so friends, on Seesaw the question you need to answer and be thinking about is: Why do you think the author wrote this book?" The assignment represented an abrupt pivot from a meaningful discussion about the morality of rule breaking to ascertaining the author's purpose.

Finding the Author's Purpose: A Way of Making Meaning?

Discerning the author's purpose was the objective of many Interactive Read Aloud lessons including *Energy Island*, *Tomas and the Library Lady*, *Meadowlands*, *Oil Spill*, *The Frog Prince*,

The True Story of the Three Little Pigs. The words "author's message" and "lesson" were used synonymously with "author's purpose."

The data suggested that as a tool to help students make meaning, the question was of limited value, at least when it required a solo performance. The following two extracts are individual responses to the question: "Why do you think the author wrote this book?" Students' use of the structure: "I think the author wrote this book" lends confidence to the openings while the subsequent breakdowns in syntax, the nervous pace of Aaron's response and Carina's admitted perplexity point to the need for another to jump in as a conversation partner and join the speaker in making meaning. Speaking quietly and hesitantly, Carina recorded her thoughts about the intentions of the author of *Prince William*:

I think the author wrote this book to the, help people know about the oil spills and teach them a lesson (nervous laugh) you should always help animals ... okay ... so I don't know (nervous laugh) ... I don't know ... I don't know what to do here anymore ... okay ... yep.

Aaron spoke for 45 seconds, longer than Carina, beginning with the same opening structure: I think the author wrote this book because um to tell us that sometimes it's okay to disobey your parents and um if you don't and and like in the lake warrior Rand [author] said that ah ... ah ... Jenny [Denny] found the seal and if she didn't then the seal would have died it only had a life span of two hours and yeah I think that's the purpose she wrote this book ... that it's okay if you disobey your parents. Bye and I'll see you tomorrow.

Without a partner, Aaron and Carina were stranded with their own words, struggling to give voice to thoughts. Carina's "I don't know what to do here anymore" speaks to her need for a peer

to respond to her, to agree or disagree so that she in turn might respond. Both excerpts could, theoretically speaking, be used as empirical support for Vygotsky's (1986) claim that words are not the external form of thought: "the structure of speech does not simply mirror the structure of thought; that is why words cannot be put on by thought like a ready-made garment" (p. 211).

The question about the author's purpose appeared then, from the data, to be less productive than the children's own questions about possibilities, less generative than the teacher's question about the ethics of rule breaking, and more difficult for children to answer. Determining the author's purpose is, however, one of the Common Core State Standards (CCSS) for reading informational text: "Identify the main purpose of a text, including what the author wants to answer, explain, or describe" (CCSS: R. L. 2.6). "Distinguish their own point of view from that of the author of the text" (CCSS: R. L. 3.6). Determining the author's purpose is certainly not without value, but Carina's and Aaron's responses show it is something best done with others.

Section 2: Questions and Opportunities

Language is the "prime cultural and psychological tool" (Mercer & Littleton, 2007, p. 69) that gets us to higher levels of development; consequently, interaction with other speakers is essential for student development. Ms. Spencer was understandably concerned when she noticed that in whole group "Few students want to voice their opinions and thinking about things" (personal communication, Aprill 14, 2021).

It was true that in Interactive Read Aloud students listened more than they spoke, although in every lesson there was an opportunity for each student to speak to another in "partner talk" which occurred at the end of the lesson. Partner talk lasted for a minute or two and preceded the individual Seesaw assignment. There were times when students readily expressed their thoughts in Interactive Read Aloud. In the lessons discussed above, Aaron and Jorge broke into an otherwise monologic delivery and voiced their opinions and thinking. The sequence Jorge initiated remained between him and the teacher, but Aaron's question initiated a sequence in which multiple students voiced their opinions and thinking. The interaction that occurred in the *Prince William* lesson is also a counter example to the trend Ms. Spencer observed. As a general observation, however, the teacher's comment was accurate: "Few students want to voice their opinions and thinking about things."

I revisited data with Ms. Spencer's concern in mind. If students were not engaged in dialogue, sharing opinions and thinking, then the opportunities for making meaning seemed slight. Referencing Bakhtin, Nystrand (1997) writes that "it is the tension between self and other, the juxtaposition of relative perspectives and struggle among competing voices that (for Bakhtin) lies at the heart of understanding as a dynamic, sociocognitive event" (p. 8).

In revisiting numerous transcripts, I distinguished three kinds of questions which students readily responded to. None of these called for opinions or thinking and instead invited recall of knowledge that was settled and static. They included questions that checked on whether knowledge had been internalized; questions that asked for recall; questions that prompted outloud remembering as a way of cementing social meanings constructed in previous lessons. In the example below (Extract 17) the teacher checked on whether knowledge had been internalized. Ms. Spencer's words have the form of a question, but their function was to prompt students to recall their knowledge of genre, knowledge that is fixed and static, and to pass it on to Hector.

Extract 17.

Ms. Spencer: Who can tell Hector because he wasn't here, what is a pourquoi book?

Mateo, what is a pourquoi book?

Mateo: A story that tells why did it happen.

Ms. Spencer: Why did it happen, right? So we're learning about why things happened.

Students readily responded to questions that called for remembering book titles, kinds of books, or the themes of recently read books, knowledge that was settled and static. These questions served an important purpose of situating current activities within an extended and coherent flow of learning experience, but they too were oriented to certain, fixed knowledge and not to reaching beyond it.

Questions were also used as prompts for recitation of knowledge from previous lessons. In the following example (Extract 18) the teacher and four students recite the agreed-upon knowledge ("what we learned") from their study of pourquoi tales. I have omitted punctuation from the teacher's turns to convey the continuous flow of her speech, which, without pauses, lent a persistent quality to her questioning. (The titles of the pourquoi tale referenced are given in brackets.)

Extract 18.

Ms. Spencer: We learned three things so far who remembers the first thing we learned? Xenia?

Xenia: How the lady slipper happened. (*The Legend of the Lady Slipper*)

Ms. Spencer: (Revoicing) Why lady slippers came into being, which are flowers. What was the second thing we learned on Day two Lexie?

Lexie: Why mosquitoes buzz in our ears. (Why Mosquitoes buzz in People's Ears)

Ms. Spencer (revoices student): Why mosquitoes buzz in people's ears and then what was the third thing we learned ...

Student: Yesterday.

Ms. Spencer: Yesterday, what did we learn yesterday?

Jorge: Why cat and mouse hate each other.

Ms. Spenser: Why cats and mouse--or cats and mice--hate each other or don't get along. The students' behavior was guided by their understanding of the kind of language event this was. The quick pace of the interaction, the absence of hesitation before the answers, the predictable form that allowed Jorge to finish his teacher's sentence indicate that the participants understood that the purpose of this language event was to recall agreed-upon knowledge. In this context "What we learned" was not in dispute. This was not a context to share personal interpretation.

Adding to the Findings

A reexamination of data (prompted by the teacher's concern) added to the four findings already established:

1. Third Graders created opportunities for making meaning with texts, both for themselves and the group. They were not always limited to the opportunities which were set up for them by the teacher.

2. When students' responses were restricted to the text alone, opportunities to make meaning were similarly limited.

3. Generative, open questions asked by the teacher supported the collaborative construction of new knowledge, as in *The Tree Lady* (Hopkins, 2013)

4. Emotional engagement and imagination were important resources in responding to both fiction and non-fiction.

5. The students readily responded to questions that required remembering or called for scripted response. These questions were not opportunities to make new meaning.

What's Happening Here? Finding Meaning in Traditional Tales

Underneath every language event, is the question "What's happening here?" (Lindfors, 1999). Participating in literacy involves knowing the conventions associated with a genre. Closely related to that is the need to recognize the genre-specific expectation for finding meaning in a text. The discourse surrounding *The Legend of the Lady Slipper* (Lunge-Larsen & Preus, 1999) illustrated that students needed to understand that the question "What is the story teaching us?" meant something quite limited in the context of folktales.

The Ojibwe tale *The Legend of the Lady Slipper* was students' first introduction to the pourquoi tale, and Ms. Spencer had yet to teach them that in this genre, characters "are simple, they're either good or bad, they're not complicated" (from the lesson on *Ming Lo Moves the Mountain*). When the teacher asked, "What is the story teaching us?" Anna and Jorge did not understand that in the context of pourquoi stories and folktales a somewhat obvious and superficial response would suffice. Without the conventional cultural knowledge of genre, they engaged in *inquiry*, seeking a deeper level of understanding.

In the discourse of Extract 19 Jorge and Anna try to make meaning using the same subjective resources of emotion and imagination that they had used in responding to *Prince William*. The two stories share some narrative features, making this entirely understandable. In both stories a young female protagonist undertakes a heroic act, commits a necessary transgression, and puts herself in harm's way to save another's life. A short summary of the tale will give context for the interaction between Anna and Jorge and their teacher. *The Legend of the Lady Slipper* tells of a courageous young girl who, during a raging pandemic, goes in search of the *mash-ki-ki* or healing herbs, to save her people. Crossing a frozen lake on her return to her village, she loses her moccasins in the deep drifts of snow. She continues barefoot, carrying the mash-ki-ki even though with each step "icy crystals cut into her flesh and her feet began to bleed." Read as an origin or pourquoi story, the tale "explains" how the moccasin flower came into being: it appeared "on the very spot where she lost her moccasins and wherever she had stepped with her bleeding feet."

Unaware of the conventions of the genre, Anna and Jorge were unconstrained by them. They wanted to go beyond the surface message of this pourquoi tale--that the moccasin flower (or lady slipper) grew from drops of blood. They responded to the tale--which has a fair amount of danger, sacrifice, and heroism--with emotion and imagination.

Extract 19.

Ms. Spencer: That was the first, we will have four pourquoi tales. This is the first one. Student (as if trying out the word): pourquoi, pourquoi.

- Ms. Spencer: Pourquoi, pourquoi tales. Anna, I see your hand. What would you like to say?
- Anna: She didn't die because she had the ... I don't know how to say ... the mash ... the special medicine.
- Jorge: But she was going to die, she was ready to die for her brother and her family. She could die in the snow.
- Anna: They didn't find the moccasins when they went back, they just found the moccasin flowers.

- Jorge: They grew out of her blood, her feet were cut and she dropped blood everywhere she walked till she got back to the village and then the people heard her crying out.
- Ms. Spencer: You're trying to make sense of it and I understand why you want to make sense of it but the truth is, the truth is that this isn't a real story, right? This is a made-up story, it's a fictional story. So now we're going to do a quick talk structure.

The kind of meaning making that the students embarked on, drawing on emotion and imagination, was discouraged with the teacher's words: "You're trying to make sense of it, but the truth is, the truth is that this isn't a real story, right?" as she redirected them back to the confines of the genre. The questions that were then assigned for partner talk ensured students responded within the narrow parameters of the pourquoi genre. Partner A would answer: "What was the story teaching us?" Partner B would answer: "Who did good and what reward did that person get?"

It would seem obvious that the kinds of meaning making students engaged in during Interactive Read Aloud were contingent, at least in part, on the kinds of questions posed. In the lesson centered on *Ming Lo Moves the Mountain* (Lobel, 1982), the questions were rhetorical questions and the meaning making opportunities were slight, until Lexie shifted the discussion to a more interesting question. A more accurate statement, then, is that the kinds of meaning making students engaged in were initially contingent on the kinds of questions posed. As anthropological theories of culture explain, participants in a cultural event have agency. Shaped by their context they are also shapers of context (Green & Castanheira, 2012). There was at first little opportunity for talk in the *Ming Lo Moves the Mountain* (Lobel, 1982) lesson. After telling students to "be thinking ... what is happy about the ending" so as to be prepared for their Seesaw assignment, the teacher read through the story *Ming Lo Moves the Mountain*, a whimsical folktale set in China. (Briefly, when Ming Lo and his wife can no longer bear the damp cold of their home in the shadow of the mountain, they ask the village wise man how to move the mountain. None of his suggestions works except the last: to perform "the dance of the moving mountain." The "dance" in reality, is just moving away from the mountain.

Two strategies incorporated student thinking (but not voices) during reading: a thumbsup-or-down check ("Show me thumb-up or thumb-down, do you think this is going to work? Cut down a really big tree and push it against the mountain"?) and rhetorical questioning, which reinforced the surface simplicity of the story ("Now what do you guys think? Is clanging some pots and pans gonna work? I don't think so either.") At the level of narrative, everyone "got" the story. The questioning strategies did not occasion shifts in knowledge or understanding and were not intended to. In Vygotskian terms the zone of proximal development to be traversed lay elsewhere, in the ambiguity that Lexie found in an otherwise straightforward story. The thinking that Lexie wanted to do was around the character of the wise man: could someone be called wise who made such foolish suggestions?

Lexie initiated an inquiry not with a question but an observation, when she commented: "The ... wise man wanted ... to do that so that they could also get away from the mountain." Teacher uptake followed: "Do you think the wise man actually tricked them?" Although Ms. Spencer had earlier directed students to be thinking about "the happy ending" for the Seesaw assignment, she took Lexie's wondering onboard, shifted the focus of the lesson, and made partner talk an opportunity to make meaning. Extract 20 captures the interaction, after Lexie responded to the irony of the book's closing sentence.

Extract 20.

01 Ms. Spencer reads: They both knew that they had made the mountain move.

(She chuckles at the ending and notices Lexie has her hand raised.)

02 Ms. Spencer: Lexie what are you thinking?

- 03 Lexie: Um, they thought that the mountain moved but it didn't actually move at all, they were the ones that moved.
- 04 Ms. Spencer: They were actually the ones that moved.
- 05 Lexie: The ... wise man wanted ... to do that so that they could also get away from the mountain [and]
- 06 Ms. Spencer: [Do] you think the wise man really tricked them?

07 Lexie: Yeah.

08 Ms. Spencer: Okay. So, here's what we're going to do. I want you ... to think about ... whether you think the wise man was really wise and I want you to say why, I want you with your partner: "I think the wise man was wise because ..." or "I don't think the wise man was wise because."

This short unscripted interaction shows how an opportunity for all the students to make meaning was created by the teacher's uptake of an individual student's comment. Ms. Spenser sensed from what Lexie was doing what she was capable of doing: discuss ambiguity of character and plot. Taking up Lexie's words ("they were actually the ones that moved") she first met Lexie in her zone of proximal development then changed the talk assignment, broadening the scope for making meaning of the tale.

Questions in the Folktale Why Mosquitoes Buzz in People's Ears

Goodman and Goodman (1990) wrote of the delicate role of the teacher in the ZPD: "supporting the learning transactions but neither causing them to happen in any direct sense nor controlling the learning" (p. 236). The lesson on the African tale *Why Mosquitoes Buzz in People's Ears* (Aardema, 1975) illustrated the difficulty and importance of the teacher's role in the zone of proximal development. The lesson showed that when teachers do too much, they reduce students' opportunities to make meaning. During the discussion part of this lesson, student responses remained undeveloped because the teacher did not ask for clarification or elaboration, but instead supplied it herself.

Why Mosquitoes Buzz in People's Ears is the perfect humorous text to teach shared responsibility for outcomes to which we all contribute. Multiple characters, including a mosquito, an iguana, a python, a rabbit, and a crow contribute to an escalating disaster which in the end affects all of them: the owl refuses to wake the sun. This theme of shared responsibility drives the tale as it unfolds.

It was in whole class discussion that students' opportunities to make meaning were limited by the teacher's "doing too much." The topic for discussion was which animal character was *most* to blame for the catastrophe. Despite the words "What do you think?" the form of the interaction was teacher question, student response, teacher evaluation, and teacher elaboration. It was in evaluating and elaborating that the teacher does too much, "controlling the learning" (Goodman & Goodman, 1990, p. 236). In Extract 21, after the teacher evaluation and elaboration at 03, Xenia had no more to say.

Extract 21.

01 Ms. Spencer: Alright so, for your Seesaw you're going to think about what *really* caused the problem ... I have my opinion about what really caused the problem ... does anybody want to share ... who do you think the real problem was? Xenia. What do you think?

02 Xenia: The farmer or the mosquito.

03 Ms. Spencer: The farmer or the mosquito, okay ... well mosquito was making up a story about farmer, I don't think farmer did anything wrong. So you think the mosquito because he told a lie?

(Xenia doesn't reply.)

04 Ms. Spencer: Anybody think anything else? Lexie what do you think?

05 Lexie: Mother Owl.

06 Ms. Spencer (her tone suggesting genuine surprise): Oh! Mother Owl! Because she blamed monkey but she didn't actually know what had happened and that it was an accident ... wow! I like that idea!

When the teacher evaluated Xenia's answer and discounted the farmer ("I don't think the farmer did anything wrong"), other students did not weigh in in support of either Ms. Spencer or Xenia. We do not know why Xenia herself remained silent after the teacher's turn (03), neither confirming the teacher's revision nor justifying her earlier claim that the farmer was also blameworthy.

In Extract 22, Avril and Angelina named a culpable animal, but the teacher supplied the supporting reasons, as she did for Lexie.

Extract 22.

01 Ms. Spencer: Avril?

02 Avril: Monkey.

03 Ms. Spencer: You think the monkey because he was the one who killed the owl, you think it was his fault. Okay ... what do you think Mateo?

04 Mateo: Python, the snake because he scared the bunny away and then he

- 05 Ms. Spencer: and that caused all the problem. I think the same too but for a different reason. I think the snake because he made an assumption he jumped to a conclusion when iguana didn't answer him. Iguana wasn't ignoring him, iguana couldn't hear, but he made he made an assumption and he set off this whole chain of events. So I think ... we could say lots of different answers there's lots of right answers. Angelina?
- 06 Angelina: Iguana.
- 07 Ms. Spencer: So you think iguana because he has sticks in his ears and it was his fault? Because if he hadn't, not had the sticks in his ears ... maybe ... yeah maybe that wouldn't have been a problem.

The teacher's comment, "We could say lots of different answers, there's lots of different answers, right?" (05) affirmed that students were free to have any perspective on the story: consensus was not the goal. Ms. Spencer's words additionally conveyed that she valued multiple perspectives. These were important messages to students. However, with the exception of Mateo, students' one-word answers were accepted, and Ms. Spencer did not prompt for elaboration, instead supplying the reasoning for students. In this sense she did too much and the students did too little. Students' silences as well as their words are important. What was the communicative function of Xenia's silence in Extract 21?

When her teacher evaluated her opinion as wrong (Extract 21, 03), Xenia remained silent. She neither agreed with her teacher's revision (that only the mosquito was blameworthy) nor justified her earlier claim that both mosquito and the farmer were blameworthy. Xenia did not read the rising terminal stress of the teacher's question: "So you think the mosquito ...?" as an invitation to dialogue. Or if she did read it as such, she did not accept the invitation. Given the teacher's earlier dismissal of Xenia's opinion--"I don't think *farmer* did anything wrong"-- dialogue would include, as a first step, disagreeing with her teacher. This was not a role that Xenia had been accustomed to in classroom interactions.

The cultural domain Speaking up in class (Appendix A) offers a possible reason why Xenia did not respond after 03. It reveals five primary reasons for speaking up in class: saying what the message of the story is; telling what [I] have learned; citing evidence from the text; supplying an academic term; answering a teacher's request for a definition, a word, or for remembered facts.

Disagreeing with an idea put forth by the teacher was not one of the reasons to speak up in class. It is understandable then, that other students did not step in at this juncture either.

Section 3: The Limits of Evidence

In this final section I present the findings from three lessons taught in sequence towards the end of the semester: *Nothing but Trouble: The Story of Althea Gibson* (Stauffacher, 2007); *Soccer Star* (Javaherbin, 2014); and *The Paperboy* (Pilkey, 1996). *Nothing but Trouble: The Story of Althea Gibson* tells the story of the first African American tennis player to compete for and win the Wimbledon Cup. *Soccer Star* and *The Paperboy* are realistic fiction. What is distinctive about these three lessons is that in the discussion part of each lesson it was a requirement that students' answers be anchored firmly to the words of the text. What followed from this requirement is plainly seen in the discourse: speaking became more an individual "performance" and less a means to think out loud, either individually or with others.

Nothing But Trouble: The Story of Althea Gibson

The requirement that responses be anchored literally in the words of the text limited the kind and quality of meaning students were able to make. This general finding had specific resonance in *Nothing but Trouble: The Story of Althea Gibson.*

Staufaccher's biographical account of the tennis great Althea Gibson (1927-2003) traces her journey from playing tennis with a paddle as a child in Harlem to her 1957 Wimbledon win. Omitting political and social context, the author tells the story as a triumph of individual talent.

The lesson began with absolute clarity about what would be expected of students following the reading. Characteristically, Ms. Spencer scaffolded successful completion of the assignment, supplying vocabulary students may use the assignment:

The assignment you have to do today is to pick a word that describes Althea Gibson, and I gave some examples like athletic, fast, strong, competitive, stubborn, angry, and determined; those are all words that you are going to learn about Althea Gibson. You are going to *make a claim* [emphasis added]: "I believe Althea Gibson was (blank)"--and then you're going to give *your reasons* why you think Althea Gibson was that ... whatever that word was, whatever that describing word was. Okay?

Ms. Spencer continued to clarify the assignment and now the words "your reasons" were replaced with "your evidence--what from the book":

You're going to write or speak your claim or you can write it too: "I believe Althea Gibson was 'blank' because …" and then your evidence--what *from the book* [emphasis added]--she was *determined* because she kept playing and playing; she was somebody who, um was … she had a hot temper … she was angry sometimes … and give some examples, like she wanted to throw people out of the stands. Remember I want a conclusion too: "These are the reasons I believe Althea Gibson was 'blank'."

The problem with relying on the book "to learn about Althea Gibson" is that the story is a very incomplete biography that fails to locate Althea Gibson in the Jim Crow era. The story is told as a celebration of individual determination and talent, without mention of the systemic racial injustice that limited where individual determination and talent could take any Black athlete or indeed any Black person. Students heard a limited narrative of a spunky, determined girl who eventually made it to the top of the tennis ladder. When social and political context are omitted from a biographical narrative, the opportunities for understanding a character are narrowed. This finding has important implications for literacy teaching.

The reading itself was nine minutes long and included two interactive periods. In the first interaction Ms. Spencer focused on an illustration (Extract 23). She invited children to think about why Althea was depicted surrounded with splashes of rainbow color, while the other characters--parents, schoolmates, police officers--and the Harlem neighborhood itself were presented in black and white.

Extract 23.

Ms Spencer: I want you to notice the pictures ... they're black and white except for

Althea. Anyone have a guess why all that color is around her? Martina: She's happy, everybody else is kind of like mad. Aaron: All the emotions she's feeling.

Teacher: Yeah, she has a lot of energy, this girl.

These three responses were brief and unelaborated, so we don't know *why* Martina chose "happy" or what Aaron meant by "all the emotions." Just before drawing students' attention to the splashes of color the teacher had commented: "there's a little bit of tension in this story …" without further elaboration. There are certainly points in the story where social class and economic disparities were alluded to, though never foregrounded. At the Cosmopolitan ("the ritziest tennis club in Harlem"), Althea, encouraged to "make something of herself" by acting like a fine lady, retorts "I don't fit with these rich society folks" and "Never said I wanted to be a fine lady." There is also the account of how "Buddy scrounged up enough money to buy Althea a stringed tennis racket at a secondhand store" to replace her "big wooden paddle." Exploring these aspects of the story, the "little bits of tension" Ms. Spencer noticed, could have supported a fuller understanding of Althea and greater appreciation of her achievements.

But what is swept entirely under the carpet is the racial segregation that denied Gibson the chance to play tennis with her equals in the game. The narrative omits any mention of the strict segregation in the tennis world between the all-Black American Tennis Association and the all-white United States Lawn Tennis Association. The historical context beneath the narrative of individual determination is quite absent.

Soccer Star

Privileging what is "in the book" restricted opportunities to engage in thoughtful critical literacy around issues of race and racial justice. Freire's (1997) words from *Pedagogy of the Heart* came to mind, and his belief that "educational practice should never be restricted to a

"reading of the word" or a "reading of text," but must include a "reading of the world" (p. 12). Freire's critical insight applies equally to the text *Soccer Star*.

Written as "an homage to all soccer stars who have risen and continue to rise up from poverty" (author's note), *Soccer Star* recounts a day in Paolo's life. He takes his sister to school, works with the fisherman Senhor da Silva, plays soccer, but mostly dreams of future greatness.

The instructions before reading restated the same requirement as yesterday: Seesaw responses should be anchored in the words of the text. Ms. Spencer was explicit about what was required for the assignment:

Your assignment today is going to be ... this boy, his name is Paolo and Paolo um you are going to have to tell me, what kind of character is Paolo, so you're going to *make a claim*: I think Paolo is "blank" because in the book it tells me "blank" and "blank." And then a conclusion.

On this day I reached a better understanding of the reasons Ms. Spencer coached her students to respond to text in a particular way, in terms of claim, evidence, conclusion. The day's assignment was essentially preparation for an upcoming district reading assessment:

So remember next week is our test in reading. You will be asked a question that you have to write an answer to and I do not want one sentence! Not one word, not one sentence, I want at least four or five sentences as an answer for a question that they ask you. So I want you practicing that.

Aaron was knitting, having earlier asked for permission. Martina was cuddling her small white West Highland terrier. Ms. Spencer was concerned that many students had still not returned when she began reading--"I'm going to get started anyway"--and she stopped several times to check on who was present and who was yet to appear. Knowing now about the district assessment in the coming week and knowing how "effective teaching" is measured, I understood her anxiety that some students would miss practicing for the upcoming reading test.

Soccer Star, like Nothing but Trouble: The Story of Althea Gibson, tells a story of individual talent and determination without any consideration of the broader economic and social setting: the poverty and gross inequality of Brazilian life is simply glossed over. Paolo doesn't attend school and is illiterate, nor do his teammates attend school, yet the author minimizes the significance of that deprivation with some verbal sleight of hand. Jose, who daily dives to entertain tourists, will one day "dive for the ball and take our team to the top." Carlos, who shines shoes and watches his younger sisters sitting on the curb, "[will] one day, with his fancy footwork score us brilliant goals." Pedro, who climbs coconut trees to harvest the coconuts, will one day "climb to glory and harvest us fortune and trophies."

In my journal I reflected on this verbal sleight of hand: "It's one thing to write a naively optimistic story for kids, "a make-believe mirage" as Freire (1997) calls it in *Pedagogy of the Heart* (p. 11), but to use the shoe shining, diving, and climbing as prophetic metaphors of greatness? I am beginning to think more about the issue of trust between author and reader."

In fact, Ms. Spencer did allude, in a passing comment, to the issue of poverty, reminding me of the moment in *Nothing but Trouble* where, drawing on her experience of reading the world, she commented "There's a little bit of tension in this story":

So I want you to notice how the boys are dressed. The boys don't have a uniform, they're

all just wearing their regular clothes, they're probably too poor to have uniforms but I

don't think it's a problem; they look like they're having a ton of fun.

It was as if she started to open a window onto a different perspective. Then, commenting "but I don't think it's a problem; they look like they're having a ton of fun," she reversed the process.

Xenia, however, did appear to think about Paolo in broader terms than his athleticism. When the teacher called for responses: "What kind of person is Paolo?" Xenia was ready: "Like, responsible because he takes care of his sister, goes to work for a little bit then goes to play and then ... that's why I say that he's like responsible." Ms. Spencer was enthusiastic about the form of her response: the beginning, the reasons, the closing. She did a little teaching around the use of proper nouns and warmly commended the middle section and the conclusion:

Oh my gosh, did you guys hear that? She said the beginning: "I think he's responsible." I want you to make sure you're using characters' names, yesterday nobody, hardly anybody said "Althea." I want you to make sure you use their names. So his name is Paolo and it's in the assignment. "*Paolo* is responsible." Then she (Xenia) gave two or three reasons and then she said, "That's why I think Paolo was responsible." That was beautiful Xenia, thank you.

Xenia's response showed she was meeting the learning goal. The teacher's evaluation and commendation expressed her happiness in Xenia's achievement and would encourage a positive affective relationship towards learning (Bozhovich, 2009). Angelina was less assured when she made her contribution.

Extract 24.

01 Ms. Spencer: Angelina you want to give it a try? And then Jorge.

- 02 Angelina: Paolo was like ... brave?
- 03 Ms. Spencer: Okay, what's your evidence?
- (Angelina is silent for nine seconds.)
- 04 Angelina: I forgot what I was going to say.
- 05 Ms. Spencer: What makes him brave?

06 Angelina: uh ...

07 Ms. Spencer: You want to think about it for a little bit? You can think about it. I'll call on somebody else we can come back to you.

Angelina was less confident, less certain in her attribution of bravery than Xenia was. Was she thinking perhaps of Paolo's small fishing boat on the roiling seas as the storm rolls in? Data from an earlier lesson showed that the opportunity to voice tentative thoughts helped students to give their thought form, as Lexie and Rafael did in the *Tree Lady* lesson and Jorge in the *Pinduli* lesson. By contrast, the directness of the question "What's your evidence?" did not invite Angelina to voice the tentative or provisional thinking that often precedes an idea. Angelina withdrew from the discussion.

Carina was further along in meeting the requirements of the assignment. In Extract 25 she made a claim (02) and when pressed for "evidence" (03), unlike Angelina, she could give a reason: "He helped his sister." The teacher then coached Carina in using the required form to express her thought (07-11).

Extract 25.

- 01 Ms. Spenser: Carina? Did you want to share something?
- 02 Carina: I think he's like kind and helpful, like he helps people with things.
- 03 Ms. Spencer: What's your evidence of that?
- 04 Carina: He helped his sister. Just because she's a different gender doesn't mean she can't get in the team.
- 05 Ms. Spencer: Wow!

