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INTRODUCTION TO SPECIAL ISSUE

Vygotskian Perspectives in Early Childhood Education

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*Introduction to Special Issue:**Vygotskian Perspectives in Early Childhood Education*

This special topic issue of *Early Education and Development* is devoted to Vygotskian and/or CHAT (Cultural Historical Activity Theory) perspectives on early childhood education. Although the ideas of Soviet developmental/educational psychologist, Lev Vygotsky (1896-1934), and those of his followers, are now central theoretical grounding within the field of early childhood education (Berk & Winsler, 1995; Bodrova & Leong, 1996; Bredekamp & Copple, 1997), it is still often a challenge understanding and implementing Vygotskian and neo-Vygotskian ideas in early childhood classrooms. Perhaps this is due to the fact that many of the central constructs within this tradition (i.e., scaffolding, zone of proximal development...) have often been conceptualized and empirically examined at the one-on-one, adult-child level, rather than at the level of classroom processes. Or perhaps the inherent conceptual and methodological complexities of socio-cultural, historical, and semiotic analyses become an obstacle to effective integration of scholarship and practice in this area. Indeed, Vygotskian theory forces us to think about not only the child and his or her current activities, but also about the child's history of previous experiences, the cultural backdrop and meaning that such activities have for the child, the social context in which that particular activity occurs in the classroom, the structure of the larger classroom context and the opportunities afforded by the available tools and cultural artifacts to be found there, and the way that teachers and other children "mediate" children's experiences in the classroom via social interaction and language use. Clearly, it is difficult in both theory and practice to think about and coordinate these multiple levels, but it is certainly worth the time and effort to do so. The goal of this special issue was to compile a selection of both empirical and theoretical papers that would help toward that effort and make a significant contribution to advancing early childhood policy, practice, and applied developmental science by both informing, and learning from, practice in early childhood settings.

*Why Vygotsky, Why Now?*

*Explosion of Scholarship.* Jerome Bruner (1987; as cited in Blanck, 1990) said that Vygotsky speaks to us from the future. Indeed this is the case. Although his works were written over 70 years ago, they couldn't have more contemporary relevance. The last decade has witnessed an explosion of research and scholarship in the area of Vygotskian theory and education. A literature search conducted during the production of this special issue, using the specific terms "Vygotsky and education" within the ERIC and PSYCHINFO databases, found a total of 721 works accessible to date. During the decade from 1973 to 1983, only 35 works (27 in ERIC, 8 in PsychInfo) were published. Between 1983-1993, 212 works (155 in ERIC, 57 in PsychInfo) were found. And for the most recent decade, 1993-2003, a whopping 474 works emerged (320 in ERIC, 154 in PsychInfo). Thus, almost 70% of all accessible scholarship throughout history on the topic of Vygotsky and education has occurred during the last 10 years. Given the volume of work in this area, a special issue seemed appropriate. *Early Education and Development* is, of course, not the only journal that felt it appropriate to devote a special issue to Vygotskian based research. As clear evidence of the growing influence of this theoretical tradition, several other journals have published special issues dedicated to Vygotskian approaches to education, including *Anthropology & Education Quarterly* (Vol. 26 (4) 1995); *Child & Youth Care Forum* (Vol. 22 (5) 1993); *Educational &*

*Child Psychology* (Vol. 17 (3) 2000); *Educational Psychologist* (Vol. 30 (2) 1995); *Journal of Special Education* (Vol. 28 (3), 1994); *RASE: Remedial & Special Education* (Vol. 20 (6) 1999), and *School Psychology International* (Vol. 16 (2), 1995). Also of note, *Mind, Culture, and Activity*, a successful journal dedicated to Vygotskian/socio-cultural/CHAT perspectives on learning and development, was formed in 1994 and continues to this day.

One of my goals for the introduction to this special issue was to provide the reader with a quick overview of works relevant to Vygotskian theory and early childhood educational practice that have been published over the past decade (1993-2003). Table 1 provides a list of such citations, organized by topic area. Full references for these works are found in the reference section. I am sure the list is not exhaustive and that there are other works overlooked that should be listed, and for this I do apologize. As can be seen from the table, Vygotskian perspectives have been brought to bear on many different areas of education, including assessment; computers and technology; multicultural education; ESL and second language learning; literacy, math, and science education; peer interaction and teacher-child interaction; play; private speech and self-regulation; school readiness; special education and inclusion; and teacher education. No doubt the next decade will also witness considerable expansion and application of ideas within this theoretical tradition.

