LISTENING IN EARLY CHILDHOOD: AN INTERDISCIPLINARY REVIEW OF THE LITERATURE

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The listening environment has changed; today’s children are:

“awash in a cosmic soup of language, numbers, images, music, and drama. Television, radio, movies, billboards, print media, electronic media, packaging, grocery stores, malls, and restaurants” all require them to become expert users of multiple symbol systems used to represent ideas, feelings, and events” (Berghoff, 1997, p. 316).
A Definition of Listening

For the purposes of this review, young children’s listening is defined as a form of communication that involves hearing, interpreting, and constructing meanings; an active process that is not limited to the spoken word; and an essential way of participating in daily routines as well as wider decision-making processes (Clark, 2005).
Young children are underrepresented in listening research. Investigating listening from its earliest beginnings—before listening styles and preferences are established—is a way to support children’s learning, to more fully understand the dynamic processes associated with effective listening, and to establish the lifelong listening habits valued in society.

Even though auditory abilities continue to develop until about fifteen years of age, many experts consider the first three years of life to be a critical period for the development of auditory-neural connections in the brain (Chermak & Musiek, 1997).
Three Basic Purposes of Research in Human Development

- Explain
- Predict
- Modify
SIX STRANDS IN THE RESEARCH
1. listening research with infants and toddlers,
2. evidence for a listening/literacy connection,
3. the link between listening and socio-emotional development
4. the listening needs of special populations
5. studies of classrooms as environments for listening
6. curriculum issues in basic and higher education
STRAND 1: LISTENING IN INFANTS/TODDLERS
Hearing acuity is at mature levels even prior to birth, commencing during the fifth month in the womb (Robinshaw, 2007).

From the earliest days of life the very architecture of infants’ brains is affected by what they hear (Vouloumanos & Werker, 2007).

Advances in technology have made it possible to assess preliterate children’s auditory processing; for example, evaluating vocabulary knowledge using visual tracking.
THE TRAJECTORY OF LISTENING
Infants demonstrate that they have heard a sound (e.g., stop playing and look at the source of the sound). Even newborns will startle to loud, sudden sounds and are sensitive to pitch (Saffran & Griepentrog, 2001). These early acts of speech perception are powerful predictors of language development at two years (Tsao, Liu & Kuhl, 2004).
Auditory Discrimination

- The ability to differentiate one sound from another and focus on those that have meaning for them—even before words are used (Aslin, Pisoni & Jusczyk, 1983; De l’Etoile, 2006).

- May rely on prosody, the lyrical sounds of language

  Example: “all gone”
Auditory Recognition

- Linking sounds to their sources and correctly labeling them, such as when a toddler hears her father’s a car in the driveway and announces “Daddy.”

- Over time, increases occur not only in the *breadth* (the range of sounds to which a child responds) but also in the *depth* (increasingly complex responses to aural input) (Schuyler & Rushmer, 1987).
STRAND II:
ORACY/LITERACY CONNECTION
A British policy paper concluded that far more attention needs to be given to listening skills so that children build their vocabularies and learn to listen attentively (Rose, 2006).

Listening comprehension is highly predictive of overall academic achievement (Bishop & Snowling, 2004; Nakamoto, Lindsey, & Manis, 2008; Skarakis-Doyle & Dempsey, 2008). Oral language variables—even more than word identification—predicted reading comprehension in first grade (Lindsey, Manis & Bailey, 2003).

The most common cause of early reading difficulty is weakness in children’s ability to apprehend, manipulate, and use the sound structure of spoken language (Lonigan, 2005; Stojanovik & Riddell, 2008).
Children with listening comprehension difficulties face serious learning challenges and are much more likely fall behind their peers as they progress through school (Field, 2001; Mendelsohn & Rubin, 1995; Schwarts, 1998).

Picture books—read aloud to and discussed with young children—are a major mechanism for support literacy growth (Justice, Meier & Walpole, 2005; Santoro, Chard, Howard & Baker, 2008).
STRAND III:
LISTENING AND EARLY SOCIO-EMOTIONAL DEVELOPMENT
The Chinese Character for Listening

Let the ears be the king

Let the eyes be ten eyes

Let there be one-heartedness

Role models. As children experience the joy of someone else’s undivided attention, they learn to value listening and acquire the disposition to listen thoughtfully to others (Dougherty & Paul, 2007; Smith, 2008).

Origins of empathy. In the hospital nursery. If one infant begins to cry, it is frequently the case that others will join in (Sagi & Hoffman, 1976)

Concepts about listening. Young children can identify the behaviors associated with effective listening (Imhof, 2002; McDevitt, 1990)
- **Language learning.** Anxiety (e.g., being pressured, corrected, or ridiculed) creates “mental blocks” that interfere with language learning and slow the process of language acquisition (Krashen, 2003).

