

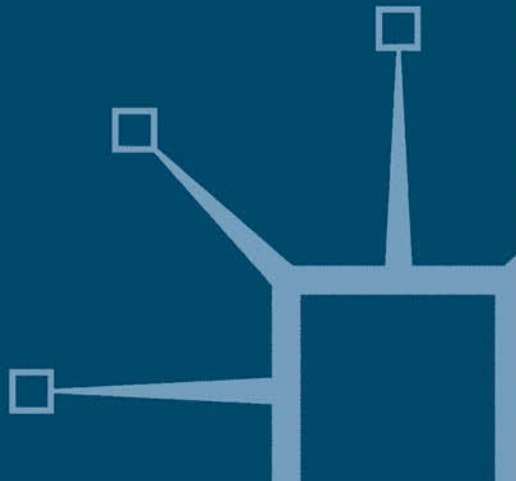
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# Language Development and Education

Children with Varying Language  
Experiences

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Paula Menyuk and Maria Estela Brisk



# Language Development and Education

*Also by Paula Menyuk*

(with J. Liebergott and M. Schultz): EARLY LANGUAGE DEVELOPMENT IN FULL-TERM AND PREMATURE CHILDREN

*Also by Maria Estela Brisk*

BILINGUAL EDUCATION: From Compensatory to Quality Schooling

LITERACY AND BILINGUALISM: A Handbook for All Teachers

SITUATIONAL CONTEXT OF EDUCATION: A Window into the World of Bilingual Learners

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*Dedication*

To our grandchildren:

Laura Menyuk, Rachel Menyuk, Mira Menyuk, Max Menyuk, Miles Bierylo, Madison Menyuk

Maria Alejandra Trumble, Isabela Trumble

*Acknowledgement*

We would like to acknowledge all the children and their teachers from whom we have learned so much over the years.

P.M., M.E.B.

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# Preface

Research in language development has blossomed over the past few decades. In addition to knowing much more about this process of development in all children, we know much more about variations in the process due to multi-cultural and linguistic backgrounds, and developmental anomalies. Language development, of course, plays a crucial role in education. It is the principal medium of instruction both through the air and in written form. As well as affecting social interaction and development in all areas, how well children acquire language will have a marked effect on their academic performance and their social adjustment.

Recommendations on how teachers and clinicians can enhance language development in all children are found in many places. It certainly appears in different places due to age, background and state differences (normal and non-normal) among children. Because it is scattered, a great deal of exploration needs to be done to find the information a teacher or clinician is looking for. We hope to bring these two topics, language development and education, together as we discuss aspects of language development during infancy, early childhood (pre-school years and primary grades), middle childhood, and adolescence and then educational practices that have been found to enhance that development.

The criteria we have used to segment the lower school years are both developmental and educational. That is, there are marked changes in language development between infancy, early childhood, middle childhood and adolescence. There are also marked changes in educational programs that are designed for infants, pre-school children, the children in the primary grades (school years 1 through 3 or 4), those in the upper elementary and middle-school years (school years 4 through 8 or 9) and those in high school (school years 9 through 12). The differences between developmental stages are not rigid because children develop at different rates. We chose to segment the book based on developmental changes because overall such changes are more consistent than the criteria used for segmenting school experience into levels in various countries.

The remarkable changes in language knowledge and use that occur during each of these stages of development will be described first. Then what has been found to be good educational practice during each of these stages will be discussed. Among other things, good practice involves awareness of and planning for diversity in the abilities of children. This diversity is a reflection of differences in experiences and state.

There are two aspects of variation that are stressed in the book. One aspect is variation in the course of development due to variation in state, that is children with language disorders. We have placed greater emphasis on variation in language experiences. More than half of the children in the world are raised in environments that provide them with more than one language. Therefore we considered it important to embed throughout the book issues concerning the development of bilingual learners. Discussing development among bilingual learners is more complicated than discussing that of monolinguals because degree of proficiency in each language and amount of use of each language vary among bilinguals and change within an individual over time. Therefore each bilingual presents a different developmental pattern. Bilingualism develops because children are exposed to another language and confronted with situations in which they must use it. Bilingual children may have been raised from birth in more than one language (simultaneous bilingualism) or they may have acquired a second language (L2) at any later point in their development (sequential bilingualism). As they develop language, they may acquire the L2 while maintaining their first language (L1) (additive bilingualism) or they may acquire L2 and lose L1 (subtractive bilingualism). Because children can be exposed to a second language at any of the stages of development described in this book, a 12 year old may be going through similar stages of L2 development as a 7 year old acquiring one language. Two 12 year olds may be at dramatically different stages of L2 development depending on their language experiences. Continuous development of the first language by second language acquirers will depend on whether children have continued access to education in that language.

Bilingual children's language development is strongly impacted by a number of external and internal factors. These factors affect children at any age, depending on when they are intensely exposed to the L2. Given the unpredictability and complexity of bilingual and L2 development, we needed to make choices as to when to address the various aspects of development and factors affecting bilingual children and the

type of bilingual learners we cover in this book. We have distributed the themes of development and factors affecting learners throughout the chapters. The reader must understand that what applies to one age may also apply to another because children may be at the beginning stages of L2 development at any age. For example in reading about semantax development in the adolescent years, the reader will need to go to an earlier chapter for details on initial L2 semantax acquisition.

We have narrowed the focus to children who are immigrants to countries where English is the national language, such as the United States, Great Britain, Australia, and New Zealand or who were born in these countries to communities that use a language other than English in their daily interactions. In addition, we are assuming that the schools they attend use English as the medium of instruction. We have chosen to focus on bilingual children who come from linguistic and cultural backgrounds other than English and then attend English-medium schools because their presence is increasing in these countries. Educators and families are still struggling to determine how best to address these children's language and literacy development.

There are other types of bilinguals in these countries such as native speakers of English who learn other languages, children raised bilingually by their families, and children who attend bilingual schools. However, while the large English-speaking countries are concerned with educating children in English who are not native speakers of English, many other countries are addressing the issues of bilingual or multilingual schooling in a somewhat broader way.