06 Ms. Spencer (with rising intonation and expectation): So. "That is why ..."

07 Carina: That is why ...

08 Ms. Spencer: "Paolo ..."

09 Carina: Paolo ... is helpful and caring.

10 Ms. Spencer: Nice! Excellent!

Students are continually "acquiring a sense of what is normal in reading" (Johnston et al., 2020, p. 60). In the interaction above, students were taught to anchor their responses to text by supporting "claims" with details from the story. Xenia, Jorge, and Carina received enthusiastic commendation as they demonstrated their growing proficiency in this skill.

The Paperboy

The Paperboy (Pilkey, 1996) was the final lesson in the sequence. The flow of the lesson, with an unplanned departure from the lesson objective, contained an important finding about how students made meaning in unscripted opportunities to share lived experience.

The book describes the paperboy's early morning routine with his small dog at his heels. The illustrations of the sleeping town in vivid magenta, turquoise, and gold beautifully convey why "this is the time when they are the happiest."

The assigned task was more difficult than the one assigned in the previous two lessons. Instead of students making a claim and supporting it with evidence from the text, in this lesson the *teacher* made the claim that students are to support:

I'm going to make a claim about the boy in this book and my claim is that the paperboy is very determined and responsible. Determined and responsible. Your job is to give some reasons. Why do you think I think he's determined and responsible? You're going to support my claim with evidence from the book.

However, although the lesson began with the same emphasis on "evidence," it did not follow the pattern of the previous lessons. Students did more than find evidence in the text. As they engaged

with the story in a personal way, the text became a significant cultural tool that shed new light on their own and their families' lives. The way that came about in itself constitutes an important finding about how students make meaning of text.

The different course of the lesson began when Jorge clarified the genre of *The Paperboy*, perhaps thinking back to his misunderstanding of the pourquoi story *The Legend of the Lady Slipper* (Lunge-Larsen & Preus, 1999). As soon as the assignment was announced he wanted to know whether he should think about this book as "something that could happen in real life." The teacher's confirmation that this story was indeed realistic fiction laid the foundation for the meaningful connections Jorge later made to his own life.

As the events unfolded, Ms. Spencer foregrounded the assignment, making evaluative comments that supported an interpretation of the paperboy as determined and responsible: "So already I can tell he's very responsible cause he's gotten himself up, nobody woke him, he's gotten himself dressed, he's given his dog breakfast and he's gotten himself breakfast." As the story ended, however, the final appealing illustration appeared to deflect the teacher's focus from the assignment to the relationship between the paperboy and his dog. Ms. Spencer commented spontaneously: "I'm curious ... like, look at this boy and his dog ... can anybody say how this boy feels about his dog?" For a short time, the assignment was not front and center. Extract 26 shows Jorge making sense of that relationship by turning to his own life, his pets, and his knowledge of Pokemon.

Extract 26.

01 Ms. Spencer: But I'm curious, like, look at this boy and his dog ... can anybody say how this boy feels about his dog? Is there anybody who thinks they know? How does this boy feel about his dog? 02 Jorge: Um, I think that this dog is like ... basically a brother.

- 03 Ms. Spencer: It's like a brother to him. Why do you say that? What's your evidence?
- 04 Jorge: That's what, like my chihuahua, my dog, we're like brother and sister mmm and my bird Nimla.
- 05 Ms. Spencer: But Jorge, Jorge what is your evidence that the dog is like a brother to the boy?
- 06 Jorge: Because you know, the evidence cause he does the one thing [everything] with the dog and the dog does one thing [everything] with him.
- 07 Ms. Spencer: They do everything together don't they, everything in the morning together.
- 08 Jorge: They sleep, they eat, they ride outside, but something that the person doesn't do is like bark, and chase, and bring, I mean.
- 09 Ms. Spencer: Right.
- 10 Jorge: Those things.
- 11 Ms. Spencer: But they're together, they're not acting the same but they're together, right?
- 12 Jorge: They're like their hearts are connected like in Pokémon when Ash and Greninja um are connected, and they do ... they like have the same actions.

Jorge tried to convey "how this boy feels about his dog" first with the metaphor of brothers then by referring to his own relationships with his pets. When, as if to get things back on a narrower track, the word "evidence" entered the discourse (03, 05), it worked as a corrective that stopped the life connections Jorge was making (02, 04). "Evidence" sent him back to the literal details of the book at 06 and 08. But having met the requirements for textual evidence Jorge then looked outside the book once more. He turned this time to his personal knowledge of the Pokémon characters Ash and Greninja. Their connection ("their hearts are connected") was for him a meaningful comparison to the close relationship between the paperboy and his dog.

Once one student brought his personal life experience to the text, others also turned to their lives as a resource for making meaning. They did not readily return to simply finding evidence in the text, even when the lesson pivoted to the original assignment concerning the paperboy's determination and responsibility. When Ms. Spencer restated the assignment, Lexie responded, citing the same evidence that Ms. Spencer drew attention to while reading. This would be the last time in this lesson that a student cited evidence from the text. From now on students drew on lived experience to connect themselves to the paperboy. It was as if having observed Jorge making meaning by drawing from his life, connecting his chihuahua, his bird, his Pokémon characters to the book, they saw the value of their own lived experience and understood that it could equally be brought into the reading transaction.

Martina certainly understood this. She explicitly named the comprehension move she was about to make:

This is a connection. So my dad used to um let me, because, like um the mailbox was like over across the street from my neighbors because, and then so I used to drive my ... I used to get on my bike and drive over there and get the mail and come back and give it to him but it's not like the same as the paperboy but I used to do it.

The teacher received the student's narrative as a responsive listener and affirmed her experience: But that was a responsibility you had, right? You had the responsibility to go and get the mail for your dad and he trusted you to do it. This boy, is he doing the right thing? Was he being responsible? Yeah. After the teacher's affirmation of Martina's life-text connection, other students found meaningful connections with the paperboy in their own lives. Xavier (Extract 27) imagined the difficulty of getting up "at half of the night," then made the connection to his mother who does precisely that. (The symbol = indicates overlapping speech.)

Extract 27.

- 01 Xavier: Get up at half of the night, get up at the night ... and go do all that, I don't think I could do all that.
- 02 Ms. Spencer: Yeah, Xavier, when he was ... in his warm snuggly bed and then he had to wake up and it was dark and cold. It's so hard, you have to be very determined to do that because if you're not determined =
- 04 Xavier: = my mom does, she works at the middle of the night.
- 05 Ms. Spencer: So your mom is also very determined, a lot of you probably have family members who are very determined to get up, I think that I'm pretty determined! I still get up when it's dark I come to work every day and you guys are determined because some of you would like to keep sleeping but you get up and come to school every day. Go ahead Anna.
- 06 Anna: My mom she wakes up at 6:00 a.m. to get changed and go to work.
- 07 Ms. Spencer: So your mom is very determined also. Jorge I see your quiet hand and then Xenia.
- 08 Jorge: I've gotten more dependent (*sic*) cos last time I used to come at like 8:00 something and now I come at like one ... 7:58 or something.
- 09 Ms. Spencer: I've noticed that, Jorge. You get on at ... even before 8:00 so you're very determined and showing me that you're ready to learn. Awesome.

- 10 Xenia: My mom and me are determined because I sometimes try to get on before 8:00 o'clock and my mom gets up at like at 4:00 a.m. or 5:00 a.m. to go to work.
- 11 Ms. Spencer: Ugh that's so hard to do when it's dark and cold but good for her, that's awesome.

Because of the emotional richness of the discourse, including the gestures of respect and admiration scattered amongst Ms. Spencer's words, students' understanding and appreciation of their parents likely grew, and perhaps their self-esteem received a boost as well. As Stone (1993) reminded us, affective factors are significant in the interpersonal dynamics between teacher and students, including "the degree of mutual trust" (p. 178).

Literacy, because it involves language, is "a relationally and emotionally saturated collection of social practices" (Johnston, 2019, p. 79). Excerpt 28 illustrates well Johnston's claim that experiencing or "living" those social practices fosters not just literate development but human development (Johnston, 2019, p. 71). The teacher skillfully made a case that Lexie, who did not see herself as responsible or determined, had indeed changed and developed into a responsible student.

Extract 28.

- 01 Lexie: Ah um so me and my dad actually wake this morning woke late. Sometimes I wake up by myself sometimes my mom wakes me but me and him wake up at the same time and sometimes me and him don't want to really get up.
- 02 Ms. Spencer: But you do Lexie and you know what, Lexie? At the beginning of the year you didn't always. You came to school late and you came to school looking like you were half asleep and now you have become more determined, Lexie, as a

student. You get up, you get dressed, and you come to school looking ready to learn which is awesome. That shows determination.

The initial assignment was to support, with evidence from the book, the teacher's claim that a fictional character, the paperboy, was very determined and responsible. In their subsequent interaction, however, students did more than this. They made meaning by connecting the book and the concept of determination to their lives and the lives of their parents who, like the paperboy, must rise early to work the early morning shift. At the end of the lesson, in a very personal and specific way, Ms. Spencer cited evidence from Lexie's life as a student that she was indeed determined, and that the change was awesome.

Reflections on the Findings

The findings that were presented in the Third-Grade Section might be grouped under the broad headings Connections, Responsibility, and Possibility. Interpersonal connections, pedagogical and psychological connections were integral to students' understanding. A student tried to communicate to others the connection between his/her lived experience and the book. The teacher made connections between the current science unit and the book. She made opportunities for students to connect their lived experience to the story. A connection I had not anticipated--the relation between emotion and imagination--was an exciting discovery.

A second theme of responsibility wove through the lessons I observed. The teacher acted on her sense of professional responsibility to prepare her students for state literacy tests, crafting daily instruction with that in mind. Beyond that, where possible, she took responsibility for students' human development as well as literacy development. Students daily grew a sense of responsibility for completing assignments independently. Possibilities that opened up and possibilities that did not develop were both evident in Interactive Read Aloud lessons. There were possibilities for students to make sense of lived experience, and to understand and appreciate people in their lives. In one memorable lesson, an opportunity was created to imagine what might be possible beyond the borders of text. At other times, the possibility of reading the world was closed off. The narrowing and expansion of possibility could be traced in the extracts presented. My interpretations of the causes of these contrary movements went beyond the classroom context to take into account the macro forces of neo-liberal education reform.

Part 2: Making Meaning in Second Grade

Second-Grade Interactive Read Aloud lessons were filled with student talk, an indication of commitment to social interaction between learners. It was not uncommon for three days to be spent in talk about one picture book text. This was the case with *The Honey Makers* (Gibbons, 1997a), *Penguins!* (Gibbons, 1998) and *Giant Pandas* (Gibbons, 2002). The amount of talk was sometimes referred to as a class accomplishment that justified a lesson's running over time: "You guys have so many great ideas to share about this book that we talked a lot during the story and so we went a little bit over" (Ms. Windsor's words after *The Gingerbread Girl*).

The amount of talk during Interactive Read Aloud lessons was the first obvious difference between the two grade levels. Before, during, and after the text was read, students and teacher talked. They wondered in advance what genre the book they were about to read might be. In contrast to the start of many Third Grade Interactive Read Aloud lessons, at times the interaction seemed somewhat chaotic, but the teacher was at ease with the special energy of her students, explaining: "I feel comfortable with embracing the true chaos of learning and changing direction based on student interest! It excites me instead of stresses me" (personal communication, April 2, 2021).

Discussion was rarely organized around a pre-set question. Much of the talk was unplanned and often not about the text *per se*. Whether the text was fiction or non-fiction, students shared experiences from their own lives. As the pony in *Molly the Pony* (Kaster, 2012) was about to be anaesthetized for surgery, students shared their own remembered medical traumas. Less dramatically, during *The Honey Makers*, everyone had a memory of a painful bee sting to share. By the end of the lesson the teacher had "got through" four pages of this twentyfour-page book. Students wove their own experience and knowledge across the threads of Gibbons' text.

Responding to text happened primarily through the talking and thinking that took place *during* the Interactive Read Aloud. Individual response, in the form of a Seesaw assignment, was frequently cancelled or postponed until students could talk more. At the end of a *Penguins!* (Gibbons, 1998) lesson, Ms. Windsor decided: "So I'm thinking, I'm gonna have you *not* do that response today ... I want more time to talk about this book before you respond to it on your own, okay?"

There might seem nothing remarkable about this amount of student talk; this was, after all, *Interactive* Read Aloud. But the testing culture that currently prevails prioritizes individual achievement and minimizes the value of students constructing understanding together. The fact that Second-Grade students do not take state-mandated tests (state-mandated literacy testing begins in Third Grade) may account for the differences in social interaction observed between the two grades. Most of the Interactive Read Aloud lessons in Second Grade consisted of talk, resulting in an extensive body of data. I constructed cultural domains and analyzed the discourse using the sociocultural concepts of joint activity, mediation, and *perezhivanie*, and through microanalysis of interaction. Through this process it became clear that a different sort of "literate epistemology" (Johnston et al., 2001, p. 223) operated in the Second-Grade class, one that viewed reading as an experience that went beyond uncovering meaning *in the text*. This was the second obvious difference between the two grade levels.

The nature of that literate epistemology and the opportunities it offers for making meaning are illustrated in the remainder of Chapter IV. Suffice it to say here that two salient features--often thought to be mutually exclusive--operated together to students' advantage. First, communal meaning making happened through social interaction. Students had opportunities to make meaning as they talked freely about texts, "changing direction" based on what interested them. Second, student's subjective experience while reading was recognized as another path to making meaning. This included both the subjective experience of *perezhivanie* and the reach of the text into the reader's life. A working description for the latter approach to making meaning is *expressive* comprehension-as-sensemaking (Aukerman, 2013) or "the active exploration of possibilities for meaning" (p. A5) until one makes personal sense.

Expressive comprehension-as-sensemaking is open to the criticism that it treats reading solely as a relation between reader and text and allows individuals' meanings to go unchallenged. This is a limitation that *dialogic* comprehension-as-sensemaking surpasses, by centrally involving "other readers and other voices" (Aukerman, 2013, p. A7).

The limitations that Aukerman rightly identifies are reduced when *expressive* comprehension-as-sensemaking is used, as it was here, in a sociocultural context where social

interaction has a prominent place in learning. A major finding of this study is that it is not a question of either/or: either *expressive* comprehension-as-sensemaking or making meaning through social interaction. The combination of both afforded students opportunities to deepen their understanding not only of texts but of their lives and the lives of others. Additionally, because students listened to "other readers and other voices" (Aukerman, 2013, p. A5) the combination of *expressive* comprehension-as-sensemaking with social interaction might be seen as a step towards dialogue. The selected extracts of discourse illustrate that finding.

The extracts are drawn from whole class hyflex Interactive Read Aloud lessons and from a small Guided Reading group that met twice weekly. Initially all three students were online. When one student, Leigh, returned to the classroom, instruction became hyflex. Leigh's return to the classroom had the unfortunate consequence of reducing her participation, probably because communication between online and in class students was never straightforward: the teacher had to revoices online students' words, because in-class students (in this case, Leigh) often could not hear them. Marilyn was sometimes absent, and sometimes called away for intervention. Gabriella was a reliable, constant participant in the Guided Reading group. In reporting findings, I focus on Gabriella.

Part 2 of Chapter IV, Making Meaning in Second Grade, is organized in four sections. These sections are: (a) Section 1: Learning Orientations to Text; (b) Section 2: Opportunities to Make Meaning: Subjective Experience within the Reading Event, (c) Section 3: Opportunities to Make Meaning: Engaging with Text Collaboratively, and (d) Section 4: The Importance of Emotion in Making Meaning.

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Section 1: Learning Orientations to Text

Teachers orient or "steer" (Santori, 2011, p. 200) students towards certain ways of making meaning from text (Aukerman, 2013; Santori, 2011; Smagorinsky, 2001) influencing the degrees of *textual agency* (Santori, 2011) students exert over text. Four orientations to text were practiced as part of the culture of Second-Grade literacy: texts as artifacts; texts as incomplete; texts as opaque; texts having multiple meanings. The consequences of each are illustrated with examples of interactive discourse.

Texts as Human Artifacts

Throughout the Interactive Read Aloud lessons the teacher emphasized books as artifacts produced by imperfect human beings. This had consequences for what students learned to do as readers: be prepared to question the accuracy of information and be aware that a book, as the product of a different time and place, might reflect values different from today.

Texts are fallible, as Ms. Windsor pointed out in *Giant Pandas* (Gibbons, 2002), noting an error in the estimated population. Texts can be dated, like *Miss Nelson is Missing* (Allard & Marshall, 2014) with its illustrations of now unacceptable behaviors like smoking. Authors may leave out information the reader would like to have, as the authors of *Molly the Pony* (Kaster, 2012) and *Beauty and the Beak* (Rose & Veltkamp, 2019) did. Pointing out these features altered the status of text from an uncontestable repository of "truth" to an imperfect and contestable human artifact.

Second, Ms. Windsor taught that the decisions and choices made by the author and illustrator shape the construction of a book. "You know authors and illustrators never do anything by accident" she said during *How Chipmunk Got His Stripes* (Bruchac & Bruchac, 2003) introducing students to the idea that whether they reinforce or contradict the story told in

words, images are purposeful (O'Neil, 2011, p. 216). The repeated illustrations of Bear's feet mean *something* because the illustrator deliberately put them there. At the conclusion of *The Gum-Chewing Rattler*, she showed the end page photographs of people used as character models and read artist Antonio Castro's explanation that he used real people (including his grandson) so that he "could capture all their emotions and feelings."

Teaching that "nothing is ever by accident in a book, right?" (Giant Pandas) underscored the intentionality of the author, who crafts a particular representation of "reality" (Janks, 2010). Aware that books offer an idiosyncratic, limited representation of "reality," Second Graders consciously adopted a broader perspective as they read and brought personal knowledge and experience into the reading event. This was evident in the reading of *Moira's Birthday* (Munsch, 1987), a story Ms. Windsor read to the class each time a student's birthday was celebrated. The student, whose birthday it was, would participate reading the comic refrain of Moira's mother and father who say repeatedly (as more and more guests arrive): "Are you crazy? That's too many kids!" For many students, the words "the mother and father" were unproblematic, but for Trevor, whose birthday was being celebrated and who has two moms, it was wrong. Trevor however, adhering to the text, narrated: "Her mother said, "Are you crazy? That's too many kids!" And the dad said, "Are you crazy? That's too many kids!" The other students, knowing that Trevor had two mothers, immediately interjected: "You mean the other mother!" Knowing that texts represent "reality" in partial or arbitrary ways, they spontaneously edited the text to confirm Trevor's identity and family.

In a sense, students "entered" the text of *Moira's Birthday*. As if they had some authorial rights. On one memorable occasion Ms. Windsor's words suggested that students do have power as readers to become a part of the text. During the non-fiction story of *Beauty and the Beak*

(Rose & Veltkamp, 2019) for example, when the students solved a problem (theoretically and through discussion) before the solution was revealed by the text, Ms. Windsor exclaimed: "Wow! I want you guys on this problem! You've got to solve this one too! Great ideas!" Her words suggested it was possible to cross the threshold, move into the text, and become part of the solution to the problem they were reading about. The orientation to texts as artifacts granted readers power to *act* on text, to uncover its assumptions, recognize its limitations and, by doing so, question the authority of text.

Texts as Incomplete

In the literate epistemology of Second Grade, texts were "incomplete" without the reader's participation. In a sense they were waiting to be brought to life by the reader. The reason, in Ms. Windsor's words, was that: "Words by themselves don't mean. You have to put it together" (*Escape from the Zoo*; Cary, 2018). One of the ways the students "put it together" was to try to understand what characters were feeling by imaginatively projecting themselves into the text, whoever or whatever the character was and regardless of whether the text was fiction or non-fiction. In Extract 29 Gabriella imagined how Poppy, a character in the story *Big Guy* (Blank, 2019) must feel.

Extract 29.

Gabriella: It's not fair.

Ms. Windsor: It's not fair? Say more about that Gabriella.

Gabriella: Like, Poppy, it's like she's, like she's the least in her family and the, her stepsisters and brothers all get theirs (their pet) and then they don't have room for hers.

Gabriella adopted Poppy's perspective as she imagined the character's feelings and interpreted the world from her point of view.

The orientation to texts as incomplete required students to imagine things the text did not tell them. It could also teach content in an engaging way. In the non-fiction text *The Honey Makers* (Gibbons, 1997a) the characters whose experience the students imagined were bees.

The relevant section of text was about the sequence of jobs worker bees have throughout their lifespan. This information was not banked in the minds of students as a list of six jobs that worker bees perform. Instead, students were asked to imagine (Extract 30) which worker bee they would prefer to be (house bee, nurse bee, wax-making bee, court bee, guard bee, forager bee).

Extract 30.

Rohann: A wax maker.

Ms. Windsor: How come, Rohann?

Rohann: It's kind of like the wax maker and the nurse is the same.

Allen: Not a forager because you might die.

Jonas: A wax-maker that makes the cells.

Ms. Windsor: Yeah, sort of like being a carpenter in real life.

Gabriella: A court bee to take care of the queen. Cos I like being responsible and be a hard worker.

Words by Themselves Don't Mean. The insufficiency of words was an overarching theme imparted in both Interactive Read Aloud and Guided Reading lessons. The text was not the repository of meaning, and the reader must engage actively to make meaning. Because words

alone were not sufficient, the value of reading pictures, of imagining characters' feelings, and using personal experiences as a resource was consistently emphasized.

Words alone were insufficient, but words became meaningful when the reader worked out for herself the significance the word had in the context of a story such as *Wilma Rudolph: Walk, Run, Win* (Cary, 2019). Gabriella, in her Guided Reading group, worked out the especial meaning of italicized "*would*" in the story. Gabriella read to the group, about the great athlete who recovered from polio to become an Olympic champion:

Then, when Wilma was four years old, she became very sick. The illness left one of her legs twisted and weak. Doctors said Wilma would never walk again. Wilma's mother told Wilma she *would* walk again. Wilma believed her mother. (Cary, 2019, p. 5)

The students were reminded that italics call for emphasis, but Gabriella wanted to understand the particular meaning of italicized *would* in this context. She made meaning of this part of the story, by gradually discovering the semantic reach of italicizing a word: *would* implied a commitment on the mother's part, an expression of determined love (Extract 31). The narrator did not tell us this about the mother; working with the teacher, Gabriella persevered, until she formed an interpretation that "fit" (Aukerman, 2013). In Vygotsky's terminology, she discovered the meaning (*smysl*) of the colorless dictionary term "would." In Bakhtin's (1981) words she took the word from "other people's concrete contexts and makes it (her) own" (pp. 293- 294). Table J1 (see Appendix J) shows the analytic representation of the interaction of Extract 31.

Extract 31.

01 Ms. Windsor: Um, this word, see this word *would* it's written kind of ... have you ever seen that before?

02 Gabriella: Yeah.

- 03 Ms. Windsor: When you see that you kind of emphasize that word, you put a little more uh you stay on it longer, so it would sound like: Wilma's mother told Wilma she *would* walk again. You guys try that; you can read it at the same time.
- 04 Gabriella: I just have like I have a feeling like why they would make it long but I don't know how to explain it.
- 05 Ms. Windsor: Why they'd make hat word, like why you would um hold on to that word for a little bit?
- 06 Gabriella: Yeah ... it's something you can't explain.
- 07 Ms. Windsor: You might be able to explain it in Spanish, huh.
- 08 Gabriella: I don't know.
- 09 Ms. Windsor: Well, keep thinking on that, and keep thinking on that okay ... Um, maybe, I wonder, cos it's something like ... almost like this "you *will*" with a lot of power and belief ... it's going to happen.
- 10 Gabriella: Oh! I think I kind of know how to explain it.
- 11 Ms. Windsor: Yeah.
- 12 Gabriella: I think they made it long, like she said *would*, like make it long because it's a promise if she would, she would do *anything* for her for she could walk.
- 13 Ms. Windsor: Wow ... that's really beautiful, yeah, I agree, I like thinking of it like that it's a promise, she will, she *would* walk again.

Beyond Words: Reading Pictures. The time spent teaching the Second Graders to read pictures equipped them to make meaning that was not expressed in the words. Learning to read pictures included learning the various ways pictures might relate to the written text, sometimes by reinforcing it, and sometimes by telling a parallel story that "expands or contradicts the one told in words alone" (O'Neil, 2011, p. 216). The consequences of learning this skill are seen in the pair of extracts that follow. The first one shows students learning the skill, the second shows Gabriella applying it and thereby expanding the range of the text.

In Extract 32 students in their small GR group began to make meaning of the story they had yet to read by first attending to the details of an illustration. A story for seven and eight-yearolds about a girl denied a pet might well seem slight, but the skill being learned was not. The positive consequences of this attention to visual detail became clear in a future "weightier" lesson. The illustration referenced is from a Guided Reading book, *Big Guy* (Blank, 2019).

Extract 32.

Teacher: I see two goldfish bowls ... maybe three. What do you see, Gabriella? Gabriella: It looks like they're playing with their pets.

Ms. Windsor: And most of them are holding their pets; I see someone at the very back holding something very small in her hand.

Leigh: There's one (kid) that doesn't have anything, it looks like she has an idea.

Ms. Windsor: What makes you think that, Leigh?

Leigh: Her eyes and her arm looks like she's thinking.

Ms. Windsor: Yeah, her body posture and her gesture. Gabriella, what are your thoughts?

- Gabriella: Her face kinda looks like people that, I think I know why, um, when people are gonna do something.
- Ms. Windsor: Yeah, and Leigh was noticing that too, and Jacky and Gabriella the other thing I was noticing besides the eyes and the arms which I agree with, I also noticed the mouth, kind of a half-smile, and I agree with you she's got some kind of idea.

The interaction of Extract 32 might seem unnecessary and even a waste of learning time to a critic who held that the business of reading was essentially decoding words. Evidence to the contrary is provided by Extract 33 where Gabriella's ability to read the detail of illustrations allowed her to enlarge upon the narrative of *Wilma Rudolph: Walk, Run, Win,* an account of the great Olympian runner, Wilma Rudolph. The interactive discourse of Extract 33 occurred after students read that when Wilma was a child, she traveled every week to the hospital to receive therapy for the effects of polio.

Marilyn read aloud with great expression: *Wilma didn't like the hospital visits, but she thought the bus rides were exciting*. Gabriella was looking at the illustration and noticed that passengers were segregated by skin color. Extract 33 shows how Gabriella thoughtfully read the visual image showing African Americans seated at the back of the bus.

Extract 33.

Gabriella: People sleep on the bus?

Ms. Windsor: Yeah, sometimes.

- Gabriella: Is that in the old times when white people got to sit in the front and Black people had to sit in the back?
- Ms. Windsor: You know, Gabriella, I'm glad you asked that and I think it *was* ... let's look at this picture.

Here the pictures do indeed "expand the story told in words" (O'Neil, 2011, p. 216) when the reader knows to give them the necessary attention. The visual detail Gabriella noticed (Extract 33) activated her knowledge of the Jim Crow era, gained through texts the class read together earlier in the year. In Extract 34 this knowledge surfaced. It was a resource for making sense of the picture, but the picture in turn became a resource for making concrete the Jim Crow era Gabriella, Leigh, and Marilyn knew about. Table K1 (see Appendix K) shows the analytic representation of the interaction of Extracts 33 and 34 combined.

Extract 34.

- 01 Gabriella: Because there's a woman, she looks like she, I dunno, I think those people there are white and the back ones are ... or brown
- 02 Ms. Windsor: Yeah it looks like that, the people in front have lighter skin and I wonder, this must have happened, we know about that time, we've read some books about that. This must have happened during the part of history when there was segregation and people with darker skin had to sit in the back of the bus, right?
- 03 Gabriella: But they changed the law.
- 04 Ms. Windsor: That's right, to, to ... through change makers, through people taking action.
- 05 Gabriella: Because people stopped riding it.

Gabriella's skill in reading pictures was integral to her ability to expand the range of the text and enlarge the group conversation to include the topics of segregation, political action and change.

Texts as Opaque

It was part of the literate epistemology of Second Grade that texts are somewhat opaque. The reader cannot always "get the text" because characters are not transparent, and events are not always fully disclosed. In both Interactive Read Aloud and Guided Reading lessons the teacher frequently shared that she was unsure how to think about a character or a series of events, and modeled that in reading, a mindset of openness is desirable. As students were about to pass judgement in *Molly the Pony* (Kaster, 2012), a non-fiction narrative about a pony abandoned during hurricane Katrina, the teacher slowed their process, reminding them that the text did not disclose all the information. The teacher's uncertainty was brought to the group and became an exemplar of an orientation to text in which judgement and certainty must be suspended. The students assumed that the pony was heartlessly abandoned by the family, until Ms. Windsor suggested other possibilities:

Ponies are pretty big and maybe the family didn't have a lot of money and maybe they weren't able to ... didn't have the right trailer. It maybe wasn't just that they were mean or bad people; they left hay for her cos they thought they'd be able to get back to her and they weren't able to.

Later in the same lesson, when they read that the pony had been savaged by a dog, students did not rush to judgement and instead considered several different possible explanations for the event left unexplained in the narrative: Maybe the dog had itself been badly treated, maybe it felt threatened by a bigger animal, maybe it was a misbehaved stray.

The orientation to text as less than transparent shaped students' understanding that narratives are open to different interpretations and that words and pictures can be read differently. In the lesson on *The Gingerbread Girl* (Ernst, 2006) the teacher stressed that this is a normal part of reading.

During the Interactive Read Aloud lesson on *The Gingerbread Girl*, the teacher expressed uncertainty concerning the main character, the Gingerbread Girl. Was she confident or was she a bragger who would get her just deserts? After Ms. Windsor expressed her uncertainty about the character, Allen questioned whether Ms. Windsor's interpretation of an illustration was correct and suggested an alternative reading: "Ms. Windsor, I don't think the teachers *were* chasing after the cookie. I think the teachers would be chasing after the kids. "Ms. Windsor took the opportunity Allen provided to endorse reading as a pluralistic practice:

Good thinking, Allen. It's funny, you're thinking about it from the perspective of a student, right, and so when you read, you're thinking the teachers would be like ... Those kids are not doing the right thing! And the teachers are gonna chase them. And I was thinking as a teacher: "I want a cookie!" But that's what happens when we read, we all are different people and we read stories differently.