*Cultural Diversity.* We need Vygotskian sociocultural theory now more than ever before, in order to help us understand, embrace, and best respond pedagogically to the increasing ethnic, cultural, and linguistic diversity of today's early childhood classroom. As the demographic profile of the early childhood classroom rapidly changes, so too must our theories, ideas, and educational practices change. The Vygotskian/CHAT perspective offers early childhood educators a number of conceptual tools for understanding and examining universals and variation in cultural and linguistic practices and the importance of the sociocultural context in children's development.

*Role of the Teacher.* One of the great challenges in providing developmentally-appropriate practice in early childhood education is determining an appropriate level of teacher-provided direction in the classroom (Winsler & Carlton, 2003). On the one hand, early childhood teachers want to nurture, guide, lead, teach, and scaffold children to help them reach their highest potential. On the other hand, teachers want to foster children's autonomy, let them solve their own problems, and allow freedom of choice. Indeed, arguably the largest debate in the field of early childhood education for some time has been where along the continuum of "child-centered" to "teacher-directed" it is best to define the role of the teacher for optimizing children's healthy development in the early childhood classroom (Hirsh-Pasek, 1991; Marcon, 1999; Powell, 1986; Schweinhart, Weikart, & Larner, 1986; Stipek et al., 1998). Some have suggested that Vygotsky's theory shows promise in helping the field define and attain a "happy medium" on this continuum, that is, a role for the early childhood teacher that effectively balances child initiation and autonomy with teacher facilitation, mediation, or "scaffolding" of children's development (Berk & Winsler, 1995; Winsler & Carlton, 2003). This is indeed a challenge, however, because while it is relatively easy for early childhood teachers to function in the extremes of this continuum, it is much more difficult to function in the middle. That is, the extremely "teacher-directed" early childhood educator can simply prepare pre-determined materials ahead of time and run through highly structured large group activities without much regard for the individual needs of the children. Likewise, the radically hands-off, "child-centered" teacher can choose to let children explore their

*Table 1.*  
Citations Relating to Vygotsky and Early Childhood  
Education, 1993-2003, by Topic

