ARTICLES

Locating Social and Emotional Learning in Schooled Environments: A Vygotskian Perspective on Learning as Unified

Jennifer A. Vadeboncoeur and Rebecca J. Collie
The University of British Columbia

This article contributes to the emerging literature on social and emotional learning (SEL) from a Vygotskian perspective. A critical perspective on SEL in the context of schooling in the United States situates current interest in SEL programs. Vygotsky's foundational work from the 1920s and 1930s is used to clarify learning as unified, and the concept of *feeling* is elaborated with literature relevant to learning in school environments and across the life course. Potential next steps for research are noted, in particular given the unity of speech, thinking, and feeling and the literature on the role of social speech and dialogue in learning and development.

" . . . affect is the alpha and the omega, the first and last link, the prologue and epilogue of all mental development" —Vygotsky (1998, p. 227)

INTRODUCTION

Given the Western tendency to dichotomize cognition and emotion, and then privilege the former over the latter, it is not surprising that school environments have not done well at fostering the social and emotional capacities of children or supporting relationships between students and teachers (e.g., Benson, 2006; Noddings, 1992). Yet, for Vygotsky, education was to be a central influence in shaping and fostering cultural development. Concepts like the *social situation of development*, which foregrounds the meanings made across the variety of learning pathways

Correspondence should be sent to Jennifer A. Vadeboncoeur, The University of British Columbia, Faculty of Education, 2125 Main Mall, Vancouver, British Columbia V6T-1Z4, Canada. E-mail: j.vadeboncoeur@ubc.ca

that are followed as infants and children move from home environments to formal schooling, and the *zone of proximal development* (ZPD), which emphasizes the potential of learning in advance of development to pull development forward, bridge both home and schooled environments and emphasize the cultural and historical ways in which children are supported by significant others as they grow into the social practices of those around them. The key point for Vygotsky was the potential of a variety of educational environments—including those constituted with caregivers, with educators in formal and informal contexts, and with peers—to facilitate social, cognitive, and emotional development through learning.

The purpose of this article is to contribute to the emerging literature on social and emotional learning from a Vygotskian perspective (e.g., Ferholt & Lecusay, 2010; Levykh, 2008; Mahn & John-Steiner, 2002; see also DiPardo & Potter, 2003, on teaching) that was preceded by Vygotsky's foundational work in the 1920s and 1930s (e.g., Vygotsky, 1987, 1997a, 1997c, 1998, 1999). In the first section, we outline a critical perspective on social and emotional learning in the context of schooling in the United States. In the second section, we return to Vygotsky's work to foreground the concept of *unity*, as well as *word meaning* and *perezhivanie* as units of analysis. In the third section, we elaborate *feeling* and the development of *verbal feeling* in relation to learning across the life course. The fourth section concludes with a brief summary.

A CRITICAL PERSPECTIVE ON SOCIAL AND EMOTIONAL LEARNING IN THE CONTEXT OF SCHOOLING

Historically, school environments have not done well at fostering the social and emotional capacities of children or supporting relationships between students and teachers (e.g., Benson, 2006; Noddings, 1992). Originally built more for the assimilation of immigrants and the efficient preparation of workers with basic literacy and numeracy skills (Kliebard, 1987), the school houses of the early 20th century in the United States were driven by a host of often competing purposes skewed by a faith in individualism and the potential of behaviorism. Schooling has simultaneously been structured to offer both access to education and a chance for social mobility for some *and* increased educational advantages to solidify the perpetuation of advantage for others (Labaree, 2010; see, for sociocultural perspective on perpetuation of advantage, Panofsky & Vadeboncoeur, 2012). In response, schooling provides access *and* advantage, promotes equality *and* inequality—a central contradiction throughout the history of education in the United States.

The struggle over the purposes of education was not lost on Vygotsky (1997c), who recognized schools as cultural, political, and historical sites that include the potentially competing perspectives of diverse cultural and economic groups with differential access to power. One area of concern was the "class-based character" of schooling, and the differential curriculum offered through the tsarist school system, which "created lyceums and institutes for the nobility, secondary schools for the urban middle classes which did not involve a classical education, and orphanages and trade schools for the poor" (p. 56). Although Vygotsky (1997c) was critical of the process of schooling, he also noted that schools could be changed; they could be restructured with more equitable outcomes. He highlighted the potential of education to foster the development of individuals with social, cognitive, and emotional competencies as well as a disposition toward ethical action. One noted goal of education was the development of citizens for an international, and now global, world. At the center of the educational process was the social environment of the school.

In the 1920s, Vygotsky (1997c) drew attention to the significant role of the social environment in schooling. In particular, he noted the *inter*psychological plane of social practices, the importance of "intimate and friendly" social relations that held children together in school communities, guiding their actions, lives, and ultimately their "moral character." He argued,

> Organizing the social environment in the school is not simply a matter of creating a constitution of school governance and of summoning children to general assemblies at regular intervals of time, of making choices and maintaining all those forms of communal organization that children are so eager to copy from adults. *Rather, it means concern for those genuinely social relations that have to permeate this environment. Beginning with intimate and friendly relations that reach down to the smallest social groups, then moving on to the broadest associations of comrades, and ending in the broadest and largest forms of children's movements, the school has to penetrate and envelop the life of the child with a myriad of social relations that could assist in the development of moral character* [emphasis added]. (p. 236)

As a central feature of the relation between student and teacher, the social environment also supported the relation between education and life, which was, for Vygotsky, nothing less than "a starting point for pedagogics" (p. 236) and the relations between students themselves.

Although this passage was written more than 80 years ago, "organizing the social environment" of classrooms and schools is still very much a focus of both educational research and everyday life in schools. Unfortunately, current schooling is still "firmly entrenched in the logic of technocratic rationality and . . . anchored in a discourse that finds its quintessential expression in the attempt to find universal principles of education that are rooted in the ethos of instrumentalism or self-serving individualism" (Giroux, 2001, p. 3). The traditional teacher-centered pedagogy and classroom discourse continues in the majority of classrooms, for the majority of time, for a number of reasons other than the professional judgment of educators as the choice for "best practice" (e.g., Cazden, 2001; Kozol, 2005). Although ostensibly meritocratic—operating under the principle that the merit of a student's work is the measure of their success—a large literature base challenges the extent to which schools actually function accordingly (e.g., Spring, 1988). Factors like social class and socioeconomic status, race and ethnicity, gender and sexual identity, and language intersect and have a great deal to do with educational success in schools (e.g., Borman & Dowling, 2010; Ladson-Billings, 2006). In addition, the work of a number of scholars foregrounds the role that the structure of schooling plays in producing and reproducing inequality, for example, in restricting relations between students and educators and between home and school (e.g., Mehan, 1992).

In this arena of competing interests and ideologies, the current fervor over social and emotional learning programs in schools in the United States has been met by strong critique from a number of fronts. Initially, the popularization of the concept of emotional intelligence (Goleman, 1995; Salovey & Mayer, 1990) led to a burgeoning interest in programs of social and emotional learning (SEL) by teachers and administrators in schools across the United States. By 2003, more than 200 educational programs had been created to address SEL, either as embedded within programs to reduce bullying or to teach character education or as a separate, stand-alone program (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2003). With the passage of a resolution supporting the teaching of social and emotional skills in schools by the National Conference of State Legislators in 2001, states began developing specific SEL standards for K-12 schooling. As of 2011, learning standards for social and emotional learning were

well developed and disseminated for prekindergarten programs in 48 states; Washington, DC; and Puerto Rico. In addition, Illinois had comprehensive learning goals and benchmarks for K-12 education standards in social and emotional learning. Although the emphasis on standards for social and emotional learning is itself potentially problematic (see, for discussion, Ladwig, 2010), the fact that they seem easier to establish in early childhood education than K-12 schooling reflects at least two assumptions: that by the time children enter K-12 schooling, social and emotional learning and development *should* be well established and/or that social and emotional learning is simply not the subject matter of K-12 schooling.

Shortly after the rapid development of SEL programming and implementation began, research and evaluations started revealing critical problems that called into question the concepts at the foundation of the programs, the programs themselves, and the way they were implemented. For example, theorists argued that the concept of emotional intelligence, upon which many SEL programs are based, is not scientifically grounded (e.g., Landy, 2005; Matthews, Zeidner, & Roberts, 2002), that it reflects consumer desire more than science (Sternberg, 2002), and that the claims that it is a remedy for "social crisis and the disintegration of civility" are unwarranted (Matthews, Roberts, & Zeidner, 2004, p. 191). Arguments were also advanced that emotional intelligence and SEL programs are largely atheoretical (e.g., Hoffman, 2009; Waterhouse, 2006). Significantly, critiques noted that the view of SEL across programs is decidedly individualistic, behavioral, and acultural (e.g., Hoffman, 2009), as well as based on a "misreading" of the way children develop emotionally (McLaughlin, 2008). Many SEL programs define *social and emotional learning* as individual self-control—with practices based on rules, behavioral contracts, manufactured "choices," and structured activities—rather than as social relationship, engagement, and belonging. Most programs have an instrumental emphasis that links social and emotional skills with personal academic success now and professional success in the future (for original instrumental emphasis, see Goleman, 1995).