Johnston et al. (2020) wrote that teaching students "to manage ambiguity and uncertainty and the way we view them" is a critical part of literacy, and one reason that "dialogic classrooms are essential" (p. 275). As part of their apprenticeship in literacy, Second-Grade students learned that there is more than one way to think about things, an orientation that would equip them to progress in the future from expressive to dialogic comprehension-as-sensemaking (Aukerman, 2013).

Texts Have Multiple Meanings

In Interactive Read Aloud lessons in general, students heard that that it was important to be open to different interpretations and that it was essential that everyone's voice is heard. At the conclusion of *The Gingerbread Girl*, the consequences of the orientation to pluralism were evident (Extract 35). Students shared their ideas about the story, suggested different character motivations and entertained imaginative possibilities.

Extract 35.

01 Maxine: When she was baking, I thought she could bake her brother back so the old lady and the old man could have their child back ... um um I thought they were gonna bake the gingerbread boy back.

- 02 Ms. Windsor: Yeah, that would have been a cool ending if they had somehow, like, somehow, they changed it that the fox really hadn't eaten him ... and he came back, that would be cool.
- 03 Elijah: Did the gingerbread girl, the gingerbread girl actually thought that that her brother was still alive ... maybe she just came, went after the fox to get the gingerbread boy out.
- 04 Ms. Windsor: Ooooh yeah you know in some folktales like if you think of Little Red Riding Hood, if you know that folktale, um, some versions of that story the wolf *swallows* her grandmother and then um and then they get her back out and she's fine, right *so* that that could have happened, you're right.

"That could have happened; you're right." Ms. Windsor could have responded with "But that didn't happen in this story." Instead, she honored Elijah's thinking, validating his hypothesizing that it *could* have happened that the gingerbread boy, swallowed but still alive, *could* have been rescued by the gingerbread girl. He was "right." What was right about this? That he was engaged in sense making, creating possible meanings with the text rather than extracting meaning "affixed within the text" (Aukerman, 2013, p. A16).

In Extract 35 (above) students engaged individually with the teacher as they shared their ideas, but they did not interact personally with other students. Because their ideas were neither developed nor challenged by other students, in Aukerman's (2013) framework of comprehension pedagogies, this interaction remains expressive comprehension-as-sensemaking. Students' interpretations surfaced but were unchallenged.

The four orientations to text which I have identified were central to the literate epistemology of Second Grade. At its core were three beliefs: Readers make different meanings from texts because "We are all different people and we read stories differently." Readers engage actively with text to construct rather than extract meaning because "Words by themselves don't mean, you have to put it together." Readers' subjective experience within the reading event is valid: "You're thinking about it from the perspective of a student, and I was thinking as a teacher." These beliefs can be subsumed under the term expressive comprehension-assensemaking. They also align with a transactional theory of reading that posits that, along with the text, the mind and emotions of the unique reader are essential in the reading act (Rosenblatt, 1978). The transactional theory and the parallels with Vygotsky's thinking will be discussed in Chapter V.

Section 2: Opportunities to Make Meaning: Subjective Experience Within the Reading Event

A vivid illustration of the power of the reader's subjective experience during Interactive Read Aloud occurred in the lesson on *Giant Pandas* (Gibbons, 2002) (Extract 36). It illustrated Vygotsky's (1994) statement that it is not the social environment *per se* that has an influence on the child, but the emotional experience generated in the child "by any situation or aspect of his environment" (p. 339).

The engaging informational text *Giant Pandas* included information that surprised the students: they learned that female pandas typically give birth to two cubs but never raise both. Allen was outraged that one cub is always neglected and allowed to die. He expressed the anger he experienced in two separate outbursts, at lines 02 and 05 of Extract 36. Words of the text are italicized.

Extract 36.

- 01 Ms. Windsor: Here's a part that's a little bit, a bit sad. I'll read it to you. *The mother panda gives birth to one or two babies,*
- 02 Allen (with passion): One baby dies!
- 03 Ms. Windsor: but then, after they are born, she only begins nursing one of the cubs. *A mother will raise only one cub at a time:* only one will survive.

(Students are silent.)

- 04 Ms. Windsor: That's kind of a ... sad fact and I see a lot of faces going (makes sad face).
- 05 Allen (sounding angry): I told you, that only, only one at a time...
- 06 Ms. Windsor: Yeah and Allen's saying why? Why? And it doesn't seem fair and it happens to people sometimes too. Why would the mother only raise one of them? Think about nature and in the wild, living in the wild. Why do you think the mom might only raise one of the two babies? Julio?

Allen's experience of this text was uniquely his. Had his teacher not been responsive to what he was experiencing, it is probable Allen would have remained "stuck" in anger. The subjective experience of a single student was taken seriously by the teacher, who immediately invited other students to consider the problem: "Why do you think the mom might only raise one of the two babies?" The limitation that expressive comprehension-as-sensemaking is often said to have--leaving the relation between reader and text private, unchallenged, or undeveloped--was not evident here. Social interaction would surround Allen's response, beginning when the teacher took up Allen's words at 06.

This episode will be discussed further in Section 4: The Importance of Emotion in Making Meaning. Table L1 (see Appendix L) is an analytic representation of Extract 36.

Interpretations Based on Words and Images

Because Second Graders are 7 and 8 years old, they often expressed their responses spontaneously as the text unfolded, as Allen did, revealing to me, as the researcher, how differently they began to make meaning. I found students constructed their initial understanding of a fiction tale on several different levels, ranging from the literal to the literary. Hearing the story *How Chipmunk Got his Stripes* (Bruchac & Bruchac, 2003) some reacted as if they were themselves in the story, one student took a quite sophisticated literary orientation to the text, observing that "right now we are hearing the story from bear's mind" and another had a very literal orientation and visualized a world of perpetual nighttime. Students had the opportunity to hear the range of responses as the story unfolded and each student became, potentially at least, a resource for all the others.

When the story drew to an end and students shared the meanings it had for them, a potentially productive phase began (Vygotsky, 1987). The contemporary sociocultural scholar Aukerman (2013) wrote that the most productive sense making happens not in private reader-text interactions but when students dialogue with each other, discover whether their reading stands up in the eyes of their peers and whether they need to revise or develop it.

For these students, learning how to engage in dialogue would be the next appropriate instructional focus. On a continuum of listening and responding to others, based on this interaction, the students would be in the beginning stage. They did not engage with each other around different interpretations. Allen dismissed what Jonas thought was a significant clue (the white on chipmunk's tail). One student, Carina, showed some dialogical skill in introducing a different interpretation: "Or maybe um it's like Pinocchio …" but the idea she brought to the table was not taken up. There was a competitive quality to the interaction--as if comprehension were a sort of "race"--indicating that students had yet to learn to be open to others' perspectives. This was a contrast to the discourse around non-fiction *Giant Pandas* (Gibbons, 2002).

The teacher's response-oriented students to a view of reading as a process open to possibilities. She affirmed that their subjective responses were a more important part of reading than "getting it right." With her statement that "Every thought you have is important" she conveyed that it was the thinking process, rather than arriving at a definitive interpretation, that mattered:

I like hearing all your thoughts. Remember ... it's important, every thought you have is important, and it's not about always getting it right ... but it's about all the thoughts that you think about as we are reading, about the characters and the story and what happens. I like hearing all your thoughts. Remember ... it's important, every thought you have is important.

Text Illuminating the Reader's Lived Experience

Students' attempts to build an interpretation based on their responses to the words and images of a text were one kind of experience within the reading event. A reader might also experience the reach of the text into her own life.

The next extract provides an example of the reader experiencing the text in this deeper and more personal way. The nature of Gabriella's experience is personal, but it occurred in the shared context of Guided Reading, in response to a cultural artifact.

On the Job (Bass, 20109) was an unlikely stimulus for the meaningful interaction that took place between Gabriella and Ms. Windsor. It is a book about unusual occupations, including

dog-food taster and teddy bear repairer, and in the hands of another teacher it might have remained a book about quirky jobs. During reading, Gabriella shared quite intimate family circumstances and revealed her identification with a future self, first as "a carer" and then "a doctor" (Extract 37). Reading about unconventional jobs became a context where the student developed her sense of identity, in part through the actions of a responsive teacher.

Extract 37.

Gabriella: I'd like to be able ... to be a carer ... that helps people.

Ms. Windsor: That's right, Gabriella, you said that you want to be a doctor, but not that helps teddy bears. That helps humans, right?

Gabriella: Yeah.

Ms. Windsor: Yeah. I would say of these two jobs though, I would prefer this one (teddy bear repairer) if these were my choices! (laughs)

Gabriella: Cos then you can help ... really old people.

Ms. Windsor: Yeah. I know Gabriella, you shared about that when we were reading some other books and um and I think ... I forget what we were reading; some biographies weren't we? About change makers? And you were saying you wanted to help people also.

Gabriella: Mmmm.

- Ms. Windsor: Oh I know! Also when we were reading about Wilma Rudolph ... could the doctor =
- (Gabriella speaks somewhat cautiously and slowly as she shares something close to her family.)

- Gabriella: = I want to be, like, a doctor too, like, because, my grandpa ... needs someone that's the same blood.
- Ms. Windsor: Uh huh.
- Gabriella: Like um has to give him something that they have.

Ms. Windsor (decisively): Yeah.

- Gabriella: And then cos both of them that he has, don't work anymore, they don't.
- Ms. Windsor: Yeah, yes, sounds like um maybe a kidney? That's ... does he need a new kidney?
- Gabriella: Just one kidney.
- Ms. Windsor: Yeah. Yeah, um, and so it has to be someone with the right blood that [his body]
- Gabriella: [All my uncles] tried it and they don't have the same blood except my mom she just needs to know but I think she does have the thing that I mean.

Ms. Windsor: Oh. You think your mom, your mom thinks she might?

Gabriella: Yeah because she's the only one that doesn't know what blood she has.

Ms. Windsor: Yeah. Yeah. Thanks for sharing about that Gabriella. I know you've mentioned wanting to be in health care and help people, um, and I think that's amazing and I think you would be ... you would do very well. I know you would do very well, in that job.

The interaction of Extract 37 illustrates Johnston et al.'s (2020) insight that in the process of acquiring literacy, children are also "developing many other dimensions of their humanity" (p. 270). Along with "acquiring cognitive skills and strategies" students develop identities (Johnston et al., 2020, p. 270).

The social environment, according to Vygotsky (1998), is not just a factor in development but "the source of development" (p. 203). But how did reading about dog-food tasters and teddy bear repair lead to the sharing of a quite personal family crisis and then to the meaningful affirmation of a student's goal?

First, Gabriella attended to the lived through experience of the book and what it called up within her. In her consciousness were both the book and how she was experiencing it, her mind going from dog-food tasters and teddy bear repairers to her grandfather, to her incipient sense that she wanted to be "a carer." Perezhivanie as a process provides a theoretical lens with which to view this psychological experience. Perezhivanie as a process theorizes a unit of consciousness in which "in an indivisible state the environment is always represented i.e., that which is being experienced … and what is (also) represented is how I myself am experiencing this" (Vygotsky, 1994, p. 342).

It was not inevitable that Gabriella should take a second step and share this experience. She did share it, however, with a person she trusted, and it was the teacher's subsequent actions that made the experience developmentally significant for her. The social environment became "the source of development" through the interaction with the teacher. It was an emotionally supportive interaction, gentle, trusting, and respectful of the very personal family information that the student shared. It illustrated that the relevance of the adult in the child's development is "the emotional richness of their communication: the adult is never a mere support of operational activity with objects" (Fleer & González Rey, 2017, p. 148).

Section 3: Opportunities to Make Meaning: Engaging with Text Collaboratively

The extracts in Section 3 confirm that expressive comprehension-as-sensemaking, used in a literacy context where social interaction for learning is the norm, affords students unanticipated opportunities to make meaning. It may also be a step towards dialogue. The first extract in Section 3 illustrates opportunities students had to make meaning together talking and wondering about the "big ideas" and concepts of *Penguins!* (Gibbons, 1998).

No explicit lesson objective was stated at the start of the first Interactive Read Aloud lesson on *Penguins!* Instead, student curiosity or "all the thoughts (they) think about during reading" drove the course of the lessons across the complex terrain of animal evolution and adaptation.

Julio, Vittorio, and Gabriella each brought their question to the group. Julio was curious about penguins' wings, Vittorio wondered how penguins breathe under water, Gabriella wondered how birds "got the idea" to change their habitat. Their personal inquiries and wonder, brought to the group, created possibilities for every student to construct new knowledge with their peers.

Julio. Ms. Windsor created the context for student-driven learning by saying, after a "picture walk" through the book: "As we read I want you to think about questions *you* might have about penguins and see if they get answered." Along with questions about why penguins live only in the northern hemisphere and how they get their names, Julio asked the question that would resonate through the subsequent lessons on *Penguins*!

Extract 38.

Julio: I would like to learn, I would like to learn why do penguins have tiny wings?

Ms. Windsor: Why do penguins have tiny wings? Yeah ... they're birds but they can't

fly. Why don't they fly?

By echoing Julio's words, Ms. Windsor confirmed the significance of his question. She clarified the oddity in more general terms--"they're birds but they can't fly"--and showed her commitment to the inquiry with her own question: "Why don't they fly?" Extract 39 captures the shared excitement, six minutes later, as students and teacher responded spontaneously to learning the answer to Julio's question, which became their question too. (The words of the text are italicized.)

Extract 39.

Ms. Windsor: *Penguins are birds but they lost* ... This is one of our questions!!

Student 1 (with incredulous expression): What!?

Ms. Windsor: ... they lost their ability to fly millions of years ago.

Multiple exclamations. What??!!

Student 2: I didn't know they could fly!

Ms. Windsor: I didn't either!

There's a kind of stunned silence before chatter resumes.

Ms. Windsor: So they *could* but they lost their ability, let's see if it's gonna tell us why.

Over time they began to spend a lot of time hunting for food in frigid waters.

Their wings changed into powerful, rigid flippers ...

Student 3: Whaaat?

Student 4: That's ...

Ms. Windsor: Okay. That is, I never knew that! I just learned that today! Ms. Windsor: *flippers for swimming*.

Squeals of excitement.

Ms. Windsor laughs: Wow!!

Allen: Just imagine a flying penguin!

The students were dependent on each other for their development. When Julio turned to the group with his question, inviting his peers and teacher to engage with him in inquiry, he was reaching beyond himself and beyond his current understanding. This "two-way reaching" (Lindfors, 1999, p. 106) created a context in which Julio's peers were his co-inquirers and, as it were, co-beneficiaries of the inquiry.

Vittorio. In the second lesson on *Penguins!* again there was no explicit lesson objective stated. Student curiosity drove the meaning making, or more accurately, curiosity plus a turning toward others. Since learning in the earlier lesson that penguins once flew, Vittorio had thought about how penguins evolved to live both in the ocean and on land. Early in the second lesson he asked, "How do penguins breathe?" I took his question to mean "Do penguins have lungs or gills?" and "How did a creature of the air adapt to be equally at home in the ocean?" In response, Ms. Windsor restated the conundrum of the previous lesson but offered no answer:

[Their] flippers used to be wings, right. So, we learned that millions of years ago their flippers actually were wings and they could fly ... and they um and so they started hunting in the water instead and um ... and so they turned into flippers but we don't know how, okay?

A conventional understanding of the zone of proximal development imagines the teacher leading the learner to meaning, guiding him/her to understand something that she, as the more knowledgeable person, already knows. Here, Ms. Windsor did not have vastly superior knowledge and her rather faltering language showed she too was grappling with the complexity of the subject. She did not answer the question that Vittorio asked: "How do penguins breathe?" and her epistemological stance of not-knowing ("We don't know how, okay?") shifted the topic slightly. The focus of inquiry now became *how* wings turned into flippers, and after that, it shifted again to why.

The teacher stepped away from the position of expert. It was the students (Asher and Liam) who hypothesized how and why. Asher shared a possible explanation for the how: "They were swimming instead of flying all the time and their body made adaptations." Gabriella then deepened the inquiry. The teacher revoiced Gabriella's question but offered no answers. The transcription of their inquiry is presented in Extract 40. (There is some redundancy in the transcript because the teacher revoices online students' words, so that in-class students knew what was said.)

Gabriella. Gabriella wondered why penguins were motivated ("got the idea") to start looking for food in the ocean.

Extract 40.

- 01 Ms. Windsor: Gabriella?
- 02 Gabriella: Why did they get the idea to start hunting ... in the water?
- 03 Ms. Windsor: Yeah, that is an interesting question. Um, so Gabriella said how did they get the idea, why did they get the idea.
- 04 Liam: Oh, I know something! I'm guessing there wasn't enough food?
- 05 Ms. Windsor: So, Liam said I'm guessing maybe there wasn't enough food in the air so they had to start hunting in water.

To clarify, in the book there was no information about "why they [penguins] got the idea" to start hunting in the water. Gabriella thought beyond the contents of the text, supported by the preceding social interaction.

When Julio, Vittorio, and Gabriella sought the assistance of their peers, they made the other students collaborators in inquiry, "possible knowers" (Aukerman, 2006). The teacher's praise was then directed, appropriately, to the entire group:

So you guys are having some great thoughts about how that may have happened and I think you're doing a great job thinking about that. I like how you guys are

starting to think about why that happened and coming up with different answers It was their thinking about "how that may have happened" that was praised. Implicit was the view that while there are many things about which we cannot be certain, it is worthwhile to think about possibilities, together.

Unanticipated opportunities to make meaning occurred when expressive comprehension-as-sensemaking combined with social interaction. In *Penguins!* these were opportunities to construct new knowledge about animal adaptations and the "big idea" of evolution. Opportunities of a different kind arose when students brought their lived experience to the text. In the lesson around the non-fiction narrative *Molly the Pony* (Kaster, 2012), initially lived experience was a resource that helped students make sense of a difficult concept. Lived experience itself then became the focus, as a text also worth exploring.

As students shared stories from their lives, the meaning created was twofold: they realized that their own recollected story was "sparked" by another's experience--they were connected as students jointly constructing this new text--and they realized that they were

connected as people who had all suffered calamities. Excerpts of discourse from the lesson *Molly the Pony* illustrate this finding.

At a dramatic turn in the narrative--the pony's leg was about to be amputated--students tried to grasp the concept of being anaesthetized. Leandra turned to something she was familiar with--her dog Mochi being "put down" for dental work. Ms. Windsor explained the important difference between "being put down" and "being put under" and once the concept was clarified, Luna shared her experience, as if using a tool to help the others understand that being anaesthetized was a safe, temporary state. Initially, their lived experience was invoked and used as a tool to better understand the concept. The discourse Luna initiated is presented in Extract 41.

Extract 41.

Luna: they gave me this weird drug thingy where like I kept on fighting back they put like one of those weird air masks on and they were like "What does it smell like?" and I was like "It doesn't smell like anything" and it took me an hour to go under, I just kept fighting and fighting, I was like "No no no" and then finally I fell asleep. One hour later I woke up, in the emergency room and I was fine.

Student 1: Why did that happen? Luna?

Student 2: She had to get her tonsils out.

Ms. Windsor: So she was saying she went through anesthesia, where they put you to sleep so they can work on you without you being scared or awake.

After Luna shared her experience, students began to share their experiences of injuries, surgeries and being anaesthetized. Because the focus shifted from *Molly the Pony* to the students' own experiences and calamities, everyone now became a "potential knower" and the interaction included many voices recounting swimming accidents, falling out of wheelbarrows,

having molars removed. Marcus, who rarely contributed to discussion focused on books, participated in talk about lived experience, because it was inclusive and invitational (Extract 42). Marcus took "and transform[ed] for [his] own use" what was useful in others' contributions (Wells & Claxton, 2002, p. 7) to share about his bird:

Extract 42.

Marcus: My bird one time...

Ms. Windsor: Yep

Marcus: Her wings were caught.

Ms. Windsor: Yeah? And how's your bird doing, Marcus?

Marcus: Better, like, she just doesn't fly.

Ms. Windsor: Yep. Yeah, Thanks for sharing, Marcus.

Trevor found a connection between one of his calamities and Luna's tonsillectomy, and he also recognized that his recollection of having stitches had surfaced because of Luna's story: "Luna sparked something for me" (Extract 43). The sequence of interlaced turns helped Trevor see how knowledge was being jointly constructed in this event.

Extract 43.

Ms. Windsor: Trevor? Did you have something to share?

Trevor: I ... Luna sparked something for me.

Ms. Windsor: Yeah?

Hank: The same thing happened when I got stitches by my eye.

Ms. Windsor: Hmmm

Student: Why did you have to get stitches??

Ms. Windsor: She asked why did you have to get stitches.

Trevor: Because I smacked my head, because it was it was right by my eye ah um hit it really hard on the corner of like a brick wall and it got cut.

Like Marcus, Trevor was usually reticent but in this event he could be stopped from sharing an earlier experience of being ejected from a wheelbarrow and hitting his head so that "the doctor had to superglue it together." Students then disputed whether this was a "trouble story" or a new genre of "injury stories"; it was as if they had kept a literary lens in their back pocket while stories of experience were shared. As more and more hands were raised, Ms. Windsor pointed out that "We all have had different trouble stories" and because everyone had trouble stories, she created breakout rooms so that everyone could share their story.

Social interaction around personal stories created an inclusive context where students could make sense of their own and others' experiences and connect with each other (López-Robertson, 2012). In Ms. Windsor's words, the experience of connection was exactly what students need during the pandemic: "What they need more than anything right now is feeling connected to their community" (personal communication, March 10, 2021).

Section 4: The Importance of Emotion in Making Meaning

Findings from this study confirm that emotion is central to teaching and learning (Barbalet, 2006; Bingham, 2004; Hargreaves, 1998). Emotion, rather than remaining private and invisible "lodged in the interior psychological life of the individual actor" (Goodwin et al., 2012, p. 16) emerged in social interaction as students responded to texts. Emotion, once expressed, could set the direction for the rest of the lesson. A student's expressed emotion could be a catalyst for engaged, whole group learning; the teacher's expressed emotions of awe, amazement, and perplexity could mediate learning.

Section 4 is organized as follows: Emotion as Caring, Emotion and Cognition Intertwined, Teacher's Emotions as Mediation.

Emotion as Caring

Contemporary research has established that caring emotions are not at odds with learning and academic achievement (Rouse & Hadley, 2018). Students seek meaningful relationships with their teachers and peers, relationships grounded in *familismo* "really caring about each other as human beings" (Lopez et al., 2019, p. 106). In Second-Grade literacy the truth of that claim was evident as online students especially showed a need to belong and sought ways to engage with other learners.

Online students in this study often felt a sense of isolation and loneliness. When they were supposed to be reading independently, they would roam around the edges of a Guided Reading group in progress. I observed that the teacher consciously changed her usual teaching practice in response to what her students needed emotionally as well as intellectually (Hargreaves, 1998, p. 847). Ms. Windsor welcomed Elijah, a regular presence on the periphery of Marilyn, Leigh, and Gabriella's Guided Reading group and allowed him to participate: "I'm glad you're here, Elijah! You're welcome to hang out for our book." When Desiree, hovering on the edge of the lesson *Wilma Rudolph: Walk, Run, Win* (Cary, 2019) politely asked, "Um, I was gonna ask if I could read a page too ..." she was also included. Although the book was at a higher level, Ms. Windsor responded enthusiastically: "Oh yeah! Desiree? Is that you? Do you want to read a page?"

One online student who had been learning remotely for nine months, explicitly expressed his longing to belong and to be with other children. In May, when Allen joined the rest of Second Grade in the school garden, he was eager to work with other children. He asked anxiously: "Do

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we have to be alone or can we work with a friend?" As planned, he was assigned to a group of four, and they rotated together through the four stations, first harvesting the early lettuce, then washing it, spinning it dry, and finally bagging and weighing it.

Undoubtedly the online learners missed school and the teacher missed their presence in the classroom. In spring, when the annual school run was held, some of the online learners came to participate. Afterwards, Ms. Windsor expressed the delight she felt in seeing her online students in person for the first time:

You guys, you guys couldn't *see* because I had my glasses on, but when I saw students running on the field that I hadn't seen all year I was crying, steaming up my glasses because I was so happy, I was so happy to see everybody running over the hills! I thought it was like a movie! Saw Marcus coming toward us and Maxine, one by one, all these students who I haven't seen in person, over the hill! I was like oh my gosh it's like a movie! This is amazing!

Into this joyful outpouring of emotion, she inserted a piece of her personal philosophy: "So much about being a student and so much about learning is really about love. And I want you to remember that. Loving what you do, being kind and loving to people around you."

The kinds of learning I have described earlier--learning through engagement with pictures, with words, with "big ideas" and with each other--occurred in a context where teacher-student relationships of caring, trust, even love were fostered. Students felt safe to share personal experiences as Gabriella did during *On the Job* (Bass, 2019). They were comfortable interjecting their own emotion into a reading discussion. Relationships where "people cared about each other as human beings" (Lopez et al., 2019, p. 106) were the foundation of the culture of Second-Grade literacy.

Emotion and Cognition Intertwined

Research has established that learning is essentially both a cognitive and emotional process (Kozulin & Gindis, 2007; Mahn & John-Steiner, 2002). In language appropriate for Second Graders, Ms. Windsor made this very assertion: thinking and feeling are not mutually exclusive. Departing from her usual practice one day by posting a learning goal, Ms. Windsor emphasized that the learning goal ("I can compare two books by the same author. What does Gail Gibbons do in her books?") did not replace enjoyment: "We're reading it (*Giant Pandas*) to *enjoy* it and in our brains we're also comparing."

The lesson on *Giant Pandas* (Gibbons, 2002) referenced in Opportunities to Make Meaning: Subjective Experience within the Reading Event, illustrated vividly how powerful students' emotional responses to literature could be. I recounted in that earlier section how, through her uptake of Allen's reaction, the teacher created an opportunity for learning and turned Allen's subjective experience into the catalyst for group inquiry.

Extract 44 presents the discourse of the inquiry as the students wondered what could explain the mother panda's actions. Essentially the students' search for an explanation was fueled by emotion; they engaged in this inquiry because they felt that something was wrong and unfair about the mother's abandoning one cub. Different explanations were put forth: she did not have enough energy (05); maybe she could not feed both, she could not keep both of them alive (09); she could not protect two cubs from predators (14). These details are important. They located the reason, tentatively at least, in things beyond the mother's control, and so changed the narrative of reprehensible abandonment. The students both felt that maternal neglect was wrong and at the same time they were able to ponder possible reasons that ran counter to their

emotional sense. They confronted the problem both reasoning and feeling simultaneously, exhibiting what Vygotsky (1987) termed "a unity of affective and intellectual processes" (p. 50).

The teacher's moves modeled how to go about searching for meaning by listening to and respecting other voices. Her stance was one of openness and fairness. She listened to the ideas brought forth but refrained from evaluating them other than "Good point" (line 06). She ensured that every voice was heard (01, 04, 10, 13) with one exception (07). Rather than try to settle matters she suggested the search remain open: "I dunno … but that's worth some more research too." (08). These behaviors might be called the "ideal form" (Vygotsky, 1994) of how to engage with others in a joint search for meaning.

Extract 44.

01 Ms. Windsor: Yeah and Allen's saying why? Why? And it doesn't seem fair and it happens to people sometimes too. Why would the mother only raise one of them? Think about nature and in the wild, living in the wild. Why do you think the mom might only raise one of the two babies. Julio?

02 Julio: Cos she, raising two cubs ...

- 03 Allen (speaking over Julio): Two babies need too much food.
- 04 Ms. Windsor: Julio and then Allen.
- 05 Julio: Cos in nature, the mother, like it takes a lot of her energy to look after the babies and she gets tired.
- 06 Ms. Windsor: Yeah. Good point, Julio. Julio brought up a bunch of good points; he's talking about energy, out in the wild especially. He said maybe they're too tired, it would take too much energy to raise two. Because babies are hard work! Yeah,

and Luis is saying something similar and I think Allen was saying something similar.

- 07 Allen: What, what ... what if it was a kid?
- 08 Ms. Windsor: And if they, if she tries to raise both I wonder if like neither one would survive. I dunno but that's worth some more more research too.
- 09 Jonas: Maybe maybe she can't feed both, the panda, both cubs and she can't keep them both alive.
- 10 Ms. Windsor: So one might not be healthy if she doesn't have enough (milk) to care for both of them, so one might not thrive. Um Rohann has a quiet hand up. 11 Rohann? Go ahead, go ahead, Rohann.
- 12 Rohann: Jonas said what I was gonna say.
- 13 Ms. Windsor: Say it in your words though, cos I want to hear, just, I want to hear if yours is similar or a little different. I'd love to hear what you have to say about that.
- 14 Rohann: Maybe, the, well ... maybe mom pandas, doesn't, can't, keep both of them away from predators because one of them is going to like wander off, um, from the mom if like, if they need water?
- 15 Ms. Windsor: Yeah, that's a really good point. Actually, Rohann you brought up a different part of that idea so I'm glad that you shared, shared your idea of not being able to keep them both safe from predators; that's a whole other idea.

In this interaction the teacher's participation is an example of what Vygotsky (1994) termed an "ideal form" interacting with a more rudimentary form. Vygotsky's original illustration of an ideal form was the fully perfected speech of a parent, who uses the developed form (even with an infant who has only the "rudimentary form") knowing that the development of the child depends on the presence of the ideal form in the environment. My position, following Veresov's (2017) lead, is that in a broader sense, any kind of "developed cultural form of behavior and interaction that the child meets in her social environment" (p. 53) might be considered an ideal form. Allen was angry about something that did not make any sense to him. When the teacher initiated an authentic inquiry in response to Allen's emotion, she modeled a culturally desirable, adult form of behavior: anger was the starting point for thinking more deeply and seeking to understand. Additionally, she modeled the "ideal form" of engaging with others in a joint quest for understanding, showing openness, fairness, and respect for different ideas. In the social interaction that followed, Allen saw a search for meaning grounded in both "affective and intellectual processes" (Vygotsky, 1987, p. 50).