We have tried to write this book for undergraduates who are required to take a course in language development, and who are interested in going on to teaching or clinical work with children who are in various phases of development. We hope it could also be used as a source of information for teachers and clinicians who are now in the field, but who have had little previous information about current findings in the area of Developmental Psycholinguistics, the study of language development. The latter students may be returning to take courses or workshops to update their knowledge, and working towards a master's degree. Therefore, both undergraduate and graduate students might use the book.

# 1

## Language Development in Infancy: Ages 0–3

### 1.1 Introduction

Language development during these very early years of life, from birth to about 2½ to 3 years, is very dramatic and rapid. From birth to 2½ years is the period usually labeled as infancy, in keeping with Piaget's description of these years (Piaget, 1926). The period starts with the baby, who spends much of the time sleeping, crying and cooing, and ends with the almost-3-year-old child who can engage in conversation with family members, peers and teachers in one or more languages. The home environment is of principal importance during these years since much of the infant's time is spent in that situation. However, over the past few decades care-giving and educational programs for infants have been developing in the U.S., as well as being available in some other countries for some time. Even though some aspects of language development are still very much the product of the familial situation in which a child is born, these programs can impact development as well, and can do so in a positive manner.

The social and economic situation of the family, and the culture and particular language(s) or dialect(s) in the environment seems to affect most markedly two aspects of language development for both monolingual and bilingual learners. These are vocabulary, or what has been termed *lexical development*, and also the use of language or what has been termed *the pragmatics of the language*. For bilingual children pragmatic knowledge includes choice of the appropriate language in the appropriate situations. There are also universal aspects of development regardless of environment. These universals of development also take place in two aspects of development. The first is in the acquisition of structural knowledge (how to combine words in utterances) or what we

and others have termed semantax. The term semantax is used because knowledge of syntactic structures and semantic relations are both required in comprehending word combinations. The second is in speech perception and production or what has been termed *phonological acquisition*.

We have used both the informal and formal words to identify the aspects of language we will be discussing because both types of words are used in the literature. Again, informal terms are vocabulary, uses of language, combinations of words and speech perception and production. The more formal terms are *lexicon*, *pragmatics*, *semantax* and *phonology*. In this chapter variation in development due to variations in the socio-linguistic context in which the child is born as well as universals in development will be discussed with respect to both children raised in English and those raised in two languages simultaneously.

There are developmental anomalies that can be identified early in life. These are sensorial problems such as deafness and blindness. Blindness is evident very early in life. Deafness is usually diagnosed in the United States, Canada, and Western European countries during the first year, although there are still deaf children who are not identified so quickly in some of these countries. Universal screening measures in hospital nurseries have played an important role in this early identification. Hearing loss and visual impairment, however, are usually not identified until later in life.

Some conditions of being developmentally delayed or challenged (earlier termed mental retardation) or cerebral palsied are also identified early. Other developmental anomalies which can affect language development such as learning disabilities and specific language impairment are usually not identified until the next period of development to be discussed, or even later. Because of the early diagnosis of some of these children their language development will be briefly discussed in this chapter.

## **1.2 Variations in language development: lexicon and pragmatics**

There are two factors that are outstanding in causing variations in lexical development and pragmatics with normally developing children. These are socio-economic status, and cultural-linguistic factors. However, some of the milestones in development in these two areas are also universal. There is a very rapid rate of development in vocabulary

over this period, and children quickly learn to use language in ways that conform to the requirements of their society. Children in all environments begin to recognize words at about 10 months of age. This is true of infants in both monolingual and bilingual environments. However, bilingual children evidence crosslinguistic behavior in vocabulary acquisition. Hildegard used the German word *auto* (car) when she spoke both German and English, although she understood both *car* and *auto*. She also invented the word *auto peep-peep* for *airplane*. It was derived from the German word *auto* and the English word *peep-peep* meaning *bird* (Leopold, 1949). One child, when she realized she was using similar meaning words in her two languages, started using doublets, (*bed-lit* Flemish and French) for certain vocabulary items to make sure she would be understood. Eve for a long time would not use the verb *tomber* (fall) in French when speaking French because she had had a bad accident in a French-speaking context. Ronjat's (1913) child, as soon as she heard a word in one language, would request the equivalent in the other. A Spanish-English toddler who, when asked to name a list of pictures in one language, and on another day in the other, did it accurately for all words except when he saw a picture of a frog. During the English test he said *froggie* and during the Spanish test he also said *froggie* but this time used Spanish pronunciation.

There is great variability in bilingual children's vocabulary development. Some studies report that development in the stronger language is comparable to monolinguals that speak that language. Others claim that vocabulary develops more slowly in bilinguals when studied separately for each language and compared to monolinguals. One of the reasons is that bilinguals usually learn vocabulary for each language from different sources (one from mama and one from papa or one from the family and one from caregivers). The contexts provide development of different vocabulary at different rates. However, when adding together the concepts that bilinguals have acquired, as represented by the words they know, their number often exceeds those expressed in the vocabulary of monolinguals. Bilinguals' vocabulary may be "less masterful than a monolingual's in either of their languages, but is surely more extensive in terms of their communicative possibilities than any monolingual" (Bialystok, 2001, p. 62).

Despite variation most children's vocabulary grows rapidly in the first 18 months of life, and even more rapidly after that. There have been studies that have found a vocabulary spurt at about 18 months in many, but not all children. A multitude of factors play a role in this spurt. This multitude includes cognitive factors, phonological abilities,

and variation in personality. These differences among infants can lead to some children experiencing a vocabulary spurt and others acquiring new words more gradually. Any delay among bilinguals in the development of vocabulary in their two languages usually evens out by grade 5. In the case of the heritage language, progress depends on its use in the school and larger society.

Studies of infants learning one language have found that typically at 10 months the average number of words recognized is about 10 words, and at 13 to 14 months is about 50 words. Infants usually produce about 10 words at 14 months and 50 words at 18 months (Menyuk, Liebergott & Schultz, 1995). These are the numbers that can typically be found in many studies of infants learning one language. There are several things that should be observed about these numbers. The first is the rapid rate of development. The second is the fact that words are usually understood before they are produced, although there are some exceptions. The third is that these are average numbers and that there is some degree of variation to be expected. However, having no spoken words at 18 months may be a sign of hearing loss or developmental problems. These conditions are very evident early on and can be easily measured at a very early time in the infant's life.

