Seven Instructional Principles for Teaching Young Learners of English

TESOL Symposium
San Diego, 2002

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Current research that combines classic principles and recent findings on how language is learned, how the brain processes language, and characteristics of young learners provide an important theoretical basis to teachers of young learners of English. This paper summarizes key aspects of this research into seven instructional principles of an activity-based, communicative model for teaching English to young learners. Examples of classroom structures and strategies that demonstrate these principles in action are depicted.

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On a recent visit to Cairo I had a chance to converse with an Egyptian friend’s 1-year old granddaughter, Salma. Though Salma is at the telegraphic speech age—she uses only one or two words at a time (and very effectively)—her Arabic comprehension is quite impressive. Although her knowledge of English includes only greetings and a few names for everyday things, she is already quite clear about which language to use with whom. In fact, when she sees photos of English speaking friends of the family, she greets them in English with an enthusiastic and North American-accented, “Hiii!”

Salma’s language development, while, of course, brilliant in the eyes of her grandmother and American “aunt,” is not unique.

What Children Bring to the Learning Process

Evidence shows that, at birth, children already possess considerable genetic programming to learn and use language (Chomsky, 1959, Pinker, 2000). Exactly which elements of resultant language acquisition come from genetic language instinct and which come from input from the social environment is the subject of some debate, but we know that both influences are powerful. When babies – even deaf babies – begin to babble, they make most of the speech sounds of most languages. Then, very quickly, their babbling narrows until they use only the sounds of the speakers they hear around them, and babies from Michoacán make Spanish babbling sounds while babies along the Nile produce Arabic babble. Though they will probably not speak a word for many months, newborns begin making sense of the speech sounds of people around them and begin responding to those sounds in appropriate and encouraging ways. When children begin speaking around one year of age, though they use only a word or two at a time, they communicate very complete—and sometimes adamant—thoughts to their caregivers.
Children often make what we call overgeneralizations; they apply a rule more widely than it is actually applied. One noun, for example, might stand for a whole class of nouns. One or two words might also communicate quite complete, but different, ideas to the caregiver who reads gestures and context cues. “Kitty!” might mean, “Look at the horse,” or, “I’m afraid of that dog.” “Galleta” (cookie) might mean something as complex as, “I’m very hungry, and if you don’t feed me soon there will be trouble.”

Data that supports the hypothesis that there is a critical period for first-language development, and that, though children are born with all the necessary equipment to develop language easily and well, language may not develop normally if this development is not triggered by language input at a certain age. A Critical Period Hypothesis has also been proposed for learning an additional language. Researchers’ evidence suggests that the way language is learned changes for older learners, and that learners who start learning a new language at an older age can never achieve the same levels of proficiency as those who start earlier, particularly in the area of accent (Lightbown & Spada, 1999). Several studies support this hypothesis while others, including the important work of Catherine Snow and her colleague (Snow & Hoefnagel-Höhle, 1978), suggest that different age groups perform various aspects of language learning tasks differently, and that older learners, who are more capable of analytical thinking, do better than younger ones at performing the same language learning tasks. If the goal of language learning is native-like proficiency, there may be some advantage to starting language learning early, but if the goal is communicative ability and academic performance in a second language, such an early start may have fewer benefits.

How Children Learn Language

Currently accepted views about how young children learn include understanding the cognitive potential and capabilities children bring into the learning setting and constructivist, interactionist approaches about how children use and develop these abilities to acquire new knowledge. (NAEYC 1996). Consider the classic contributions of theorists Piaget, Vygotsky, and Bruner to our understanding of these processes and then the more recent findings from brain research. The current findings seem to complement the work of these earlier scientists by theorizing on their observations of and experiments with children. The French psychologist Jean Piaget gave us a view of the child as scientist, as the active learner accomplishing developmental milestones along a predictable continuum by conducting experiments on the environment (Piaget, 1970; Brainerd, 1978). Piaget sees thought as deriving from action. Thought is action internalized and carried out in the mind of the learner. Piaget describes categories of cognitive development: assimilation, in which the child takes in new experiences without any transformation in the way the information is processed; and accommodation, in which the child adjusts to features of the environment in some way. A child assimilates new information by calling additional four-legged furries
“Kitty.” The child accommodates new information when she finds there are at least two different classes of four legged furries, one including “kitties” and one “doggies.’ Initially assimilation and accommodations occur as behavior, shown by what children do; but eventually assimilation and accommodation become more clearly thinking processes.

Another of Piaget’s important contributions was his description of a series of stages through which children’s thinking progresses, from the sensorimotor stage—in which an infant interacts physically with the environment, building a set of ideas about how things work in reality—through the formal operations stage, in which preadolescents and adolescents can think abstractly and logically. Margaret Donaldson (1978), from the University of Edinburgh, expanded the Piagetian understanding of children’s capabilities by showing that children could show much more advanced cognition than Piaget theorized when she substituted more child-appropriate and familiar language, objects, and tasks that made sense in a child’s reality.