The lesson *Beauty and the Beak* (Rose & Veltkamp, 2019) adds to these findings. In this lesson, the teacher purposefully created an opportunity for emotional engagement with text. This opportunity to "feel the problem" was followed by a determined and imaginative approach to a problem that challenged the adults in the narrative.

Beauty and the Beak, a non-fiction narrative, tells the story of a bald eagle badly injured and unlikely to survive after her beak is shattered by a hunter's bullet. The narrative recounts the eagle's amazing recovery when a raptor rehabilitator, an engineer, and a dentist join forces to design and fit a prosthetic beak. The book could simply have been read to the students, with a few "comprehension checks" along the way. Instead, the lesson unfolded at a slow pace. There was time to comprehend the bird's plight, space to wonder about the cause of the injury (whether accident or malice), and time devoted to jointly imagining a solution. Although the details of the bird's injury had already been described in the book, Ms. Windsor invited the students to describe the problems caused by the shattered beak. This was an opportunity to respond emotionally, to get a somatic sense of the injury and for emotions of concern and empathy to surface. Students understood that "It hurts to breathe," "She might not be able to feed herself," "She probably can't get to the eagles, cannot go a far distance," "She's not able to fly anywhere." Maxine said: "I feel bad that she can't, that she can't eat." These responses could not be reached by turning to the text; students needed to imagine and feel what a shattered beak meant for the eagle.

The discourse of this part of the lesson showed the reach of expressive comprehensionas-sensemaking when combined with social interaction. Students turned inwards and outwards, first attending to their felt responses, then sharing with their classmates the concern they felt. As they shared their felt understanding of the problem, emotions of concern and empathy were socially distributed among the community supporting the imaginative problem solving they would engage in, the making of an artificial beak.

The search for a solution began when one student turned quite tentatively to the others (Extract 45). He was not convinced himself of the idea he brought to the group and offered it almost as an impossibility, saying "they couldn't, they couldn't ... could they?" Allen was struggling very hard to think of a way to restore the eagle's beak; he was invested emotionally and intellectually.

Extract 45.

01 Allen: I mean they couldn't, they couldn't replace her beak with a mechanical beak, could they? (rising intonation indicates genuine query)

02 Luna: You can replace anything with something made out of mechane.

03 Allen: My mom does have a mechanical leg ... I think ... or hip, I dunno.

04 Luna: I think it's a hip.

05 Allen: But they, they they they can't replace it with a mechanical one because when she tries to drink water and she ... with her beak that she is gonna get like shocked.

06 Ms. Windsor: Hmm.

(Multiple students crosstalk.)

07 Ms. Windsor: What's that Luna?

08 Luna: They can make waterproof mechanical stuff cos I mean like if you can make a mechanical if you can make a speaker that's waterproof, you can make a mechanical beak ... that's waterproof.

09 Allen (tentatively agreeing): Hmm ... yeah.

The teacher positioned herself during the first interaction almost as a spectator, made minimal comments and allowed the students to explore possibilities. (She refrained, for example, from asking what "mechane" was.) Her role as the discussion continued was to guide the students by making them aware of what they could do to construct a solution, gently nudging them to use a resource they had not accessed. She reminded them of a relevant text, making the story *Molly the Pony* a cultural resource they could draw on. She also reminded them of what they had already done, elevating them as problem solvers and reminding them of their process: "Like Luna was saying ... and Allen was saying ..." choosing words to emphasize their joint effort.

The students had a difficult task, yet no-one suggested just reading on to find out how the problem was solved. Extract 46 shows that these 8-year-olds, given time to feel, think and imagine together seemed to enjoy the hard work of coming up with a solution. Before the story

revealed the solution that the raptor rehabilitator, the engineer, and the dentist came up with,

students had imagined the same solution: a prosthetic beak made by a 3D printer.

Extract 46.

01 Luna: If you can make a replacement for a human you can make a replacement for an animal it's basically the same thing.

02 Ms. Windsor: That's exactly what this engineer said !

03 Allen: Replace the body part; you can never replace anybody.

- 04 Finn: You can use a 3D printer!
- (Crosstalk.)
- 05 Ms. Windsor (responding to Allen): Not entirely; body parts. FInn? Go ahead
- 06 Finn: You can use a 3D printer.
- 07 Ms. Windsor: Say it again?
- 08 Finn: You can use a 3D printer because it makes a house so why could it not make a beak?

The commitment to finding a solution and the willingness to work on a seemingly impossible challenge began with the opportunity to feel the problem. In Vygotsky' (1987) thinking nothing could be more natural. To artificially isolate "the intellectual from the volitional and affective aspects of consciousness" he judged the most basic deficiency of traditional psychology (p. 50).

Teacher's Emotions as Mediation

Ms. Windsor expressed her own emotions of joy and gratitude, awe, wonder, and perplexity, freely and spontaneously in Interactive Read Aloud and Guided Reading lessons. Awe, wonder, and perplexity had an observable effect on student learning, while the "consequences" of expressions of joy and gratitude were less easily observed. However, they were prominent in Guided Reading lessons, and deserve mention.

Joy and Gratitude. Frequently in Guided Reading lessons, Ms. Windsor told her students that that they were appreciated, their work was valued, and that working with them brought her joy. "I just feel so joyful at the way you thought about the book" she said after reading *Wilma Rudolph: Walk, Run, Win* (Cary, 2019). She thanked her students "for your excellent reading and thoughts" and said she had "an amazing time" reading with them. As the semester drew to a close, Ms. Windsor expressed her gratitude for what her students had taught her: "I want to thank you for reading with me today … and this whole year. I've learned so much from you about reading." In this era of high stakes testing, students know their reading level, their "deficits," and whether or not they are on grade level, but they are seldom thanked for their effort and rarely hear that they bring joy to their teacher. In Guided Reading lessons the opposite occurred.

In the whole class context of Interactive Read Aloud the open-hearted expression of personal joy and gratitude was less common. Gratitude transformed to appreciation for the thinking that was achieved through talk and admiration for their work. After students responded to *The Moon Book* (Gibbons, 1997b) Ms. Windsor exclaimed: "Let's do a gallery walk of the pictures we created of the moon. Man these were so cool! I was so happy to see them!" If literacy practices matter not just for the kind of literacy that is acquired but also "for the trajectory of human development" (Johnston, 2019, p. 64) then the affirmation these students hear is extremely important.

Wonder and Wondering. As young children learn literacy, they learn what counts as a resource for the meaning making they do (Aukerman, 2013). Second Graders learned that

emotions were a resource for making meaning first by seeing their teacher express emotions of wonder and perplexity and then by being drawn into group conversations about whatever it was that was wondrous or perplexing.

The teacher's wonder or fascination with some curious phenomenon was often commingled with puzzlement. Ms. Windsor was perplexed by the content of *Giant Pandas* (Gibbons, 2002) and astonished to learn from *Penguins!* (Gibbons, 1998) that penguins could once fly. She could not explain either of these evolutionary changes but the fact that she personally did not understand them was not a reason to move on from them; rather she drew students into a discussion where they talked about different possibilities. In this sense her emotion mediated student learning.

Extract 47 illustrates the sequence: an expression of wonder--that pandas spend so many hours eating--was followed by wondering about a perplexing fact: why did pandas stop eating meat to begin eating bamboo, a plant so lacking in nutritional value that they must spend up to sixteen hours eating every day? Extract 48 illustrates what follows from the perplexity expressed and shared. Words of the text are italicized.

Extract 47.

Ms. Windsor: *Because bamboo isn't very nutritious, pandas must spend between 10 and 16 hours a day eating.* Here's another one of those mind-blowing things; I didn't know that! They spend nearly the entire day eating! *in order to stay strong and healthy. The average panda eats about 27 pounds of bamboo in a single day.* That's a lot of bamboo!

[Chatter breaks out.]

Ms. Windsor: I see a lot of great faces on that one! (Her voice gets faster and higher in pitch.) That makes me wonder though, if they can't get enough nutrition in the bamboo, right, why did they start eating bamboo instead of meat? Why did they stop eating meat if bamboo isn't that nutritious? And they have to spend twenty hours a day eating?

The teacher's expression of wonder and then wondering was "productive" in that it prompted Leandra to share some additional knowledge about bamboo that was as surprising (and true) as the information that perplexed Ms. Windsor: bamboo contains cyanide. Ms. Windsor was reading quite slowly and expressively when Leandra raised her hand. (Words of the text are italicized.)

Extract 48.

Ms. Windsor: *Giant pandas use their big teeth and powerful jaws to crush and eat the bamboo stalks and they also they also eat the leaves.* They eat the stalk *and* the leaves. Did you have a question, Leandra?

Leandra: Bamboo is actually poisonous to some animals.

Ms. Windsor: Not to them though, not to pandas.

Leandra: To birds it is, it has cyanide.

Ms. Windsor: Yeah?! I did not know that! Leandra said that bamboo is poisonous to some animals but not to pandas.

Soon after Leandra's share, Lucas, signaled that he wanted to speak. His claim that "Some spaghettis are made out of the insides of bamboo" is probably not true (as far as I can ascertain) but it had the effect of initiating an extended session, in which he and other students shared their own wondrous facts about bamboo, things they had seen and things they knew. Houses could be made of bamboo. Armor made of bamboo offered a lot of protection, said Finn. Trevor saw a bamboo raft going down a river, Daniella's mother had a bamboo plant, and they circled back to bamboo houses. The teacher responded enthusiastically to each contribution. From this interaction students probably learned some facts they did not know previously, but more importantly, they learned that their classmates were people to learn from, and that their own knowledge--things they have seen or heard--was relevant and welcomed in the cultural event of school literacy

In the third lesson on *The Honey Makers* a brief but significant sequence captured the relation between the teacher's expressed emotion and student learning. Elijah would hypothesize, Allen actively would seek out new vocabulary, and Asher would construct new knowledge about the connectedness of bees and other animals.

The video shown in place of the written text would, on its own, have added to students' knowledge of bees. It showed forager bees gathering pollen (to be made into bee bread for larvae) and focused on the "baskets" on the bees' back legs. As we watched the bees brushing the pollen grains into these *corbiculae* (baskets), Ms. Windsor stopped the video to draw students' attention to this detail and express her amazement: "Look at that!" "Wow!" "That is a lot of pollen!" "How does she even fly?" In the moments that followed, amid the "big noisy conversation" (cultural domain Responding to text) I heard three students share learning that they themselves initiated. Elijah decided the class's earlier "knowledge" was incorrect and needed to be revised: the wings had to be "way bigger than we thought" to make flying possible. Allen (Extract 49) took the initiative to learn a scientific term:

Extract 49.

Ms. Windsor: Ms. Oddie do you remember the name for the baskets?

Ms. Oddie: I don't but I'm gonna find out.

Allen: Corbiculae.

Ms. Windsor: Corbiculae! That's it, thank you, Allen.

Allen: I looked it up!

Asher (Extract 50) shared a new connection he had formed: bees are like other animals that rely on camouflage because bees gather only pollen that matches their color.

Extract 50.

Asher: They fly um they collect the color pollen that is their same color to like protect theirselves

Ms. Windsor: Oooh that's a very cool comparison. Did you guys hear that?

Asher: Bees are like animals that need camouflage because the bee, the pollen they collect in their basket matches the color of their hair

Other features of the cultural context contributed to the learning experience of Elijah, Allen, and Asher: the choice of the book, the video, the three-day immersion in the bee topic, the artifacts of the beekeeper's craft arrayed around the classroom. The teacher's expression of awe and amazement was, however, an essential factor that mediated their construction of new knowledge. The final of the four *Honey Makers* lessons confirmed that claim.

An Unexpected Finding. In the fourth *Honey Makers* lesson, students would have hands-on experience "becoming honey makers" themselves. On the table in the classroom were a bowl, a masher, a small wire screen, and a honeycomb frame with empty cells and honey-filled cells. The in-class students moved their chairs closer to the table. The language throughout was procedural: what to do, in what order, how to do it. In-class students watched as Ms. Windsor cut the honey-filled cells off the comb. Enjoying the viscous drip, they exclaimed "Ew, ew, eeew!"

and "I see honey!" The online students, engaged throughout the third lesson, were unusually inattentive on day four, while hands-on activities were demonstrated. After mashing the honey-filled cells, Ms. Windsor put small quantities of mashed comb in containers and handed them to students. They covered their container with wire mesh, inverted it over a transparent plastic cup, and watched the honey begin to drip.

The online students knew that they too would be able to extract honey by performing these steps. Their teacher explained that all the necessary pieces would be placed in their personal bin in the lobby, ready for parents to pick up. Yet they were not caught up in learning as Elijah was in the previous lesson. At home, Allen disappeared for a time, Gabriella played with yarn, Finn rolled off his bed. Marcus came and went, Elijah left with a blanket, and Finn returned, eating chips from a blue and yellow striped bag. The barrier to the online students' simultaneous enjoyment of this experience and their unusual inattentiveness cast into broad relief the powerful effect of emotional mediation in previous lessons. Emotions of awe and wonder traveled across the online barrier in ways that demonstrated hands-on activity did not. This important finding about the mediating role of emotion in learning is significant, especially as hyflex and remote learning become routine practice during the continuing COVID-19 pandemic.

Gabriella's Experience of Reading with a Teacher

Uncovering what students experience as they learn is seldom easy (Nuthall, 2007; Smagorinsky & Daigle, 2012; Jackson, 1990). As I observed online I experienced the common difficulty of finding out how students felt about learning, in this case, literacy learning. When Gabriella spontaneously spoke about her experience and feelings I was grateful for her insight and for the unsolicited and therefore authentic information she offered. In a Guided Reading lesson towards the end of the spring semester, Gabriella burst out with the kind of appreciation few reading teachers hear:

This is one thing about reading. I like hearing books [Epic or Raz-Kids] but it's so hard for me to read them by myself ... I get the words right but I just don't really read. I just get so excited when I read with, like, a teacher.

Gabriella was not a struggling reader. At first Ms. Windsor was not sure what Gabriella meant when she said: "it's so hard for me to read them by myself." Gabriella herself knew it was not the words that made reading by herself hard: "I get the words right." Extract 51 shows the interaction in which the student tried to explain and the teacher identified the lack of a reading community as a reason why independent reading was hard.

Extract 51.

- Gabriella: I get the words right but I just don't really read; I just get so excited when I read with, like, a teacher.
- Ms. Windsor: Yeah, yeah, you know you're not alone in feeling that way ... you know, because I think reading can be really like a community, we read together ... and I think it's more fun. I wonder what's going on like when you're reading on your own. Does it feel like just more work to get the information?
- Gabriella: It feels more work, work to read, and I'm ... I tell myself that I'm gonna read but at the end I change my mind because it's not ... I feel like it's gonna be really hard.

Gabriella made these comments during the last of four Guided Reading lessons built around a common theme: birds' adaptation to their environment. The context of Gabriella's metacognitive

reflection--the four-lesson sequence and the immediate context of the final lesson--reveals some of what "gets [her] excited" when she reads with a teacher.

First, during the sequence of lessons, Gabriella experienced a change in her orientation to the texts. Initially intrigued by the content and simply accepting the information, she developed a more independent, critical stance until in the third lesson she questioned whether the overarching concept of adaptation provided a reasonable explanation for a curious phenomenon. Reading in *Feathers: Not Just for Flying* (Johnson, 2019) that the desert sandgrouse flies fifty miles to find water, and then returns to its parched habitat where "the chicks suck the water off their father's wet feathers" she asked with some incredulity: "But why do, instead of living in a desert why don't they live somewhere else where they don't have to fly fifty miles to find water?" Implicit in her words was some resistance to the central theme of the unit: birds are well adapted to their environment. Her incredulity and her resistance might be compared with Vygotsky's notion of struggle as an inevitable and desirable part of learning (Levykh, 2008; Veresov, 2009; Vygotsky, 1997).

Second, Gabriella experienced a change in her relation to her teacher. In the interaction that followed her question, Ms. Windsor was not the more knowledgeable other who guides a student through a sticky problem. The interaction does not align with the traditional zone of proximal development. The teacher had no answer to Gabriella's question and reasserted the general theme of the lessons--adaptation--the concept Gabriella had questioned:

It's a good question. It's a good question! (Laughs) I dunno! That's their habitat ... but since it does live there, animals have special adaptations, right? They, over time, they adapt and change and have these special features to help them survive in their environment.

The teacher was not the "primary knower" (Aukerman, 2006) in this event and her stepping away from that role--"I dunno!"--gave the student a more prominent role as a "possible knower." In the following, final lesson, Gabriella was forceful in pursuing her question and in fact determined the course of the lesson.

Both changes--in orientation to text and in relation to the teacher--can be framed in terms of the Vygotskyan notion of drama or struggle or collision (Russian "category") as a source of development (Levykh, 2008; Veresov, 2009; Vygotsky, 1987). Dramatic moments need not be violent or sensational or public; they occur in everyday life, including in educational settings (Fleer & González Rey, 2017, p. 8) and are associated with transitions, in this case a transition to a reader determined to pursue her own questions (Zittoun, 2008).

The final lesson began and Ms. Windsor started to show a short video about the adaptations that enable birds to survive (Extract 52). Almost hidden amongst the adaptive details was the problem the blue-footed booby faces: a predator (the Galapagos hawk) and a decline in population. It was the problems that Gabriella picked up on and wanted to understand; adaptive features that earlier would have intrigued her (the blue-footed booby's feet are good for wrapping around their eggs for warmth) were bypassed. There was some tension as Gabriella tried to halt the video to pursue her inquiry and Ms. Windsor continued as planned.

Extract 52.

Ms. Windsor: I want to show you the osprey, the one in the book that is a diving bird; it goes down and gets fish. Look at this! It's pretty cool!Gabriella: But I want to know which animal eats those, which animal eats thoseMs. Windsor: Which animals eat the blue-footed booby?

Gabriella: Yeah.

Ms. Windsor persisted for another minute with the video then responded to Gabriella's wish: "Let's take a look at that." She typed into her search engine a question about a decline in the birds' population.

It was at the end of this lesson that Gabriella described reading with a teacher as "exciting." Three distinctive features contributed to that assessment. Combined with concepts of struggle and social collision, they reveal what "really reading" meant to Gabriella.

First, Gabriella was pursuing *her* inquiry into why the booby was endangered. She resisted her teacher's focus on the osprey: "But I want to know which animal eats those."

Secondly, she experienced a different kind of collaboration. The first collaboration was the usual kind: the teacher helped Gabriella understand the explanation provided by the website. Ms. Windsor summed up the gist of the explanation in Extract 53.

Extract 53.

- Ms. Windsor: And so something has changed in their food source. They're not um, there's a lack of, the disappearance of sardines, that may be something they always used to eat and they're nowhere anymore so something in their diet has changed sometimes that happens because of ah like humans' effect on their habitat and sometimes it might be overfishing.
- Gabriella: Or something affects them ... if they need something and don't have it, it affects them.

Gabriella: But what was the food that changed?

Ms. Windsor: Sardines. They, they're, you know what those are? Gabriella: No.

Ms. Windsor: They are, I'm gonna show you a picture, they're tiny little fish.

The second collaboration, captured in Extract 54 was quite different. When Gabriella offered a hypothesis (01) the teacher confirmed it, not out of her pre-existing knowledge but using knowledge she was constructing in the moment (02). The collaboration was between partners who were equal in that both were constructing knowledge and each shared the meaning they were making in the present moment.

Extract 54.

- 01 Gabriella: Maybe they're endangered because people keep eating them and they eat them before they can have a family?
- 02 Ms. Windsor: Yeah, look at this! *A small Atlantic fish that's become lunchtime favorite ... it's in danger of becoming extinct.*
- 03 Gabriella: So the blue-footed booby is coming extinct because those are coming extinct, and that's their food.

04 Ms. Windsor: Yes, you got it.

Gabriella summed up (03) the understanding of cause and effect jointly constructed with her teacher. This was the third feature of the lesson that contributed to Gabriella's assessment that she was "really reading": she constructed new knowledge. Ms. Windsor started to expand, appropriately, on the theme of human impact on the environment. Gabriella contributed as an equal partner to this short interaction, expressing her own theme of animal-human connectedness. Extract 55 shows their interaction.

Extract 55.

Ms. Windsor: So you know in the world we are connected, right? So what we do to one thing affects, if we do something to a habitat or to a smaller animal it affects other animals, right? And plants = Gabriella: = Cos animals are just like people, they just look different

Ms. Windsor: Say it again, Gabriella?

- Gabriella: Animals are just like people, they just, you don't understand them and they don't, they look different.
- Ms. Windsor: That's right. (Pause) Yeah! I learned a lot today! I'm glad we investigated, and Gabriella ...

Gabriella: Are you crying??

Ms. Windsor: Happy! You're gonna see me tearing up a lot today, it's one of those days. At the conclusion of the lesson, Ms. Windsor elevated Gabriella's dominant role in their joint activity, celebrating her desire to satisfy her curiosity, as well as the fact that she forcefully expressed her wishes. She identified Gabriella as "a knowledge producer" (Johnston et al., 2020, p. 40) and delighted in the fact that her student's questions and wonderings "led us to learning something really interesting."

I'm just really proud of you, I love how you're thinking about, that you wanted to find out more about and were able to verbalize that, *say* it and you had the right questions and wonderings that led us to learning something really interesting today. I love that. (Ms. Windsor)

Wrapping up, Ms. Windsor commented on the excitement of learning from non-fiction texts, wearing her familiar teacher-learner persona: "Actually I did think there were some pretty mindblowing things in here, right? I didn't know that, I actually really did not know that feathers were used for so many things."

At this point Gabriella spoke out, realizing that what she had just engaged in was "really reading":

This is one thing about reading. I like hearing books but it's so hard for me to read them by myself. I get the words right, but I just don't really read. I just get so excited when I read with, like, a teacher.

What Gabriella liked about reading, what got her "excited about reading with a teacher" was precisely the quality of the interaction around the blue-footed booby: joint inquiry that was student driven, occurring in a context where thinking together and struggling together to reach understanding was valued.

Reflections on the Findings

The findings presented in the Second-Grade Section might be grouped under the headings Connections, Responsiveness, and Possibility. These headings, or themes, are a little different from the Third-Grade themes. In replacing responsibility with responsiveness, I do not imply that Ms. Spencer was not responsive, nor that Ms. Windsor was not responsible. Both teachers manifested qualities of responsiveness and responsibility.

In Second Grade, connections of various kinds were evident. Students communicated with peers as they responded to texts in group interaction. Students were expected to connect the images and words of a text and connect both to the imagined feelings of characters. Students made meaning by connecting a text and its representation of the world to their understanding of how different people lived their lives in the world. Rather than finding meaning in the text, they made meaning through this connection.

A second theme of responsiveness flowed through the lessons observed. The pattern of utterance and response seen in many interactions was one form of responsiveness. Another was the way a student's unpredicted, sensitive response to text, followed by teacher uptake, might shape the course of a lesson. Students' individual responses to text were held to be more important than the class "getting through" an Interactive Read Aloud text, and more important than reaching a single, agreed upon meaning. Throughout, the teacher took seriously students' perspectives, questions, and emotions, responsive to them as unique individuals.

The theme of possibility includes both uncertainty and potential. In the literate epistemology of Second Grade, texts did not have one certain meaning; ambiguity and uncertainty were therefore a natural part of reading. The other sense of possibility--as potential, infused teacher-student interactions around student identity and becoming. It also entered discussions about problems in the natural world, and discussions about social justice issues, emphasizing the possibility for change. The extracts have, I hope, brought to life the abstracted themes of connections, responsiveness, and possibility.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Sociocultural theory posits that all learning is social. When children communicate and engage with people in their environment, including those who are more mature and proficient, the interaction "awakens internal developmental processes" (Vygotsky, 1978, p. 91) or potential abilities that can only operate with others. Vygotsky (1994) wrote:

"It (is) a very simple fact, namely that man is a social creature, that without social interaction he can never develop in himself any of the attributes and characteristics which have developed as a result of the historical evolution of all humankind" (p. 349).

The words "interaction" and "develop" are key. The social environment is not just a place to be in community with others but a place for developmen*t*, by which Vygotsky meant something quite specific. Development comes from the interaction between "rudimentary forms" possessed by the child and "ideal forms," forms already mastered by the mature adult (Vygotsky, 1994, p. 352). The importance of the social environment is that it is the site of this kind of interaction. Over time, after "a long series of developmental events" (Vygotsky, 1978, p. 57), interpersonal activity will be transformed into an intrapersonal or inner process.

I begin Chapter V in this way to clarify the concepts of social interaction and development central to Vygotsky's theory of education, concepts that are often left undefined. These concepts are important in my discussion of interaction between students and teacher. Social interaction and development, as understood in the Vygotskyan sense, challenge the deficit discourse with a developmental perspective and so call into question the assumptions of those who would "pathologize" education (Fleer & González Rey, 2017). Vygotsky' writings on the matter of testing similarly challenge the current practice of assessing only "mature functions" with measures of absolute achievement. Vygotsky (1978) wrote that when we use tests to determine a child's "mental age" we make an assumption that "only those things that children can do on their own are indicative of mental abilities" (p. 85). This is the assumption behind standardized tests. Vygotsky (1978) remarks, with irony, that "even the profoundest thinkers" have failed to entertain the idea that "what children can do with the assistance of others might be in some sense more indicative of their mental development than what they can do alone" (p. 85).

It follows from this that an accurate, rounded picture of the student should include not only what she can do independently but also what she is beginning to do in interaction with others. Vygotsky's words support the importance of observing interaction---"what children can do with the assistance of others"--in order to see what students are capable of doing when working with others and not merely what they can do independently.

To understand the ways Second- and Third-Grade students made meaning in literacy instruction I observed their interactions during Interactive Read Aloud and Guided Reading as these structures were enacted in the distinct culture of each classroom. In undertaking this research, I was motivated by a belief that the children of La Montaña could do much more than standardized tests indicated. I questioned the assumption that what students did alone was what they could do. My purpose, as stated in Chapter I, was to understand how the social and cultural practices of classroom literacy instruction afforded students opportunities to make meaning with texts, drawing on multiple resources: personal subjective experience, the texts themselves, emotion, and interactions with peers in the social context.

The questions guiding this research were:

- Q1 What opportunities to make meaning are afforded by the social and cultural practices of Interactive Read Aloud and Guided Reading in a Second-Grade and a Third-Grade classroom?
- Q2 What opportunities are available in the interaction of those literacy events for students to use language as a tool to generate, explore and challenge ideas?
- Q3 What evidence is there that emotional and other subjective resources, including lived experience are valued as relevant to making social meanings and personal sense in the literacy event?

This research was conducted using a sociocultural framework. My observations and interpretations were accordingly informed by the principles of sociocultural theory and my conclusions were formed in terms of those principles. They may be expressed, in condensed form, as follows: First, social relations are essential for learning. Second, the opportunities for individual development are found in joint activity with others. Third, we realize our higher mental powers through our participation in culture (Bruner, 1990) internalizing, through various kinds of mediation, knowledge, skills, and understanding that we could not reach on our own (Wertsch, 1985, 1990). These principles and concepts provided the first lens for my observations of Second and Third Graders participating in literacy instruction.

Contemporary research asks productive questions about each of these principles. Is the social interaction essential for learning necessarily between people in the roles of novice learner and expert teacher? (Fernández et al., 2001). Can it be between learners of similar levels of understanding? (Tudge, 1990). How do opportunities for individual development come about in joint activity with others? (Bingham, 2004; Fleer & González Rey, 2017; Stone, 1993). The concept of internalization also provokes contemporary questions: What kinds of mediation bring

about internalization? (Daniels & Hedegaard, 2011; Fleer & González Rey, 2017). Can affective relationships mediate internalization? (Bartholo et al., 2010; Bingham, 2004; Stengel, 2004). The questions posed by contemporary scholars "polished" the lens allowing me to see more clearly how social interaction for learning, for individual development, and for reaching higher mental powers contributed to students' literate and human development.

Chapter V is organized in four sections. Section 1 "Luna sparked something for me," relates interaction from Interactive Read Aloud lessons to the first tenet of sociocultural theory---social relations are essential for learning. Section 1 shows that social interaction was important for making meaning of texts; that through social interaction students created contexts for learning; and that in social interaction there were opportunities for individual development in the Vygotskyan sense.

Section 2 "Bees are like other animals" shows that students reached more complex understandings supported by the literacy culture of which they are a part, acquiring knowledge, and understanding that they could not reach on their own (Wertsch, 1985, 1990). Section 2 also shows that in both classes a culture of caring overlapped with the academic culture. There were opportunities within literacy instruction to foster human development that both teachers took advantage of. Finally in Section 2, I propose that the literacy culture of Second Grade has its epistemological foundation in the transactional theory of experience proposed independently by both Dewey and Vygotsky.

In addition to the principles of sociocultural theory stated above, language--"the prime cultural and psychological tool" (Mercer & Littleton, 2007, p. 69) --is fundamental to sociocultural explanations of learning and development. Section 3 focuses on language.

Section 3 is titled "It's something you can't explain"--Gabriella's words as she struggled to express in words her inner understanding (Extract 31). Section 3 relates the language of extracts from Chapter IV to Vygotsky's understanding of language. Students expressed their thoughts-in-the-making in unpolished speech that was itself under construction. The conclusion I reach is that students can generate, explore, and challenge ideas, when no "rigid correspondence between thought and speech" (Vygotsky, 1986, p. 249) is required.