The second aspect of lexical or vocabulary development that has been studied is the nature of the words that are produced early. In the study cited above (Menyuk et. al., 1995), the children's first words were labels for objects, persons and animals (real or toy). These were the most frequent early words. They also produced words for actions (*kiss*, *push*), games (*patty-cake* and *peek-a-boo*), some adjectives (*dirty*, *my*), adverbs (*here*, *up*), and formulaic expressions (*hi* and *bye*). The frequency with which each category of word is used is a function of two factors: the language being acquired (some languages place greater emphasis on actions than on labels for things) and the cultural importance assigned to each category. An example of the first is that children acquiring Korean will have a higher proportion of verbs than nouns in their early vocabulary. An example of the second is that the use of formulaic expressions may be a function of the social importance given some words such as *please* and *thank you* by the child's culture.

Lexical acquisition is a process of segmenting from a stream of speech a phonological sequence and relating that sequence to an object or event or quality of an object or event. Universal abilities in lexical development are the ability to learn these relations and the ability to store them in memory. The frequency with which a word is used makes it easier for it to be stored in memory and retrieved. Despite the



universals observed in lexical development, the socio-linguistic effects of the input from the environment can be observed early. There is a very direct effect of parental input on the rate of acquisition of words. This is one area of language development that is very dependent on the nature of the interaction between the caregiver and the child.

There are several things that caregivers do that seem to increase the rate at which new words are acquired both early and later in infancy, and these will be discussed in detail in the next chapter. Socio-economic status and culture affect the number of children a family will have. The mother of four children may have less time to engage in these interactions, which seem to speed up the rate of acquisition of words, than the mother of one. These factors may have an effect on rate of acquisition of vocabulary. Birth order affects bilingual learners. Older children do better at developing the family heritage language because they have more direct interaction with parents than younger ones.

Characteristics of mother-child interactions are not solely a function of socio-economic status and culture but also of the individual styles of mothers. This difference in style may be a function of the personality of the mother. Some mothers talk a great deal to their children while others do not. Socio-economic status may also affect the frequency with which mothers verbally interact with their children. Middle-class mothers may engage in teaching interactions more frequently than lower-income mothers. This style may be dictated to some extent by the cultural differences among mothers. In some cultures talking to babies is considered a waste of time; the notion might be that "since babies do not understand what is said to them" it's a waste of time to talk to them. However, babies do learn by observation as well as by direct interaction.

Two other areas of language development are affected by socio-economic status and culture. One is pragmatic development and the other is literacy. We shall discuss pragmatic development in this chapter and emergent literacy will be addressed in the next chapter. Schieffelin and Ochs (1986) discuss, in a book dedicated to studies concerned with pragmatic development, how children learn about their culture through engagement in different interactional routines. A very important aspect of this learning is what an infant finds out about the uses of language in their community. Are they to be quiet and listen in certain situations or to assert themselves by speaking up? Are they very important members of the community, or are they "lowly" members? How will they be allowed to express needs and feelings? In middle-class child-centered communities, there is a great deal of attention paid to

the infant's behavior, and, usually, there is a prompt response to that behavior. This is less the case in some families where there is less attention paid to babies (or at least their language), and responses to their behaviors are not so prompt. Developmental psychologists found, in an early study, that prompt response to crying during the early months of life has an effect on how early crying shifts to other vocalization behaviors (babbling) in the first year of life (Bell and Ainsworth, 1972). Responding promptly to crying does not reinforce crying itself but, rather, vocalization behavior that may precede the all-out screaming that can occur if the infant is not attended to.

The sequence of development of actual forms used to communicate intent are affected by the frequency with which various types of interaction routines are engaged in, and in what language or dialect, by members of the infant's community. Pragmatic knowledge, or how to speak to whom, under which circumstances, develops through communication interaction between the child, caregivers, and others.

Pragmatic development of bilingual learners includes being aware that there are two languages. Fantini (1985) reports that his child could distinguish Spanish and English as two languages (1: 10). He would respond to people speaking Spanish and be indifferent to those speaking English – a language he seldom heard. Infants also learn which language to use with whom and where. They have an unconscious awareness of language differences. Even toddlers learn in what place or context it is allowable to alternate their languages (this is known as code-switching). For example, Fantini's child would frequently code-switch at home but never in pre-school (Fantini, 1978). Often bilingual infants are inflexible about the rules of language choice that they develop based on their experience. A toddler became upset at her uncle, who usually spoke English, because he inserted a short phrase in Spanish (Bergman, 1976). Changes in these rules can leave an infant speechless. For example, a hearing child of deaf parents would not talk to the teacher on the first day of pre-school because he was used to having adults sign when communicating with him.

The various intentions of communication have been described as a variety of speech acts (Grice, 1975). The form of what we say conveys more than just the meaning of the words and the structures in which they are put. For example, a request such as "Can you pass the salt?" is in the form of a question, but really asks for someone to pass the salt rather than simply give an answer. The expectation is that someone *will* pass the salt. Statements such as "That's my book" may be a form of telling or of indicating that the book is mine so don't touch it. Demands

such as "Give me my book!" may be a form asking for action or may imply that someone is doing something they shouldn't do with the book. Questions such as "Is that my book?" may be a way of asking for information or may indicate that the book doesn't belong to anyone else. Speech acts by their form, the context in which they are produced, and the paralinguistic cues (intonation, stress, facial expression, and gesture) attached to the utterance, are the acts that we carry out when speaking.

During infancy some of the basic speech acts of indicating, requesting, questioning and commanding are used. Initially, they are conveyed by use of babble and different patterns of intonation, stress, facial expression, and gesture (the paralinguistic cues listed above). In American English rising intonation on the end of a sentence can convey a question or request. Sharply rising then falling intonation can convey a demand. There are differences among languages in the use of these cues. These intonation contours are used on babble, then words, and then on two-word utterances. The child then learns the particular structures used in the language to convey intent: that is, how to question, command, and state using the appropriate word combinations, as well as appropriate intonation contours.