Implementation has also been a significant problem for SEL programs. Greenberg et al. (2003) noted that schools have been flooded by a variety of programs that address diverse SEL related issues, from violence prevention, to antibullying, to conflict resolution. This resulted in the failure of many efforts because they were short term and uncoordinated; were not properly linked with the school mission; and were not supported by school leadership, administration, or staff. Teaching social and emotional learning as an "add-on" to an already packed curricular schedule, rather than integrating it, poses additional problems. Although some have argued that social and emotional learning must be approached as a whole school change in climate (Cohen, 2006; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Weare & Gray, 2003), CASEL, founded in 1994, has minimal recommendations including that each program year include at least eight lessons and that lessons are created either for 2 consecutive years or for follow-up lessons after the program year (CASEL, 2003). As an alternative to this piecemeal approach, Noddings (2006) urged proponents of whole school approaches to include all subjects, including math and sciences, and grades in an integrated approach.

The structure of schooling, in general, poses an additional barrier for implementing SEL programs. Educational researchers have highlighted the disturbing effects of 30 years of standards-based reforms in the United States, including a narrowed conception of the purpose of education overall, reduced roles for students and teachers (e.g., Clinchy, 1995; Darling-Hammond, 1997; Greenberg, 2010), and an overemphasis on static assessments *of* learning, to the exclusion of assessments *for* learning (Stiggins, 2002). With regard to the latest in the

series of reforms, the No Child Left Behind Act, Cochran-Smith and Lytle (2006) argued that the processes of learning and teaching were "linear, remarkably narrow, and based on a technical transmission model of teaching, learning, and teacher training that was rejected more than two decades ago" (p. 669). In broad strokes these reforms (a) overemphasize standardized assessments, what is important in education is what can be measured on specific sorts of assessments under specific conditions, what is countable becomes what counts (Green & Luke, 2006; Ladwig, 2010); (b) marginalize prevention programs and programs that have nonacademic goals, like social and emotional learning (Meier & Wood, 2004); and (c) erase factors that influence students' performance that are not linked to teaching and are outside of teachers' control, like the evidence of growing inequalities between groups and communities, the social reasons for early school leaving, and a loss of economic infrastructure in both rural and abandoned urban areas (Sizer, 2004).

Clearly, there is a need to develop approaches to social and emotional education that reduce the emphasis on behavioral skill sets and individual assessments and, instead, develop methods for linking social and emotional ideals with social practices in schools (Hoffman, 2009). Among other things, this would require "connecting the language of research more realistically and more humanely with the language and *experience* of emotion in teaching and learning, and not substituting one for the other" (p. 546). In this context of schooling, a Vygotskian perspective may be a much needed and radical response.

RETURNING TO VYGOTSKY'S FRAMEWORK

Vygotsky's work challenges behavioral, individualistic, and fragmented approaches to social and emotional learning by offering a unified and profoundly social conceptualization of learning. Several central theoretical and methodological concepts are defined and elaborated in this section as a framework for rethinking learning in schools. Along with the more commonly discussed concept, *mediation*, the lesser acknowledged concept of *unity* is defined, as well as *unit of analysis*. The concept of unity is paramount in understanding methodology, as well as defining and maintaining relationships between theoretical concepts. Two units of analysis are described, *word meaning* and *perezhivanie*, emotional experience. These concepts are woven into two subsections: on unity and analysis by units, and consciousness as a unity of intellect and affect.

On Unity and Analysis by Units

Across written work and published lectures, Vygotsky grounded central theoretical concepts in a dialectical relationship that *unified* psychological functions in human relationships and experiences in social environments. Of particular relevance here, he advanced the unity of student, teacher, and social environment (Vygotsky, 1997c); the unity of affective and intellectual processes (Vygotsky, 1987); the unity of social, cognitive, and emotional experience (Vygotsky, 1994); and the unity of speech and thinking (Vygotsky, 1987). Although it was common for researchers to separate perceived constituent elements of psychological phenomena in order to reduce complexity by isolating one element at a time, Vygotsky (1987) argued that doing so

resulted in the loss of the relationships between elements, as well as potentially distorted the elements themselves. As an example, he offered an analogy for understanding speech and thinking in the problem of attempting to characterize the properties of water by decomposing it into the separate elements hydrogen and oxygen: A researcher "will discover, to his chagrin, that hydrogen burns and oxygen sustains combustion" (p. 45). Instead, maintaining the dialectical relationship between concepts enabled attention to dynamic processes, rather than a simplistic and potentially distorted product, or a static "fossilized behavior."

A methodological implication of the concept of unity is the requirement for a *unit of analysis* that retains the properties that "are characteristic of the whole," rather than reducing a phenomenon into "elements" (Vygotsky, 1994, p. 342). As acknowledged by Luria (1987), Vygotsky did not articulate a universal formula for identifying units of analysis, though he did advance an index or guide:

> He argued that these units must contain within themselves the *opposing* aspects of dialectical unity. Of course, he did provide us with some important concrete examples of the search for these units. In particular, . . . [he] arrived at fundamentally new results primarily because he sought a new unit of analysis where intellect and affect are fused in a unified whole. (p. 373)

In addition to retaining the properties of the whole, a unit of analysis must maintain the heterogeneity, the internal contradictions, of the whole. These internal contradictions enable the unit to have the potential to develop, change, and transform, in effect, to be a "*living* part of the whole" (Zinchenko, 1985, p. 98). An understanding of this developmental history is vital to contributing to both a description and an explanation of learning and development (van der Veer, 2001).

Vygotsky identified at least two units of analysis: word meaning and *perezhivanie*. Word meaning is a unit of analysis for the unity of speech and thinking, and allows "more effective research on the relationship of verbal thinking to the whole of the life of consciousness" (Vygotsky, 1987, p. 51). Word meaning has a specific definition: "It is the internal structure of the sign operation. It is what is lying between the thought and the word" (Vygotsky, 1997a, p. 133). As such, it can be reduced neither to the word nor to the thought alone. In addition, word meaning also reflects "*a unity of generalization and social interaction, a unity of thinking and communication*" (Vygotsky, 1987, p. 49), therefore, forming a bridge between inner speech for oneself and social speech for others. Analysis by units is especially significant for the unity of speech and thinking because it enables the examination of the relationship between an individual's interests and thinking, as well as the relationship between thinking and participation in social practices. As a unit, word meanings change and develop over time through experience and engagement with systems of knowledge. Word meaning "is inconstant. It changes during the child's development and with different modes of the functioning of thought" (Vygotsky, 1987, p. 249). The developmental history of word meaning follows a path from initial experiences and particular labels to generalization across contexts-of-use to the development of everyday and scientific concepts. The development of thinking itself, "the *meaning of children's words*, is what determines the new relationship which can exist between the environment and the different developmental processes" (Vygotsky, 1994, p. 346). Whereas meaning lies between thought and word, it also lies between the environment and the child's psychological functions, including perception, attention, memory, and thinking. Indeed, Vygotsky (1994) brought together both word meaning and *perezhivanie*, described next, in discussions of the relationship between the social environment and the developing child (see, for discussion, Vadeboncoeur, 2013).

Perezhivanie, sometimes translated as "experience," "lived experience," or "lived through experience," is translated as emotional experience here; however, also noted is the lack of an easy translation (see Bozhovich, 2009; van der Veer, 2001). Emotional experience is a unit of analysis for the *social situation of development,* the system of relations between the child and the social environment grounded in meaning. Emotional experience is a unity of the social environment and the developing individual, as well as a unity of cognition and emotion, across culturally normed situations of development, including the move from home to formal schooling in Western industrialized societies.

> *An emotional experience* [*perezhivanie*] *is a unit where, on the one hand, in an indivisible state, the environment is represented, i.e.* that which is being experienced—an emotional experience [*perezhivanie*] is always related to something which is found outside the person—*and on the other hand, what is represented is how I, myself, am experiencing this,* i.e., all the personal characteristics and all the environmental characteristics are represented in an emotional experience [*perezhivanie*]; everything selected from the personality, all the features of its character, its constitutional elements, which are related to the event in question. So, *in an emotional experience* [*perezhivanie*] *we are always dealing with an indivisible unity of personal characteristics and situational characteristics, which are represented in the emotional experience* [*perezhivanie*]. (Vygotsky, 1994, p. 342)

With *perezhivanie*, Vygotsky (1994) emphasized the relationship between the social environment and the child as central and dynamic: "It is not just the child who changes, for the relationship between him and his environment also changes, and the same environment now begins to have a different influence on the child" (p. 346). Both child and environment change over time, and the *meaning* of experiences in the environment for the child changes over time as well. In early childhood, meaning and consciousness, the child's relationships with others and with herself, are being constructed such that the "I" of individual experience begins to contribute differently in social interactions. By later childhood, the meanings of experiences shift and change because they can be generalized across contexts-of-use (Vygotsky, 1998).

Consciousness as a Unity of Intellect and Affect

Vygotsky (1987) gave shape to the concepts of unity and units of analysis, and used these ideas to build a system of systems, a definition for human consciousness and the study of human consciousness. Human consciousness, as a consciousness of thinking, relies on the word, and word meaning provides the link between thinking and the word: "There is a dynamic meaningful system that constitutes *a unity of affective and intellectual processes.* Every idea contains some remnant of the individual's affective relationship to that aspect of reality which it represents" (p. 50). One way of uniting intellect and affect in consciousness—maintaining the dialectical relationship between each idea about reality and an individual's affective relationship to that aspect of reality—is through word meaning.