The principles of sociocultural theory, together with Vygotsky's perspective on language, provided a strong framework for research. I completed the framework with the inclusion of emotion as a resource of equal importance to social relations and as necessary as culture and language in making meaning of experience. Section 4 focuses on emotion. The position I take is supported by the strand of Vygotsky's opus concerned with subjectivity and emotion, a strand that has been mostly overlooked (Fleer & González Rey, 2017; González Rey, 2009, 2011, 2014b; Veresov & Fleer, 2016). (The Literature Review provides an explanation for this neglect.) Vygotsky was emphatic that education--and by extension educational research--must attend to emotion. He believed that the relation between student emotion and educational practice was of critical importance: "The teacher must be concerned not only that students think about and learn (for example) geography, but also feel deeply about it" (Vygotsky, 1997, p. 107).

I found in this study that emotion was indeed "no less important a tool than is thinking" (Vygotsky, 1926/1997, p. 107). In Section 4 I revisit excerpts from Chapter IV and discuss them from that perspective.

Section 4 is titled "I told you! Only one survives." Section 4 shows that "emotional experience generated in the child by "any situation or aspect of his environment" (Vygotsky,

1994, p. 338) is integral to learning. My conclusion, based on the empirical evidence is that emotion becomes developmentally significant for the child through interaction with the teacher.

Section 1: "Luna Sparked Something for Me" (Trevor)

"Of all affairs, communication is the most wonderful ..." (Dewey, 1958, p. 166)

Social Relations are Essential for Learning

Trevor's comment: "Luna sparked something for me" marked his entry into a studentinitiated discussion where social interaction was an "instrument" (Barnes, 1975, p. 84) for making new meaning through the sharing of lived experience.

At the "wonderful" moment Trevor acknowledged Luna, he awoke and fully entered the discussion. The moment occurred at a stage in the lesson when talk had shifted from the text itself (*Molly the pony*, Kaster, 2012) to the experience of students--injuries incurred and recovered from. Trevor explicitly acknowledged another student, Luna, and her words as the source of his recollection. Trevor's comment indicated his awareness that the context created by students for sharing lived experience had made an opportunity for him to tell and remake his experience in the telling. For he did not tell it as a lean, unadorned, straightforward account, but added dramatic emphasis: "smacked (my head) really hard right by my eye"; "the doctor had to superglue it together!" Narrating his misadventure in the social sphere, at some distance from the event, put Trevor in a different relationship to the event. Social interaction was "an instrument for reshaping (his) experience, that is … a means of learning" (Barnes, 1975, p. 84). Trevor learned that he and the other students were connected by similar catastrophes and reliant on one another as they constructed an oral text of common misfortunes.

In Second Grade, social interaction was commonly initiated by a student's idiosyncratic response to an aspect of text. The lesson *Giant Pandas*, Gibbons, 2002; Extracts 36, 44) is an

example of this. After Allen's reaction to some of the content, students began to discuss possible reasons for the neglect of one cub. They did not reach a sure and certain explanation, but they entertained several possible explanations. They also experienced what Vygotsky called "a unity of affective and intellectual processes" (Vygotsky, 1987, p. 50). The evaluative component of emotion (Nozick, 1989)--the sense that something was wrong in the pandas' behavior--did not go away. But the students were able to come up with possible reasons for the behavior that ran counter to their emotional sense. Social interaction made this valuable experience possible.

In both classes social interaction was often initiated by students' sense that they could not make sense without the help of others. "Turning to others" is a "two-way reaching" (Lindfors, 1999, p. 106) to get beyond self and to get beyond one's current understanding. In Aaron's case there was also a sense that he could not act in the world without others. Aaron's question "How can we not use oil?" (Extract 3) invited discussion about alternative resources and at the same time invited concerted action in response to environmental degradation, again something he could not undertake alone. His purposeful initiation of social interaction created an opportunity for multiple students to contribute ideas and step out of the passive role of a listener.

Social interaction initiated by personal inquiries created possibilities for every student to create new knowledge with their peers. When in *Penguins!* (Gibbons, 1998) Julio, Vittorio and Gabriella turned to others with their questions about adaptation and evolution (Extracts 38, 39, 40) they lifted concepts which on their own they could not understand and brought them into the dynamic context of live discussion. Their quest for understanding was not completed in this discussion: no definitive answers were found, but the search for understanding--How did flippers become wings? How did penguins "get the idea" to look for food in the ocean?--would surely go on far beyond the forty minutes of the Interactive Read Aloud lesson. Perhaps this is the most

important thing the students learned in social interaction: that there are no boundaries to the search for knowledge for "there is always more to be discovered and more to be said" (Greene, 1995, p. 43).

Contexts for Interaction

Literacy is always embedded in and responsive to a particular context; it is not an autonomous skill and is not imparted universally in uniform fashion (Street, 1995, 2004, 2013; Street & Street, 1991). Students are always being apprenticed, more or less explicitly, into a situated form of literacy practice built on a "literate epistemology" (Johnston et al., 2001) that legitimizes some kinds of interaction and does not call for others.

Prima facie, Third-Grade students were apprenticed more obviously into certain ways of doing things through the consistency of a repeated lesson format. The pattern of their Interactive Read Aloud lessons prepared them for the literacy assessments at the district and state levels that would test independent reading as an individual, private relation between text and reader. Interactive Read Aloud lessons were part of an apprenticeship that would equip them to successfully complete work independently. Knowing their assignment ahead of time, they listened with it in mind, interacted briefly with a partner, then responded independently to the question. As I have noted elsewhere, there was less social interaction, a contrast to Second-Grade lessons which were filled with talk.

Counter examples to this general observation are the lessons *The Paperboy* (Pilkey, 1996), *Prince William* (Rand, 1992), and *The Tree Lady* (Hopkins, 2013), all of which included enthusiastic participation in rich discussion. These three examples of rich social interaction are counter examples to the general observation made earlier that "there was less social interaction" in Third Grade. That general observation is sound, but to conclude that the apprenticeship model

was the single reason would be unjustified. To repeat Street's (1995, 2004, 2013) and Street and Street's (1991) claim, literacy is always embedded in and responsive to a particular context. My hypothesis, based in part on Street's claim, is that it is less the apprenticeship model (easily visible in Third) than the collaborative model (easily visible in Second) that accounts for the difference in interaction, and more likely the fact that standardized tests are a fact of life in Third. Grade. All aspects of literacy instruction, including the place of social interaction, were influenced by that fact.

Opportunities for Individual Development in Social Interaction

For Vygotsky (1994), the importance of the social environment was that it was the site where "rudimentary forms" interacted with "ideal forms" (p. 352). Development began in that interaction because the child could use skills that were by no means proficient, and being undeveloped, could not be exercised independently. In isolation, "the interaction of forms" sounds somewhat mechanical, until the affective aspect of experience (central to Vygotsky's psychology) is brought into the picture. Wells (2007) noted that the affective nature of joint activity has largely been overlooked, yet it is precisely the affective aspect--satisfaction, joy, or pleasure, that "sustains joint engagement … and creates intersubjectivity" (p. 247). We can imagine, then, that in the interaction of rudimentary forms with "ideal" or mature forms of behavior or speech, the child experiences not only the satisfaction of solving problems or completing tasks she could not complete alone, but also experiences pleasure and some pride as new ability emerges. I think these emotions can be detected in Rafael's, Lexie's, and Anna's participation in the discourse of *The Tree Lady* (Hopkins, 2013).

The interaction in the lesson *The Tree Lady* (Hopkins, 2013; Extracts 9, 10, 11) was "the source of development" for both Rafael and Lexie. Rafael on his own could not connect the colonists' destruction of the forests to Wangari Maathai's actions; Ms. Spencer's probing questions helped him to make the causal link. Rafael began with a similarity: "They both liked trees," was pushed to think of a difference: "Oh yeah, because in *Wangari Maathai* she didn't live in like ... a sand town," and pushed further to explain why Maathai was planting trees: "Because they (the colonists) cut them down." Lexie on her own, without the interaction between Ms. Spencer and Rafael, would not easily have drawn the contrast between Wangari Maathai and Kate Sessions (Extract 11): "Wangari was taking risks for peace and um Kate was not taking risks she was just planting them because there was none."

In this lesson Rafael and Lexie accomplished what they could not do on their own: Rafael linked individual action to its political cause, while Lexie articulated the difference between the two women, first in their contrasting motives for action and then in the consequences of their actions. Anna too developed through listening to the interaction. Her restatement of her friend's idea in her own words: "She did not fight with nobody or nothing she just planted them" showed that she was "taking over for (her) own use … what (she) finds effective in the contributions of others" (Wells & Claxton, 2002, p. 7).

This interaction, which led to understanding that could not have been predicted, had an organic quality to it. The final insight Lexie reached was contingent on the interaction of her partially developed skills with Rafael's. Neither was proficient at comparing characters from different books and different cultures. Lexie's sudden "no" (Extract 11, 02) indicates that what she was about to say was some sort of surprise even to her. The cognitive development underway was the ability to see similarity between different situations and recognize a qualitative

difference between similar actions--things the students could not do by themselves. I use the word "underway" mindful of Vygotsky's (1978) words that emergent functions "take on the character of inner processes only as a result of prolonged development" (p. 57).

An objection might be raised that in the interaction of *The Tree Lady* (Hopkins, 2013) lesson no "ideal form" was evident. Vygotsky illustrated the encounter of "rudimentary" with "ideal" forms using the example of a small child just learning to speak exposed to the fully developed speech of a parent. The contrast of rudimentary and mature forms may not be as obvious in the interaction of *The Tree Lady* but I would argue, following Veresov (2017) that the encounter did take place and was central to the students' development. The teacher's moves modeled how to go about comparing, by finding similarity and difference, by listening to others, building on their words and ideas, and synthesizing details into a coherent comparison. These behaviors might be called the "ideal form" (Vygotsky, 1994) of how to construct a comparison and how to construct meaning with others. The teacher's language that accompanied joint experience elicited more detail and scaffolded synthesis. Her role was essential in the interaction.

A different response to the objection is to concede that the meeting of ideal and rudimentary forms may not be the best explanation of development in a classroom situation. Perhaps Vygotsky's example of the parent and child in dyadic communication cannot be applied to a classroom of one teacher and twenty students. If not, then the concept of development has to be expanded or reconceived as Moll (1990) reconceives it when he posits that the developmental zone is not, as it is usually described, a distance between what the child can do independently and with support but is instead the cultural-historical setting of learning itself (Smagorinsky, 2011). Smagorinsky states that this "social systems" perspective on development minimizes the teacher's role because it allows for an explanation of learning without explicit instruction. The interaction of *The Tree Lady* (Hopkins, 2013) offers some middle ground: the teacher played an important role not through explicit instruction but as a mediator who supported development through calibrated assistance to Martina, Rafael, Lexie and others. Both Vygotsky's and Moll's perspectives on development agree on the necessity of participation in joint activity.

Reciprocity Between Students and Teacher

In neither class were students passive recipients of instruction. In sociological terms, as member participants in cultures they had a certain degree of agency to change or steer the lesson in a different direction.

When I reflect back on all the lessons I observed, the words that come to mind are unpredictability, reciprocity, and surprise. Certainly, lessons sometimes stayed a fixed course, especially in Third Grade, but there too the shape of a lesson was not entirely predictable. As students responded to some aspect of text, boundaries shifted, and the nature of the event changed. Lexie observed in *Ming Lo Moves the Mountain* (Lobel, 1982; Extract 8) that the wise man's suggestion (to dance backwards) was a ruse--"The wise man wanted to do that so they could get away from the mountain." Ms. Spencer took up her comment, sensed that ambiguity of plot was of interest to her students, and so changed the topic of partner talk.

When Gabriella (Second Grade) halted the lesson *Wilma Rudolph: Walk, Run, Win* (Cary, 2019) to ask: "Is that in the old times when white people got to sit in the front and Black people had to sit in the back?" (Extract 8) she moved the boundaries of the Guided Reading lesson and made segregation, political action, and change topics of discussion. The very rich interaction that followed was not planned by the teacher, and (unless her words in Extract 8 are disingenuous) Ms. Windsor had not anticipated discussion going in the direction Gabriella took it. Nor had she anticipated Allen's reaction in *Giant Pandas* (Gibbons, 2002; Extract 36), but in both lessons, as

Ms. Spencer also did, she followed students' lead, allowing what interested, intrigued, or upset them to guide the rest of the lesson.

The reciprocity of teachers and students stands out in these and many other lessons. Contexts for rich learning were created when students voiced questions and concerns and as their teachers responded to them. (There were also occasions such as the Third-Grade lesson *The Paperboy* (Pilkey, 1996) and the Second-Grade lesson *The Honey Makers* (Gibbons, 1997a) when teachers' questions and concerns, at first seeming digressions, created contexts for rich learning.

In this study, context was more than the place and time of an Interactive Read Aloud or Guided Reading lesson. It included student subjectivity, emotion, and knowledge--"the social and emotional understandings and feelings of the participants who create the interaction" (Lindfors, 1999, p. 7). Instructional contexts expanded in response to students' emotional understandings and feelings and a reading lesson became, in Hoffman's (2017) words, "human interaction in meaning making" (p. 267).

Section 2: "Bees are Like Other Animals" (Asher)

Students Participating in Literacy Cultures

Asher shared his realization after a "big noisy conversation" (cultural domain Responding to text) during the Second-Grade lesson *The Honey Makers* (Gibbons, 1997a). Students had watched a video in place of the written text, of bees gathering pollen, brushing it into the "baskets" (*corbiculae*) on their back legs, and taking it back to the hive to be made into "bee bread" for the larvae. Asher's statement in full is: "Bees are like animals that need camouflage because the bee, the pollen they collect in their basket matches the color of their hair" (Extract 50). This was new knowledge that he had constructed; there was no such comparison made in the video. Asher constructed his understanding as he participated in a distinctive cultural context--Second-Grade Interactive Read Aloud. Two features of the cultural context were especially supportive of his learning.

First, speaking was not a performance. Asher first shared that "They fly um they collect the color pollen that is the same color to like protect their selves." His words didn't quite express the idea that was forming. His teacher completely disregarded any syntactic and grammatical irregularities and enthusiastically responded "Oooh that's a very cool comparison. Did you guys hear that?" What can be said and how it can be said are cultural conventions that vary from classroom to classroom and teacher to teacher (Gutierrez, 2008; Gutierrez & Larson, 1994). In this cultural context, syntactic and grammatical irregularities were not important, but the growing idea was. As well, joint activity had an affective dimension of excitement and wonder. The teacher's enthusiasm ("Oooh that's a very cool comparison") helped Asher's thought find its form (Vygotsky, 1986) and he shared his new connection: bees are like other animals that rely on camouflage because bees gather only pollen that matches their color. The cultural context of this episode enabled Asher to reach understanding he would not have reached otherwise. Without the big noisy conversation, the video, the relaxed conventions about public speech, the time for unstructured interaction, the teacher's enthusiasm, it is unlikely that Asher would have constructed this new knowledge.

Each class differed in procedures and ways of interacting. They differed in their use of time and in their use of resources beyond the written text. The amount of talk was different. Completing individual assignments was expected in Third but only occasionally in Second. These differences aside, the classes had one striking feature in common. In both classrooms, in addition to the academic culture was a culture of caring for students as whole human beings and not merely as "at risk" students. Because the culture of caring overlapped with the academic culture, students reached more complex understandings of who they were and could be, in the context of literacy. During literacy instruction teachers made the most of opportunities to foster human development as well as literate development (Johnston et al., 2020).

When Gabriella (Second Grade) read *On the Job* (Bass, 2019; Extract 37) with her Guided Reading group, the occupation of teddy bear repairer sparked in her a concern and a hope. She thought about her grandfather who was ill, and she thought about becoming a doctor. In the culture of the Guided Reading group it was normal to share thoughts, so Gabriella revealed what worried her and what she hoped for. In the interaction with her teacher, she revealed a very personal family situation and shared the difficulty of securing medical treatment for her grandfather. The fact that all this information was received with respect and unhurried attention attests to the culture of caring surrounding academic instruction. When Gabriella shared that she wanted to be "a carer" and a doctor because of her grandfather, Ms. Windsor took the opportunity to affirm the worthiness of the goal and her student's ability to reach it: "You would do very well, I know you would do very well, in that job." As she acquired literacy, Gabriella was "developing many other dimensions of (her) humanity" (Johnston et al., 2020, p. 270).

The culture of caring was made evident during the Third-Grade lesson *The Paperboy* (Pilkey, 1996) in the quite personal interaction between the teacher and a student. When Lexie could not see the qualities of determination and responsibility in herself, Ms. Windsor was quick to dispel negativity and affirm who Lexie was becoming as a student. The other students had rushed to share how they and their parents showed determination and responsibility, getting up in the dark for the early shift or being online and ready for school early. Lexie on the other hand shared how she and her father didn't want to get up (Extract 28). Ms. Spencer responded:

But you do Lexie and you know what, Lexie? At the beginning of the year you didn't always. You came to school late and you came to school looking like you were half asleep and now you have become more determined, Lexie, as a student. You get up, you get dressed, and you come to school looking ready to learn which is awesome. That shows determination.

In a very personal way, Ms. Spencer cited evidence from Lexie's life to help her reach a more complex understanding of how she had changed and the student she was becoming. This happened, as it did in Second Grade, because the culture of caring overlapped with the academic culture. In both classes, the teachers took responsibility for what Biesta (2006) calls the "coming into the world" of unique human beings (p. 9).

Literacy Cultures Respond to Political Contexts

The form that Interactive Read Aloud took in Third Grade was different from Interactive Read Aloud in Second Grade: in each grade literacy instruction was responsive to context. Third Grade would take state mandated literacy tests, Second Grade would not. It was essential that instruction in Third should prepare students for assessments of individual reading proficiency. As a turnaround school, La Montaña's continued existence depended on improved results on standardized tests. Ms. Spencer purposefully crafted instruction to fulfill her professional responsibility. She took an authoritative role in the Interactive Read Aloud lesson. She announced ahead of time the assignment that would follow the reading, scaffolded its successful completion by guiding students' thinking during the reading, and chose a topic for partner talk closely related to the assignment.

Second-Grade Interactive Read Aloud was different. Most of the lesson consisted of talk. Often the talk was not about the text *per se* but about students' responses. Students shared experiences from their own lives, raised issues the text did not answer, and responded emotionally. Reading was viewed as an experience that went beyond uncovering meaning in the text. Expressive comprehension-as-sensemaking (Aukerman, 2008)--the surfacing of personal responses and meaning--is a term that captures part of what was going on. Sharing personal responses and meanings in social interaction was the complementary part. While expressive comprehension-as-sensemaking is open to the criticism that it treats reading solely as a relation between reader and text and allows individuals' meanings to go unchallenged, this criticism could not be applied to Second Grade.

However, allowing readers' personal meanings and responses to have any part in literacy discussion--regardless of whether they are subject to critique and challenge--is out of fashion and currently threatened by a conceptualization of reading that is not often justified in theoretical terms. The common descriptor "scientifically based reading instruction" is often used as if its theoretical soundness was self-evident. As the "science of reading" approach grows, the approach used by Ms. Windsor and its theoretical foundation will need to be explained and justified as a theoretically sound alternative to the ascendant model of reading.

The model of reading that dominates literacy today privileges the text as the container of meaning and visualizes the reader outside of and separate from the text, using strategies to unlock its meaning (Aukerman, 2013; Santori, 2011). One of the purposes of the Common Core State Standards was to cement this model of reading in instructional practice:

It is necessary for readers to *get* the text. Readers need to get their mental arms around the text, to be able to retell it, to cite it, to ground anything they have to say about the text with textual references, to talk and think in ways that are confined within what you might call "the four corners of the text." (Calkins et al., 2012, p. 39)

Getting one's "mental arms around the text" implies the separation of reader and text, while talking and thinking "confined" within "the four corners of the text" suggests a reader constrained by the text, with little freedom to move. Because this is the view of reading that dominates the field of literacy practice today, the literate epistemology of Second Grade requires justification on the grounds of its theoretical soundness as good educational practice.

Transactional Theory and the Literate Epistemology of Second Grade

Transactional theory understands reading as a very different process. The text as a "configuration of signs" (Smagorinsky, 2001, p. 141) is important, but equally important is what "that particular juxtaposition of signs" (Rosenblatt, 1978, p. 137) calls up within each reader. The transactional view allows for diverse interpretation and surprise, because, in Rosenblatt's (1978) words: "We cannot simply look at a text and predict what a reader will make of it" (p. 137).

Transactional theory can be traced to Dewey, connected to Vygotsky's concept of perezhivanie and, more broadly, to his writings about the relation between individual and the environment. Dewey described the transactional approach as "the seeing together ... of what before had been seen in separations and held severally apart" (Dewey & Bentley, 1948, p. 112). Dewey and Bentley had proposed the term "transaction" to replace "interaction" and mark a paradigm shift away from the dualistic paradigm of knower and known, subject and object as separate entities (Rosenblatt, 1978). With acknowledgment to Dewey, the literary scholar Rosenblatt (1978) took up and applied the transactional theory of experience to reading, "seeing together" the reader and the text, not separate and distinct.

Rosenblatt conceptualized reader and text as a single fused entity; Vygotsky (1994) described the relationship of the individual and environment as an "indivisible state" (p. 342).

Vygotsky argued that at an experiential level there are not even two separate entities. The only way in which an individual relates to the environment is through emotional experience, which he defined as being simultaneously conscious of what is being experienced and "*how* I myself am experiencing this in an indivisible state" (Vygotsky, 1994, p. 342). At the center of both the literary and the sociocultural theory is the metaphor of a relationship between partners of equal importance: "the seeing together ... of what before had been seen in separations and held severally apart" (Dewey & Bentley, 1948, p. 112).

The parallels between the transactional literary theory and the Vygotskyan theory of individual and environment are striking, and both theories are important for this research. Nevertheless, I hesitated initially to apply to Second-Grade literacy a theory commonly associated with older readers and weightier texts. Yet all education practices are underpinned by some theory or other. As Mercer and Littleton (2007) state, this is so even if the theory is not acknowledged: "The idea that there can be educational policy and practice without a theory of some kind is simply nonsense. The choice is always between one theory or another, even if the theories involved are never clearly spelled out" (Mercer & Littleton, 2007, p. 65).

It is imperative that educators can argue for the soundness of their practice in terms of theory and expect others to do so as well. The transactional theory emphasizes the reader's relationship with the text and the importance of unique personal response. It does not state that the text is of no importance (Rosenblatt, 1978, pp. 12, 29, 31, 69) but suggests that we cannot predict what a reader will make of a text because the "generic reader" (Rosenblatt, 1978, p. xii) does not exist. The transactional theory of reading, traceable to both Dewey and Vygotsky, supports the possibility of readers' freedom to make meaning from texts, and make meaning of their lives through text.

Section Three: "It's Something You Can't Explain" (Gabriella)

The Need to Talk with Others

Students in both grades needed others, both peers and teachers, to build understanding of texts, but they needed not only to communicate in words but to construct understanding in relationship. The difficulty that two Third-Grade students had, each trying to audio record their thoughts alone, illustrated how vital it was that students talk with others. Without a partner to talk with, neither Carina nor Aaron could answer in a coherent way the question about the author's purpose: "Why did the author write this book?" (*Prince William*; Rand, 1992). Carina's words especially revealed that on her own she could not develop her ideas: "I don't know ... I don't know what to do here anymore."

The title of this section: "It's something you can't explain" comes from a Second-Grade Guided Reading lesson: *Wilma Rudolph: Walk, Run, Win,* (Cary, 2019). Unlike Carina, Gabriella had the benefit of being with others as she struggled to express herself. The interaction discussed below shows the potential of language realized in interaction, the importance of the teacher as a mediator of understanding, and the gradual process of thought finding expression. These are themes that recurred throughout the research project. Explicating the interaction between Gabriella and her teacher in terms of these themes generated an additional two perspectives on language. Rather than communication to produce answers, the interaction was a sequence of turns linked by responsive understanding. This is of course a Bakhtinian perspective; my analysis simply gave specific illustration of the "chain of utterances" (Morris, 1994, p. 5). Secondly, the social and linguistic domains were thoroughly integrated. To separate the social and linguistic aspects of interaction was difficult and the attempt began to appear meaningless. Through interaction with her teacher (Extract 31) Gabriella was able to explain what earlier she thought she could not: italicized "would" meant that Wilma Rudolph's mother was making a sure and certain promise that Wilma would recover from polio. Gabriella came to this understanding through interaction that illustrated two of Vygotsky's propositions concerning language. The first proposition is that the potential of language as a cultural and psychological tool is realized in interaction: "the semiotic capacity demands the presence of the social "other" (Branco & Lopes-de-Oliveira, 2017, p. 37). In very basic terms, talking with her teacher helped Gabriella construct understanding that she could not otherwise construct. Second, the interaction illustrated the relation of thought to speech as "an inner movement through a series of planes," one the inner "meaningful semantic aspect of speech" and the other the "external phonetic aspect" (Vygotsky, 1986, p. 218). Extract 31 demonstrates both propositions and shows the importance of the teacher as an unobtrusive mediator supporting the gradual emergence of understanding (Goodman & Goodman, 1990). Table II in Appendix I is an analytic representation of the entire interaction.

Extract 31 (reduced)

- Gabriella: I just have like I have a feeling like why they would make it long but I don't know how to explain it.
- Ms. Windsor: Why they'd make that word, like why you would um hold on to that word for a little bit?

Gabriella: Yeah ... it's something you can't explain.

Ms. Windsor: You might be able to explain it in Spanish, huh.

Ms. Windsor: Well, keep thinking on that, and keep thinking on that okay? Um, maybe, I wonder, cos it's something like, almost like this "you *will*" [emphasis added] with a lot of power and belief; it's going to happen.

Gabriella: Oh! I think I kind of know how to explain it!

Ms. Windsor: Yeah?

Gabriella: I think they made it long, like she said "*would*" like make it long because it's a promise if she would, she would do *anything* [emphasis added] for her for she could walk.

Gabriella initiated the interaction because she wanted to fully grasp the significance of a small but important feature of the written text: the italicized "*would*"--not a dictionary meaning but the "actualized meaning" (Morris, 1994, p. 4) in the specific context of *Wilma Rudolph: Walk, Run, Win.* The social interaction began in curiosity about language, was conducted through language, and enabled Gabriella to express her personal sense (smys*l*) of a word. Separation of the linguistic and social aspects would be artificial: Vygotsky's linguistic and social propositions operated in synchrony. The "continual movement" (Vygotsky, 1986, p. 218) of thought and word until the right words were found happened within social interaction.

What stood out in the language of social interaction was the relational quality. The teacher was responsive to her student, mediated her understanding of the story without explicit telling, and was an unobtrusive but essential mediator who gave the student time to construct her understanding, reading Gabriella's frustration ("I don't know how to explain it," "it's something you can't explain") well enough to calibrate the level of support needed: "You might be able to explain it in Spanish," "Keep thinking on that."

On another level, the relational quality was evident in the pattern of utterance and response. Each of Gabriella's turns (or utterances) was made in the expectation of a response. "I don't know how to explain it" waited for some sort of response, but not an answer, since she did not say "How do you explain it?" Neither did Ms. Windsor ask a question: "Can you explain it in Spanish?" that expected a yes/no answer. "You might be able to explain it in Spanish, huh" expected a response. Rather than communication set on producing answers, this interaction was a "chain of utterances" (Morris, 1994, p. 5) linked by responsive understanding. The interaction between Ms. Windsor and Gabriella showed the integration of the social and linguistic domains, and the relational nature of language use or languaging. Dewey (1958) expressed this exactly: "Language is specifically a mode of interaction of at least two beings, a speaker and a hearer … it is therefore a relationship" (p. 185).

Talking with others did not necessarily solve problems or result in certainty. The interaction of *Giant Pandas* (Gibbons, 2002) was one such example. Second-Grade discussion of the panda problem reached no consensus. Allen's question remained unanswered, "worth some more research" in Ms. Windsor's words. Despite the lack of any resolution, the value of engaging in "socially purposeful sense-making" was evident (Aukerman, 2008, p. 56). As students engaged with each other, the emergent form of their interaction showed dialogic features important for students to experience. The teacher's invitations to individual students to share their personal perspective set the tone for a pluralistic approach to the problem: "Say it in *your* [emphasis added] words, I'd love to hear what you have to say about that." They listened to different explanations without passing judgement, experienced uncertainty, and had to accept that the problem remained open and unresolved. On this occasion an explanation was beyond the

students' reach, but they had used the resources of language to search for understanding, and experienced "the capacity of language to produce new meaning" (Morris, 1994, p. 5).

The Relation of Thought to Speech

It was common for students to express their thoughts-in-the making in unpolished speech that was itself under construction. This was no impediment to building understanding. A single speaker, with his "initial stabs at the expression of an idea" could initiate interaction that generated new meaning (Smagorinsky, 2008, p. 10). In *The Tree Lady* (Hopkins, 2013), the two words "sand town" (Rafael's approximation for "desert") drew attention to the different geographical settings of Kenya and San Rafael, a contrast that was central to the meaning students would subsequently build together. Rafael's approximate and expressive usage generated interaction from which the entire Third-Grade class would benefit.

That students were able to "generate, explore, and challenge ideas" (Research Question 2) in rough and ready language was an interesting finding but it is not surprising in the context of Vygotsky's theory of language. Vygotsky (1986) maintained that there was "no rigid correspondence between thought and speech" and thoughts could not "emerge fully formed" (pp. 222, 249). Third Grader Jorge's words expressing his interpretation of *Pinduli* (Cannon, 2004) were an example of this. An original idea worthy of discussion emerged gradually: "Um, what I realized … like … is … she was, she was, she was trying to get … she was helping her mother find food so they don't um starve to death" (Extract 6).

Vygotsky's proposition calls into question the sense of always asking students to speak in complete sentences and makes practices such as "cold calls" questionable. Removing the expectation for perfect precise speech made students more likely to participate as Martina did in *The Paper Boy* (Pilkey, 1996):

This is a connection. So my dad used to um let me, because, like um the mailbox was like over across the street from my neighbors because, and then so I used to drive my, I used to get on my bike and drive over there and get the mail and come back and give it to him but it's not like the same as the paperboy, but I used to do it.