TOPIC	CITATION(S)
Assessment	Grigorenko & Sternberg, 1998; Guthke, 1993; Lidz, 1995; Missiuna, 1996; Pellegrini, 1998; Tzuriel, 2001
Computer/Technology	Bellamy, 1996; Blanton, Simmons, & Warner, 2001; Coufal, 2002; Freeman & Somerindyke, 2001; Luckin, 2001; Mayer, Schustack, & Blanton, 1999; Mercer, 1994; Pange & Kontozisis, 2001; Roschelle & Teasley, 1994; Verillon, 2000
Cultural Variation/ Multicultural Education	Cole, 1996; Rogoff, 2003; Rogoff, Mistry, Göncü, & Mosier, 1993; Souza Lima, 1995; Stremmel, 1997
ESL/Language Learning	Anton, 1999; Brooks & Donato, 1994; Cazden & Starfield, 1994; de Almeida Mattos, 2000; De Guerrero & Villamil, 2000; DiCamilla & Anton, 1997; Kinginger, 2002; Lantolf & Appel, 1996; Nassaji & Swain, 2000; Ohta, 1995; Robbins, 2001; Schinke-Llano, 1993, 1995; Smith, 2001; Takahashi, 1998
General/Theory/Overview	Berk & Winsler, 1995; Bodrova & Leong, 1996; Chaiklin, 2001; Cole & Engestrom, 1993; Daniels, 1996; Daniels & Lunt, 1993; DeVries, 2000; Engestrom, 1997; Engeström, Miettinen, & Punamaki, 1999; Forman, Minick, & Stone, 1993; Glassman, 2001; Göncü, 1999; Grigorenko, 1998, 2001; Haenen, 2001; Holzman, 2000; Jacob, 1997; John-Steiner & Mahn, 1996; Karpov & Bransford, 1995; Kelly & Washtell, 1996; Kozulin, 1995, 1998; Kozulin & Presseisen, 1995; Kozyrev & Turko, 2000; Kravtsov & Berezhikhovskaya, 1999; Lawrence & Valsiner, 1993; Llyod & Fernyhough, 1999a, 1999b, 1999c, 1999d; Mahn, 1999; Mahn & John-Steiner, 2002; Martin, 2000; Meacham, 2001; Nelson, 1996; Newman & Holzman, 1993; Popkewitz, 1998; Prawat, 2000; Rudneva, 2000; Smith, 1993; Stetsenko & Arnievitch, 2002; Tryphon & Voneche, 1996; Tudge & Scrimsher, 2003; Valsiner, 1998; van der Veer, 1994; Vinson, 2001; Vygotskaya & Lifanova, 1999; Vygotsky, 1994, 1997a, 1997b, 1997c, 1998, 1999; Vygotsky & Luria, 1993; Wells, 1999; Wells & Claxton, 2002; Wertsch, 1998; Wertsch, Rio, & Alvarez, 1995
Literacy / Reading	Antonacci, 2000; Au, 1996; Dixon-Krauss, 1995, 1996a, 1996b; John-Steiner, Panofsky, & Smith, 1994; Lee & Smagorinsky, 2000; Prior & Welling, 2001; Stone, 1993
Math Education	Berenson, 1997; Bussi & Bartolini, 1998; De Abreu, 2000; Jones & Schneider & Watkins, 1996; Thornton, 1993; Lerman, 1996, 2001; Saxe, Dawson, Fall, & Howard, 1996; Saxe & Guberman, 1998; Steele, 2001; van Oers, 2000; Waschescio, 1998
Moral Education	Buzzelli, 1993, 1995, 1997; Tappan, 1997, 1998a, 1998b
Peer Interaction	Brown, Metz, & Campione, 1996; File, 1993; Forman & Cazden, 1994; Hogan & Tudge, 1991; Karasavvidis, Pieters, & Plomp, 2000
Play	Berk, 1994a; Bodrova & Leong, 1998; Bodrova, Leong, Hensen, & Henninger, 2000; Göncü, 1993; Haight & Miller, 1993; Sawyer, 1997

Table 1 (Continued).

Citations Relating to Vygotsky and Early Childhood  
Education, 1993-2003, by Topic

TOPIC	CITATION(S)
Private Speech/ Language for Self-Regulation	Berk, 1994b; Berk, & Spuhl, 1995; Daugherty & Logan, 1996; Duncan & Pratt, 1997; Fernyhough & Russell, 1997; Krafft, & Berk, 1998; Parrila, 1995; Winsler, 1998; Winsler, Carlton, & Barry, 2000; Winsler, De León, Wallace, Carlton, & Willson-Quayle, in press; Winsler & Diaz, 1995; Winsler, Diaz, Atencio, McCarthy, & Adams Chabay, 2000; Winsler, Diaz, McCarthy, Atencio, & Adams Chabay, 1999; Winsler, Diaz, & Montero, 1997; Winsler & Naglieri, in press
School Readiness	Carlton & Winsler, 1999
Science Education	Rowlands, 2000; Shepardson, 1999; Zuckerman, Chudinova, & Khavkin, 1998
Special Education/ Inclusion	Gindis, 1995a, 1995b, 1999; Mallory & New, 1994; Schneider & Watkins, 1996; Ukrainetz, 1998; Vygodskaya, 1999; Vygotsky, 1993
Teacher-Child Interactions	Fleer, 1992; Rogoff, Turkanis, & Bartlett, 2001; Samaras, 1991; Stremmel & Ru, 1993; Winsler & Carlton, 2003; Yang, 2000
Teacher Education	Clifford, 1999; Jacobs, 2001; Jones, Rua, & Carter, 1998; Manning & Payne, 1993; Maynard, 2001; Samaras, 2000; Samaras & Gismondi, 1998; Shepel, 1995; Wood & Bennett, 1998

environment unfettered, without getting involved in the children's activities. However, the difficult task for the Vygotskian-inspired early childhood professional is to understand what children bring culturally, historically, and linguistically to the classroom, negotiate shared interests, meanings, and goals between teacher and child, engage children in meaningful leading activities, and figure out how best to guide, interact with, and "scaffold" children, both individually and in a group, to mediate and enrich the child's experiences in the classroom.