When describing the concentration of layers of meaning in inner speech, Vygotsky (1987) differentiated meaning and sense: Meaning is the most stable and unified aspect of a word, the cultural meaning that enables communication at a particular historical moment, whereas sense is "a dynamic, fluid, and complex formation," "the aggregate of all the psychological facts that arise in our consciousness as a result of the word," idiosyncratic and shaped by an individual's developmental history (p. 276). Word meaning and sense develop in relation to emotional experience as

factors of the social environment—which are experienced as relative to the individual—are *made meaningful* by the individual who is herself developing and changing as a result. Word meaning becomes more stable, coalescing through repetitions of successful speech events, and sense becomes more nuanced, linking fewer words to more complex and intense feelings and experiences. Both reflect and constitute intellect and affect, the social and the individual, to varying degrees over the course of development.

Mediation, the central fact in human psychology (Wertsch, 1985), highlights the general human capacity to invent, build, and use tools to transform our environment, as well as the capacity to create and use sign systems for meaning making and to develop as a result. Rather than acting on the world directly, our physical actions are mediated by the tools we build and use to work in and transform the environment. In addition, and more significant, our experience in the world and our psychological representation of it is also mediated by the psychological tools we have created: speech and language, numerical and musical notations, cultural symbols and forms of art, and general semiotic systems, among other things (Vygotsky, 1999). Speech is the primary system used for meaning making, and it becomes an exemplar of this process through the emphasis on the unity of speech and thinking in consciousness. Using speech and language, humans initially learn to influence others, and ultimately learn to influence their own behavior, including their own psychological action, as higher psychological functions develop.

Higher, or specifically human, psychological functions enable us to operate independently from contextual cues, and therefore to gain control over our own behavior. Mnemonic aids like notched sticks and knots, early forms of writing, and recording information all indicate that early in historical development, humans "already went beyond the limits of given natural functions and moved on to a new, cultural organization of . . . behavior" (Vygotsky, 1999, p. 46). Higher psychological functions are exemplified in the shift from attention to voluntary attention, natural perception to cultural perception, and natural memory to mediated memory—a shift enabled by the use of external sign systems or cultural semiotic systems. Although the main foci of Vygotsky's limited career was on a few significant sign systems—including speech, and alternative forms of communication like sign language systems, mnemonic systems, and literary art forms—cultural development becomes possible through participation with cultural semiotics inclusive given the human capacity to use almost anything to make and share meaning.

Here, we offer the example of perception to better ground working definitions for "intellect" and "affect": intellect as the human capacity for generalization through mediation; affect as the human capacity to respond to, to be affected by, objects, events, and experiences, as well as meanings imposed on them (see Damasio, 2003, for discussion of affect for Spinoza). At different periods of development, shaped by culturally normed situations of development, particular psychological functions—such as perception, attention, memory, and/or thinking—take a leading role in development. For example, quite early perception takes the lead, whereas attention, memory, and thinking are still undifferentiated, and changes in perception—the shift from natural to cultural, or verbal, perception—catalyze changes in attending, remembering, and thinking:

> After speech develops, another method of seeing appears—isolating the figure from the background. Speech changes the structure of perception due to generalization. It analyzes what is perceived and categorizes it, signifying a complex logical processing, that is, dividing the object, action, quality, etc. into parts. (Vygotsky, 1998, p. 280)

Through speech, perception is transformed from a "function into a complex system" that continues to change and contribute to interfunctional change as well.

We perceive the world through speech that includes the names of objects as well as the meanings of objects. Word meaning enables generalization, which influences our ability both to recognize objects from one context to the next—Vygotsky uses the example of a clock— and to recognize a clock and differentiate it from other objects that exist in the same setting. As the ability to generalize develops, the intellect develops in tandem: "To say that our perception is intellectual perception is to say that all of our perception is generalized perception" (Vygotsky, 1998, p. 290). In addition, speech includes the actions of others, our own actions, and our own internal psychological states.[1] Speech "as a means of communication leads to naming and connecting our internal states to words": "'I'm sleepy,' 'I'm hungry,' 'I'm cold'" (p. 291). The connections formed are generalizations that develop over time. Vygotsky (1998) differentiated between feeling hunger and knowing "I am hungry," something that develops at around 7 years of age as a child develops an intellectual orientation to his own experiences. Around this age, emotional experiences are becoming generalized and the child develops a new way of relating to himself and his experiences; affective generalization, a "logic of feelings," is developing as well. Word meaning and the developing ability to generalize across visual perception, as well as perceptions of the actions of others, our own actions, and our own internal psychological states, binds intellect and affect in consciousness.

As in perception, word meaning and generalization also unify intellect and affect in other psychological functions, including attention, memory, and thinking. This is obvious given reflection on our own experience; however, attention, memory, and thinking have been interpreted as representative of the intellect alone, perhaps a symptom of the Western tendency to privilege what is more commonly understood to be cognition over emotion. For Vygotsky (1987), all psychological functions reflect the unity of intellect and affect and the concept of unity provides theoretical grounding for two additional proposals: (a) that all psychological functions are interrelated and operate as a single psychological system and (b) that development results from changes in the relations between psychological functions, "*change in the functional structure of consciousness—is the main and central content of the entire process of mental development*" (Vygotsky, 1987, p. 188). Interfunctional relationships are dynamic, continuously changing, and catalyzing change across psychological functions: "*Above all the interfunctional connections and relationships among various processes, in particular intellect and affect, change*" (Vygotsky, as cited in Wertsch, 1985, p. 190).

As an example of interfunctional relatedness, specifically cultural forms of attending— methods of gaining attention, maintaining joint attention, moving attention from one object to the next, and communicating "attending to"—are learned through gesture, facial expression, and body posture; sounds and intonation; and ultimately words in social practices with caregivers and significant others. As speech develops, changes in attention entail

---

[1]The theory of mind literature privileges cognition over emotion in mind. For example, more research is conducted on words like "beliefs," "thinking," "knowing," and "guessing," as separate from less commonly studied words for desires and emotions. Researchers in the field itself have sought to redress this imbalance by advancing "affective theory of mind." As the separation of cognition and emotion in both approaches is problematic, we use the phrases "psychological states" and "psychological state terms" in an effort to privilege the unity of intellect and affect in experience.

changes in the meaning, as well as the memory of and reflection on emotional experience within social environments for the developing child. Verbal thinking, inner speech, develops through the internalization and agglutinization of social speech enabling learning and development from syncretic thinking to thinking in complexes to thinking in concepts. Ultimately,

> thought has its origins in the motivating sphere of consciousness, a sphere that includes our inclinations and needs, our interests and impulses, and our affect and emotion. The affective and volitional tendency stands behind thought. Only here do we find the answer to the final "why" in the analysis of thinking. (Vygotsky, 1987, p. 282)

As word meaning and sense develop, language plays differing roles in the integration of intellect and affect. Thinking, in turn, qualitatively changes over time, as well as influencing change across the system of interfunctional relations.

Vygotsky (1998) wrote that affect plays an important role in both motivating and grounding the other psychological functions throughout development, as well as being unified with intellect in consciousness; however, he did not leave us with clear definitions for differentiating between feeling and emotion. Coupled with his early work, *The Psychology of Art*, Vygotsky was returning to examine and address affective experience toward the end of his life. He is noted to have argued for the future direction of his research to be on "affective tendencies, emotion, feelings. . . . The life of affects; from here a turn toward Spinoza" (Leontiev, 2005, p. 35). Of interest, current work in the neurosciences provides empirical support for the unity of intellect and affect in consciousness foregrounding the cognitive aspects of emotional processes and the emotional aspects of cognitive processes (e.g., Damasio, 2003; Immordino-Yang & Damasio, 2007). There is still much to be done, as noted in recent theoretical work on *perezhivanie* (e.g., Smagorinsky, 2011); however, Vygotsky's conceptualization of consciousness as unified, along with the unity of psychological functions, necessitates a unified perspective on learning.

ELABORATING FEELING: THE DEVELOPMENT OF VERBAL FEELING

Although Vygotsky did not provide clear definitions for differentiating between feeling and emotion, we elaborate feeling in a preliminary way in order to work through feeling and thinking in a manner that maintains the unity of intellect and affect in consciousness. Defining feeling becomes particularly problematic if the unity of intellect and affect in consciousness is forgotten or simply unknown by a researcher. Then, defining "feeling" becomes a pathway for carving feeling and thinking into a binary that is logically either/or, rather than a dialogical unity both/and. The same problem is entailed by defining attention, perception, memory, and thinking as psychological functions that can be categorized as "subcomponents" of intellect (see Wertsch, 1985), leaving interest, feeling, volition, emotion, and motive as left over "subcomponents" of affect. This bifurcation neglects the unity of intellect and affect and the threads of interfunctionality that bind all psychological functions together. There is a second danger, in that focusing on the role of speech in the development of feeling reduces attention to other cultural semiotic systems that play significant roles in the meaning making that attends emotional experience. Some of this danger can be reduced, perhaps, given Vygotsky's attention to the roles of pointing and gesture, art and literature, and imagination and creativity as sign or sign-reliant processes for making meaning.