- **Self-regulation.** Behavioral problems often accompany poor receptive language skills in preschool children (Estrem, 2005). When children do not hear or understand what is being discussed, they often become withdrawn in school or appear inattentive; they may also act out in socially inappropriate ways (Cruger, 2005).

- **Autobiographical memory.** A child’s capacity for remembering and recounting personally significant experiences is driven by the “mental workspace” available for storing recollections (Gathercole, 2007; Richmond & Nelson, 2007). Autobiographical memory is constructed mainly through listening to family stories (Nelson, 1999; 2007; Resse & Newcombe, 2007).
STRAND IV.
CHILDREN WITH SPECIAL NEEDS

- Children with hearing impairments, ELLs and Children with Auditory and Attentional Issues
Sensorineural hearing loss. Neither amplification nor medical and surgical procedures can correct the problem (McCormick, Loeb & Schiefelbusch, 2002); some can benefit from a cochlear implant if the surgical procedure is done early (Easterbrooks & Estes, 2007; Eisenberg, Fink & Niparko, 2006; Lee, Huh, Jeung & Lee, 2004).

Providing translation is not enough. Pretend play with peers is recommended because children are unified by shared interest in the activity and they have to “think on their feet” in order to keep the play theme going (Brown, Rickards & Bortoli, 2001).

Scaffolding Learning (Bruner, 2004). Teachers can support the learning of children by combining three modes of thought: enactive, iconic, and symbolic; this enables all children to participate at some level in the activity (Rothenberg & Fisher, 2007; Seo, 2002).
Other Hearing Challenges

- **Otitis media (OME)**—a middle ear infection and resulting accumulation of fluid in the ear—is the most common cause of hearing loss and hearing problems in young children (Cole & Flexer, 2007). By 3 years of age, 1/3rd of children have had 3 or more episodes of OME and 85% of school age children have had at least one (Winskel, 2006). OME alters the structure of the middle ear lining; it recovers more slowly after each episode (Tos, Holm-Jensen, Sorensen, & Moregensen, 1982).

- **Common difficulties.** Flexer (1997) estimates that, on any given day, about 1/3 of first graders are not hearing normally due to allergies, background noise, tinnitus (caused by medications), ear infections, and so forth.
Children new to English are in the company of peers with a 4-5 year advantage (Hutchinson, Whiteley, Smith & Connors, 2003; Nelson et al., 2005). It may take 2-3 years to acquire communicative language with peers and another 5-7 years for proficiency with academic English (Cummins, 1984; Hakuta, Butler & Witt, 2000; Genesee, Lindholm-Leary, Saunders & Christian, 2005).

Most young children are not adept at “filling in the blanks” when messages are incomplete or ambiguous (McFadden & Pittman, 2008; Skarakis-Doyle & Dempsey, 2008; Soli & Sullivan, 1997; Stelmachowicz, Hoover, Lewis, Kortekaas & Pittman, 2000).

Even seemingly simple academic tasks, such as listening to a story, require focused, persistent meaning-making efforts (Field, 2001; Gallas, 1994; Gallas, 1997; Lund, 1991; Lundsteen, 1993; Morley, 1991; Vandergrift, 2006). If story sharing is made more interactive then listening can be improved (Cabrera & Martinez, 2001).
Children with Auditory and Attentional Difficulties

- **Limits of Audiological Screening.** A child may pass the test but be unable to detect more subtle differences between speech sounds or changes in pitch (Jerger, 2006).

- **Working Memory.** Listening comprehension and working memory are impaired in attention-deficit hyperactivity disorder irrespective of language impairment (McInnes, Humphries, Hogg-Johnson, & Tannock, 2003).

- **Metacognitive Strategies.** Teach children to reflect on their own listening behaviors, identify what they need in order to listen more effectively, monitor their listening comprehension, and modify their listening habits accordingly (Goh & Taib, 2006; Jones, 2007; Resnick & Snow, 2009).
Homework. Rehearsal and repetition are recommended (Illiadou, Nikolaidou, Kaprinis & Kaprinis, 2008); teacher coaching, homework practice sessions with peers, and training in how to use study aids (e.g., a homework calendar) can help children’s homework can be improved (Bryan & Brustein, 2004).

Work with Parents/Families (Lu, 2000; Smith, 2008). An intervention where parents of children with communication difficulties were supplied with home activity packets to promote shared listening reported positive effects on parental attitudes and children’s listening skills (Stevens, Watson, & Dodd, 2001).
STRAND V: CLASSROOMS AS LISTENING ENVIRONMENTS
What does it mean to listen?

To pay attention, then use your imagination.

Not to screw it up. Listen to directions.

People use ears to listen to other people. If you don’t listen, you can’t hear what the teacher is saying.

Listen to the teacher so you get smarter, grow up, and go to college.

How can you tell if someone is listening?

When they’re being quiet and look like they are thinking inside.

Because they look at me and talk to me after.

If they are looking at their shoe or talking to someone else then they are not listening. They are in lala land!
Are you a good listener? How do you know?
Yes, because I hear a lot of people and what they say to me.
Yes, because I am from China.