Particular patterns of paralinguistic cues that are used in a child's culture are carried over to multi-word utterances, and continue even as those utterances become more complex. This is done so that important differences among meanings can be conveyed. Different gestures may be used while indicating the same intent when speaking one language or another. An anecdote in the literature indicates that the gesture used with "bye" was different from the gesture used with "*adios*" by an English-Spanish speaking child.

It has been noted in a number of studies of child-centered societies that turn-taking behavior between infant and caregiver begins very early (as early as 3 months). The caregiver speaks to the infant and waits for a response. The infant looks at the caregiver and vocalizes, and then the "conversation" continues in this manner. The caregiver cues the behavior by looking directly at the infant and producing words at a frequency that is higher than that used when addressing other adults, and also by stressing words. This seems to be a universal behavior in our and other societies when talking to infants. A typical utterance might be "Hi *baby*" (or baby's name) produced with stress on the word *baby* or the baby's name, and ending with a sharp change in intonation, either rising or falling. Although these types of interactions take place in all societies there may be differences in the timing of responses between infants and adults in one society compared to another.

Turn-taking behavior over the first year of life is composed of these kinds of interactions as well as play interactions such as “patty cake” and “peek-a-boo.” In different cultures, other than that of middle-class United States families, somewhat different forms of interaction take place, but in all cultures a special form of interaction is usual between infants and caregivers (Snow and Ferguson, 1977). Communication routines of various sorts are a part of the communication interaction in all cultures. There are several important lessons about communication that appear to be taught and learned in these interactions. One is the role that the addressee (the baby) should play in communication; that is, to take a turn or not, to take it immediately or with some delay. The other is the way in which a particular society expects these interactions to take place in terms of the forms used. As the child’s language matures these roles are made clearer by the caregiver. In the beginning the caregiver takes primary responsibility for presenting and guiding communication interactions, but as the child’s language matures there are increasing expectations about the amount and nature of participation on the part of the child.

In the discussion of early lexical and pragmatic development we have talked about the effect of the environment on this learning and set aside the kinds of abilities that are required to learn these two systems of language. However, there are particular sensory and cognitive abilities that are needed to acquire these aspects of language. The infant must have the ability to learn the ways in which particular sensory experiences are related to the language used in his or her environment; that is, to relate words and utterances to objects and events in the environment. These are universal, a product of a human’s ability to acquire this kind of knowledge. The two aspects of language development that we have labeled universal are phonology and semantax. The development of these two systems are said to be primarily based on the unique perceptual and cognitive abilities of the child learning a language.

### **1.3 Universals in language development: phonology**

The pattern of development of two aspects of language development that do not seem to be remarkably modified by the specific context into which a child is born is the pattern of syntactic and phonological development. Clearly each language or dialect that a child acquires has a specific grammar or set of rules for word combinations, and a specific set of sounds and rules for the combination of these sounds. However, there are universal limitations on the set of rules that any language can

have for both syntax and phonology. In phonology the sounds of a language are only those that humans can hear or see (as in the case of sign language). The sets of rules for the sound combinations that make up words seem to be based more on the biological and cognitive constraints of being human than on the particular society into which an infant is born.

We shall start with phonology because this is what has been termed the surface structure of the language presented to the baby. Therefore, the information in the stream of speech (or stream of gestures) is what reaches the infant first. Although there is overlapping among languages, different languages have somewhat different boundaries between speech sound segments that are distinctive. Therefore, the bilingual child has the task of making distinctions between speech segments in two languages.

The process of phonological acquisition is an orderly process consisting of acquiring a set of speech sound distinctions. This process occurs in a certain order. Infants also acquire a set of speech sound production distinctions, and these are also mastered in a certain order. For example, distinctions are made between plus-voice labial and nasal sounds such as between /b/ and /m/, before distinctions between minus-voice labial and alveolar sounds such as /p/ and /t/ are acquired. Labial sounds such /m/, /b/ and /p/ are articulated clearly before the alveolar sounds /t/ and /d/ are clearly produced. Plus-voice sounds such as /d/ and /g/ are acquired before their minus-voice cognates /t/ and /k/.

Research in this area has shown that early on there are segments of the speech signal that are differentiated based on their supra-segmental differences; that is those differences that occur between different intonation patterns. As described above, an early method of communicating intent is the use of different intonation contours on babbled utterances, then words and then multi-word utterances. Simultaneously, research has shown that infants can distinguish both the supra-segmental information in utterances with different intonation patterns, and between segments or speech sounds in the system. For example, infants can distinguish between the syllable /pa/ and the syllable /ba/ based on their initial segments. Early in infancy infants can make some distinctions among speech sound segments from any language. This makes them ready to acquire the sound system of any language or languages.

By using a modern technique for measuring speech sound discrimination in infants, it has been found that infants use certain acoustic differences in the signal to discriminate between two sounds. Adults also

use these same differences to discriminate between sounds. Another important finding from this research is that regardless of differences in the languages in the environment, infants perceive many speech differences that exist in any language when they are less than 6 months old. This, apparently, is a universal ability. Between the age of 6 and 10 months, they begin to discriminate speech sound differences that exist in their own language or languages much more easily than those that exist in other languages. Bilingual infants respond to the sounds of each language differently, indicating that they perceive the differences. For example, infants can distinguish the slight sound differences between the English and Spanish pronunciation of /pa/ and /ba/ (Bialystok & Hakuta, 1994).

Although speech sound discriminations shift to a set that fits a particular language or languages, in the case of bilinguals the order in which discriminations occur is dictated by the acoustic parameters that are used universally by infants to discriminate. Thus, for both monolingual and bilingual infants voicing distinctions are easier to make in stop sounds (/ba/ versus /pa/) than in continuants (/su/ versus /zu/). This result indicates that there is universal ability to discriminate more accurately among a particular set of speech sounds than among others. As stated, speech discrimination develops from a universal ability to discriminate between a number of speech sound contrasts to a particular set of discriminations. In learning more than one language, the child or adult must be able to discriminate between speech sound segments in both languages. The initial ability to discriminate among many possible speech sounds is part of the infant's competence.