The following discussion includes some commonly discussed concepts: the *general genetic law of cultural development*, *internalization*, and the *zone of proximal development*. In addition, *feeling* is purposefully elaborated as the perception of a certain state of the body refracted through a quality of thinking—syncretism, thinking in complexes, thinking in everyday and/or scientific concepts—and the sense, meaning, and evaluation in response that becomes the *content of thought and memory*. Feelings arise in relation to states of the body (hunger, thirst, exhaustion; Vygotsky, 1998); emotions (fear, excitement, frustration; Vygotsky, 1998); color, art, literature, and music (e.g., Vygotsky, 1987, 1999); and learning, coming to know, and the values placed on the subject matter and process of learning (Vygotsky, 1997a, 1997c). Across lived experience, feeling is the dialectical unity of the body, a quality of thinking, and the content of thought; as such, a perceptual state perceived through a quality of thinking may precede a thoughtful response, or the reverse, a memory may evoke a perceptual state. It is our view that learning experiences that facilitate the development of feeling, interwoven with verbal thinking, must be recentered in educational environments; thus an outline of the development of *verbal feeling* is offered on the basis of Vygotsky's work with current empirical research for elaboration.

Infancy and Early Childhood: The World Through Others

We label and learn about internal psychological states and feelings through speech in our relationships with others. As infants participate in mediated social practices, repertoires of coupled action and speech, they begin *internalizing* aspects of the social practice, for example, caregivers' interpretations of their own actions, "Mommy, made that too hot"; interpretations of the infant's actions and underlying desires, "You must want this baby chick!"; and more specific interpretations of internal states, "Oh, are you getting tired, hungry, frustrated?" With the *general genetic law of cultural development*, Vygotsky (1997b) advanced the idea that "every function in the cultural development of the child appears on the stage twice, in two planes, first, the social, then the psychological, first between people as an intermental category, then within the child as an intramental category" (p. 106). The *social plane* includes culture, "a product of social life," the cultural semiotics of lived experience and meaning making, as well as the relationships that make up daily life and the social structural relations woven throughout practices, expectations, norms. Individual psychological functions develop in relationships with caregivers and more experienced others—relationships that have the potential, over time, to enable participation in social practices and through which children grow into the intellectual and affective life of those around them. More than a setting for development, the social environment is the "source" of cultural development (Vygotsky, 1994), in particular given *internalization*, a process that transforms social speech, or the speech-for-others that co-occurs as participants engage in joint activities, into private and, ultimately, inner speech, or speech-for-oneself. Infants' behaviors develop meaning in a system of social behavior derived from concrete relations with adults who interpret their gaze and physical movements, which begin as undifferentiated behaviors, as *meaningful* (Vygotsky, 1998).

Through speech, experiences of our own internal psychological states, as well as the facial and bodily expressions of others, are connected with words for us by caregivers who narrate events and experiences in our world, and our responses to them, before we are able to do so ourselves. Each word becomes saturated with "intellectual and affective content from the entire context in which it is intertwined" (Vygotsky, 1987, p. 276). As noted earlier, young children

begin to connect their own experiences to statements that couple the body with evaluations of experience, such as the link made between a mother's comment, "Oh, getting tired now?" and an evaluation of feeling tired that later becomes "I'm feeling tired." Vygotsky (1999) noted that we "cannot have any doubt as to the reality of the pain hunger, or thirst we experience. Our affects make it clear to us that we, together with our body, are one being" (p. 164). In addition, through speech the facial expressions and body postures of others are connected with words by caregivers who describe and explain the behaviors of characters in storybooks and people in the world: "Look, the sheep is smiling, it must be happy" and "The baby is sad, she dropped her toy mouse." Over time, children begin to differentiate more subtle feelings, "feeling concern," "feeling elated," "feeling uncomfortable," or "feeling confused." Indeed, Nelson (2005) highlighted, in relation to her research on "community of minds," that language is the only ability that has clearly been shown to be directly related to a folk understanding of differences in perspective and the beginning of a social understanding of the feelings of others. The unseen forces that "shape our emotional responses through life, are not primarily our biological urges, but the patterns of emotional experience with other people" (Gerhardt, 2004, p. 16).

Consistent with Vygotsky's work, there are several reasons why talk, or social speech, about an infant's internal psychological states is important. Language enables tacit understandings of thinking and feeling to be made explicit, and it also enables similarities and differences in visual perspectives and in thinking and feeling between self and other to be made explicit (Nelson, 1996). Although words linked to psychological states, like feelings, provide a label for a child's own feelings and the facial expression or body posture of another person, they must be connected with the child's internal psychological states or they will not become a means of understanding underlying psychological states: "Such an infant would have no reference point with which to understand that internal states accompany the [psychological] state word mothers have used in conjunction with another person's facial expressions or actions" (Taumoepeau & Ruffman, 2006, p. 468). Indeed, using a word is not the same as understanding the concept signified by the word. Although meaning begins with individual words, word meanings shift in use and take on various shades of the context within which they are used. There is no singular one-to-one word to concept relationship that is universally applied. The terms "feel," "think," and "believe" are used in a variety of different ways in everyday conversation and refer to a variety of different meanings, only some of which are psychological states. As emphasized by Nelson (2005), the meaning of words is constructed through use. It begins as a pragmatic process of construction that is initially "without meaning": The gap between word meaning and the construction of concepts means that children use words in social relationships with others before they know what they mean.

In home and in early childhood education environments, the social participation of young children who are becoming competent is supported by the structure provided by *scripts* and *narratives,* which are common across everyday social practices, including play. A script is defined as an ordered sequence of actions that is appropriate to a particular context and organized around a goal. Scripts contain "slots" or gaps and rules for what may fill these gaps (Nelson, 1981): The roles for a particular context, like preschool, may include teachers, children, and parents; the practices in a preschool may include learning centers, morning snack, and circle time, along with the words and actions that accompany and constitute each practice. Children are enabled to act competently in a routine situation, structured by a script, without a full understanding of the words, roles, actions, and goals involved. *Narratives*, characterized as recounting events and

telling stories, tend to operate in a similar fashion and support the development of an under-standing of time and an organizational structure for memory. Listening to narratives and creating narratives exposes children to alternative emotional experiences and perspectives in addition to providing narrative structure; "story understanding requires the use of language as an internal per-sonal representation, one derived from the external [social] presentation" (Nelson, 2005, p. 42). Receptive language enables the ability to represent alternative states of the world, like past and present; alternative understandings or experiences, like mine and yours; and two different feelings about the same event. Both scripts and narratives provide a framework that enables participants to "fill gaps" in word meaning, knowledge, and action as they engage in social practices.

Young children use lexical terms for psychological states as early as 2 years old, when they are made explicit by their conversation partners and, in particular, when mothers describe the actions of their toddlers as mindful, as reflecting feelings, desires, thoughts, and beliefs. They also show evidence of social understanding—a folk understanding of differences in perspective and feeling—when differences are established or shared through ongoing narration of everyday social practices and, later, dialogue around social practices (Nelson, 1996, 2005). Talk about psy-chological states, like desires, does more than foster children's language development in relation to psychological state words. Talk builds on a child's understanding of self and fosters children's understanding of the differences in perspectives and feelings of others. It improves their per-formance, for example, on tasks related to identifying how a cartoon character feels. Engaging young children (15-month-olds) in language related to desires uniquely predicted their later psy-chological state language and emotion task performance (at 24 months), "even after accounting for earlier child language, mother SES, mothers' own emotion understanding, and other types of mother language" (Taumoepeau & Ruffman, 2006, p. 479). One aspect that enables mothers to engage their young children in *zones of proximal development*—operating in advance of develop-ment given assistance from a more experienced other that bridges *inter*psychological functioning and *intra*psychological functioning, or what the child can do alone—is the extent to which a child uses personal pronouns. The use of personal pronouns seems to signal that the child is beginning to consolidate a sense of self, and in response mothers begin to shift their talk to include the feelings and thinking of others. Mothers talk about the child initially, making internal psycholog-ical states explicit, then talk about the psychological states of others (Taumoepeau & Ruffman, 2008). This early dialogue is constituted by the mother's culturally developed (ideal) forms of social speech in interaction with the child's developing forms of social speech, a feature of the social environment made significant by Vygotsky (1994): The speech of adult caregivers, along with everything that is represented in speech through meaning, models a potential future for the child as an adult, the ideal form of social speech "is already available in the environment from the very beginning" (p. 348).