*A Host of Powerful Ideas.* Vygotskian and neo-Vygotskian theory offer a set of powerful ideas for understanding and facilitating young children's development and learning. The list below reflects a non-exhaustive grouping of some of these ideas:

- 1) A focus on the *social and cultural context of learning* and the influence that other people, cultural artifacts, and the environment has on children's development.
- 2) *General Genetic Law of Cultural Development* – That all uniquely human psychological functions first appear socially, between people during social activities, and only later, after a process of internalization or appropriation, do they appear individually as part of the individual's mental functioning.
- 3) Developmental can be seen as the gradual *internalization or appropriation of cultural tools* and *increased participation* in sociocultural activities.

- 4) A focus on *uniquely human, higher-order psychological functions* such as language, tools, signs, symbols, and other cultural artifacts.
- 5) *Language is central*, both socially, as the tool used by teachers to mediate and enrich the child's experience of the world, but also privately (i.e., private speech or self-talk) as the primary tool used by children to internalize culture and transform/re-organize the mind.
- 6) *Cultural and linguistic variation* in tools, artifacts, scripts, activities, participation rules, and meanings lead to variation in all domains of children's development.
- 7) *The dialectical, dynamic, bi-directional, and transactional relationship* between the child's biological or natural line of development, or what the child brings to an activity setting/experience, and the cultural line of development or the history of the child's experiences. The child both changes and is changed by the environment dynamically over time.
- 8) *Zone of proximal development (ZPD)* – An imaginary activity-specific zone defined by the distance between what the child can do (the competence the child can demonstrate) independently without assistance and what s/he can do with or after the careful assistance of another person (teacher, parent, peer). This is where development takes place, where culture and cognition create each other (Cole, 1985), and where the teacher wants children to “be” often — working or playing with something that is slightly challenging for the child and possibly requiring some mediation or assistance.
- 9) *Scaffolding* – A metaphor used to describe a particular type of assistance that the teacher provides the child in the ZPD that is characterized by joint participation, negotiation, and engagement in an activity, together with the teacher monitoring and maximizing the child's participation in the activity by carefully modulating the type of assistance given and withdrawing the amount of adult assistance provided to keep the child in the ZPD.
- 10) *Primary and secondary deficits for special needs children*. Because development for children with exceptionalities follows the same laws as those for normally developing children, attention needs to be paid to insure that the social and cultural environment (social interactions, communication, peer and adult-child relationships) of special needs children be normalized as much as possible. This will help avoid the development of additional secondary or cultural deficits for the special needs child that emerge from a history of disturbed social interactions and reduced cultural participation in daily activities.
- 11) *Dynamic assessment*. In order to see what is going on cognitively with a child, one needs to see development in motion, with history, within the ZPD, over time. Static, one-point-in-time measures of children's individual, unassisted competence, as are typically used, do not get at individual differences in the width of the ZPD or differences in children's ability to profit from intervention. Therefore, assessment should be dynamic, involving both measures of children's individual functioning and their functioning during/after a socially “scaffolded” session.

### *The Current Special Issue*

This special issue starts out with a well-written article by Robert Duncan and Donato Tarulli on the role of play as a leading activity in early childhood. This paper effectively integrates ideas from Vygotsky, Leont'ev, and Bakhtin to show how fantasy play acts as its own zone of proximal development that contributes to the development of symbolic mediation, to the appropriation of social roles and symbols, and to the child's preparation for the upcoming leading activities of elementary school and beyond. This work also provides a helpful account of internalization and appropriation, highlighting the child's active, selective, and creative contribution in what children take from social experience to be their own, and offers a number of vivid examples for early childhood educators. This work serves to remind us that one of the powerful contributions of Vygotsky's theory is that there is a clear place for both play and "work" (defined as enjoyable and meaningful engagement in appropriately challenging, developmentally appropriate, goal-directed activities with the careful assistance/scaffolding of teachers) for children in Vygotskian-inspired early childhood settings.