Like speech perception, speech production is composed of a sequence in which speech sound distinctions are realized in a certain order. To begin with the infant produces various kinds of vocalizations (crying, cooing, raspberries, etc.) and then begins to babble. The composition of this babbling appears to be universal until the age of around 12 months when there is some indication of understanding the meaning of some words. Babbling then becomes more representative of the speech sounds of an infant's own language or languages. The repetitive babbling the baby produces requires the ability to move the articulators in a more complex manner than do vocalizations like cooing and raspberries. Babbling occurs when the baby has greater control of the articulators. Bilingual infants babble with sounds in their two languages.

The order in mastery of production of speech sounds seems to continue to be dictated by ease of articulation as well as perceptual

distinctions between sounds. It is easier to say *mama* and *baby* (consonant vowel syllable) than *put* (consonant, vowel, consonant syllable). It is easier to say *batu* than *bottle*, to say *fis* than *fish*, and so on. Speech production begins as a universal process and then sharpens to a particular set of speech sound productions and combinations. However, in this developmental shift, ease of articulation continues to play a role.

Bilinguals develop two sound systems without confusing them. However, when a sound is easier in one language than the other, it is produced first and then used in both languages. For example, Latvian uses apical /r/, while in southern Swedish it is a uvular /r/. This latter sound is more difficult to produce. When a child is learning both languages the apical /r/ is used in all contexts that require an /r/. A further example is from Burling (1959). He reports that his son had differentiated vowels for English and Garo, but used Garo consonants until he was 3–4 years when the family moved to the U.S. For example, the single Garo strident sound /s/ was used in place of the three English phonemes /zh/, /sh/, and /s/. Phonological development influences word production. Lexical items are acquired earlier in one language as compared to the other when they include sounds that are produced earlier. For example, the word *ten* is acquired earlier than the word *diez* because *ten* includes consonants acquired earlier.

As in speech sound perception, somewhat different speech-production abilities must be used when becoming bilingual. Overall speech production seems to be a more difficult task than speech discrimination. The fine movements required of the articulators in speech production are a product of the development of the motor system over time, and of practice. Therefore, the motor requirements of sound making in each of the languages being acquired by the infant make articulating the speech differences between languages a more difficult task than discriminating between the speech sounds of the two languages.

The process of phonological development is both universal and particular. Monolingual infants learn to recognize words produced by their mothers and female speakers earlier than words produced by male speakers. Familiarity of the speech signal is the factor that plays an important role in recognition. Thus, bilingual infants may learn to recognize particular words in one language but not in their other language when these words are spoken frequently by either mother or father. As stated earlier, the more frequently a word is heard the easier it is to store and retrieve it.

## 1.4 Universals in development: semantax

Semantax development has been described as the acquisition of rules for combining words in utterances to convey different intents. Over the past few decades various researchers have applied different linguistic descriptions to this development. This is because linguists and psycholinguists have developed different syntactic descriptions. We will try in our discussions of semantax acquisition during the various periods of development to make some generalizations about the findings of the developmental period regardless of the variations in description. There are generalizations that can be made regardless of this variation.

The infant's primary task in the acquisition of the semantax of the language of the environment is to learn how that language conveys various intentions. In examining the various intentions that children have early on there appears to be a universal list. This list includes questions, requests, commands, assertions and negation. Some examples of early utterances in English that carry out these intentions can be found in Table 1.1.

Several things can be noted about these early utterances. First, they are primarily two words in length. Second they do convey intentions very adequately, especially when produced with appropriate intonation and stress. Third, they are incomplete. An outstanding finding about semantax development is that utterances increase in length over time. This has been found in many, many studies of this development. In the study referred to earlier (Menyuk et al. 1995) it was found that among the 58 children studied the average sentence length from 22 months to 36 months (approximately 2 to 3 years) increased from 1 to 4 words. The incompleteness of the utterances is due to the omission of what

*Table 1.1* Early and later utterances produced by infants

<i>Intentions</i>	<i>Early child language</i>	<i>Later child language</i>
question	What that?	What is that?
request	Wanna ball	I want the ball
command	Gimme doll	Give me the doll!
assertion	That fish	That's a fish
negation	No fish	That's no fish
partial imitation	Idonowatis shoe	I don't know what it is – a shoe
repetition	That uh fish	That's a fish



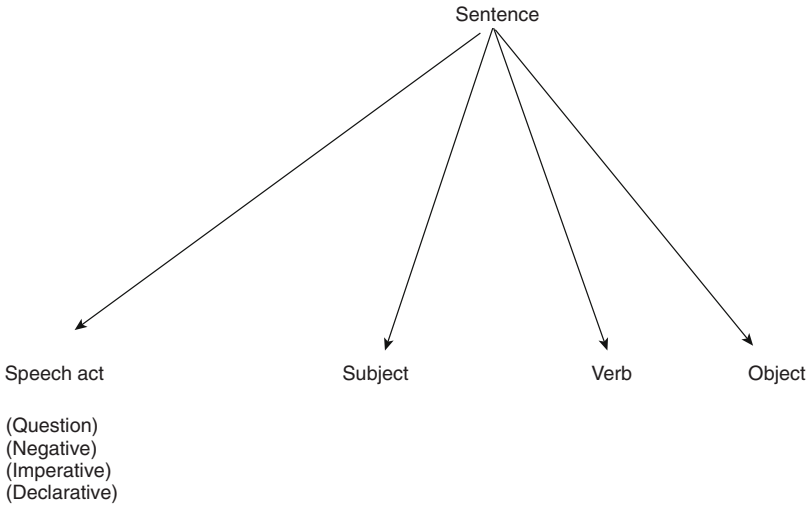


Figure 1.1 Early sentence structure

have been called morpho-syntactic markers. More familiarly, these are articles, tense and number markers, adjectives, copulas, etc. If we expand each of these utterances in accordance with the rules of English the nature of the omissions become clearer. The later examples that contain expansions can also be seen in Table 1.1.

In terms of linguistic descriptions infants acquire knowledge of the basic structure of an utterance as indicated in Figure 1.1. When they are in the one-word transitional stage they may express one structure in the utterance at a time. During the two-word stage they express two of the structures shown, and when in the three-word stage all parts of the utterance.