The social environment that shapes each child's experience in homes and early childhood education environments is not universal but is instead bound to cultural roles, values, norms, and practices. The kind and quality of social relationships and the extent to which children are engaged in talk related to their own internal psychological states, as well as the feeling and think-ing of others, matters. It matters not as a universal, as in this is what all 2-year-olds can do, but as a particular quality of the environment relative to a particular child. Importantly, social speech enables infants and young children to differentiate the objects around them, their own thinking and feeling, and the thinking and feelings of others. This differentiation is the basis for gener-alization and, ultimately, the development of verbal thinking and feeling. Although *what* is said

is explicitly connected to the development of one's own feelings and the feelings of others, it is also critical to examine *how* words are made available and the nature of the relationship in which the words are shared. Holzman (2009) advanced the idea that common caregiver responses with infants, *accepting* their sounds and attempts to communicate and *building on* them, is something that is important in all communication across the life course. The notion of accepting and building on what is communicated significantly changes the act of communication by not negating what is on offer and instead working to shape it. *Perezhivanie* foregrounds the *what* and *how* of social speech as features of the social environment that provide a source of cultural development through life events made *meaningful* for, with, and ultimately by each particular child.

School Age: Developing a Logic of Feelings

Inseparable from the emotional experience of learning, which has "a substantial influence on absolutely all forms of behavior and on all components of the educational process" (Vygotsky, 1997c, p. 106), schooling begins a more formalized process of constructing concepts and knowledge. Moving from syncretic thinking, through complexes, to pseudoconcepts and everyday concepts, children begin to develop a "logic of feelings" around the age of 7 years old, enabled by the increasing ability to generalize feelings about body states; feelings of emotions; and feelings evoked by art, literature, and music. A child recognizes the difference between "feeling hunger and knowing that I am hungry" (Vygotsky, 1998, p. 291) both because she is learning to generalize the experience of hunger along with the word and because she is developing conscious awareness of her self as someone who experiences hunger with similarities with and differences from others who experience hunger. The developing ability to generalize enables an intellectual orientation to her own experiences, a logic of feelings that forms a foundation for further self-exploration in relation to her own feelings—"I'm happy, unhappy, angry"—and feelings in response to the judgments of others—"I'm a good student," "I'm a bad student." This logic of feelings also enables the continued development of social understanding including the recognition that others experience the world in some ways similar to and in other ways different from me.

In a classroom, the *zone of proximal development* (ZPD) takes on qualities different from zones between caregivers, infants, and young children and unique to schooled environments. A child's evolving psychological functions surface in joint practices with more experienced peers and educators, and instruction must be aimed in advance of development in order for learning to lead development. However, the relationship between teacher and student is different from the relationship between caregiver and child, and the classroom setting with 30 to 35 students and one adult is quite different from what most children have encountered at home. Ideally, engaging students in their ZPDs enables them to perform roles and actions that they are not quite competent to perform—"performance before competence" in Cazden's (1981) words—and combines the pragmatics of practice with a proleptic or future-oriented vision of their capabilities and contributions. One student may have learned to recognize and name her own internal psychological states from her caregivers, but as time goes on there is less time for this kind of talk in schools; after the early grades there are fewer discussions about feelings and classroom discourse shifts to privileging thinking and reason over feeling. For another student, who has had

less experience with social speech around internal psychological states, there may be little time to learn it authentically in schools.

In schools, systematic, *scientific concepts* are merged with and developed from *everyday concepts* as children and youth engage in educational activities, like naming, categorizing, and forming relationships between words, or sign–sign activities. The human ability to replace an object with a word, or sign, and then link signs with other signs enables decontextualization and the development of concepts, but this is not a solely abstract, rational, or unemotional process. Rather, our psychological system links concepts through affect and emotional experience. As Vygotsky (1997a) noted

> that I think about my affects, that I place them in other relationships to my intellect and other processes, changes much in my mental life. To put it more simply, our affects act in a complex system with our concepts . . . feeling is historical, . . . it changes its essence in different ideological and psychological environments, although there undoubtedly remains a certain basic biological component on the basis of which this emotion develops. (p. 103)

The development of thinking and feeling through speech occurs over time as we become consciously aware of the connections expressed through concepts: There is an "intimate connection and dependency that exists between the development of the emotions and the development of other aspects of mental life" (Vygotsky, 1987, p. 332). Students integrate concepts as they make sense of new classroom material, a process that requires both intellect and affect, the ability to generalize and feel, that leads to verbal thinking and verbal feeling.

Feeling stands alongside what I have learned, how the material shapes who I think and feel I am, and how others think and feel about me, inherently contributing to the construction of identity as a certain kind of learner, a certain kind of knower, and the values associated (see Vadeboncoeur, Vellos, & Goessling, 2011): "I'm good at math, but not good at spelling." If I learn too fast, or too slow, or if I am unable to show what I learned in ways recognized by my teacher I may experience feelings of shame, feelings of failure. The social situation of development highlights a pathway of development that moves: from recognizing and labeling internal psychological states and reading the facial expressions and body postures of others with caregivers, to school environments through which students develop feelings in relation to concepts and knowledge. Feelings also arise in relation to what knowing means to them, what kind of a person they are becoming, and the values associated, often in the assumed absence of feeling. In schooled environments, focus on concept and knowledge generation occurs in spite of the various feelings associated with learning, ranging from embarrassment, if I learn at a pace different from my classmates, to pride and relief, if I conquer complex word problems in mathematics. Feelings surface in relation to the material, but also in relation to what counts, or is valued, as learning, the value of learning it for me, specifically the role it plays in my life and how it changes me as a person once I have learned or failed to learn. Elation brought about by doing well on a test, shame and doubt brought about by failure—students learn quickly they are either capable or not of succeeding in the different knowledge subjects that make up schooled environments.

A review of current literature provides some exemplars of research that attend to the unity of intellect and affect and the dialectical relation between thinking and feeling in school environments. For example, the ethnographic research of Ferholt and Lecusay (2010) with a teacher and his classroom of kindergarten and first graders highlighted the opportunities provided by

"playworlds" in terms of creating learning environments that balanced intellect and affect, and in which both students and teacher learned from and taught each other (Lindqvist, 1995). Although the teacher was a coparticipant and actor in the playworld, he initially struggled to hear some of the students as he moderated a dispute that had split the class into two different camps: one requesting and the other refusing to add new characters to the script. He responded to students who argued their position on the basis of logical reasoning, but he was less able to hear and understand students who argued their position on the basis of personal preferences or feelings. As the dialogue continued, however, he became more sensitive to the ways in which both forms of argument were related and necessary. Ultimately, what enabled the children to work together after the split was a heartfelt statement of friendship that was offered by one student and taken up by the others. In what truly became a ZPD for both the students and their teacher, it was the dialogue and debate—the words they used to share ideas and make meaning from their interactions reflecting thoughtful emotions, "intelligent emotions," in Vygotsky's words—that enabled the teacher to understand and support what was proposed, thus resolving the conflict with and between students.

As a second example, *Partners in Reading*, a program involving eighth graders with community volunteers, created a place for dialogue around shared book reading activities over the course of a year, a required process that was ungraded and did not include an evaluation of correctness or quality of writing in dialogue journals (DiPardo & Schnack, 2004). The purpose of the program was to create a place for dialogue on thoughts and feelings about reading and writing, along with the subject matter of what was read. With the emphasis taken off "getting it right," the dialogue in the journals reflected the issues that surfaced when reading was freely chosen: "Do I *like* this book? What bearing does it have on things I care about in my own life and environment? How do I *feel* about these characters and their life situations? . . . What would I do? What *should* I do?" (p. 32). Although the authors noted that this kind of reading and writing—grounded in warm relationships that promoted mutually negotiated participation—is often neglected in classrooms, they also highlighted that the best teachers engage students in a range of literacy activities. A key difference in the dialogue journals in this program was the educational context created by both partners in the activity struggling to interpret what was read, imagine and predict what might come next, and make meaning of the text both for the characters in the text and for their own lives. As in the work of Ferholt and Lecusay (2010), the adult volunteers were developing alongside the students. DiPardo and Schnack (2004) noted, following Vygotsky, that all human interactions, even those in traditional, teacher-centered classrooms, include an emotional component. What was most salient in this research was

> the seamless melding of tough-minded exploration, caring rapport, and unrestrained enthusiasm for books that characterized our informants' participation. What are so often taken up as separate strands in discussions among educational experts—"affective education," . . . "motivation," and so on—were woven here on a single loom. (p. 33)

Explicit in these two examples is the link between social speech for others, and private speech and inner speech for oneself, or verbal thinking and feeling that is generated and made available in dialogue. For example, when a parent narrates a child's feelings to a new experience, or a teacher asks questions that enable a student to focus on the steps for completing a math problem, the social interaction occurs through a verbal exchange. This social speech may be incorporated

into private speech as the child remembers and utters the same words for the process of completing the task. The foundation of dialogue, whether face-to-face or through written dialogue journals, is the dialectical process of moving between thought and word, between feeling and word:

> Thought is not expressed but completed in the word. Any thought strives to unify, to establish a relationship between one thing and another. Any thought has movement. It unfolds. . . . This flow of thought is realized . . . as a transition from thought to word and from word to thought. (Vygotsky, 1987, p. 250)

Word meaning and sense is inconstant, dynamic, changing, and deepens with traces of experience and thoughts and feelings about experiences. Dialogue, oral or written, becomes an occasion for moving between thought, feeling, and word, for engaging in the "*living process of verbal thinking*" and feeling (Vygotsky, 1987, p. 249). The meaning and sense of words, laden with thinking and feeling, evolve as inner speech through internalization. Internalization leads to cascading change in the nature of psychological functions and their interfunctional relationships. Verbal thinking and feeling enables a logic of feelings to develop as generalization increases enabling a student to both make thoughts and feelings explicit and gain distance from experience to reflect back on it.