Next in the issue is an engaging article by Sheryl Scrimsher and Jonathan Tudge that serves to remind us of several very important aspects of Vygotskian theory that are often times under-recognized in current treatments of sociocultural theory. For example, we should not focus exclusively on the teacher side of teacher-child scaffolding interactions (i.e., what the teacher does) but also pay critical attention to what the children themselves do in, and bring to, classroom interactions. Teaching and learning are inseparable parts of one unified social activity (*obuchenie* for Vygotsky), and just as it takes two to tango, it takes a good understanding of each other on both sides for good teaching and learning to occur. This means that to realize the potential of Vygotskian sociocultural thought, early childhood educators must get serious about understanding, respecting, and responding to cultural, racial, and ethnic diversity within the classroom.

The next paper, by William Blanton, Rita Menendez, Gary Moorman, and Linda Pacifici, introduces The 5th Dimension to the early childhood community. The 5th Dimension is a unique after-school mixed activity program, now implemented in a variety of locations throughout the world, in which elementary school-aged children engage in a variety of literacy activities in the playful and motivating context of computer games, multimedia, and telecommunications. Although the 5th Dimension is well-known within the educational technology field and among CHAT scholars, I suspect it might be new and possibly refreshing to early childhood professionals. In this particular empirical piece, Blanton and his colleagues investigate the extent to which children's participation in this after school program is associated with increased skills in comprehending written instructions. Although this research is conducted with third- to fifth-graders, the ideas certainly transfer to settings with younger children, with a main idea being that rather than directly teaching something (i.e., reading) as an end in itself, one can often reach the same, if not more, pedagogical goals by embedding the desired activity/experience within the context of other valued goals and desires of the children (i.e., computer games). This piece also nicely highlights some of the challenges and rewards inherent in conducting applied evaluation research in community program settings.

Included next is a notable qualitative study by X. Christine Wang and Cynthia Carter Ching that explores the ways in which children define and use personal computers during choice time in a first grade classroom. This work, in addition to describing the larger social

and classroom context of computer use, and exploring the opportunities afforded by available cultural artifacts, also describes how students jointly negotiate multiple meanings and goals and how they transform classroom computer participation rules over time. This work reminds teachers and educational technology scholars that although computer programs are typically designed for individual use, this is not the social reality of children's computer game playing, and that many fascinating social and cultural processes surround children's participation in this particular activity setting.

The final work in this issue, by Mary Ann Evans, Shelley Moretti, Deborah Shaw, and Maureen Fox, is a fine attempt to take the notion of scaffolding and apply it to the arena of parental coaching during joint parent-child book reading. This study shows, for example, how parents dynamically modify their assistance contingent upon the child's immediately preceding reading successes and how parental assistance varies as a function of child reading level. This project also makes a contribution by showing the methodological struggles involved in trying to operationalize the construct of scaffolding and break down adult teaching behaviors into code-able categories along a potential continuum of level of assistance. Although some Vygotskian scholars would understandably argue that taking such a quantitative and "micro" approach to such a complex and dynamic cultural practice as parent-child book reading misses out on much of the qualitative and contextual interpretative richness made possible by the sociocultural perspective, I think methodological pluralism and diversity is a healthy sign of a powerful theory. A final contribution of this research is that it helps parents and early childhood professionals reflect on what they are saying and/or doing with young children and the whether it is tailored to fit the particular child's changing needs.

It is unfortunate that only a few articles and topics from a much longer list of possible papers and areas could be addressed in the limited space of this one special issue. There was an excellent response to the call for papers for this issue. I received 20 manuscripts for consideration from scholars and practitioners representing eight different countries. In addition to the five papers included here, one or two other manuscripts from the larger pool of submissions will likely be appearing later in a forthcoming regular issue of *EE&D*. I would like to thank all of the authors who submitted papers for this issue, thereby contributing greatly to its ultimate success. I would also like to thank all of the 53 reviewers for this special issue (see page) for generously offering their time, care, and expertise to comment on the manuscripts. I hope that this special issue helps the early childhood field continue to explore the many insights and opportunities found within the Vygotskian sociocultural theoretical approach for at least the next decade and beyond.

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