Bilingual children go through the same stages of semantax development as monolinguals, on the whole, but there is conflicting evidence as to whether bilingual children start with one or two syntactic systems. It is often difficult to determine what system is being acquired because of the limited amount of language that is used early on, and the fact that babies use words in both languages. Most researchers presently believe that infant bilinguals develop two syntactic and morphological systems from the start. The systems develop independently following the order and constraints typical of each language but influenced by the fact that the child is developing two languages (Bialystok, 2001; DeHouwer, 1995).

Structures with the same function may be acquired at different times in each language depending on the level of difficulty of that structure in the language. Sometimes bilingual children will use the easier structure in both languages, as an interim strategy, until they learn the more difficult structure. In other cases acquisition in one language facilitates acquisition in the other. For example, Burling's (1959) child acquired the conditional structure in Garo quite early because it is an easier structure in that language than in English. When the family moved back to the U.S., the child started using the conditional in English before his monolingual English-speaking peers did so.

Once bilingual children have two-or three-word sentences they use the proper word order for each of their languages. If one language is dominant the syntax of that language is also initially dominant. As said, the complexity of the structural features of each language also influences the rate of development of structures within each language. In addition, the functional load (the amount of information conveyed) plays a role. For example, the verb system in Spanish, which has a richer morphological system, and therefore carries a greater functional load than the English system, was acquired more rapidly and used more consistently by a bilingual Spanish-English speaking child (Saunders et al, 1974, p. 58).

### **1.5 Aspects of infant development specific to bilingualism**

"Bilingualism is not a phenomenon of language; it is a characteristic of its use" (Mackey, 1968, p. 554). Use influences relative development of the two languages, the alternation of languages or code-switching, and avoidance or rejection of languages. The rate of language development of bilingual children differs with respect to children and languages. Some children develop at expected rates while others show critical initial delay in general or in particular aspects of language. These latter children usually catch up in both languages in a matter of months provided they receive input in both languages and have no developmental disabilities (Ronjat, 1913; Swain and Wesche, 1975).

Bilinguals develop each language at different rates relative to the amount of use of each of the languages in their environment, and particular characteristics of the languages. Usually, the language of the country in which they are living develops faster, particularly once babies begin to be exposed to language outside the home. The children of three Spanish-English bilingual families raised in California were developing their two languages at comparable rates. One of the

children moved to Mexico for three weeks. Although the family continued using both languages the child became predominantly Spanish-speaking (Padilla & Liebman, 1975). Caldas and Caron-Caldas (2000) report similar switches in proficiency between English and French by their children. The family lived in the United States and spent summers in Canada in a predominantly French-speaking environment.

The pace of language development is affected when children are moved from an environment where one language predominates to another environment in which the predominant language is different (Genesee, Nicolaidis & Paradis, 1995; Leopold, 1949). At age 1;6 (1 year, 6 months) Angelica appeared language-delayed to her relatives. She was used to living in an English-speaking environment in the United States with her father using English and her mother Spanish. For the first two weeks of her first experience in Latin America she refused to speak to anyone except her mother and in private. Once she adjusted to the fact that everybody spoke Spanish, and not only her mother, her public speaking returned.

Language alternation or code-switching is a phenomenon of bilingualism. Switching from one language to the other can take place within a sentence or between sentences. It occurs throughout the life of the bilingual for a variety of reasons. Mixing content words is typical of early bilingual language development because some words are unknown in both their languages. Cognates, or words similar in both languages, may cause hesitation and lead the child to use both words. Caroline, a French-English speaker, used terms from both languages because she was not sure which one she should use. For example she said both /kol/ for *ecole* and /kul/ for *school* (Celce-Murcia, 1978). Level of difficulty of pronunciation sometimes leads to avoidance and code-mixing. For example, Mikihide would code-switch to Japanese for such words as *clown*, *drum*, and *blocks* because of the difficulty Japanese speakers have in pronouncing the initial consonant clusters in these words (Yoshida, 1978).

As bilinguals mature they improve their ability to code-switch, and the functions of code-switching become more sophisticated. Swain & Wesche (1975) report on a child who paraphrased in the other language to make sure that the interlocutor would understand. She said "Un autre, Johnnie. Another one" (p. 18).

Children may not develop, and also reject, one of the languages at any age because they associate it with something unpleasant. A toddler did not like the nursery school she was in, and as a consequence rejected English because she associated it with the school. Children

raised in one-parent, one-language homes may reject the language of the parent who leaves when the parents divorce (Mackey, 1972).

### **1.6 Deaf children: a special bilingual case**

Included among children we are describing as bilingual are deaf children. Deaf children, who are developing normally outside of their deafness, seem to take two paths to language development. Deaf children of deaf parents who use sign in their communication with their children acquire sign language in much the same way as hearing children acquire vocal language. Hearing parents who interact with their children using sign language also have children who follow a similar pattern of sign language development as children of deaf parents. However, hearing parents of deaf children have to learn sign, and may initially be less competent in the use of sign than deaf parents. In that case, the developmental course of sign language acquisition may be somewhat slower. It is important to note that some deaf children of hearing parents who don't use sign language have been found to develop a system of home-grown sign that captures the symbolization of objects and events by gesture. They then go on to express relations among these objects and events using these gestures in a manner that is very similar to the early word combinations of hearing children (Goldin-Meadow, 1982).

We have placed deaf children among bilingual children because these children function in two languages: sign language for face-to-face communication and English for written communication. Some deaf children may develop knowledge of the spoken language of the environment by exposure to total communication (spoken and signed language presented simultaneously) and by learning about written language. In addition, some of these children can also communicate using speech, depending on their degree of hearing loss. They do so, even at an early age, by hearing through amplification and learning how to articulate speech. Some of these children become multilingual by learning not only American Sign Language (ASL) but also English and a heritage language used at home (Gerner de Garcia, 1993).

### **1.7 Language development of some children with developmental problems**

The problems that will be addressed in this part of the chapter are those of developmental delay, blindness, cerebral palsy, and autism. There are

a number of reasons why the discussion of language development during infancy is limited to these populations. One is that these children are usually identified in infancy whereas other types of problems are usually not identified until later in development. With children who are developmentally challenged or delayed, blind, and cerebral palsied, data have been collected about their language development from birth on. Another is that during infancy they may be placed in a group of normally developing children for their education. Finally, there are educational interventions that have been suggested for them with which teachers should be familiar. We begin by talking about the nature of the language problems that these children might have.