Developing an intellectual orientation to experience through generalization enables the development of a logic of feelings. The logic of feelings each child develops is shaped by word meaning and the ability to use word meaning to generalize that is the basis for verbal thinking and verbal feeling. Feelings are shaped by the cultural understandings that constitute the norms and expectations in social environments regarding how to feel, how to respond to events and experiences, how to express feelings, how others feel, and how to respond to those feelings. *Perezhivanie* acts as a prism developing in the relationship between a child and his environment that influences "how a child becomes aware of, interprets, [and] emotionally relates to a certain event" (Vygotsky, 1994, p. 341), and determines the kind of influence relationships, social practices, and events across contexts, in particular home and school, will have on a child and on his development. Central to emotional experience is the situated meaning that the child makes through the development of verbal thinking and feeling through engagement in zones of proximal development. The logic of feelings, therefore, maintains traces of the social environment given word meaning and sense and, ultimately, comes to reflect a cultural ordering of feelings, what makes sense in a particular culture, and expectations for what may occur if actions contradict cultural norms. The logic of feelings links moral dialogue to inner speech through feelings for self and others, thus making norms and expectations for psychological and physical actions and ethical engagement explicit.

A cultural characteristic of "thinking" in Western industrialized societies that is privileged in formal school settings is the emphasis on generalization, the move away from the particular, that parallels the privilege of objectivity over subjectivity. As both thinking and feeling become more cultural, thinking emphasizes generalization and decontextualization, whereas feelings are shaped to fit cultural expectations and norms for the expression of feelings and responses to others' expressions of feelings. However, the unification of thinking and feeling is what makes a sign, an idea, an event, or an experience *meaningful* including the subject matter of school work and/or becoming a certain kind of student. The empirical research by Ferholt and Lecusay (2010) and DiPardo and Schnack (2004) provides exemplars of school experiences that ensure intellect and

affect are unified, thus improving learning in these holistic environments. Playworlds and similar kinds of rich learning environments, like those constituted through intergenerational dialogue journals, provide more authentic links between intellect and affect because they engage students and teachers in something more than a lesson "about empathy" or "about self-regulation." Rather, thinking and feeling are linked through authentic explorations across the curriculum that engage both students and educators in learning together in an atmosphere that reduces the emphasis on grading and comparing students while still providing formative feedback.

Young Adulthood and Adulthood: Feeling Through Concepts

Emotional experience changes as word meaning and sense develop the basis for thinking in concepts and as relationships evolve over time and students gain proficiency at adjusting their thinking and feeling to schooled contexts. Even young adults and adults may find that schooled and work environments are fraught with anxiety about academic performance and professional creativity. Indeed, the importance of honoring the unity of intellect and affect does not cease in young adulthood or adulthood, or when formal schooling is completed, but continues throughout the life course.

During young adulthood, the quality of thinking, a combination of thinking in everyday and scientific concepts based on experience in formal schooling, shapes the experience, expression, and response to feelings.

> The thinking that the surrounding environment imposes together with a system of concepts also involves our feeling. We do not simply feel—a feeling is consciously grasped as jealousy, anger, offense, or an insult. When we say that we despise a certain person, this expression changes these feelings, because they enter into some connection with our thinking. (Vygotsky, 1997a, p. 102)

In addition, however, and unique to the formal school environment, thinking in concepts influences *perezhivanie* and feelings related to learning in schools, related to coming to know classroom material, and the values associated with this subject matter and the process of learning it. The institution of schooling itself has a history that is socially and culturally constructed, rather than being singular and/or universal (Cole, 1990). Ways of being and becoming through schooling are cultural and historical practices that are woven with meanings, understandings, expectations, and values that also have a history of valuing intellect and affect, more or less. "Affect and intellect are not two mutually exclusive poles, but two mental functions, closely connected with each other and inseparable, that appear at each age as an undifferentiated unity although they contain ever newer relations between affective and intellectual functions" (Vygotsky, 1998, p. 239). Learning and development over the life course relies on the unity of intellect and affect regardless of the extent to which affect is reduced or silenced in different school or work environments.

As an compilation of empirical research, Mahn and John-Steiner (2002) described the role of caring support in lifelong learning and creativity with high school and university students learning English as a second language (ESL) and adults engaged in creative collaboration, including writers, painters, and philosophers in long-term partnerships. Both authors drew on previously published work to exemplify the effects of "the gift of confidence," or the learning, expression, and creativity that resulted from being supported by a trusted educator, colleague, and/or friend.

Mahn's research with ESL students focused on the role of ungraded dialogue journals in promoting English language use, self-expression, and risk taking that led to deep and engaged learning. Rather than plan what they could say with proficiency in advance and have that dictate what was included in the journals, students wrote about what was important and meaningful to them. This led to risk taking with their language learning and becoming more aware of how they were making meaning from their lived experiences. The dialogue journals became places for human connection and support that the students responded to with more writing and language practice. Similarly, John-Steiner's research with creative long-term collaborations foregrounded the importance of a joint commitment to the collaboration, staying open to each other's ideas, and the need to believe in each other's contributions. Long-term relationships offer zones of proximal development for lifelong learning and generativity. Connected with education, the authors noted that "without understanding the students' perezhivanija and the ways that their zones of proximal development are affected by their responses to interactions in the classroom, it is difficult for teachers to offer the support that will motivate their continuing development" (Mahn & John Steiner, 2002, p. 56). In terms of reforming education, they argued that it is important.

> to discover what is necessary to establish classroom environments in which opportunities are created for students to understand their experiences with language and literacy acquisition, their interaction with parents and peers, their value systems and beliefs, and their ways of making meaning of the world. (p. 56)

Dialogue journals, classroom dialogue, and collegial dialogue support students and adults engagement in and awareness of their learning processes, including thinking and feeling about learning, forming the foundation for lifelong meaningful learning.

As a conceptual example, Tappan (1998) brought some of Vygotsky's ideas into conversation with Noddings's (1992) model of education that weaves an "ethic of care" throughout the environment of schooling arguing that Vygotsky's work forms the foundation for a "caring pedagogy." Four components of this model—modeling, dialogue, practice, and confirmation—were elaborated with reference to Vygotsky's research or research inspired by Vygotsky. *Modeling* was linked to assisted performance in the ZPD with regard to concrete examples of caring relationships; students were not told they should care but were shown how to care and engaged in caring relationships with competent caring educators. *Dialogue*, central to Noddings' work, is also central to Vygotsky's, in particular for the way in which the *inter*psychological plane grounds the *intra*psychological plane of consciousness through the internalization of social to private and then inner speech. Dialogue, as "marked by a strong interest on the part of both teacher and student in sustaining their connection and maintaining the caring relation they share," also includes "experiences of conflict and struggle, within the context of ongoing relationships, [which] are crucial to the development of trust, respect, responsiveness, and care" (Noddings, 1992, pp. 29–30). *Practice* referred to the necessity of practical engagement in social practices that enable guided and supported participation for internalizing ways of being and ways of caring for each other. *Confirmation* entailed confirming what is best in a person, facilitating the child's development while communicating the proleptic ideal or norm for action, as well as trust in and devotion to the student. Noddings' (1992) model moves across caring for the self, caring for others, caring for the natural world, and caring for ideas by reaching into every aspect of school culture, rather than segregating SEL into a 20-min lesson with a distinct beginning and ending, followed by what is perceived to be a more academic and, therefore, more important topic such as mathematics.

Although dialogue plays a central role in learning and teaching, research on classroom discourse has contributed to a large body of literature that highlights the ways in which school is "done" through language and social practices (e.g., Cazden, 2001), and more specifically, the triadic sequence that includes the teacher's *initiation* or question, a student's *reply*, followed by the teacher's *evaluation* (IRE; Mehan, 1979). In an IRE sequence, the initiation is a "known answer question," a question that is asked by a person who already knows the answer for the purposes of evaluating the respondent's learning and/or controlling their behavior. A student is usually called upon by the teacher to reply, and this reply is evaluated by the teacher. The IRE sequence, and the communication system created by the teacher more generally, shapes the identities that teachers and students play, as well as how, and to what extent, students engage in learning (Mehan, 1998). The sequence positions the teacher as both initiator and evaluator; students neither initiate questions nor evaluate them. As an identifiable speech pattern or genre, it is an efficient, individualistic, behavioral approach that reflects all too well the emphasis on test taking and, in particular, multiple-choice tests in schools.

The IRE constructs a world where there is one right answer for every question, that this answer can be known with certainty, and that what makes an answer correct is its origination in a higher authority, usually the textbook, sometimes the teacher, always the test developer.