Rohann's contribution at the end of *Giant Pandas* (Gibbons, 2002) illustrated, as Jorge's words did, that expressing thoughts-in-the making in speech-under-construction was no impediment to building understanding. Rohann's thought developed as he spoke, or more accurately because he spoke. "Maybe, the, well, maybe mom pandas, doesn't, can't ... keep both of them safe from predators because one of them is going to like wander off um from the mom if like, if they need water?" (Extract 44) Through hesitant, colloquial speech, with gaps and reformulations, Rohann raised the idea that there was a reason for the mother panda's behavior: one cub was allowed to die because it would simply not be possible for the mother to protect two cubs. Rohann replaced "doesn't" with "can't" as his thinking developed and "found (verbal) form" (Vygotsky, 1986, p. 219). He was engaged in the difficult business of turning inner speech (for himself) into external speech for others (Vygotsky, 1986).

The distinction between the two is important to understand because it has ramifications for classroom practice. Inner speech for oneself is not speech minus sound but "an entirely separate speech function" with its own "peculiar syntax" that "appears disconnected and incomplete" (Vygotsky, 1986, pp. 215, 244, 236). Turning inner speech into external speech for others is not a matter of "vocalizing inner speech" but transforming the structure of inner speech into "syntactically articulated speech intelligible to others" (p. 249). Therein lies the difficulty.

Vygotsky's explanation of unrehearsed speech, with its unformed syntax, gaps, and restarts, as a necessary precursor to generating meaning increases adds to an appreciation of what children experience when they are invited to speak.

An additional point deserves to be made about the ending of Rohann's utterance. He had presented his idea as but one possibility, and the rising intonation of his closing words ("if they need water?") invited others to pick up the train of thought. In Bakhtin's terms he was looking for a response to his utterance as if it were just one link in a chain of making meaning (Morris, 1994). This invitational aspect was itself a dialogic feature. The teacher's response commended other dialogic features of his utterance: the fact that the idea was different, that it was *his* idea, and that he had shared it publicly:

Yeah, that's a really good point. Actually, Rohann, you brought up a different part of that idea so I'm glad that you shared, shared your idea of not being able to keep them both safe from predators; that's a whole other idea

Dialogic Features of Expressive Comprehension-as-Sensemaking

Expressive comprehension-as-sensemaking combined with social interaction at times exhibited some of the characteristics of dialogue. Dialogue was not explicitly mentioned in my research questions, and before I conducted research, I had not predicted that answers to the second research question would point in the direction of dialogue. The second research question asked:

Q2 What opportunities are available in the interaction of those literacy events for students to use language as a tool to generate, explore and challenge ideas?

One answer to that question is that when students engaged in joint problem solving, shared diverse ideas, responded without evaluation, and suspended certainty, opportunities arose to generate, explore and challenge ideas. The key idea of dialogue, as I use the term, is "to suspend certainty, never allowing one voice (this includes any internal or external voice that is employed by an individual) to completely take over or consume others" (White, 2016, p. 27). My use of the term is quite narrow compared to the meanings dialogue holds in the research of scholars including Alexander (2022), Bakhtin, (1981), Mercer and Littleton (2007), Nystrand (1997), and Wegerif (2011). White's (2016) definition does however serve my purposes.

The Second-Grade interaction during *Molly the Pony* (Kaster, 2012) showed a willingness to listen to others and in *Giant Pandas* (Gibbons, 2002) students suspended certainty. In interaction with the teacher students shared different interpretations of *The Gingerbread Girl* (Ernst, 2006). I also observed many occasions when students were not open to others' interpretations. The interaction around *How Chipmunk Got His Stripes* (Bruchac & Bruchac, 2003) was an example of this. Interaction had a competitive tone, as if comprehension were some sort of race, and I noted that "On a continuum of listening and responding to others respectfully they would be in the beginning stage."

The tendency in an era of standardized measurement is to look at incomplete development from a deficit point of view, that is, at what children cannot yet do. My comment bears traces of that tendency. A better approach, in keeping with Vygotsky's understanding of development, would be to use a continuum sensitive to what children are beginning to do with others in a context that supported development. Expressive comprehension-as-sensemaking combined with social interaction was such a context, where students took steps towards dialogue. Certainly, the Vygotskyan idea of teaching leading development would support the use of a continuum for two purposes: first to attend to what a student was beginning to do in interaction, and then to plan instruction geared to the child's emerging abilities not the matured functions. A possible future research project might be to create a continuum or oral participation.

The ways of talking and working together in school have far reaching consequences. In Dewey's (1916) words:

In directing the activities of the young, society determines its own future in determining that of the young. Since the young at a given time will at some later date compose the society of that period, the latter's nature will largely turn upon the direction children's activities were given at an earlier period. (p. 41)

In scholarly literature the argument is made that if society is to function as a democracy, where decisions are made "on the basis of informed dialogue among its members" then, early on in their education, children should begin to learn the skills needed for participation in democracy (Wells, 2007, p. 265). This argument is also made by Alexander (2020), Biesta (2006), and Dewey (1916). The ways of talking and working together in school are part of that learning. It is suggested that learning a dialogic orientation may have far reaching consequences, shaping an "adult way of being in the world" that is open to and respectful of different perspectives (Wegerif, in press).

The views expressed by education scholars and the perspectives of the teachers in this study were, it turned out, quite similar. Both teachers spoke about the need for more talk in the classroom. Ms. Spencer wanted her students to express ideas and opinions more. Ms. Windsor was concerned that with the elimination of social studies, because of the school's turnaround status, there were fewer opportunities for talking with students about important issues in society. In her view, issues of racial and social justice should not remain outside the walls of the classroom. She spoke of these matters not as abstractions but in very contemporary terms and made a similar argument to the one made by Biesta, (2006), Wegerif (in press), and Wells (2007): the discussions students experience in the classroom influence the kinds of citizens they become as adults. Ms. Windsor spoke passionately about this school-to-world connection:

With George Floyd's murder and the Black Lives Matter movement and the things people are talking about in life, in the world, it's not a question, we have to be having those discussions, we have to be and make sure our books initiate powerful and difficult discussions. We have to be having those discussions, so they become caring, active citizens and feel connected to their community. That's why we're in the state we're in with our racist culture and climate in the United States. (Ms. Windsor personal communication, May 23, 2021)

Section 4: "I Told You, Only One Survives" (Allen)

Emotional Experience is Integral to Learning

For Vygotsky, the relation between student emotion and educational practice was of critical importance. In a lecture he delivered at Gomel's Teacher's College he told the assembled student teachers, "It is precisely the emotional reactions that have to serve as the foundation for the educational process" (Vygotsky, 1926/1997, p. 107). In this study, there were several ways emotions might "serve" or support students' meaning making.

Sources of Emotional Response

Emotion Generated by Text

In Interactive Read Aloud, emotion generated by texts was a catalyst for joint meaning making. Three familiar lessons, briefly revisited, illustrate the various ways in which emotion was integral to making meaning of texts. Shared emotional reactions were the foundation of joint problem solving in *Beauty and the Beak* (Rose & Veltkamp, 2019). The details of the bald eagle's injury had already been described in the book when Ms. Windsor made time for her Second-Grade students to respond emotionally in the social context. As students described the eagle's problems breathing, eating, flying, and preening, emotions of concern and empathy surfaced and were shared--"socially distributed"--amongst the group (Johnston, 2019, p. 37). Socially shared emotions supported the imaginative thinking that was soon to be undertaken: how to make an artificial beak for the disfigured eagle.

Vygotsky (1926/1997) maintained that teaching devoid of emotion led to "disengagement from the world" and declared that whatever the subject, teachers must "take care to stimulate the particular activity emotionally" (pp. 106, 107). While this could describe what the teacher did in the lesson *Beauty and the Beak*, more accurately, emotions themselves, stimulated by the narrative and socially distributed served as the foundation for imaginative problem solving.

A single student's powerful emotional response to *Giant Pandas* (Gibbons, 2002) was the foundation of a joint search for a reason for the inexplicable. Allen (Second Grade) did not keep private his mixed emotions--anger, sadness, and incredulity--but expressed them spontaneously. Allen's emotions and the moral judgement they contained were taken seriously by the teacher. Because of her uptake, they directed the course of the rest of the lesson. The students approached the problem reasoning and feeling simultaneously, exhibiting what Vygotsky (1987) termed "a unity of affective and intellectual processes" (p. 50).

In both lessons the teacher's participation was critical. She incorporated students' emotional reactions as a natural part of the social practice of literacy. Students' engagement with text grew and the literacy event became personally meaningful.

In the *Prince William* (Rand, 1992) lesson, the story aroused various emotions: concern, delight, sadness, worry, and joy, emotions that were elaborated in social interaction as Third-Grade students shared their own experience of the fragility of small beings, baby cousins born early and (like the seal) incubated for a time. Students' emotional engagement with the text, combined with their subjective associations, gave new significance to their earlier experiences. This quite complex emotional experience led to a period of imaginative engagement with possibilities beyond the text. Could the seal still be alive? The teacher orchestrated the interaction and participated as a fellow inquirer as students engaged in imaginative inquiry into what could be, adopting "a stance of openness to (a world) of possibilities" that had its beginning in emotional response (Lindfors, 1999, p. 4). Emotional experience was integral to learning in these literacy events and in each the teacher had an important role.

Perezhivanie

Emotion was a similarly vital resource when an individual student related to an aspect of text that was personally significant for her/him, though perhaps not to anyone else. Vygotsky posited that the social environment had only relative influence on any individual. Regarding literacy, then, we should expect students to have different interpretations and different responses to aspects of the text. When Martina, Xavier, and Jorge heard the story *The Paper Boy* (Pilkey, 1996) they heard the same narrative and probably would have given the same answers to literal questions such as "What did the boy do after he completed his round?" But each formed a different personal meaning around the concept of "responsibility." For Martina, responsibility was riding her bike through the neighborhood to the community mailboxes. To Xavier, responsibility was his mother getting up for work at midnight, while for Jorge, responsibility was the relationship he had with his dog and his bird. While the literal details of the story would fade,

the personal connections made to the concept of responsibility would likely remain significant over time. These understandings of responsibility were not lifted from the story *per se* but grew from each student's emotional experience or perezhivanie of the story.

Historically, perezhivanie has not received the attention paid to sociocultural concepts such as the social genesis of mind, internalization, or the zone of proximal development (Fleer & González Rey, 2017, p. 1). Yet the concept is essential to an understanding of Vygotsky's thinking about the relative influence of the social environment and the unique subjectivity of the individual:

The emotional experience (perezhivanie) arising from any situation or from any aspect of his environment, determines what kind of influence this situation or this environment will have on the child. It is not any of the factors in themselves (if taken without reference to the child) which determines how they will influence the future course of his development, but the same factors refracted through the prism of the child's emotional experience (perezhivanie). (Vygotsky, 1994, pp. 339-340)

The concept of perezhivanie was a tool that crafted a better understanding of students' experience of Interactive Read Aloud. Students in the same literacy environment did not experience a book in the same way; the components of the story were refracted through the perezhivanie of different readers. In Maxine's mind *The Gingerbread Girl* (Ernst, 2006) could *almost* be a resurrection story; to Elijah (also in Second Grade) it had elements of a daring rescue story. Aaron, because he spoke Swahili, had a unique personal connection to *Wangari Maathai*: *The Woman Who Planted Millions of Trees* (Prévot, 2017). When the text narrated the substitution of the English (Jewish) name *Miriam* for Wangari's Kenyan name, Third-Grade Aaron immediately responded: "I have an African name." The detail of the changed name was

refracted through the prism of Aaron's emotional experience. The rising intonation of his utterance invited a response; his perezhivanie placed him in dialogue with the text. The brief interaction, captured in Extract 8, points to the importance of perezhivanie as a dynamic experience, not solipsistic but making new subjective resources available.

In the standardized testing culture, reading is increasingly conceptualized as a matter of finding meaning in the text (Aukerman & Schuldt 2017). Perezhivanie, because it emphasizes the unique subjectivity of the students, and foregrounds what a child brings to the social environment, provides a theoretical basis for a description of reading as human interaction in meaning making (Hoffman, 2017).

The Social Situation of Development

The image of the refracting prism and the proposition that the influence of the environment is relative might seem in conflict with the concept of the social environment as the source of development. If the child is relating to only some factors of the social environment, how influential can the environment be? Is relating to those factors in itself developmentally significant?

The question can be resolved when it is remembered that the social environment is also the place where the "rudimentary" forms of the child interact with the mature forms of the adult. Teachers played an essential role ensuring that the student's responses to something in the text-her "rudimentary" or present relation to "some factors" of the text--became developmentally significant. The interaction of Ms. Spencer and Lexie was one illustration of this. Lexie's somewhat negative view of herself as the opposite of the energetic paper boy was transformed by her teacher, who celebrated her student's growth in responsibility over the semester. Gabriella's emotional experience while reading *On the Job* also illustrated the importance of the teacher. Her experience of the book surfaced various emotions: love and concern for her grandfather, a sense of responsibility and an incipient sense of her potential. The concept of perezhivanie as a reflecting prism is highly applicable to this event. Gabriella (Second Grade) did not reflect the lighthearted, humorous tone of the book and she related specifically to the "carer" (the teddy bear repairer). In interaction, her perezhivanie became developmentally significant. The social environment became the source of development through the interaction with the teacher, who built on the first tentative expression: "I'd like to be able … to be a carer … that helps people" and after a period of listening and responding sensitively, affirmed Gabriella's potential: "I think that's amazing and I think you would be … you would do very well. I know you would do very well, in that job."

Emotion and Engagement with the World

From Vygotsky's perspective, emotions were indispensable in education, essential for a life worth living, and necessary for full engagement with the world. In the lecture delivered at Gomel's Teacher's College, where he declared that emotional reactions must serve as the foundation for the educational process, he characterized the education of pre-revolutionary times, rational and intellectual to excess, as lifeless and uninspired, and described its consequences as "frightful hardheartedness, an utter absence of feeling" (Vygotsky, 1926/1997, p. 107). Uninspired teaching, he said, "diminished every vital relationship to the world" and accounted for students' disengagement from the world (Vygotsky, 1926/1997, p. 107). The connection Vygotsky made, perhaps one hundred years ago (the exact year of the lecture is unknown) between education, emotion, and engagement with the world has enduring significance. Today the catastrophic effects of human-made climate change are daily brought home to us, as floods,

fires, and drought ravage the planet. We can no longer disengage from these catastrophic events and their causes. The gross inequalities of housing, food, and education should equally engage our emotions and provoke a vital connection with others from whom we too easily disengage. Vygotsky drew very clear connecting lines between education, emotion, and full engagement with the world. His wider vision of education as equipping children and young people to "live 'in' and 'with' the world" has vital relevance today (Biesta, 2022, p. 3).

The relation between reading, emotion, and engagement with the world was plainly visible in the Second-Grade Guided Reading lesson *Wilma Rudolph: Walk, Run, Win* (Cary, 2019). Gabriella, reading about the childhood of the Olympic champion, was shocked by the illustration of Wilma seated at the back of a segregated bus. She then recalled other texts her class had read about changemakers in the Jim Crow era. There was a synergy between three components of the reading experience: her emotion, her recollection of earlier reading, and her connection to the "real world" where "they changed the law because people stopped riding it."

Reading is not a matter of absorbing facts but also of understanding their implications. Students need time to absorb, consider and feel the implications of what they read. The essential connection between reading, emotion, and engagement with the world is asserted by Hannah-Jones, Pulitzer Prize winning journalist and creator of the 1619 Project. Referring to the emancipation of enslaved persons she writes:

The way we are taught this in school, Lincoln "freed the slaves," and then the nearly four million people who the day before had been treated as property suddenly enjoyed the privileges of being Americans like everyone else. We are not prodded to contemplate what it means to achieve freedom without a home to live in, without food to eat, a bed to

sleep on, clothes for your children or money to buy any of it (Hannah-Jones, 2020, pp. 49, 50).

Biesta (2022) highlights the importance of the kind of education Hannah-Jones imagines, education that (re)directs students' attention to the world so that they may engage with the world, contribute to it, and change it. Biesta (2022) contrasts, as Vygotsky did, a purely curriculumcentered education with an education that has a vital interest in what students will do with what they learn:

Just trying to get curriculum content into children and monitor retention and reproduction, without any concern for who they are and what they might do with all the content they are acquiring misses the existential point of education ... and therefore the point of education altogether. (p. 3)

The Experience of Wonder

Rachel Carson (1956), marine biologist and conservationist, defined the sense of wonder as "the recognition of something beyond the boundaries of human existence" (pp. 49, 50). In Chapter IV I presented extracts in which students from both grades wondered about the natural world: seals, pandas, penguins, dying species, bald eagles, the moccasin flower that lives for more than a century, bees with baskets on their back legs. Wonder and wondering were intertwined, emotion and cognition interdependent. Amazement that penguins once flew through the air led to questions: How did their wings turn into flippers? How did they get the idea to hunt for food in the ocean? In the Second-Grade Guided Reading lesson *Feathers: Not Just for Flying* (Johnson, 2019) Gabriella was incredulous when she read about the desert sandgrouse and craved an explanation for the extraordinary: "But why do, instead of living in a desert why don't they live somewhere else where they don't have to fly fifty miles to find water?" The challenge, Carson (1956), wrote, was to preserve the sense of wonder into adulthood, not just so that adults would continue to experience the thrill of awe, but because the emotion was the ground for intellectual exploration:

Once the emotions have been aroused--a sense of the beautiful, the excitement of the new and unknown, a feeling of sympathy, admiration, or love--then we wish for knowledge

about the object of our response. Once found, it has lasting meaning. (pp. 49-50) Vygotsky (1987) similarly believed that intellectual exploration began in emotion experienced in connection with some aspect of reality: "Every idea contains some remnant of the individual's affective relationship to that aspect of reality which it represents" (p. 50). As Carson did, Vygotsky attributed special importance to the sense of wonder. Referring to the ancient Greek belief that philosophy began with wonder Vygotsky (1926/1997) expanded: "Psychologically, this is true with regard to all knowledge, in the sense that every bit of new knowledge must be preceded by a certain sense of craving" (p. 107). Wonder inspired and then sustained the search for understanding: "feelings such as curiosity, interest, wonder, and the like ... guide intellectual activity in the most explicit fashion" (Vygotsky, 1926/1997, p. 109).

In Chapter IV, a number of extracts illustrated the power of the teacher's emotion to mediate learning. During *Giant Pandas* (Gibbons, 2002) Ms. Windsor shared her curiosity with her Second-Grade students: "Why did pandas become vegetarian?" During *Beauty and the Beak* (Rose & Veltkamp, 2019) she expressed her sadness: "It hurts my heart to think about somebody being that cruel to an animal on purpose." From the teacher's standpoint, Vygotsky (1926/1997) wrote, "there can be no unacceptable or undesirable emotions" (p. 105). Ms. Windsor then drew children into discussion, showing that emotion was a resource for making meaning. Without

curiosity they would not find out why pandas spend sixteen hours each day eating. Without experiencing sadness and concern for the eagle they would not design the prosthetic beak.

The Honey Makers (Gibbons, 1997a) lesson showed students' construction of new knowledge was mediated by the teacher's expressions of awe and amazement. Following Ms. Windsor's exclamations: "Look at that! Wow! That is a *lot* of pollen! How does she even fly?" and in response to her exuberance during the video, Abraham constructed a hypothesis, Allen searched for new vocabulary, and Asher constructed new knowledge about bees and their relation to other animals.

Vygotsky and Carson both had an acute sense of the relation of emotion to knowing and the desire to know. Carson (1956) wrote:

I sincerely believe that for the child and the (adult) seeking to guide him, it is not half so important to know as to feel. If facts are the seeds that later produce knowledge and wisdom, then the emotions and the impressions of the senses are the fertile soil in which the seeds must grow. (p. 49).

Research from the field of social and affective neuroscience, cited in the Literature Review, confirmed the interdependence of emotion and cognition (Duncan & Barrett, 2007; Hoemann & Barrett, 2019; Storbeck & Clore, 2007). Immordino-Yang (2011) asserted that all learning experiences involve an emotion component: "even the driest, most logical academic learning cannot be processed in a purely rational way" (p. 101). Vygotsky, Carson, and the findings from this study point to the power of one specific emotion--wonder--to inspire and sustain the search for understanding.

Implications

This study focused on what students actually do in Interactive Read Aloud and, to a lesser extent, in Guided Reading. It showed that students found emotion and lived experience to be important resources for making meaning when reading. When students expressed their emotions and shared their lived experience in the social environment, they created a context that supported all students in constructing understanding.

Understanding emotion and lived experience to be central to reading, and acting on this understanding, would make Interactive Read Aloud more participatory and more meaningful to students. The finding regarding what students actually do and need to do implies a necessary shift from establishing the single meaning of the text to greater openness to students' feelings and ideas, and to exploration of multiple possible meanings (Aukerman & Schuldt, 2017).

Openness and exploration were achieved through a pedagogy of expressive comprehension-as-sensemaking combined with social interaction. This was most evident in Second-Grade Interactive Read Aloud. Critics of this approach might ask why the teacher should allow all sensemaking to be aired, and why she should respect multiple possible meanings. Clearly, embracing this form of pedagogy implies adopting a broader set of outcomes, arguably more valuable than talking and thinking confined to "the four corners of the text" (Calkins et al., 2012, p. 39). Outcomes would include an awareness that multiple perspectives exist, and that one's own perspective can change through engaging with others. Extending this line of thinking, some scholars suggest that when children learn, early on, to be open to and respectful of different perspectives, they acquire the skills necessary for adult participation in democracy (Alexander, 2020; Biesta, 2006; Dewey, 1916; Wells, 2007). The findings of this study also included the interdependence of emotion and cognition, a finding that has far reaching implications for education in general. Emotion was a catalyst for the exploration of ideas, and for problem solving. In addition, the teacher's emotions of curiosity and wonder mediated learning. Unfortunately, the ancient assumption that emotion and rationality are opposed to one another and compete for control of our behavior still holds sway today. This harmful folk intuition is not supported by research in neuroscience (Hoemann & Barrett, 2019). It has potentially damaging consequences for students, privileging the "voice of decontextualized rationality" (Wertsch, 1990, p. 122). Lopez et al. (2019) make a similar case that excluding affective-cultural knowledge has a negative effect on academic achievement.

The interdependence of cognition and emotion has special implications for literacy. If reading is to be consequential in the development of students as human beings engaged in the world, then students must respond fully to texts, emotionally as well intellectually (Janks, 2010). Perezhivanie, because it foregrounds the unique subjectivity of students, and emphasizes what each brings to the social practice of Interactive Read Aloud, might be the start of a dialogue between the student and the text, a meaningful engagement in which the content, the ideas and the very words of the text, are considered in light of what the student thinks and knows. Aaron's engagement with *Wangari Maathai* (Prévot, 2017) began in just such an experience. The findings strongly support moving beyond the reductive conceptualization of reading as finding meaning only in the text to a recognition of the value of transactions between students and text (Aukerman & Schuldt, 2017). All of this implies a conceptual shift to understanding reading as human interaction in meaning making (Hoffman, 2017).

From Vygotsky's perspective, emotions were indispensable to full engagement with the world. In reading, when students respond at an emotional level, they are more likely to realize

the import of what they read and make meaningful connections to the world at large. This implies teachers' valuing emotion as important, making time for students to reflect on the import of the words they read, and perhaps, as Hannah-Jones (2020) puts it, "prodding" students to contemplate the meaning of a text.

This research included several important findings about language that have implications for literacy teaching and for education in general. A common assumption is that language is something everyone possesses, a tool used to funnel thought, an "outer expression of inner states" (Dewey, 1958, p. 169). This research problematizes that assumption. Good ideas did not emerge fully formed and well-articulated, but slowly, hesitantly, with reformulations, gaps, grammatical errors and syntactic twists and turns. Good ideas emerged in speech that was exploratory in nature and not a performance.

It is essential that every student has the opportunity to speak for the simple reason that unless we speak, we cannot be sure what we think. Turning inner speech (for oneself) into external speech (for others) is a difficult process because there is "no rigid correspondence between thought and speech" (Vygotsky, 1986, p. 249). Forming small groups for discussion, so that everyone has an opportunity to speak is especially important for students whose first language is not English and who may feel more comfortable speaking in the smaller group (Yoon, 2007).

This research also established that to get beyond their own understanding, students needed to talk with others. This was not a matter of "weaker" students needing support from more competent peers who could explain a phenomenon or had superior problem-solving skills, although this is how social interaction is sometimes misconstrued: a coming together of "selfsufficing" individuals who share "observations and ideas that have prior and independent existence" (Dewey, 1958, p. 169). Students frequently had no prior, independent ideas when they began to discuss a topic. Depending on one another, because individually they were at a loss, created a context where new ideas emerged.

The implication is clear. Because every student gains from discussion, it is essential to bring all students into the meaning making and sharing processes. Dewey (1958) wrote of the outcome in words that echo Vygotsky's concept of internalization: "If we had not talked with others and they with us, we should never talk to and with ourselves" (p. 170).

Limitations

This research was limited to remote observation of hyflex literacy instruction, meaning teachers were teaching students at home and in the classroom simultaneously. Observation was limited to elementary students at the Third-Grade and Second-Grade level. Both classes were within the same school. I was not able to engage with students in the classroom or observe them in the classroom. My observations were limited to what could be seen on my computer screen. Audio recordings were a major source of data but my reliance on audio recordings can also be seen as a limitation.

The hyflex delivery of instruction meant that the Interactive Read Aloud and Guided Reading lessons were not typical lessons, because the community of learners was split: some students were together in the classroom and others were isolated at home. I recorded and analyzed interaction that was very different from the usual classroom interaction. The findings are specific to a unique context: hyflex classrooms operating in pandemic.

Early on when my research proposal was approved by the Institutional Review Board (Appendix M), I had concerns that pandemic-imposed constraints might limit significant

findings. This has proved not to be the case. Significant findings emerged through the close analysis of discourse within a sociocultural framework.

Significance

This study is unusual because it took place during the Covid pandemic. The observations of hyflex instruction resulted in findings that may even be unique--discovering what eight and nine-year-old students can achieve in Interactive Read Aloud and (to a lesser extent) Guided Reading when the classroom is divided into two communities, one online and one in the physical classroom.

The study differs from many sociocultural studies by foregrounding aspects of Vygotsky's work that have often been overlooked in sociocultural research. These include his thinking about the individual and the environment, the importance of emotion in making sense of experience, and the inseparability of cognition and emotion. These were the very concepts that ensured Vygotsky's work was banned in the Soviet Union for forty years and they remained obscured when limited representations of his work reached the West. In this research the set of familiar sociocultural concepts expands to include these relatively unfamiliar aspects of Vygotsky's thinking.

The sociocultural framework of this study is strengthened by microanalysis of discourse. This level of analysis shows patterns of interaction, the kinds of discourse moves, and the function of utterances. It is significant that new speech "functions" emerged, additional to those identified by Kovalainen and Kumpalainen (2005, 2007). The new "functions" (I prefer to use "purposes") include the expression of emotion, imagining, and changing perspective while speaking. This study is significant in its unique context, its foregrounding of frequently neglected aspects of Vygotsky's work, and in the combination of a sociocultural perspective with microanalysis of discourse.

Future Research

The tendency in an era of standardized measurement is to look at incomplete development from a deficit point of view, that is, at what children cannot do. I would like to immerse myself in research on oral language development, become familiar with existing continuums of oral language development, such as the First Steps Oral Language Developmental Continuum from Western Australia, and from there attempt classroom-based empirical research on language use in the elementary classroom. I am interested in what children can do with language in different contexts, and what expectations are made in different contexts, such as math, science, art, as well as the contexts I have focused on in this study: Interactive Read Aloud and Guided Reading.

Another area of interest is the language used by teachers to talk about students' academic achievement. How far has the discourse of evidence-based practice been internalized? How do teachers understand the concept of an intervention? Is the concept of intervention, borrowed from the medical field, an appropriate concept for education? Do teachers think so? How do teachers use the language of measurement? Has the discourse of measurement, been internalized? What language is used to share information with parents at parent teacher conferences? What language is used in professional development? These questions deserve investigation.

A third possible research project would be to do a cross-cultural study of literacy practices in elementary classrooms in New Zealand and the United States. Historically, the 268

whole-language approach has been embraced in New Zealand, but that has recently changed. In both countries a phonics-based approach to the teaching of reading has taken hold. Both countries now use standardized testing. Finding the similarities and differences between the literacy practices of two classes comparable in as many respects as possible, would be a worthwhile undertaking.

Final Reflection

Research is not only a study of a phenomenon but also a study of the researcher's own views (Gutierrez & Orellana, 2006). The research questions I asked early on reflected my understanding of making meaning, of language and of emotion when I began this study.

I understood opportunities as structural, in a sense, places or niches in the edifice of a lesson where the teacher might pause so that students might make meaning of texts. Perhaps not consciously, but at an unconscious level I thought of opportunities in that way. But the opportunities were not like that. Now I think of opportunities to make meaning in terms of relationships and response.

Wegerif (2011) wrote that "Learning to think involves responding to the call of others" (p. 189). In the context of reading, "others" could be the call of real voices in the classroom or online, voices within the text: a character such as a seal, an eagle, a boy in Brazil, or the voice of the narrator in *Moira's Birthday* (Munsch, 1987). Students responded to one another out of a desire to get beyond self and the limits of their own knowledge (Lindfors, 1999). They responded to characters within the text out of empathy or affection. Through response they made meaning.