The problems of developmentally delayed or challenged children can be twofold. They might not have the cognitive abilities to relate swiftly changing phonetic sequences (words) produced by caregivers to objects and events in the environment. They may then have great difficulty in recoding what they hear into swift articulation sequences. These are abilities that are displayed by children without these developmental problems during the first year of life. Because the impaired children have these difficulties, there can be varying degrees of delay in their lexical development. The degree depends on how delayed they are in both cognitive and physical development.

Subsequently, they are also delayed in semantax development because of the dependence of this development on lexical knowledge, and also the additional memorial requirement and production requirements needed to acquire this knowledge. Where they show little deficit is in trying to take a turn, and in the expression of needs and feelings through paralinguistic means. This is especially the case with Down syndrome children. Autistic children, who may also suffer varying degrees of cognitive development delay, show all the problems in language development that can be observed in developmentally delayed children. In addition, they have great difficulty in relating to others in their environment. Early on, they do not attempt to take a turn in communication. They do not focus on the face of their addressee, and they have little facility in the use of paralinguistic cues to convey needs and feelings.

Cerebral palsied children who are cognitively normal show a picture that is opposite to that of deaf children. They appear to understand what is said to them. They comprehend vocal language, but have enormous difficulty in articulating language. They therefore do not take a turn early on nor can they express needs and feelings using babbling with different intonation contours. Because of their particular

physiological difficulties, they may even be limited in how they can alter facial expression and gesture to communicate intent.

A classic study of the language development of blind children without other developmental anomalies indicates that they develop language slowly but normally (Fraiberg & Adelson, 1973). Initially they are delayed in lexical development because of diminished experience with objects and events but appear to catch up at a later age. They use auditory, spatial, and tactile information to denote objects and events. They have even been found to be very adept at using cross-modal information to acquire vocabulary meanings, although their meanings for words may vary somewhat from sighted children. They can do this because there is information about word meanings that can be derived from the sentence context in which particular words are used. These sentences can partially define the words that are used in them.

Each of the above groups of children exhibits particular difficulties in acquisition of particular aspects of language. Developmentally challenged children have some difficulty in lexical and semantactic development, and, sometimes, phonological problems. Autistic children may have all or only some of these problems, depending on how developmentally delayed they are, and, also, difficulties in pragmatics. Cerebral palsied children have difficulty producing any aspect of language but little difficulty in comprehension unless they are also developmentally delayed. Deaf and blind children develop language “normally”. Deaf children acquire sign language if exposed to it. Blind children show an initial delay but appear to catch up. Each of the other groups of children we have discussed has particular difficulties with language because of the nature of their nervous system and cognitive problems.

## **1.8 A brief summary**

The important aspects of development of language during infancy are the following:

1. First, learning to take a turn
2. Then, learning how to take a turn to express intent
3. First, learning phonologically what a word is
4. Then, learning distinctions between words based on meaning, phonology, and basic syntactic role (actor or action).
5. First, learning how to express actor-action relations in the native language

6. Then learning how to express three-part relations (subject + predicate)
7. And then learning how to coordinate and combine subject + predicates

All children who are developing normally acquire these various aspects of language during infancy. Children with developmental problems develop some aspects of the system during infancy but not others. Which aspects they acquire and which they do not depend on the nature of the difficulties they have in processing and recalling linguistic information.

Along with language development there are other aspects of development that also occur. Among the most important of these developmental aspects is cognitive development. This development plays a very important role in language development. These two aspects of development, language and cognition play a very important role in social development. In Table 1.2 below a summary of the two strands

Table 1.2 Cognitive and linguistic developments over the first two years

<i>Approximate age</i>	<i>Cognitive development</i>	<i>Linguistic development</i>
1-4 months	Surprise at object disappearance Object tracking	Speech-non-speech vocalizing Perceptual differentiation of segments & intonation Vocalization interchange
4-8 months	Properties of objects recognized Consolidation and repetition of motor habits Procedures for making interesting things last	Babbling Intonation differences on babbling
8-12 months	Use of signs and symbols to anticipate Observation of causality	Attention to stressed words Response to some words Reduction of babbling to words
12-18 months	Object permanence	Comprehension of two term relations Holophrastic utterances
18-24 months	Spatial & functional arrangements Logical classification	Comprehension of three term relations Two word utterances

of development, cognitive and linguistic, is presented. The cognitive development summarized is based on Piaget's (1970) descriptions.

As can be seen by an examination of Table 1.2, there appear to be many similarities between the two strands of development. For example, consolidation and repetition of motor habits occurs during the same time period that true babbling occurs. Use of signs and symbols to anticipate and attention to stressed words also occur during the same time period. There is no claim being made that one development causes the other to occur, simply that there are similarities in development.



# 2

## Infant Language Education

### 2.1 The effect of input on language development in infancy

There is a controversy among child language researchers about the effect of input on child language acquisition throughout the years of development. This controversy was the result of arguments about whether language development is the result of the environment shaping behavior, or the result of a child's unique abilities to process language information. This is what has been labeled the "nature–nurture" argument. There has now been a great deal of data collected about the infancy years, and the influences that appear to affect language development during this period. Some of these influences are from the environment. Others are due to the innate abilities of the infant to process various kinds of sensory information. The answer to the nature–nurture argument is that both are involved. The question for educators of infants is what in the input of the environment assists in the development of language in this period.

We will start by discussing what has been found about caregivers' interaction behaviors with infants. Although much of the data collected on this topic was initially in primarily middle-class families in the United States, such behaviors have also been found in other groups. Examples of this are middle-class (SES) families in other countries, and some lower socio-economic-status (SES) families that have a similar orientation toward infants, so-called child-centered families. This probably includes many families that are not living in poverty, and have access to family and other sources of input. In these environments there are several behaviors of caregivers that appear to be special and potentially of importance in helping the infant to learn about language. The following is a list of these behaviors.

1. Use simple sentences and vocabulary.
2. Use clear articulation.
3. Reduce the rate of speaking.
4. Talk about the here-and-now.
5. Acknowledge the child's reference.
6. End sentences with rising intonation and use a great deal of contrastive stress.
7. Repeat words, phrases, and sentences.