> Indeed, it appears that if we were designing institutions from scratch with a primary goal of *guaranteeing* that there would be few incentives to pursue dialogue and even fewer opportunities to do so, we could not do much better than the typical public school. (Burbules, as cited in Lefstein, 2010, p. 181)

In the face of a large literature base that advances the importance of dialogue in learning and developing, the IRE sequence is highly resistant to change (see, for a related example, Lefstein, 2008). Research on changing classroom discourse has emphasized changing interactional roles, for example, when a teacher intentionally moves from the position of evaluator to asking questions *without known answers*, or interactional norms, for example, when a new activity is not clearly defined or when genres are imported from other spaces (e.g., reality television or game shows). Recent research by Lefstein and Snell (2012) argued for the potential of changing other characteristics of a discourse genre—for example, the topic or the activity— as levers for change. A critical point to future research in this area may be in identifying a unit of analysis that retains the properties of classroom discourse: not simply attempting to change one property, but working strategically to change a unit of classroom discourse that reflects the whole. That the IRE does not reflect typical adult dialogue, or the dialogue between creative collaborators, provides additional evidence that it is unique to formal schooling environments that emphasize testing in general, and standardized testing in particular.

REUNITING LEARNING IN SCHOOLS

Although the institution of schooling was purposefully structured through a bifurcated lens to facilitate the development of what was deemed most important—cognition—as a method for keeping what was deemed least important—emotion—in check, a Vygotskian perspective foregrounds unification as the foundation for learning and development including the unity of intellect and affect, the unity of individual and social, and the unity of speech, thinking, and feeling that

we have elaborated. Here, *feeling* is purposefully elaborated as the perception of a certain state of the body along with the concurrent quality of thinking (syncretism, thinking in complexes, thinking in everyday and/or scientific concepts) coupled with the content of thoughts grounded in and remembered through word meaning and sense. Feeling is mediated by social relationships and language and cultural semiotic systems and develops in relation to changes in the development of thinking toward verbal thinking as dialectically related verbal feeling. Children learn and develop through relationships with caregivers and educators by making sense of experience through negotiated interpretations, and given the guidance of caring adults who initiate them into a particular community of minds within which they learn to recognize, adjust to, and negotiate feelings in a unified psychological system that includes perception, attention, memory, and thinking. The lives of children and caregivers, learners and educators, are *always already* unified by intellect and affect and, ultimately, verbal thinking and feeling. When we learn, our everyday concepts, saturated with meaning and sense, give way, sometimes only with resistance, to scientific, systematic concepts that provide new ways of thinking, seeing, feeling. When we teach, we share our passion for ideas and attempt to engage our students with subjects that have meaning and value for us. The narrowing of the educational endeavor to fit the constraints of schools as institutions, coupled with a cultural emphasis on what is deemed to be cognition, and in particular logical reasoning skills as separate from feeling, contributes to the perception of schooled environments as purely rational ones, though lack of attention to feeling does not mean it does not exist.

This reading of Vygotsky's framework foregrounds two educational implications: (a) that learning and development are *irreducibly* unified processes of thinking and feeling and (b) that learning and development are mediated by both social relationships and language and cultural semiotic systems through social speech—the talk of mothers' and the dialogues of classroom and collegial engagement. Along with participants in social practices, patterns of speech communication contribute to the constitution of practices in homes, schools, and creative collaborations as well. That speech communication mediates experience brings to sharp relief the importance of student–teacher relationships in schools, in particular, the way we engage students in the process of education through talk about subject matter, activities, and assessments, as well as the meanings they make of educational environments and the relationships through which they are constituted. Two potentially complementary pathways for unifying learning in schools—the role of language in unifying thinking and feeling and the literature on dialogue in learning and development—are highlighted because, together, they provide the possibility of establishing a child's learning history by examining the texture of experience across the *social situation of development* including home, early childhood education, and schooling.

Vygotsky (1997c), a critic of school environments, noted that public schools "should not be understood as simply consisting in a crowd of children who have nothing to do with one another" (p. 237). Instead, he challenged us with a vision of schools as places (a) where relationships between teachers and students sustain the exploration and examination of accumulated knowledge of human cultures, (b) where curricula link experiential everyday concepts with abstract scientific concepts that offer differing perspectives of and experiences in the world, (c) where students' interests are the starting point for authentic educational tasks coupled with ongoing assessment *for* learning, (d) where teachers are acknowledged as experts and social actors, and (e) where education leads to the cultural development of all children including those with learning differences that are biological (see, on this final point, Vygotsky, 1993). Although different

from the context of schooling in Russia during the 1920s and 1930s, schools continue to play an undoubtedly significant role in learning and development today.

Schools are environments that are significant enough, indeed, to work toward change in the face of the contradictions inherent in the present context in the United States. Unlike the majority of SEL programs that enter schools today under conditions of individualism and behaviorism only to surface at limited times and in limited ways, Vygotsky provided us with a holistic theoretical and methodological framework that speaks back to the critiques of emotional intelligence and SEL programs by offering a unified theory of learning and development. From this perspective, educators must take into account the variability of educational histories in homes and preschool experiences when they welcome children into the social environments of K-12 schooling. The social environment of schooling must include methods for acknowledging and addressing differences in early educational histories with new educational experiences based in respect and compassion. The social, cognitive, and emotional ideals of learning must be linked with social practices in schools and across school environments, and children and teachers must be supported as they establish the relationships that contribute to learning experiences in the social environment. Schools must become places for engaging in unified experiences and, for this to occur, the reunification of learning must be valued by the school and outside community. However, drawing attention to *perezhivanie,* emotional experience, *the unity of child and social environment*, as well as the importance of the meanings made by the child through developing word meaning and sense, *the unity of speech, thinking, and feeling*, and the role of narrative and dialogue in both, the contradictions between Vygotsky's perspective and the way that schools are currently constructed could not be more blatant.

In place of Vygotsky's holistic perspective, what we see currently in the United States is a move to redress the bifurcation of cognition and emotion in education being transformed to suit a political and economic context significantly at odds with making real change. The emphasis on individual assessments and behavioral skill sets does not reflect the history of relational learning between children and their caregivers, early childhood teachers, and peers, just as standardized assessments of word meaning do not reflect conceptual learning. Although there is a great deal to be concerned about in this context, there is at least one way forward: through research that continues to elaborate this unified perspective. The task at hand is both more difficult and more simple than it seems. We learn and develop through emotional experience, in social relationships, with language and cultural semiotics. If the goals of education are to engage with the accumulation of diverse human knowledges that exist and understand our own human experience; to learn how to relate to others and express ourselves; to learn cultural values related to needs and interests and reflect on them critically, in effect recommitting ourselves to them through use; and to participate in and examine values for caring about, with, and for others, ideas, and our world, then how should school environments look and, more specifically, what role in learning might caring communication and dialogue play?

ACKNOWLEDGMENTS

REFERENCES

Benson, P. L. (2006). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents* (2nd ed.). San Francisco: Jossey-Bass.

Borman, G., & Dowling, M. (2010). Schools and inequality: A multilevel analysis of Coleman's equality of educational opportunity data. *Teachers College Record*, *112*, 1201–1246.

Bozhovich, L. I. (2009). The social situation of child development. *Journal of Russian and East European Psychology*, *47*(4), 59–86.

Cazden, C. (1981). Performance before competence: Assistance to child discourse in the zone of proximal development. *Quarterly Newsletter of the Laboratory of Comparative Human Cognition*, *3*, 5–8.

Cazden, C. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Portsmouth, NH: Heinemann.

Clinchy, B. M. (1995). Goals 2000: The student as object. *Phi Delta Kappan*, *76*, 383–388.

Cochran-Smith, M., & Lytle, S. L. (2006). Troubling images of teaching in No Child Left Behind. *Harvard Educational Review*, *76*, 668–697.

Cohen, J. (2006). Social, emotional, ethical, and academic education: Creating a climate for learning, participation in democracy, and well-being. *Harvard Educational Review*, *76*, 201–237.

Cole, M. (1990). Cognitive development and formal schooling: The evidence from cross-cultural research. In L. C. Moll (Ed.), *Vygotsky and education: Instructional implications and application of sociohistorical psychology* (pp. 89–110). New York: Cambridge University Press.

Collaborative for Academic, Social, and Emotional Learning. (2003). *Safe and sound: An educational leader's guide to evidence-based social and emotional learning (SEL) programs*. Chicago: Collaborative for Academic, Social, and Emotional Learning. Retrieved November 12, 2009, from http://www.casel.org/downloads/Safe%20and%20Sound/1A_Safe_&_Sound.pdf

Damasio, A. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain*. New York: Harcourt.

Darling-Hammond, L. (1997). School reform at the crossroads: Confronting the central issues of teaching. *Educational Policy*, *11*, 151–166.

DiPardo, A., & Potter, C. (2003). Beyond cognition: A Vygotskian perspective on emotionality and teachers' professional lives. In A. Kozulin, B. Gindis, V. S. Ageyev, & S. M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 317–345). New York: Cambridge University Press.

DiPardo, A., & Schnack, P. (2004). Expanding the web of meaning: Thought and emotion in an intergenerational reading and writing program. *Reading Research Quarterly*, *39*, 14–36.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, *82*, 405–432.

Ferholt, B., & Lecusay, R. (2010). Adult and child development in the zone of proximal development: Socratic dialogue in a playworld. *Mind, Culture, and Activity*, *17*, 59–83.

Gerhardt, S. (2004). *Why love matters: How affection shapes a baby's brain*. New York: Routledge.