I learned that in teachers' responsiveness to students as persons there was opportunity to make personal meaning of lived experience. This research took place during the Covid pandemic, which affected all the participants. They did not escape the trauma and painful losses of the pandemic year. In this context, it was essential that teachers were in relationship with students. The words of Fleer and González Rey (2017) are apposite: "The relevance of the adult for the child's development is precisely the 'emotional richness of their communication': the adult is never a mere support of operational activity with objects" (Fleer & González Rey, 2017, p. 148). It is not necessary to revisit lessons and lengthy extracts to provide "evidence" that teachers responded to the call of students (Wegerif, 2011). It is enough to recall the interactions of Lexie, Allen, Rafael, Gabriella, Abraham, Xavier, Asher, Luna, and Rohann with their teachers. Those interactions help me understand what Dewey (1958) may have meant when he wrote that language is a relationship, and that "the community of partaking is meaning" (p. 185).

At the start of this journey, I asked about opportunities to "use language as a tool to generate, explore, and challenge ideas." "Tool" no longer seems the right metaphor. A tool is something designed with a specific purpose in mind, something used to get a job done. If speech is a tool, it is a tool that needs to be shared, passed around, its potential discovered in use. Students did generate and explore ideas through speech, but through a back and forth, back and forth movement between thought and speech (Vygotsky, 1986). In that movement, nothing was predetermined. Vygotsky (1986) wrote: "Thought and word are not cut from one pattern … words cannot be put on by thought like a ready-made garment" (p. 219). I understand, thanks to listening to Third and Second Graders, that speech is less like a tool to hammer out thought, and more like a garment woven and rewoven again in each interaction, until eventually the garment is finished and ready to clothe thought.

About emotion, the focus of my third question, I found out more than I had hoped to discover. Of those discoveries, the one that most excites me is the potential of emotion to inspire active engagement with the world, both the natural and the social world.

The catastrophic effects of human-made climate change are daily brought home to us. Today the devastation of Puerto Rico. Last week the floods in Pakistan. We can no longer ignore these catastrophic events and their causes. It is all too easy, however, to feel hopeless and helpless and to want to disengage from these disasters. Vygotsky, one hundred years ago, offered a way out of the sluggishness of despair. He proclaimed the connection between education, emotion, and full engagement with the world, maintained that the emotional reactions were foundational to education and declared that in the hands of the teacher, there is no "bad" emotion that cannot be developed for good (Vygotsky, 1926/1997).

Leaving with that vision makes this journey worth the struggle.

REFERENCES

- Aardema, V. (1975). Why mosquitoes buzz in people's ears. Puffin.
- Alexander, R. J. (2020). A dialogic teaching companion. Routledge.
- Alexander, R. J. (2022). Education in spite of policy. Routledge.
- Allard, H. G. & Marshall, J. (2014). *Miss Nelson is missing*. Houghton Mifflin Harcourt.
- Aukerman, M. (2006). Who's afraid of the big "bad answer"? Association for Supervision and Curriculum Development, 64(2), 37-41.
- Aukerman, M. (2007). When reading it wrong is getting it right. Shared evaluation pedagogy among "struggling" fifth grade readers. *Research in the Teaching of English*, *42*(1), 56 -103.
- Aukerman, M. (2008). In praise of wiggle room: Comprehension in unlikely places. *Language Arts*, 86(1), 52-60.
- Aukerman, M. (2013). Rereading comprehension pedagogies: Toward a dialogic teaching ethic that honors student sense making. *Dialogic Pedagogy: An International Online Journal*, *1*, A1-A31.
- Aukerman, M., & Schuldt, L. C. (2017). Bucking the authoritative script of a mandated curriculum. *Curriculum Inquiry*, *47*(4), 411- 437.
- Aukerman, M., Schuldt, L. C., Aiello, L., & Martin, P. C. (2017). What meaning-making means among us: The intercomprehending of emergent bilinguals in small-group text discussions. *Harvard Educational Review*, 87(4), 482 - 511.

Bakhtin, M. M. (1981). The dialogic imagination. The University of Texas Press.

- Barbalet, J. (2006). Emotion. Contexts, 5(2), 51-53.
- Barnes, D. (1975). From communication to curriculum. Boynton/Cook Publishers.
- Bartholo, R., Tunes, E., & Tacca, M. C. V. R. (2010). Vygotsky's and Buber's pedagogical perspectives: Some affinities. *Educational Philosophy and Theory*, *42*(8), 866-880.
- Bartlett, L. (2005). Identity work and cultural artifacts in literacy learning and use: A sociocultural analysis. *Language and Education*, *19*(1), 1-9.
- Bartolome, L. I. (1994). Beyond the methods fetish: Toward a humanizing pedagogy. *Harvard Educational Review*, 64(2), 173-194.
- Bass, J. V. (2019). On the job. Heinemann.
- Becker, E. S., Goetz, T., Morger, V., & Ranelluci, J. (2014). The importance of teachers' emotions and instructional behavior for their students' emotions: An experience sampling analysis. *Teaching and Teacher Education*, 43, 15-26.
- Bell, M. A., & Wolfe, C. D. (2004). Emotion and cognition: An intricately bound developmental process. *Child Development*, 75(2), 366-370.
- Berger, M. (1994). Oil spill. Harper Collins Children's Books.
- Bernstein, B. (1971). Class, codes, and control: Vol.1: Theoretical studies towards a sociology of language. Routledge.
- Bernstein, B. (1973). Class, codes, and control: Vol. 2: Applied studies towards a sociology of language. Routledge.
- Bernstein, B. (1975). Class, codes, and control: Vol. 3: Towards a theory of educational transmissions. Routledge.
- Bernstein, B. (1990). Class, codes, and control: Vol .4: The structuring of pedagogical discourse. Routledge.

Biesta, G. J. J. (2006). *Beyond learning: Education for a democratic future*. Routledge.Biesta, G. J. J. (2022). *World-centered education*. Routledge.

- Bikner-Ahsbahs, A., Knipping, C., & Presmeg, N. (Eds.). (2015). Approaches to qualitative research in mathematics education: Examples of methodology and methods. Springer International Publishing.
- Bingham, C. (2004). Let's treat authority relationally. In C. Bingham & A. M. Sidorkin, (Eds.), *No education without relation* (pp. 23-39). Peter Lang Publishing, Inc.

Blank, A. (2019). Big guy. Heinemann.

- Bloome, D. (2012). Classroom ethnography. In M. Grenfell, D. Bloome, C. Hardy, J. Pahl, J.Rowsell, & B. Street (Eds.), *Language, ethnography, and education* (pp. 7-27).Routledge.
- Bloome, D., Carter, S. P., Christian, B. M., Otto, S., & Shuart-Faris, N. (2005). *Discourse* analysis and the study of classroom language and literacy events: A microethnigraphic perspective. Routledge.
- Bozhovich, L. I. (2009). The social situation of child development. *Journal of Russian and East European Psychology*, 47(4), 59-86.
- Branco, A. U., & Lopes-de-Oliveira, M. (2017). *Alterity, values, and socialization*. Springer International Publishing.

Bruchac, J., & Bruchac J. (2003). How chipmunk got his stripes. Puffin Books.

- Bruner, J. (1966). Toward a theory of instruction. Harvard University Press.
- Bruner, J. (1986). Actual minds, possible worlds. Harvard University Press.
- Bruner, J. (1990). Acts of meaning. Harvard University Press.
- Burman, E. (2008). Deconstructing developmental psychology (2nd ed.). Routledge.

- Calkins, L., Ehrenworth, M., & Lehman, C. (2012). *Pathways to the Common Core: Accelerating achievement*. Heinemann.
- Campbell, M. S. (2020, April 24). How 2 Iowa colleges manage a new reality. *The New York Times*, L5.
- Cannon, J. (2004), Pinduli. Houghton Mifflin Harcourt.
- Carson, R. (1956). The sense of wonder. Harper Perennial.
- Cary, A. (2018). Escape from the zoo. Heinemann.
- Cary, A. (2019). Wilma Rudolph: Walk, run, win. Heinemann.
- Cervetti, G., Pearson, P. D., Bravo, M. A., & Barber, J. (2006). Reading and writing in the service of inquiry-based science, In R. Douglas, M. Klentschy & K. Worth (Eds.), *Linking science and literacy in the K-8 classroom* (pp. 221-244). NSTA Press.
- Chang-Wells, G. L. M., & Wells, G. (1993). Dynamics of discourse: Literacy and the construction of knowledge. In E. A. Forman, N. Minick, & C. Addison Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 58-91). Oxford University Press.
- Christie, F. (Ed.). (1999). *Pedagogy and the shaping of consciousness*. Continuum International Publishing Group.
- Clarà, M. (2016). Vygotsky and Vasilyuk on *perezhivanie*: Two notions and one word. *Mind*, *Culture, and Activity, 23*(4), 284 -293.
- Clay, M. M. (1991). Becoming literate: The construction of inner control. Heinemann.
- Cole, M., John-Steiner, V., Scribner, S., & Souberman, E. (Eds.). (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

- Cook-Gumperz, J. (Ed.). (2006). *The social construction of literacy*. Cambridge University Press.
- Damasio, A. (2003). Looking for Spinoza: Joy, sorrow, and the feeling brain. Harcourt Inc.
- Daniels, H., Cole, M., & Wertsch, J. V. (Eds.). (2007). *The Cambridge companion to Vygotsky*. Cambridge University Press.
- Daniels, H., & Hedegaard, M. (Eds.). (2011). *Vygotsky and special needs education*. Continuum International Publishing Group.
- DaSilva Iddings, A. C., Risko, V. T., & Rampulla, M. P. (2009). When you don't speak their language: Guiding ELLs through conversation about text. *The Reading Teacher*, 63(1), 52-61.
- Del Rio, P., & Alvarez, A. (2002). From activity to directivity: The question of involvement in education. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century*. (pp. 59-73). Blackwell Publishing.
- Dewey, J. (1916). Democracy and education. The Free Press.
- Dewey, J. (1958). Experience and nature. Dover Publications, Inc.
- Dewey, J., & Bentley, A. F. (1948). Knowing and the known. Beacon Press.
- DuBois, J. W. (2007). The stance triangle. In R. Englebretson (Ed.), *Stancetaking in discourse* (pp. 139-182). John Benjamin Publishing.
- Duncan, S., & Barrett, L. F. (2007). Affect is a form of cognition: A neurobiological analysis. *Cognition and Emotion*, 21(6), 1184-1211.
- Eisenhart, M., & Allen, C. D. (2016). Hollowed out: Meaning and authoring of high school math and science identities in the context of Neo-liberal reform. *Mind, Culture, and Activity*, *23*(3), 188-198.

Eisner, E. W. (1993). Forms of understanding and the future of educational research. *Educational Researcher*, 22(7), 5-11.

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, K., Utriainen, K., & Kyngäs, H. (2014, January-March). *Qualitative content analysis: A focus on trustworthiness*. SAGE Open.

Ernst, L. C. (2006). *The Gingerbread girl*. Dutton Children's Books.

- Fecho, B. (2013). Literacy practice and the dialogical self: Isaac making meaning. Journal of Constructivist Psychology, 26(2), 137-136.
- Fernández, M., Wegerif, R., Mercer, N., & Rojas-Drummond, S. (2001). Re-conceptualizing "scaffolding" and the zone of proximal development in the context of symmetrical collaborative learning. *Journal of Classroom Interaction*, 36(2), 40- 54.
- Fleer, M., & González Rey, F. L. (2017). Beyond pathologizing education: Advancing a cultural historical methodology for the re-positioning of children as successful learners. In M.
 Fleer, F. L. González Rey, & N. Veresov (Eds.), *Perezhivanie, emotions, and subjectivity* (pp. 145-173). Springer Nature.
- Forman, E. A., Minick, N., & Addison Stone, C. (Eds.). (1993). *Contexts for learning: Sociocultural dynamics in children's development*. Oxford University Press.
- Freire, P. (1997). Pedagogy of the heart. Bloomsbury Academic Publishing.
- Gage, B. (2018, February 18). When 'Reform' means a process of elimination. *New York Times Magazine*, pp. 9-11.
- Gee, J. P. (2004). *Situated language and learning: A critique of traditional schooling*. New York: Routledge.

Gee, J. P. (2008). A sociocultural perspective on opportunity to learn. In P. A. Moss, D. C.Pullin, J. P. Gee, E. H. Haertel, & L. J. Young (Eds.), *Assessment, equity, andopportunity to learn* (pp. 76-109). Cambridge: Cambridge University Press.

Geertz, C. (1973). The interpretation of cultures. Basic Books.

Gharib, M., & Turner, C. (2020). Just for kids: A comic exploring the new coronavirus. *NPR*. https://www.wuwm.com/post/just-kids-comic-exploring-new-coronavirus#stream/0

Gibbons, G. (1997a). The Honey makers. Harper Collins Publishers.

Gibbons, G. (1997b). The Moon book. Tien Wah Press.

- Gibbons, G. (1998). Penguins! Tien Wah Press.
- Gibbons, G. (2002). Giant pandas. Tien Wah Press.
- González Rey, F. L. (2009). Historical relevance of Vgotsky's work: Its significance for a new approach to the problem go subjectivity in psychology. *Outlines*, *1*, 59-73.
- González Rey, F. L. (2011). A re-examination of defining moments in Vygotsky's work and their implications for his continuing legacy. *Mind, Culture, and Activity, 18*(3), 257-275.
- González Rey, F. L. (2014a). Advancing further the history of Soviet psychology: Moving forward from dominant representations in Western and Soviet psychology. *History of Psychology*, 17(1), 60-78.
- González Rey, F. L. (2014b). Human motivation in question: Discussing emotions, motives and subjectivity from a cultural-historical standpoint. *Journal for the Theory of Social Behavior*, 45(4), 419-439.
- González Rey, F. L. (2016). Vygotsky's concept of *perezhivanie* in *The Psychology of art* and at the final moment of his work: Advancing his legacy. *Mind, Culture, and Activity*, 23(4), 305-314.

- Goodman, Y. M., & Goodman, K. S. (1990). Vygotsky in a whole-language perspective. In L. C.
 Moll (Ed.), *Vygotsky and education: Instructional implications and applications of* sociohistorical psychology (pp. 223-251). Cambridge University Press.
- Goodwin, M. H., Cekaite, A., & Goodwin, C. (2012). Emotion as stance. In A. Peräkyla & M. Sorjonen, (Eds.), *Emotion in interaction* (pp. 16- 42). Oxford University Press.
- Grant, R. A., & Wong, S. D. (2003). Barriers to literacy for language-minority learners: An argument for change in the literacy education profession. *Journal of Adolescent and Adult Literacy*, 46(5), 386-394.

Graves, D. H. (1990). Discover your own literacy. Heinemann Educational Books.

- Green, J. L., & Castanheira, M. L. (2012). Exploring classroom life and student learning. In B.
 Kaur (Ed.), *Understanding teaching and learning: Classroom research revisited* (pp. 53-56). Sense Publishers.
- Green, J. L., Castanheira, M. L., & Yeager, B. (2011). Researching the opportunities for learning for students with learning difficulties in classrooms: An ethnographic perspective. In C. Wyatt-Smith, J. Elkins, & S. Gunn (Eds.), *Multiple perspectives on difficulties in learning literacy and numeracy* (pp. 49-90). Springer.
- Greene, M. (1995). Releasing the imagination. Jossey-Bass.
- Grenfell, M., Bloome, D., Hardy, C., Pahl, J., Rowsell, J., & Street, B. (2012). Language, ethnography, and education. Routledge.
- Guccione, L. M. (2011). Integrating literacy and inquiry for English Learners. *The Reading Teacher*, 64(8), 567- 577.
- Gutierrez, K. D. (2001). What's new in the English Language Arts: Challenging policies and practices. *Language Arts*, 78(6), 564-569.

- Gutierrez, K. D. (2008). Developing a sociocultural literacy in the Third Space. *Reading Research Quarterly, 43*(2), 148-165.
- Gutierrez, K. D., & Larson, J. (1994). Language borders: Recitation as hegemonic discourses. International Journal of Educational Reform, 3(1), 22-36.
- Gutierrez, K. D., & Orellana, M. F. (2006). At last: The "problem" of English Language
 Learners: Constructing genres of difference. *Research in the Teaching of English*, 40(4), 502-507.
- Gutierrez, K. D., Rymes, B., & Larson, J. (1995). Script, counterscript, and underlife in the classroom: James Brown versus Brown v. Board of Education. *Harvard Educational Review*, 65(3), 445-472.
- Hagenauer, G., & Hascher, T. (2010). Learning enjoyment in early adolescence. *Educational Research and Evaluation*, *16*(6), 495-516.
- Halliday, M. A. K. (1995). Language and the theory of codes. In A. R. Sadovnik (Ed.), *Knowledge and pedagogy: The sociology of Basil Bernstein* (pp. 127-145). Ablex
 Publishing Corporation.
- Halliday, M. A. K. (2003). *The collected works of M. A. K. Halliday. IV. The language of early childhood.* Continuum.

Halliday, M. A. K. (2007). Language and education (Vol. 9) (J. J. Webster, Ed.). Continuum.

Hannah-Jones, N. (2020, June). What is owed. The New York Times Magazine, 30-35, 47, 50-53.

Hargreaves, A. (1994, April 4- 8). Development and desire: A postmodern perspective [Paper presentation]. American Educational Research Association Annual Meeting, New Orleans, LA, United States.

- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, 14(8), 835-854.
- Hasan, R. (1999). Society, language, and the mind: the meta-dialogism of Basil Bernstein's theory. In F. Christie (Ed.), *Pedagogy and the shaping of consciousness* (pp. 10-30). Continuum International Publishing Group.
- Hasan, R. (2002). Ways of meaning, ways of learning: Code as an explanatory concept. *British* Journal of Sociology of Education, 23(4), 537-548.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Heath, S. B. (1983). Ways with words. Cambridge University Press.
- Heath, S. B., & Street, B. V. (2008). *On ethnography: Approaches to language and literacy research*. Teachers College Press.
- Hedegaard, M. (2009). Children's development from a cultural-historical approach: Children's activity in everyday local settings as foundation for their development. *Mind, Culture, and Activity, 16*, 64-81.
- Herreid, C. F., Terry, D. R., Lemons, P., Armstrong, N., Brickman, P., & Ribbens, E. (2014). Emotion, engagement, and case studies. *Journal of College Science Teaching*, 44(1), 86-95.
- Hoemann, K., & Barrett, L. F. (2019). Concepts dissolve artificial boundaries in the study of emotion and cognition, uniting body, brain, and mind. *Cognition and Emotion*, 33(1), 67-76.
- Hoffman, J. V. (2017). What if "just right" is just wrong? The unintended consequences of leveling readers. *The Reading Teacher*, *71*(3), 265-273.

Holdaway, D. (1979). The foundations of literacy. Ashton Scholastic.

Holland, D., & Leander, K. (2004). Ethnographic studies of positioning and subjectivity: An introduction. *Ethos*, *32*(2), 127-139.

Hopkins, H.J. (2013). The Tree lady. Simon & Schuster.

- Huber, L. P., Gonzalez, L. C., & Solórzano, D. G. (2018). Considerations for using critical race theory and critical content analysis: A research note. *Understanding and dismantling white privilege*, *VIII* (2), 8-26.
- Hubler, S., & Goldstein, D. (2020, July 14). 825,000 students in California set to be online only. *The New York Times*, pp. A1, A8.
- Immordino-Yang, M. H. (2011). Implications of affective and social neuroscience for educational theory. *Educational Philosophy and Theory*, *43*(1), 98-103.
- Izard, C. E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives on Psychological Science*, *2* (3), 260-280.

Jackson, P. W. (1990). Life in classrooms. Teachers College Press.

- Janks, H. (2010). Literacy and power. Routledge.
- Javaherbin, M. (2014). Soccer star. Candlewick Press.
- Jenkins, S. (2006). Almost gone: The World's rarest animals. Harper Trophy.
- Johnson, A. (2018). Teaching in the gap. *Literacy Today*, 36(1), 18-20.
- Johnson, L. (2019). Feathers: Not just for flying. Heinemann.
- Johnston, P. (2019). Talking children into literacy: Once more, with feeling. *Literacy Research: Theory, Method, and Practice*, 68, 64-85.
- Johnston, P., Woodside-Jiron, H., & Day, J. (2001). Teaching and learning literate epistemologies. *Journal of Educational Psychology*, *93*(1), 223-233.

Johnston, P., Champeau, K., Hartwig, A., Helmer, S., Komar, M., Krueger, T., & McCarthy, L. (2020). Engaging literate minds: Developing children's social, emotional, and intellectual lives, K-3. Stenhouse Publishers.

Kaster, P. (2012). Molly the pony. Macmillan Children's Publishing Company.

- Kitayama, S., Markus, H. R., & Kurokawa, M. (2000). Culture, emotion, and well-being: Good feelings in Japan and the United States. *Cognition and Emotion*, *14*(1), 93-124.
- Kitayama, S., & Mesquita, B. (2006). Cultural affordances and emotional experience: Socially engaging and disengaging emotions in Japan and the United States. *Journal of Personality and Social Psychology*, 91(5), 890-903.
- Kovalainen, M., & Kumpalainen, K. (2005). The discursive practice of participation in an elementary classroom community. *Instructional Science*, *33*(3), 213-250.
- Kovalainen, M., & Kumpalainen, K. (2007). The social construction of participation in an elementary classroom. *International Journal of Educational Research*, *46*, 141-158.

Kozinets, R. V. (2015). Netnography: Redefined. SAGE Publications Ltd.

- Kozulin, A., & Gindis, B. (2007). Sociocultural theory and education of children with special needs: From defectology to remedial pedagogy. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 332-362). Cambridge University Press.
- Kullenberg, T., & Pramling, N. (2017). Children's musical and emotional meaning making:Dialogicality in instructional interaction. *Mind, Culture, and Activity, 24*(4), 338-352.
- Lee, D. L., & Smagorinsky, P. (2000). *Vygotskian perspectives on literacy research*. Cambridge University Press.

- Lemov, D. (2010). *Teach like a champion: 49 techniques that put students on the path to college.* Jossey-Bass.
- Levenson, R. W. (2019). Reflection on thirty years of *Cognition and Emotion*. *Cognition and Emotion*, *33*(1), 8-13.
- Levykh, M. G. (2008). The affective establishment and maintenance of Vygotsky's zone of proximal development. *Educational Theory*, *58*(1), 83-101.
- Lewis, C., Enciso, P., & Moje, E. B. (2007). (Eds.). Reframing sociocultural research on literacy. Lawrence Erlbaum Associates, Publishers.
- Lewis, K. (2017). Lessons learned: Applying principles of Reading Recovery in the classroom. *The Reading Teacher*, *71*(6), 727-734.
- Lincoln, S. Y., & Guba, E. G. (1985). Naturalistic inquiry. Sage.
- Lindfors, J. W. (1999). *Children's inquiry: Using language to make sense of the world*. Teachers College Press.
- Lobel, A. (1982). Ming Lo moves the mountain. Harper Collins Publishers.
- Lopez, E. J., Basile, V., Landa-Posas, M., Ortega, K., & Ramirez, A. (2019). Latinx students' sense of *familismo* in undergraduate science and engineering. *The Review of Higher Education*, 43(1), 85-111.
- López-Robertson, J. (2012). "*Esta pàgina me recordò*": Young Latinas using personal life stories as tools for meaning-making. *Bilingual Research Journal*, *35*, 217-233.
- Lunge-Larsen, L., & Preus, M. (1999). *The legend of the lady slipper*. Houghton Mifflin Company.

- Mahn, H., & John-Steiner, V. (2002). The gift of confidence: A Vygotskian view of emotions. InG. Wells & G. Claxton (Eds.), *Learning for life in the 21st century* (pp. 46-59). BlackwellPublishers Ltd.
- Martin, J. R. (1999). Mentoring semogenesis: 'Genre-based' literacy pedagogy. In F. Christie (Ed.), *Pedagogy and the shaping of consciousness* (pp. 123-156). Continuum International Publishing Group.
- Matusov, E. (2004). Guest editor's introduction: Bakhtin's dialogic pedagogy. *Journal of Russian and East European Psychology*, 42(6), 3-11.
- Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational* Review, *62*(3), 279-300.
- Maybin, J., & Moss, G. (1993). Talk about texts: Reading as a social event. *Journal of Research in Reading 16*(2), 138-147.

McMillan, J. H. (2016). Fundamentals of educational research. Pearson.

- Mercer, N. (1995). *The guided construction of knowledge: Talk among teachers and learners.* Multilingual Matters.
- Mercer, N., & Littleton, K. (2007). *Dialogue and the development of children's thinking*. Routledge.
- Merriam, S. B. (1995). Theory to practice: What can you tell from an N of 1? Issues of validity and reliability in qualitative research. *PAACE Journal of Lifelong Learning*, 4, 51-60.
- Meyer, D. K. (2014). Situating emotions in classroom practices. In R. Pekrun & L.
 Linnenbrink-Garcia (Eds.), *International handbook of emotions in education* (pp. 458-473). Routledge.

- Meyer, D. K., & Turner, J. C. (2002). Discovering emotion in classroom motivation research. *Educational Psychologist*, 37(2), 107-114.
- Moje, E. B., & Lewis, C. (2007). Examining opportunities to learn literacy: The role of critical sociocultural literacy research. In C. Lewis, P. Enciso, & E. B. Moje (Eds.), *Reframing sociocultural research on literacy* (pp. 15-49). Lawrence Erlbaum Associates, Inc.
- Moll, L. C. (Ed.). (1990). Vygotsky and education: Instructional implications and applications of sociohistorical psychology. Cambridge University Press.
- Moll, L. C. (1992). Literacy research in community and classrooms: A sociocultural approach. In
 R. Beach, J. L. Green, M. L. Kamil, & T. Shanahan (Eds.), *Multidisciplinary perspectives* on literacy research (pp. 211-244). National Council of Teachers of English.
- Moll, L. C. (2000). Inspired by Vygotsky: Ethnographic experiments in education. In D. L. Lee & P. Smagorinsky (Eds.), *Vygotskian perspectives on literacy research* (pp. 256-269).
 Cambridge University Press.
- Moll, L. C., & Greenberg, J. B. (1990). Creating zones of possibilities: Combining social contexts for instruction. In L. C. Moll, (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp. 319-349). Cambridge University Press.
- Moll, L. C., & Whitmore, K. F. (1993). Vygotsky in classroom practice: Moving from individual transmission to social transaction. In E. A. Forman, N. Minick, & C. Addison Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 19-43). Oxford University Press.
- Morris, P. (Ed.). (1994). The Bakhtin reader: Select writings of Bakhtin, Medvedev, and Voloshinov. Arnold.

Munsch, R. (1987). Moira's birthday. Annick Press.

- National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of scientific research literature on reading and its implications for reading instruction (ED 444 126). ERIC. https://files.eric.ed.gov/fulltext/ED444126.pdf
- Nias, J. (1996). Thinking about feeling: The emotions in teaching. *Cambridge Journal of Education*, *26*(3), 293-306.
- Nieto, S. (2010). Language, culture, and teaching: Critical perspectives. Routledge.

Nozick, R. (1989). The examined life: Philosophical meditations. Simon & Schuster.

Nuthall, G. (1996). Commentary: Of learning and language and understanding the complexity of the classroom. *Educational Psychologist*, *31*(3/4), 207-214.

Nuthall, G. (2007). The hidden lives of learners. NZCER Press.

- Nuthall, G. (2012). Understanding what students learn. In B. Kaur (Ed.), *Understanding teaching and learning: Classroom research revisited* (pp. 1-39). The Netherlands: Sense Publishers.
- Nystrand, M. (with Gamoran, A., Kachur, R., & Prendergast, C.). (1997). *Opening dialogue: Understanding the dynamics of language and learning in the English classroom.* Teachers College Press.
- Oades-Sese, G. V., Matthews, T. A., & Lewis, M. (2014). Shame and pride and their effects on student achievement. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), *International handbook of emotions in education* (pp. 246-265). Routledge.
- O'Neil, K. E. (2011). Reading pictures: Developing visual literacy for greater comprehension. *The Reading Teacher*, 65(3), 214-223.

- Pacheco, M. (2010). English-Language Learners' reading achievement: Dialectical relationships between policy and practices in meaning-making opportunities. *Reading Research Quarterly*, 45(3), 292-317.
- Painter, C. (1999). Preparing for school: developing a semantic style for educational knowledge.In F. Christie (Ed.), *Pedagogy and the shaping of consciousness* (pp. 66-88). Continuum International Publishing Group.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. Contemporary Educational Psychology, 8(3), 317-344.
- Pilkey, D. (1996). The Paperboy. Orchard Books.
- Prévot, F. (2017). *Wangari Maathai: The woman who planted millions of trees*. Charlesbridge Publishing.
- Purcell-Gates, V. (1995). *Other people's words: The cycle of low literacy*. Harvard University Press.
- Purcell-Gates, V. (Ed.). (2010). *Cultural practices of literacy: Case studies of language, literacy, social practice, and power*. Routledge.
- Radford, L., & Sabena, C. (2015). The question of method in a Vygotskian semiotic approach. In
 A. Bikner-Ahsbahs, C. Knipping, & Presmeg, M. (Eds.), *Approaches to qualitative research in mathematics education: Examples of methodology and methods* (pp. 157-184). The Netherlands: Springer International Publishing.
- RAND Reading Study Group. (2002). *Reading for understanding: Toward a research and development program in reading comprehension*. Rand.
- Rand, G. (1992). Prince William. Henry Holt and Company.