How can listening help you?
Because it helps you do your homework and not ask questions that people have already said.

So you know the rules and you won’t get sent to the principal’s office.

If you want to get smarter or drive then you need to listen. My dad is a vet and he listens to people so that he knows how to save their animals (Jalongo, 2008).
Studies estimate that between 50 and 75% of students’ classroom time is spent in listening to the teacher, other students, or audio media (Imhof, 2008; International Listening Association, 2008; Smith, 2008; Strother, 1987; Wolvin & Coakley, 1995, 2000).

Variables that exert a negative effect on children’s listening comprehension at school include the rapid rate of speech of some teachers; background noise, distractions, and interruptions in the classroom; and language or dialect differences between the child and teacher or peers (Swain, Harrington, & Friehle, 2004).
In order for a teacher’s voice to be heard above the ambient room noise, the speech-to-noise ratio (S/N) needs to be about 2 to 1 (Robinshaw, 2007). In practice, this seldom is the case (McSporran, 1997).

Even an empty classroom has noise from HVAC systems, the reverberation of sounds off hard surfaces, and noises from outdoors (Knecht, Nelson, Whitelaw & Feth, 2002); after the children arrive, the signal-to-noise ratios degrade even more (Nelson et al., 2005; Rogers, Lister, Febo, Besing, & Abrams, 2006).
Increasingly, experts are endorsing sound amplification systems to make the intended message audible above the noise (Cole & Flexer, 2007).

Difficulties with listening due to attention deficit disorder (ADD), auditory processing disorder (APD), and specific language impairment (SLI) are exacerbated by background noise (Gilmore & Vance, 2007).
STRAND VI:
BASIC AND HIGHER EDUCATION CURRICULUM ISSUES
There is little question that listening is the “Cinderella skill” of language, eclipsed by its sister skills of speaking, reading and writing (Nunan, 1997; Smith, 2003).

Listening has been the forgotten, neglected language art for decades (Dimitriadi, Hodson, & Ludhra, 2006; Tompkins, 2008) and changing its status will require a fundamental shift in thinking (Janusik, 2002).

Even when listening is part of the written and taught curriculum, it sometimes is neglected in assessment and this tends to diminish its relative importance in today’s test-driven curriculum (Jones, 2007).
The place of listening strategies in each state’s academic standards, the instructional materials used with children, and in the teacher training and instructional repertoires of pre-service and in-service educators (Sanger & Anderson, 2009).

Listening is the language skill children use the most, yet it is the one that is taught the least – an inverse relationship between the real world and the classroom (Jones, 2007).

Few teaching methods textbooks include more than a page or two on listening and educators assume that learning to listen is somehow “automatic” (Flowerdew & Miller, 2005; Sims, 2005).
 Listening instruction must transcend subject matter boundaries and include applications of technology (Parker & Pardini, 2006; Skouge, Rao & Boisvert, 2007).

Individual talk about digital photos from their lives are more effective than a “tsunami of words” (Keat, Strickland, & Marinak, 2009).
RECOMMENDATIONS
Institute a “Pedagogy of Listening”

- **interior listening**—children reflect on what it means to be in a particular environment
  
  Example: acoustic ecology—research linking the child’s listening in various environments to his/her interpretation of and appreciation for them (Deans, Brown, Dilkes, 2005; Schafer, 1977).

- **multiple listening**—children’s and adults’ voices are given equal time and respect

- **visible listening**—children discuss and interpret ways to document listening experiences (e.g., drawings, photographs, print, sculpture, etc.) (Clark, 2007; Rinaldi, 2001).
Take a Developmental Assets Approach

- Which “represents a shift away from relying solely on prevention and intervention efforts to the enhancement of assets within homes, child care settings, and communities in the service of optimal language development for children at all levels of risk” (Weigel, Lowman, & Martin, 2007, p. 732).

- This turns educational thinking upside down because, rather than operating from a deficit model that ascribes blame for the child’s difficulties, it looks at the evidence of what maximizes development and strives to provide those experiences for all children in ways that are tailored to each child’s strengths (Neuman, 2009; Sesma, Mannes & Scales, 2005).
“What I needed as a child in school was a teacher who wanted to hear my voice, my ideas, the words that were always present but never spoken; a teacher who would have given me the support and safety and a space in which to project that voice... a teacher who would have valued my voice just because it was mine, not because it provided the right answer”

Karen Gallas, 1994, p. 14
Prepare Adults Who Work with Young Children to be superlative listeners as they strive to better understand children, families, and colleagues; to interpret the rhythm and balance of learning experiences; to hear the social, cultural, and community contexts of students’ lives; and to attend to silence and acts of silence (Schultz, 2003).

Doing anything less would deprives young children of the experiences they need to grow as listeners and learners.

Example: A listening workshop for Michigan teachers from the UP
In Conclusion

“What people really need is a good listening to.”
References—in the current issue of IJL