Giroux, H. A. (2001). *Theory and resistance in education. Towards a pedagogy for the opposition* (Rev. ed.). Westport, CT: Bergin & Garvey.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam.

Green, J., & Luke, A. (2006). Rethinking learning: What counts as learning and what learning counts [Introduction]. *Review of Research in Education*, *30*, xi–xiv.

Greenberg, M. T. (2010). School-based prevention: Current status and future challenges. *Effective Education*, *2*, 27–52.

Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., et al. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, *58*, 466–474.

Hoffman, D. M. (2009). Reflecting on social emotional learning: A critical perspective on trends in the United States. *Review of Educational Research*, *79*, 533–556.

Holzman, L. (2009). *Vygotsky at work and play*. New York: Routledge.

Immordino-Yang, M. H., & Damasio, A. (2007). We feel, therefore we learn: The relevance of affective and social neuroscience to education. *Mind, Brain, and Education*, *1*, 3–10.

Kliebard, H. M. (1987). *The struggle for the American curriculum, 1893–1958*. New York: Routledge.

Kozol, J. (2005). *The shame of the nation: The restoration of apartheid schooling in America*. New York: Random House.

Labaree, D. F. (2010). *Someone has to fail: The zero-sum game of public schooling*. Cambridge, MA: Harvard University Press.

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U.S. schools. *Educational Researcher*, *35*(7), 3–12.

Ladwig, J. G. (2010). Beyond academic outcomes. *Review of Research in Education*, *34*, 113–141.

Landy, F. J. (2005). Some historical and scientific issues related to research on emotional intelligence. *Journal of Organizational Behavior*, *26*, 411–454.

Lefstein, A. (2008). Changing classroom practice through the English National Literacy Strategy: A micro-interactional perspective. *American Educational Research Journal*, *45*, 701–737.

Lefstein, A. (2010). More helpful as problem than solution: Some implications of situating dialogue in classrooms. In K. Littleton & C. Howe (Eds.), *Educational dialogues: Understanding and promoting productive interaction* (pp. 170–191). Abingdon, UK: Routledge.

Lefstein, A., & Snell, J. (2012, April). *Classroom interaction and dialogue: Processes of continuity and change*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.

Leontiev, A. A. (2005). The life and creative path of A. N. Leontiev. *Journal of Russian and East European Psychology*, *43*(3), 8–69.

Levykh, M. G. (2008). The affective establishment and maintenance of Vygotsky's zone of proximal development. *Educational Theory*, *58*, 83–101.

Lindqvist, G. (1995). The aesthetics of play: A didactic study of play and culture in preschools. *Early Years: An International Journal of Research and Development*, *21*, 7–14.

Luria, A. R. (1987). Afterword to the Russian edition. In R. W. Rieber & A. S. Carton (Eds.), *The collected works of L. S. Vygotsky Volume 1: Problems of general psychology* (pp. 359–373). New York: Plenum.

Mahn, H., & John-Steiner, V. (2002). The gift of confidence: A Vygotskian view of emotions. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century: Sociocultural perspectives on the future of education* (pp. 46–58). New York: Blackwell.

Matthews, G., Roberts, R. D., & Zeidner, M. (2004). Seven myths about emotional intelligence. *Psychological Inquiry*, *15*, 179–196.

Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional intelligence: Science and myth*. Cambridge, MA: MIT Press.

McLaughlin, C. (2008). Emotional well-being and its relationship to schools and classrooms: A critical reflection. *British Journal of Guidance & Counselling*, *36*, 353–366.

Mehan, H. (1979). "What time is it, Denise?" Asking known information questions in classroom discourse. *Theory Into Practice*, *28*, 285–294.

Mehan, H. (1992). Understanding inequality in schools: The contribution of interpretive studies. *Sociology of Education*, *65*, 1–20.

Mehan, H. (1998). The study of social interaction in educational settings: Accomplishments and unresolved issues. *Human Development*, *41*, 245–269.

Meier, D., & Wood, G. (2004). *Many children left behind: How the No Child Left Behind Act is damaging our children and our schools*. Boston: Beacon Press.

Nelson, K. (1981). Social cognition in a script framework. In J. H. Flavell & L. Ross (Eds.), *Social cognitive development: Frontiers and possible futures* (pp. 97–118). New York: Cambridge University Press.

Nelson, K. (1996). *Language and cognitive development*. New York: Cambridge University Press.

Nelson, K. (2005). Language pathways into the community of minds. In J. W. Astington & J. A. Baird (Eds.), *Why language matters for theory of mind* (pp. 26–49). New York: Oxford University Press.

Noddings, N. (1992). *The challenge to care in schools*. New York: Teachers College Press.

Noddings, N. (2006). Educating whole people: A response to Jonathan Cohen. *Harvard Educational Review*, *76*, 238–242.

Panofsky, C. P., & Vadeboncoeur, J. A. (2012). Schooling the social classes: Triadic zones of proximal development, communicative capital, and relational distance in the perpetuation of advantage. In H. Daniels (Ed.), *Vygotsky and sociology* (pp. 192–210). New York: Routledge.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, *9*, 185–211.

Sizer, T. (2004). Preamble: A reminder for Americans. In D. Meier & G. H. Wood (Eds.), *Many children left behind: How the No Child Left Behind Act is damaging our children and our schools* (pp. xvii–xxii). Boston: Beacon Press.

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.

Spring, J. (1988). *The sorting machine revisited: National educational policy since 1945*. White Plains, NY: Longman.

Sternberg, R. J. (2002). Foreword. In G. Matthews, M. Zeidner, & R. D. Roberts (Eds.), *Emotional intelligence: Science and myth* (pp. xi–xiii). Cambridge, MA: MIT Press.

Stiggins, R. J. (2002). Assessment crisis: The absence of assessment FOR learning. *Phi Delta Kappan*, *83*, 758–765.

Tappan, M. (1998). Sociocultural psychology and caring pedagogy: Exploring Vygotsky's "hidden curriculum." *Educational Psychologist*, *33*, 23–33.

Taumoepeau, M., & Ruffman, T. (2006). Mother and infant talk about mental states relates to desire language and emotion understanding. *Child Development*, *77*, 465–481.

Taumoepeau, M., & Ruffman, T. (2008). Stepping stones to others' minds: Maternal talk relates to child mental state language and emotion understanding at 15, 24, and 33 months. *Child Development*, *79*, 284–302.

Vadeboncoeur, J. A. (2013). Framing achievement when learning is unified: The concept of unity in Vygotsky's theory and methodology. In S. Phillipson, K. Y. L. Ku, & S. N. Phillipson (Eds.), *Constructing educational achievement: A sociocultural perspective* (pp. 13–25). New York: Routledge.

Vadeboncoeur, J. A., Vellos, R. E., & Goessling, K. P. (2011). Learning as (one part) identity construction: Educational implications of a sociocultural perspective. In D. M. McInerney, R. A. Walker, & G. A. D. Liem (Eds.), *Sociocultural theories of learning and motivation: Looking back, looking forward* (pp. 223–251). Charlotte, NC: Information Age.

van der Veer, R. (2001). The idea of units of analysis: Vygotsky's contribution. In S. Chaiklin (Ed.), *The theory and practice of cultural-historical psychology* (pp. 93–106). Aarhus, Denmark: Aarhus University Press.

Vygotsky, L. S. (1987). *The collected works of L. S. Vygotsky Volume 1: Problems of general psychology* (R. W. Rieber & A. S. Carton, Eds.). New York: Plenum.

Vygotsky, L. S. (1993). *The collected works of L. S. Vygotsky Volume 2: The fundamentals of defectology* (R. W. Rieber, Ed.). New York: Plenum.

Vygotsky, L. S. (1994). The problem of the environment. In R. van der Veer & J. Valsiner (Eds.), *The Vygotsky reader* (pp. 338–354). Oxford, UK: Blackwell.

Vygotsky, L. S. (1997a). *The collected works of L. S. Vygotsky. Volume 3: Problems of the theory and history of psychology* (R. W. Rieber & J. Wollock, Eds.). New York: Plenum.

Vygotsky, L. S. (1997b). *The collected works of L. S. Vygotsky. Volume 4: The history of the development of higher mental functions* (R. W. Rieber, Ed.). New York: Plenum.

Vygotsky, L. S. (1997c). *Educational psychology* (R. Silverman, Trans.). Boca Raton, FL: St. Lucie Press.

Vygotsky, L. S. (1998). *The collected works of L. S. Vygotsky. Volume 5: Child psychology* (R. W. Rieber, Ed.). New York: Plenum.

Vygotsky, L. S. (1999). *The collected works of L. S. Vygotsky. Volume 6: Scientific legacy* (R. W. Rieber, Ed.). New York: Plenum.

Waterhouse, L. (2006). Multiple intelligences, the Mozart effect, and emotional intelligence: A critical review. *Educational Psychologist*, *41*, 207–225.

Weare, K., & Gray, G. (2003). *What works in developing children's emotional and social competence and well-being?* London: Department for Education and Skills.

Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.

Zinchenko, V. P. (1985). Vygotsky's ideas about units for the analysis of mind. In J. V. Wertsch (Ed.), *Culture, communication, and cognition: Vygotskian perspectives* (pp. 94–118). New York: Cambridge University Press.