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<tr>
<th>Piaget’s Stages of Child Development</th>
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<td><strong>Sensorimotor</strong> (birth–2 years) Children interact physically with the environment, developing ideas about how things work.</td>
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<td><strong>Pre-Operational</strong> (ages 2–7) Children are not able to think abstractly, but need concrete situations to process ideas.</td>
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<td><strong>Concrete Operations</strong> (ages 7–11) Children have enough experiences to begin to conceptualize and do some abstract problem solving, though they still learn best by doing.</td>
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<tr>
<td><strong>Formal Operations</strong> (ages 11–15) Children are able use abstract thinking like adults.</td>
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Lev Vygotsky (1962), the Russian theorist, contributes a view that gives much more importance to language and to the role of others in the child’s world on child learning. Vygotsky addresses the early speech of infants and its development into language, and discusses the differences between outward talk and what is actually happening in the child’s mind. In the example demonstrating how a child classifies four-legged “furries,” when the child points to a four-legged, fur-covered animal and says, “kitty,” we might hypothesize that the child labels a class of four-legged furry things, including cats, dogs, and horses, as “kitty.”
Vygotsky sees the child’s learning as developing through interaction with more knowledgeable others, who mediate learning by talking while playing, reading stories, and asking questions. With the help of adults, children can do more than they can do on their own. Vygotsky developed a concept called the zone of proximal development (ZPD), which is what the child can nearly do, but cannot do alone. Mediation gradually moves this ZPD outward as the learner is able to do more and more independently.

Jerome Bruner (Wood, Bruner & Ross, 1976) also places strong emphasis on the role language plays in children’s cognitive growth and explores the nature of mediation. He offers the label of “scaffolding” for the all-important talk that adults use to mediate the world for children, and to support them in solving problems. In Bruner’s research with North American mothers and children, parents who supported children by scaffolding tuned into the needs of children and adjusted to make tasks more difficult as the children became more capable. Bruner observed parents scaffolding as they:

- helped get children interested in the task;
- simplified tasks, often breaking them down into smaller steps;
- kept children on tasks by reminding them of the goal;
- pointed out what was important or demonstrated alternate ways to do tasks;
- kept children from becoming too frustrated; and
- demonstrated the task (Wood, Bruner & Ross, 1976; Cameron, 2001.)

Bruner also places emphasis on the value of formats and routines, features of events that permit scaffolding to occur. He described the routine of parents reading bedtime stories to their children from babyhood onwards. At first they share a large picture story and turn the pages together, naming pictures in the book. Adults do most of the talking, naming, and telling about objects and characters in the book. Later, parents begin to read simple stories, often with rhyme, rhythm, and repetition. Parents also begin to ask questions about the book. Children begin to finish sentences and recite along. Children may begin to “read” the book from memory to their parents. The familiar and secure routine can also incorporate novelty and change as the child is ready for more challenge. The parent helps the child to operate in the ZPD, or “the growing edge.”

**Brain Studies Regarding Children’s Cognitive and Language Development**

From a very different perspective, exciting research is now being done to better understand how our brains change throughout human development. Although adults’ and children’s brains work similarly for some tasks, even small differences can help us learn more about how the brain develops. A recent study at the Washington University in St. Louis, MO (Schlaggar, et al, 2002) used functional magnetic resonance imaging (fMRI) to measure brain activity during a verbal activity and found that children and adults use different parts of their brains for the same task. The subjects, adults from 18–35 years old
and children from 7–10 years old, looked at individual words on a computer screen and responded by speaking a new word (a related verb, a word that rhymed, or a word with the opposite meaning). Two major differences were discovered in the brain activity of children and adults. The children had more activity in the left extrastriate cortex, whereas the adults had more activity in another area of the brain, the left frontal cortex. Both of these areas are known as language processing areas of the brain, but this study indicates that children and adults use these areas quite differently. (Schlaggar, et al, 2002).

Another brain study is of particular interest to language professionals. In this study, Kim, et. al. (1997), looked into the question of how multiple languages are processed in the brain. They looked at bilingual individuals and compared brain activity of individuals who learned two languages early in life with the brain activity of bilinguals who learned one of their languages after they reached puberty. Early learners were found to use very similar overlapping regions of the Broca’s and Wernicke’s areas of the brain, both of which are known to be areas where language is processed. Late bilinguals used very different, though adjacent regions of the Broca’s area for each language.