- Rodriguez, S. C., & Braden, E. G. (2018). Representation of Latinx immigrants and immigration in children's literature: A critical content analysis. *Journal of Children's Literature*, 44(2), 46-61.
- Rogoff, B. (2003). The cultural nature of human development. Oxford University Press.
- Rose, D., & Martin, J. R. (2012). Learning to write, reading to learn. Equinox Publishing Ltd.
- Rose, D. L., & Veltkamp, J. (2019). Beauty and the beak. Persnickety Press.
- Rosenblatt, L. M. (1978). *The reader, the text, the poem: The transactional theory of the literary work.* Southern Illinois University Press.
- Rothstein, R. (2008). Whose problem is poverty? Educational Leadership, 65(7), 8-13.
- Rouse, E., & Hadley, F. (2018). Where did love and care get lost? Educators' and parents' perceptions of early childhood practices. *International Journal of Early Years Education*, 26(2), 159-172.
- Sadovnik, A. R. (Ed.). (1995). *Knowledge and pedagogy: The sociology of Basil Bernstein*. Ablex Publishing Corporation.
- Saldaña, J. (2016). The coding manual for qualitative researchers. SAGE Publications Ltd.
- Santori, D. (2011). "Search for the answers" or "Talk about the story"? School-based literacy participation structures. *Language Arts*, *88*(3), 198-207.
- Saxe, G. B., de Kirby, K., Le, M., Sitabkhan, Y., & Kang, B. (2015). Understanding learning across lessons in classroom communities: A multi-leveled analytic approach. In A. Bikner-Ahsbahs, C. Knipping, & N. Presmeg (Eds.), *Approaches to qualitative research in mathematics education: Examples of methodology and methods* (pp. 253-318). Springer International Publishing.

- Scheiber, N. (2020, March 25). Gig workers driving without a safety net. *The New York Times*, pp. B1, B5.
- Schirmer, E., & Apple, M. W. (2018). Struggling for the local: Money, power, and the possibilities of victory in the politics of education. In M. W. Apple (Ed.), *The struggle for democracy in education: Lessons from social realities* (pp. 41-69). Routledge.
- Schutz, P. A., & DeCuir, J. T. (2002). Inquiry on emotions in education. *Educational Psychologist*, 37(2), 125-134.
- Schutz, P. A., & Lanehart, S. L. (2002). Introductions: Emotions in education. *Educational Psychologist*, *37*(2), 67-68.
- Shanahan, T. (2005). *The National Reading Panel Report: Practical advice for teachers*. Learning Point Associates.
- Shor, I., & Freire, P. (1987). A pedagogy for liberation. Bergin & Garvey.
- Sidorkin, A. M. (1999). *Beyond Discourse: Education, the self, and dialogue*. State University of New York Press.
- Siegel, H. (1997). Rationality redeemed. Routledge.
- Singh, P. (2002). Pedagogising knowledge: Bernstein's theory of the pedagogic device. *British* Journal of Sociology of Education, 23(4), 571-582.
- Smagorinsky, P. (2001). If meaning is constructed, what is it made from? Toward a cultural theory of reading. *Review of Educational Research*, *71*(1), 133-169.
- Smagorinsky, P. (2008). *Teaching English by design: How to create and carry out instructional units*. Heinemann.
- Smagorinsky, P. (2011). Vygotsky's stage theory: The psychology of art and the actor under the direction of *perezhivanie*. *Mind*, *Culture*, *and Activity*, *18*, 319-341.

- Smagorinsky, P. (2013). What does Vygotsky provide for the 21st century language arts teacher? *Language Arts*, 90(3), 192-203.
- Smagorinsky, P., & Daigle, E. A. (2012). The role of affect in students' writing for school. In E. Grigorenko, E. Mambrino, & D. Preiss (Eds.), *Handbook of writing: A mosaic of perspectives and views* (pp. 293-307). Psychology Press.
- Smagorinsky, P., & O'Donnell-Allen, C. (2000). Idiocultural diversity in small groups: The role of the relational framework in collaborative learning. In C. D. Lee & P. Smagorinsky (Eds.). *Vygotskian perspectives on literacy research*. (pp. 165-191). Cambridge University Press.
- Solomon, R. C. (1984). Emotions and choice. In C. Calhoun & R. C. Solomon (Eds.), What is an emotion? Classic readings in philosophical psychology (pp. 305-327). Oxford University Press.
- Spradley, J. P. (1979). The ethnographic interview. Waveland Press, Inc.
- Spradley, J. P. (1980). Participant observation. Waveland Press, Inc.
- Stauffacher, S. (2007). Nothing but trouble: The story of Althea Gibson. Dragonfly Books.
- Stengel, B. S. (2004). Knowing is response-able relation. In C. Bingham & A. M. Sidorkin (2004), No education without relation. Peter Lang Publishing, Inc.

Stetsenko, A. (2017). The transformative mind. Cambridge University Press.

- Stone, C. A. (1993). What is missing in the metaphor of scaffolding? In E. A. Forman, N. Minick, & C. Addison Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 169-184). Oxford University Press.
- Storbeck, J., & Clore, G. L. (2007). On the interdependence of cognition and emotion. *Cognition* and Emotion, 21(6), 1212-1237.

- Street, B. V. (1984). *Literacy in theory and practice*. The Press Syndicate of the University of Cambridge.
- Street, B. V. (1995). Social literacies: Critical approaches to literacy in development, ethnography and education. Routledge
- Street, B. V. (2004). Futures of the ethnography of literacy? *Language and Education*, *18*(4), 325-330.
- Street, B. V. (2005). The hidden dimensions of mathematical language and literacy. *Language and Education*, *19*(2), 135-140.
- Street, B. V. (2013). Applying earlier literacy research in Iran to current literacy theory and practice. *Iranian Journal of Society, Culture & Language, 1*(1), 1-9.
- Street, J. C., & Street, B. (1991). The schooling of literacy. In D. Barton, & R. Ivanič, (Eds.), Writing in the community (pp. 143- 167). Sage Publications.
- Tudge, J. (1990). Vygotsky, the zone of proximal development, and peer collaboration:
 Implications for classroom practice. In L. C. Moll, (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp. 155-175).
 Cambridge University Press.
- Uchida, Y., Townsend, S., Markus, H. R., & Bergsieker, H. B. (2009). Emotions as within or between people? Cultural variation in lay theories of emotion expression and inference. *Personality and Social Psychology*, 35(11), 1427-1439.
- Van der Veer, R., & Valsiner, J. (1991). Understanding Vygotsky: A quest for synthesis. Blackwell Publishers.

Van der Veer, R,. & Valsiner, J. (1994). The Vygotsky reader. Oxford: Basil Blackwell Ltd.

- Van der Veer, R. (1996). The concept of culture in Vygotsky's thinking. *Culture and Psychology*, 2, 247-263.
- Veresov, N. (2009). Forgotten methodology: Vygotsky's case. In A. Toomela & J. Valsiner.
 (Eds.), *Methodological thinking in psychology: 60 years gone astray?* (pp. 267-295).
 Information Age Publishing, Inc.
- Veresov, N. (2017). The concept of perezhivanie in cultural-historical theory: Content and contexts. In M. Fleer, F. González Rey, & N. Veresov (Eds.), *Perezhivanie, emotions and subjectivity* (pp. 47-70). Springer.
- Veresov, N., & Fleer, M. (2016). *Perezhivanie* as a theoretical concept for researching young children's development. *Mind, Culture, and Activity*, *23*(4), 325-335.
- Vološinov, V. N. (1929). Marxism and the philosophy of language. Harvard University Press.
- Vygotsky, L. S. (1971). *The psychology of art* (Scripta Technica, Inc., Trans.). The M. I. T. Press.
- Vygotsky, L. S. (1978). *Mind in society* (M. Cole., V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
- Vygotsky, L. S. (1981). The genesis of higher mental functions. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 144-189). M. E. Sharpe.
- Vygotsky, L. S. (1986). Thought and language (A. Kozulin, Ed.). The MIT Press.
- Vygotsky, L. S. (1987). *Thinking and speech*. In R.W. Rieber & A. Carlton (Eds.), *The collected works of L.S. Vygotsky* (Vol. 1, pp. 43-287). Plenum Press.
- Vygotsky, L. S. (1994). The problem of the environment. In R. Van der Veer & J. Valsiner (Eds.), *The Vygotsky reader* (pp. 338-354). Blackwell.
- Vygotsky, L. S. (1997). Educational Psychology. CRC Press. (Original work published 1926)

Vygotsky, L. S. (1998). The collected works of L. S. Vygotsky (Vol. 5). Plenum Press.

- Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology*, 42 (1), 7-97.
- Vygotsky, L.S. (2011). The Dynamics of the schoolchild's mental development in relation to teaching and learning. (A. Kozulin, Trans.). *Journal of Cognitive Education and Psychology*, 10 (2), 198-211.
- Walker, D. (2003). *Constructing literate, artistic, and social identities after school: Community cultural resources in support of latina/o youth.* [Doctoral dissertation, University of Colorado at Boulder].
- Walker, D. (2018). "Teen views of sex:" Inter-animation of dialogue in a radio feature story produced by Mexican immigrant youth. *Dialogic Pedagogy: An International Online Journal*, 6, A39-A59.
- Webb, S., Massey, D., Goggans, M., & Flajole, K. (2019). Thirty-five years of the gradual release of Responsibility: Scaffolding towards complex and responsive teaching. *The Reading Teacher*, 73(1), 75-83.
- Wegerif, R. (2011). Towards a dialogic theory of how children learn to think. *Thinking Skills and Creativity, 6*(3), 179-190.
- Wegerif, R. (in press). Dialogic education. Oxford Research Encyclopedia of Education.
- Wells, G. (2000). Dialogic inquiry in education: Building on the legacy of Vygotsky. In C. D.
 Lee & P. Smagorinsky (Eds.), *Vygotskian perspectives on literacy research* (pp. 51-86).
 Cambridge University Press.
- Wells, G. (2007). Semiotic mediation, dialogue and the construction of knowledge. *Human* Development, 50, 244-274.
- Wells, G., & Claxton, G. (Eds.). (2002). Learning for life in the 21st century. Blackwell Publishing.

- Wertsch, J. V. (Ed.). (1985). *Culture, communication, and cognition*. Cambridge University Press.
- Wertsch, J. V. (1990). The voice of rationality in a sociocultural approach to mind. In L. C. Moll,
 (Ed.), Vygotsky and education: Instructional implications and applications of
 sociohistorical psychology. Cambridge University Press.
- White, E. J. (2013). Cry, baby, cry: A dialogic response to emotion. *Mind, Culture, and Activity,* 20(1), 62-78.
- White, E. J. (2016). Introducing dialogic pedagogy: Provocations for the early years. Routledge.
- White, E. J., & Gradovski, M. (2018). Untangling (some) philosophical knots concerning love and care in early childhood education. *International Journal of Early Years Education*, 26(2), 201-211.
- Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Pearls, pith, and provocation: Validity in qualitative research. *Qualitative Health Research*, *11*(4), 522-537.
- Williams, G. (1999). The pedagogic device and the production of pedagogic discourse: a case example in early literacy education. In F. Christie (Ed.), *Pedagogy and the shaping of consciousness* (pp. 88-123). Continuum International Publishing Group.
- Wood, D. J., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychiatry and Psychology*, *17*, 89-100.

Yezerski, T. F. (2011). Meadowlands: A wetlands survival story. Farrar Straus Giroux.

Yoon, B. (2007). Offering or limiting opportunities: Teachers' roles and approaches to English-Language Learners' participation in literacy activities. *The Reading Teacher*, 61(3), 216-225.

- Zembylas, M. (2003). Caring for teacher emotion: Reflections on teacher self-development. *Studies in Philosophy and Education, 22,* 103-125.
- Zembylas, M. (2006). Beyond teacher cognition and teacher beliefs: the value of the ethnography of emotions in teaching. *International Journal of Qualitative Studies on Education*, 18(4), 465-487.
- Zittoun, T. (2008). Learning through transitions: The role of institutions. *European Journal of Psychology of Education, xxiii* (2), 165-181.
- Zittoun, T. (2010). How does an object become symbolic? In B. Wagoner (Ed.), *Symbolic transformation: The mind in movement through culture and society* (pp. 173-192).
 Routledge.

APPENDIX A

CULTURAL DOMAINS IN THIRD GRADE

Cultural Domains in Third Grade

Cultural Domain of Reading in Third Grade

READING
is a part of
Extracting a message
Thinking about facts we're learning
Answering questions posed by teacher
Deciding author's purpose
Reading accurately
Respecting the authority of the book

Cultural Domain of Understanding a Story in Third Grade

UNDERSTANDING A STORY
is a means to
Remembering details of the story
Using picture 'support'
Finding evidence in the text

Cultural Domain of Responding to Text in Third Grade

RESPONDING TO TEXT
is a way to
Telling what happened in a story
Telling information gained through reading
Using talk structures to speak about a text
Individual writing to a prompt
Individual recorded speech

Cultural Domain of Speaking Up in Class in Third Grade

SPEAKING UP IN CLASS
is a reason for
Saying what the message of a story is
Telling what (I) have learned
Citing evidence from the text
Supplying an academic term
Answering a teacher's request for a definition, word, or remembered facts

Cultural Domain of Teacher's Role in Reading Instruction in Third Grade

TEACHER'S ROLE IN READING INSTRUCTION
is a part of
Ask students questions
Evaluate answers
Assign topics for discussion
Model using evidence for opinions held
Draw attention to literary features of text
Teach and require use of academic vocabulary
Express succinctly feelings during reading

APPENDIX B

CULTURAL DOMAINS IN SECOND GRADE

Cultural Domains in Second Grade

Cultural Domain of Reading in Second Grade

READING
Is a part of
Being uncertain
Inferring feelings from pictures
Asking questions unanswered in the text
Enjoyment
Talking
Wondering
Thinking beyond the book

Cultural Domain of Understanding a Story in Second Grade

UNDERSTANDING A STORY
is a means to
Thinking about characters' feelings
Imagining what I would do
Looking at illustrations for clues
Locating the story
Talking with other students
Wondering aloud
Thinking about the author's moves (e.g., 'But one day')
Comparing to other stories

Cultural Domain of Responding to Text in Second Grade

RESPONDING TO TEXT	
Is a way to	
Sharing emotions	
Imagining characters' feelings or predicament	
Multi modal response including dance and drawing	
Big noisy conversation	
Wondering	

Cultural Domain of Speaking Up in Class in Second Grade

SPEAKING UP IN CLASS
is a reason for
To share a personal connection
To share an idea
To share a different point of view
To open a new talk topic
To talk about what is not understood
To express emotion

Cultural Domain of Teacher's Role in Reading Instruction in Second Grade

APPENDIX C

COMMUNICATIVE FUNCTIONS

COMMUNICATIVE FUNCTIONS OF UTTERANCES (Kovalainen & Kumpalainen, 2007, p. 145)

EVI:	Evidence negotiation: asking for or presenting evidence, justification or reasons
DEF:	Defining: asking for or providing definitions, elaboration, clarification
EXP:	Experiential: sharing or asking another to share personal experiences, feelings, or
	examples from one's own life
VIEW:	View sharing: asking for or expressing views, opinions, perspectives
INFO:	Information exchange: asking for and providing information, solutions, or
	observations
ORC:	Orchestration of classroom interaction: taking charge of the interactional
	management of speaking turns
N-VERB:	Non-verbal communication: expressions that reflect willingness to participate in
	classroom interactions
NEU:	Neutral interaction: echoing and revoicing the ongoing interactions
CON:	Confirming: signals acknowledgement and acceptance of the topic of interaction
EVA:	Evaluation: Offers assessment of contributions to meaning making

APPENDIX D

ADDITIONAL COMMUNICATIVE FUNCTIONS

ADDITIONAL COMMUNICATIVE PURPOSES OF UTTERANCES

This is a list of communication purposes that the researcher created to describe functions not found in the research of Kovalainen and Kumpalainen (2007).

CL/ELAB:	Asking for or providing clarification or elaboration
EMO:	Expressing emotion
IMAG:	Sharing or inviting an imaginative perspective
REVIEW :	Changing or developing a view, an opinion or perspective during a message unit
RT:	A simple resuming of reading from the text, neutral in its effect on interaction
RTT:	A return to reading from the text that truncates or works to end a speaker's turn
SUBJ:	Sharing elements of oneself that are singular to the self as individual

APPENDIX E

INTERACTION SEQUENCES

INTERACTION SEQUENCES (Kovalainen & Kumpalainen, 2007)

Interaction sequence	Description		
TIB	Teacher-initiated bilateral sequence		
TIM	Teacher-initiated multilateral sequence		
SIB/T	Student-initiated bilateral sequence with teacher participation		
SIM/T	Student-initiated multilateral sequence with teacher participation		
SIB	Student-initiated bilateral sequence without teacher participation		
SIM	Student-initiated multilateral sequence without teacher		
STI	Solo teacher initiation		
SSI	Solo student initiation		

APPENDIX F

WANGARI MAATHAI; AARON AND SWAHILI: TRANSCRIBED INTERACTION DATA

Table F1

Wangari Maathai; Aaron and Swahili: Transcribed Interaction Data

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Ms. Spencer reads: Those who care about the Earth as Wangari did can almost hear her speaking the four languages she knew: Kikuyu, Swahili, English, German, while she carried out her important work with important people.			
Aaron: Ms. Spencer, in the place I grew up in, well, in the town I grew up in Africa we spoke Swahili	SIM/T	SI	ЕХР
Ms. Spencer: Swahili is one of the languages of Africa, you're right Aaron. So that is pretty cool, you have a connection. Um, Sebastian.		TR	DEF EVA ORC
Sebastian: I speak three languages		SI	EXP
Ms. Spencer: That's incredible. Right you speak Mandarin, right? A little bit of Mandarin?		TR	EMO CL/ELAB
Sebastian: Mandarin, Spanish, English		SR	CL/ELAB
Ms. Spencer: That's amazing. Yeah, and she spoke four, it's just incredible to me. <i>Wangari</i> <i>encouraged many village</i> <i>women</i>		TR	EMO RT

Note. The words of the book being read are italicized to distinguish the teacher's comments from the text.

APPENDIX G

WANGARI MAATHAI; AN AFRICAN NAME: TRANSCRIBED INTERACTION DATA

Table G1

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Ms. Spencer reads: <i>The</i> <i>British claim the best land</i> <i>for themselves and insist</i> <i>that Kenyans take Christian</i> <i>names. As a result, Wangari</i> <i>is called Miriam during her</i> <i>childhood.</i> So they don't want her to have a Kenyan name or an African name they want her to have a British name so they give her the name <i>Miriam</i>		TI	CL/ELAB
Aaron: I have an African name	SSI	SI	EXP
Ms. Spencer: I don't think she likes that. No. Um the British grew richer by		TI	VIEW
cutting down trees to plant more tea			RT

Wangari Maathai; An African Name: Transcribed Interaction Data

Note. The words of the book being read are italicized to distinguish the teacher's comments from the text.

APPENDIX H

WANGARI MAATHAI, WHAT HAPPENED IN KENYA? TRANSCRIBED INTERACTION DATA

Table H1

Wangari Maathai, What happened in Kenya? Transcribed Interaction Data

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Ms. Spencer: Rafael?	TIB	TI	ORC
Rafael: I actually have a similarity		SI	VIEW
Ms. Spencer: Okay		TR	CON
Rafael: That they both <i>liked</i> trees?		SI	VIEW
Ms. Spencer: Okay, so they		TR	NEU
both liked trees, that's absolutely right, yeah. Do			EVA
you have a difference?			CL/ELAB
Rafael: Yeah, because in <i>Wangari Maathai</i> , she did not live in like a sand town		SR	VIEW
Ms. Spencer: Oh yeah, she		TR	NEU
didn't live in a desert, it wasn't a desert. Actually			EVA
that's interesting. Why was Wangari planting trees?			CL/ELAB
Rafael: Because she liked		SR	VIEW
Ms. Spencer: But what had happened, what had happened to the trees in Kenya?		TI	CL/ELAB
Rafael: They, um, they cut them down		SR	CL/ELAB
Ms. Spencer: Yes! So she		TR	CON
was planting trees because they had been cut down and			CL/ELAB
Kate was planting trees			CL/ELAB
because there weren't any, because it was a desert.			EVA (3)
Yeah! Good! That's			ORC
interesting. Um, Lexie, was it you next?			

APPENDIX I

IS PRINCE WILLIAM ALIVE? TRANSCRIBED INTERACTION DATA

Table I1

Is Prince William Alive? Transcribed Interaction Data

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Ms. Spencer: Alright, do you have a comment or a question? Go ahead.	TIM	TI	ORC
Xavier: Where is he now?		SI	VIEW
Ms. Spencer: Where is he now? Oh, well, I'm		TR	NEU
guessing, I guess we don't			VIEW
know, but probably dead Lexie?			ORC
Lexie: I'm wondering if		SI	VIEW
maybe the mother of Prince William got rescued at the center and they didn't know and maybe she found him like later in the ocean		51	IMAG
Ms. Spencer: It is possible		TF	EVA
that she also got rescued but they weren't together and they <i>could</i> find each other			VIEW
again in the water but we don't know for sure. Rubi.			ORC
Rubi: When did the oil spill happen?		SI	DEF
Ms. Spencer: So 1989 was I was in college so it was it was 20, 30, about 32 years ago		TR	DEF
Rubi: Maybe he, do you		SI	VIEW
think he might be alive?			IMAG
Ms. Spencer: Good		TR	EVA
question. Rubi's question is: Do you think Prince William is still alive?			NEU

APPENDIX J

WILMA WOULD WALK AGAIN: TRANSCRIBED INTERACTION DATA

Table J1

Wilma Would Walk Again: Transcribed Interaction Data

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Ms. Windsor: Yeah! Um, this word, see this word "would" it's written kind of have you ever seen that before?	TIB	TI	
Myrida: Yeah		SR	
Ms. Windsor: When you see that you kind of emphasize that word, you put a little more uh you stay on it longer, so it would sound like: Wilma's mother told Wilma she <i>would</i> walk again. You guys try that;			INFO
you can read it at the same time.			ORC
Myrida: I just have like I have a feeling like why they would make it long but I don't know how to explain it		SI	REVIEW
Ms. Windsor: Why they'd		TR	NEU
make that word, like why you would um hold on to that word for a little bit?			CL/ELAB
Myrida: Yeah it's something you can't explain		SR	VIEW
Ms. Windsor: You might be able to explain it in Spanish, huh		TR	VIEW

Table J1 (continued)

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Myrida: I don't know		SR	
Ms. Windsor: Well, keep thinking on that, and keep thinking on that okay			
 Um, maybe, I wonder, cos it's something like almost like this "you <i>will</i> " with a lot of power and belief it's going to happen		TI	
Myrida: Oh! I think I kind of know how to explain it		SR	REVIEW
Ms. Windsor: Yeah		TR	CON
Myrida: I think they made it long, like she said <i>would</i> , like make it long because it's a promise if she would, she would do anything for her for she could walk		SI	VIEW
Ms. Windsor: Wow that's really beautiful, yeah, I agree, I like			EMO
thinking of it like that it's a promise,			EVA
she will, she would walk again			CL/ELAB

APPENDIX K

PEOPLE SLEEP ON THE BUS? TRANSCRIBED INTERACTION DATA

Table K1

People Sleep on the Bus? Transcribed Interaction Data

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Myrida: People <i>sleep</i> on the bus?	SIB/T	SI	CL/ELAB
Ms. Windsor: Yeah, sometimes. But she likes, I think she likes being around people and liked things happening, right? She likes some excitement, she doesn't like going to the hospital but she thinks the bus ride is absolutely fine		TR	CL/ELAB VIEW
Myrida: Is that in the old times when white people got to sit in the front and Black people had to sit in the back?		SI	REVIEW
Ms. Windsor: You know, Myrida, I'm glad you <i>asked</i> that and I think it <i>was</i> let's look at this picture		TR	CON
Myrida: Because there's a woman, she looks like she I dunno, I think those people there are white and the back ones are or brown		SI	REVIEW
Ms. Windsor: Yeah it looks like that, the people in front have lighter skin and I wonder this must have happened we know about that time, we've read some		TR	CON
books about that. This must have happened during the part of history when there was segregation and people with darker skin had to sit in the back of the bus, right?			REVIEW

Table K1 (continued)

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Myrida: But they changed the law		SI	CL/ELAB
Ms. Windsor: That's right to, to through changemakers, through		TR	CON
people taking action			CL/ELAB
Myrida: Because people stopped riding it		SI	CL/ELAB

APPENDIX L

GIANT PANDAS; A PART THAT'S A LITTLE SAD: TRANSCRIBED INTERACTION DATA

Table L1

Giant Pandas; a part that's a little sad: Transcribed Interaction Data

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Ms. Windsor: Here's a part that's a little bit, a bit sad. I'll read it to you. <i>The</i>	TIM	TI	ORC
mother panda gives birth to one or two babies			EMO
Allen, with passion: One		SR	EMO
baby dies!			INFO
Ms. Windsor: But then after they are born, she only begins raising one of the			INFO
cubs. A mother will raise		TI	
only one cub at a time. So only one will survive.			VIEW
That's kind of a sad fact and I see a lot of faces going 			EMO
Allen , angrily: I <i>told</i> you		SR	EMO
that only only one at a time		Sit	LMO
Ms. Windsor: Yeah and		TR	ORC
Allen's saying why? Why? And it doesn't seem fair and		TF	NEU
it happens to people sometimes too. Why would the mother only raise one of them? Think about nature			VIEW
and in the wild, living in the wild. Why do you think the mom would only raise one of the two babies? Julio?		TI	VIEW
			VIEW
Julio: Cos she raising two cubs		SR	VIEW
Ms. Windsor: Julio and then Allen		TF	ORC

Table L1 (continued)

Transcribed interaction data	Interaction Sequences	Discourse Moves	Communicative Functions
Julio: Cos in nature, the mother, like it takes a lot of her energy to look after the babies and she gets tired		SI	VIEW
Ms. Windsor: Yeah. Good point, Julio. Julio brought up a bunch of good points;		TR	EVA
he's talking about energy, out in the wild especially. He said maybe they're too tired, it would take too			TF
much energy to raise two. Because babies are hard work! Yeah			NEU
			VIEW

Note. The words of the book being read are italicized to distinguish the teacher's comments from the text.

APPENDIX M

INSTITUTIONAL REVIEW BOARD APPROVAL



Institutional Review Board

Date:	03/11/2021
Principal Investigator:	Alison Oddie
Committee Action:	IRB EXEMPT DETERMINATION – New Protocol
Action Date:	03/11/2021
Protocol Number:	2006004912
Protocol Title:	"I don't believe the world is tilted": Emotion, struggle, and relationship in making meaning with texts IRB exempt application
Expiration Date:	

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(701) for research involving

Category 1 (2018): RESEARCH CONDUCTED IN EDUCATIONAL SETTINGS. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:

- You wish to deviate from the described protocol and would like to formally submit a modification
 request. Prior IRB approval must be obtained before any changes can be implemented (except to
 eliminate an immediate hazard to research participants).
- You make changes to the research personnel working on this study (add or drop research staff on this
 protocol).

Carter Hall 3002 | Campus Box 143 | Greeley, CO 80639 | Office 970-351-1910 | Fax 970-351-1934



- At the end of the study or before you leave The University of Northern Colorado and are no longer a student or employee, to request your protocol be closed. "You cannot continue to reference UNC on any documents (including the informed consent form) or conduct the study under the auspices of UNC if you are no longer a student/employee of this university.
- You have received or have been made aware of any complaints, problems, or adverse events that are
 related or possibly related to participation in the research.

If you have any questions, please contact the Research Compliance Manager, Nicole Morse, at 970-351-1910 or via e-mail at <u>nicole.morse@unco.edu</u>. Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - <u>http://hhs.gov/ohrp/</u> and <u>https://www.unco.edu/research/research-integrity-and-compliance/institutional-review-board/</u>.

Sincerely,

Nicole Morse Research Compliance Manager

University of Northern Colorado: FWA00000784

APPENDIX N

LIST OF CHILDREN'S LITERATURE

LIST OF CHILDREN'S LITERATURE

- Aardema, V. (1975). Why mosquitoes buzz in people's ears. Puffin.
- Allard, H. G., & Marshall, J. (2014) Miss Nelson is missing. Houghton Mifflin Harcourt.
- Bass, J. V. (2019). On the job. Heinemann.
- Berger, M. (1994). Oil spill. Harper Collins Children's Books.
- Blank, A. (2019). Big guy. Heinemann.
- Bruchac, J., & Bruchac J. (2003). How chipmunk got his stripes. Puffin Books.
- Cannon, J. (2004), Pinduli. Houghton Mifflin Harcourt.
- Cary, A. (2018). Escape from the zoo. Heinemann.
- Cary, A. (2019). Wilma Rudolph: Walk, run, win. Heinemann.
- Ernst, L. C. (2006). The Gingerbread girl. Dutton Children's Books.
- Gibbons, G. (1997a). *The Honey makers*. Harper Collins Publishers.
- Gibbons, G. (1997b). The Moon book. Tien Wah Press.
- Gibbons, G. (1998). Penguins! Tien Wah Press.
- Gibbons, G. (2002). Giant pandas. Tien Wah Press.
- Hopkins, H.J. (2013). The Tree lady. Simon & Schuster.
- Javaherbin, M. (2014). Soccer star. Candlewick Press.
- Jenkins, S. (2006). Almost gone: The World's rarest animals. Harper Trophy.
- Johnson, L. (2019). Feathers: Not just for flying. Heinemann.
- Kaster, P. (2012). Molly the pony. Macmillan Children's Publishing Company.
- Lobel, A. (1982). Ming Lo moves the mountain. Harper Collins Publishers.
- Lunge-Larsen, L., & Preus, M. (1999). *The legend of the lady slipper*. Houghton Mifflin Company.

Munsch, R. (1987). Moira's birthday. Annick Press.

- Pilkey, D. (1996). The Paperboy. Orchard Books.
- Prévot, F. (2017). *Wangari Maathai: The woman who planted millions of trees*. Charlesbridge Publishing.
- Rand, G. (1992). Prince William. Henry Holt and Company.
- Rose, D. L., & Veltkamp, J. (2019). Beauty and the beak. Persnickety Press.
- Stauffacher, S. (2007). Nothing but trouble: The story of Althea Gibson. Dragonfly Books.
- Yezerski, T. F. (2011). Meadowlands: A wetlands survival story. Farrar Straus Giroux.