Still other research on how the brain operates lends support to Piaget’s developmental stages. Myelin is the fatty substance that coats the axons of neurons in our brains. The coating acts like insulation to permit messages to travel quickly and efficiently. Neurophysiologists (Hannaford, 1995; Healy, 1994) hypothesize that myelin coating in the brain increases with use and/or progresses from lower brain areas to the prefrontal cortex, where higher order thinking skills take place. Sprenger (1999) matched Piaget’s stages with stages of myelin release and brain growth and found an interesting correspondence between Piagetian stages, with perhaps larger variability in age of attainment of the formal operations stage. This research provides biological support to the stages of child development Piaget hypothesized based on his observations and experiments with individual children.

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<tr>
<th>Piaget’s Stages</th>
<th>Stages of Myelin Release &amp; Brain Growth</th>
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<tbody>
<tr>
<td>Sensorimotor (birth–2 years)</td>
<td>Large motor system and visual system</td>
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<tr>
<td>Pre-operational (ages 2–7)</td>
<td>Language acquisition</td>
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Concrete operations (ages 7–11) | Manipulate thoughts and ideas
---|---
Formal operations (ages 11–15) | Higher order thinking

Some experts like Jensen (1998) suggest that we educators should apply what we learn about the child’s brain in our work with young learners. Because the brain is complex and dynamic and develops with maturity and use, we should match its developmental stages with what we ask of children in schools, providing complex, problem-solving tasks. Our brains innately search for meaning and patterns—perceiving parts and wholes simultaneously; learning through focused attention and peripheral perception—so we should provide meaningful tasks and scaffold children’s discovery of patterns of language, offering opportunities to perceive and examine both parts of an experience as well as the whole. Because we are programmed to be social beings who rise to challenges but fight or flee when threatened, we should work to provide a positive social environment in our schools and classrooms, where learners feel safe, yet challenged.

Some neuroscientists suggest that it’s still too early in the development of the study of the biological brain for us to apply directly in the classroom what is only now being learned. Yet we are getting closer to being able to make such recommendations. There is much reason to be excited about what is being discovered and even more enthused about the possibilities for what we will one day understand about learning and teaching through biological studies. We also see interesting parallels between what we are discovering from looking at the brain in action and what we have already hypothesized from theory and experimental research. We have speculated that children and adults think in qualitatively different ways, and when we have the opportunity to actually watch brains work, that is exactly what they seem to do. We have observed that the nature of language learning may change after a critical period in children’s development and researchers are actually watching brains that show us that this may be true.

We also see strong evidence that domains of children’s development—physical, social, emotional, and cognitive/linguistic—are closely related and that development in one domain influences development in other domains. This principle is emphasized in the statement on developmentally appropriate practice of the National Association on the Education of Young Children (NAEYC, 1995). So, skill in walking can facilitate exploring the environment and thus advance cognition about space and orientation; skill in interpersonal communication can enhance language input from adults and thus language development.

Based on this understanding of what we continue to learn about how children develop and how they develop language, I propose seven instructional principles for supporting children’s second-language (L2) development.

**Seven Instructional Principles for Teaching Young Learners of English**

Effective teaching of young learners promotes innate language acquisition mechanisms by providing children opportunities to use language as a tool for creating and sharing meanings and by scaffolding experiences to help children function “at the growing edge” (Berk & Winsler 1995; Bodrova & Leong, 1996). Effective teaching, therefore, involves authentic communication between learner and teacher and among learners, and is activity-based, providing purposeful ways for students to use language to meet age-
appropriate goals. Using language goals from one age group for learners at earlier ages may not serve any benefit, but instead may cause learners to miss important opportunities to accomplish developmental milestones for their stage of development. Teachers should:

1. **Offer learners enjoyable, active roles in the learning experience.** Young learners are meaning-seekers who learn best by doing and who prefer a safe, but still challenging learning environment. We must provide language input and modeling for young language learners in any language environment, but particularly in an EFL setting where the teacher and the materials are the primary source of language. Yet, the input must be provided in child-appropriate ways. Direct teaching in the full group for large portions of instructional time is being strongly encouraged by educational and political leaders in the United States and probably is having some repercussions in Mexico. Direct instruction methodologies and content intended for older learners are being pushed down to classes of younger learners based on the idea that introducing them sooner will make learning more effective. But young children learn differently and need different learning environments. Overuse of direct teaching of young learners in the full classroom group risks the fallacy that “input” will automatically lead to “intake” – that if we teach something, it has been learned. But for young children, active involvement in the construction of concepts is essential. We must provide input in child-appropriate ways and offer many opportunities for children to use language purposefully as language develops. For example, once we have modeled language and procedures for water experiments about things that float and things that sink, or which container holds more water, we can provide opportunities on the playground for children to experiment with water and use the language in discussions. We scaffold by asking questions and making comments as children participate in their very purposeful play and learning tasks.

2. **Help students develop and practice language through collaboration.** Children are social learners. While ensuring that students have access to vocabulary and structures they need—and rich exposure to many kinds of literature is a very effective way to model high quality, academic language—and then supporting their language as needed, we provide opportunities for learners to communicate with us and with one another. During the water explorations, for example, one child could be encouraged to conduct the experiments while others give instructions and ask questions about what they see happening.

3. **Use multi-dimensional, thematically organized activities.** Provide thematically organized activities and incorporate multiple dimensions of learning and learning styles appropriate to younger learners (Enright & McCloskey, 1988). Thematic organization offers us opportunities to cycle and recycle related language and concepts so that we can support children as they develop the complex connections that lead to learning. We need to incorporate many kinds of child-development appropriate activities into children’s exploration of themes: we might move like waves on the sea, sing songs about sailing on the ocean, draw pictures of our experiments or our favorite water creatures, weigh and measure water, solve
problems about sharing lemonade, read and reflect on a story about a mother duck temporarily losing one of her little ones, and, with children, write reports about what we are learning and thinking about.

4. **Provide comprehensible input with scaffolding.** Provide rich yet comprehensible input with supportive scaffolding from teacher, context, and peers to help learners work at the ZPD or “the growing edge” – providing tasks and concepts that children can accomplish or acquire with just a little instruction and support. When children can perform these tasks independently, the growing edge changes or expands, and teachers then support learners with slightly more difficult tasks and concepts. Since teachers must continually focus on providing input and requests for output that children will need to perform at the next level, they must use careful observation and classroom-based assessment to know their children’s capabilities well. Scaffolding activities for reading and writing might include reading a story aloud, providing graphic organizers to help children understand and discuss the language patterns and structure of a story, and shared writing with children from the graphic organizer. Following are two graphic organizers that teach about text structure. The first shows a line story about what happens when an old woman swallows various animals. The teacher or a student can point to the creature they’re singing about and help children learn the pattern. The second story shows the pattern of a circle story, one that ends up where it begins.

(McCloskey, 1998)

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**Graphic Organizers for a Song and a Story**

**THERE WAS AN OLD WOMAN WHO SWALLOWED A FLY**

**IT COULD ALWAYS BE WORSE**  
*— a Yiddish folktale by Margot Zemach.*

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(McCloskey, 1998)

5. **Integrate language with content.** Teaching language for age-appropriate academic content has several advantages: Students learning two languages in
school in a bilingual setting curriculum can be integrated across languages, so that the children in L2 (second-language) classrooms encounter the same concepts that they do in L1 (first language) classrooms but with new labels, both reinforcing the content-area learning and facilitating the new language learning because it is based on what children already know. In a L2 setting, teaching language through content means that students’ academic learning is not delayed while they learn language. Rather, they have the opportunity to learn language in age-appropriate, stage-appropriate activities that will prepare them for grade-level academic content.

6. **Validate and integrate home language and culture.** Continued development of children’s home language will only support development of a new language. Another misunderstanding of how language develops that is common outside linguistic and language educational circles is that a first language can hinder or interfere with a second. Rather, students with good academic learning in their first language are clearly at an advantage when they begin to learn additional languages. When a child “breaks the code” or “joins the literacy club” and understands the basic concepts of reading in one language, this does not need to be re-learned in the target language. Rather, students now need to learn only new words, new sounds, and new written codes – no small task, but a much easier one than learning to read in a new language when a child doesn’t have literacy concepts.

As language educators, we can help young learners use their knowledge and learning experiences of their home language to expand their learning in a second language. Acquiring a new language should clearly be an additive process and should never necessitate losing one’s mother tongue.

7. **Provide clear goals and feedback on performance.** Children want to do right. They need to know when they’ve achieved a goal and when they still have more to learn. We must establish clear language and content goals for learners and provide learners with feedback on their progress toward those goals. We can also, in developmentally appropriate ways, encourage learners to begin to evaluate their own progress toward accomplishing goals to help them become independent, self-motivated learners.

In spite of the sophistication of our research techniques, the speed of our computers, and the years of thought and study we have put into understanding children’s development, it is a long, long road to such understanding—a road along which we educators of young learners of English are still taking baby steps. This paper is a modest effort to bring together classic thought in the field of early childhood cognitive and language development, recent work examining how children’s brains operate as they develop cognition and language, and recommendations for how we can organize and conduct learning experiences to put the best of what we know to work. Our goal is to help children like baby Salma in Cairo—children all over the world—to grow and develop in happy, healthy, richly multilingual ways.
References


Additional Resources for Teacher Educators and Teachers of English to Young Learners


Notes

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