Examination of some of these behaviors suggests that several of them are probably due to caregivers wanting to clarify the linguistic stream of speech. They do so unconsciously as we all do when communicating with others we think might have some difficulty in understanding. We say linguistic, rather than acoustic (or through-the-air sounds) because similar behaviors have been found in mothers' signing to their infants. Examples of attempts to clarify are behaviors 1, 2 and 3. Behavior 4 appears to have an additional purpose. Talking about the here-and-now allows the child to relate what is being said (or signed) to objects and events in the environment. The infant's attention is drawn to these objects by the caregiver's use of eye gaze and pointing when speaking. Caregivers use various means to indicate. They may point, or hold up, or gaze at an object as they name it, and name it with emphasis and clear articulation. Of course this can only be done when the object is in the situation in which it is being named. These behaviors of pointing, looking at, and holding up the object while naming have been labeled by various researchers as gaining mutual attention. It's much easier to acquire the meaning of a word or phrase when the reference is made clear, and when the infant is ready to acquire such knowledge. This behavior usually begins when the infant gives some evidence of comprehension of words.

Early on the caregiver takes on the lion's share of work to make reference clear. At a later time the infant-toddler assumes part of the responsibility by starting to name the objects and events in the environment. Then what plays an important role is acknowledgement by the caregiver of what the child is looking at, pointing to, or holding up, and, at a later time is talking about. Both the positive affect of acknowledging what the child is talking about, and sticking to the child's topic of discussion, rather than changing the subject, are the behaviors being described. Talking about the here-and-now (behavior 4) and acknowledging the child's reference (behavior 5) have been found to speed up the rate of lexical acquisition. Caregivers who use these behaviors

frequently and consistently have infants who acquire a lexicon at a faster rate.

Using contrastive stress and rising intonation at boundaries (behavior 6) and repeating words and phrases (behavior 7) may play an important role in still another aspect of early language acquisition; that is, segmentation of the stream of speech. Contrastive stress draws attention to important words in the utterance. Rising intonation at the end of phrases and the end of the utterances mark syntactically important boundaries. Repetition of words and phrases does the same thing. When the caregiver says, "See the ball, ball." with increased stress on the word *ball*, the word *ball* is being emphasized and segmented from the utterance. When the caregiver says, "Roll the ball. The ball. Roll it." The caregiver is segmenting the words *ball* and *roll* from the utterance. In statements such as "I'm rolling the ball," "You roll the ball." The utterance is being segmented into phrases. It is possible that in such segmentation a little semantactic lesson is being taught. Basic relations may be taught in this way but it is not a simple lesson. The child must do a great deal of work to figure out the relation between changing intonation at boundaries and repetition boundaries that segment phrases and semantactic categories such as *agent + action* and *subject + predicate* in utterances (for example, "I roll", "you roll" and "you roll the ball"). Unlike the relation between word occurrence and the behaviors cited which make very clear the association between the word and objects and events in the environment, segmentation behaviors require an additional step to calculate the occurrence of these kinds of shifts with phrase characteristics.

As stated, there is a great deal of evidence that the frequency with which behaviors 4 and 5 are observed in mother-infant interaction has an effect on the rate with which a lexicon is acquired. However, there is little evidence that the frequency with which behaviors 1 (using simple sentences and vocabulary), 2 (using clear articulation) and 3 (reducing the rate of speaking) or even 6 and 7 (use of intonation shift and repetition) are used have an effect on language development. Nevertheless, there are several related findings that suggest that these behaviors do play an important role in terms of establishing a positive communication situation for infants. Positive communication interaction seems to depend on two factors: caregivers' willingness to take the perspective of the child, and the child's ability and willingness to engage in the interaction. The caregiver's positive support by using these devices in the interaction increases the child's willingness, and also, many argue, his or her ability to engage in the interaction.

## 2.2 The nature of infancy educational programs

Infant and toddler care programs of various kinds have grown as the number of traditional caregivers (mothers) who have entered the job market has increased. These programs are both formal and informal. The prevalence of these programs has grown over the 1990s on into the 21st century. In 1990, two thirds of families with young children in the United States had working mothers, and half of these children were in some form of non-relative care. The figures are quite commensurate in other countries where the need to have two incomes in the family, or any income in single-parent families, has also grown. In addition the education of women for many different and better-paying occupations has increased the number of working mothers in many countries.

Because the number of children in these programs has grown over the past decade, there have been numerous studies of the effects of such programs instituted by various childcare agencies. These studies were initially carried out because the general assumption was that giving the care of infants to others than the mother would be damaging to the infant psychologically. It would interfere with a recognized and important psychological development, that of attachment. The effects of such programs have been found to be both positive and negative depending on the quality of the care and, importantly, the home environment. An early review of such programs can be found in a paper by Scarr and Eisenberg (1993). A brief summary of the findings is that programs that enrich the experiences of children from both low SES and middle SES families have been found to have a significant positive effect in terms of both linguistic and cognitive growth. This appears to be less the case with infants from low SES families, although infant programs can have a positive effect on children from these families depending on the quality of care. The answer to why this might be the case obviously lies in the definition of quality.

There are now many city and state rules that are designed to ensure the quality of care for infants. Many of these rules are concerned with the environment in which the care is given: the space, the facilities, and the infant adult ratio in the setting. To be a licensed center for infants the setting must meet certain requirements. A most important aspect of receiving quality care is the children-to-caregiver ratio. The training of the caregivers is important as well. The training of infant and pre-school educators is a specialty that some schools of education have focused on. An examination of the effect of input on language development makes clear why this is an important aspect of quality

care. In order to interact with infants in ways that will enhance their language development, as well as other aspects of development, there need to be frequent one-on-one interactions between caregivers and infants. This is only possible in settings that have a very favorable infant-to-caregiver ratio.

### **2.3 Development across the board**

In addition to enhancing language development quality care programs should be designed to enhance cognitive, social, and motor development as well as language development. These areas of development take place simultaneously. An examination of the major accomplishments that take place in infancy point to the necessary interaction of these areas of learning. The classic studies of Piaget describe a set of behaviors (sensory-motor in Piaget's terms) that take place over the first two years of life (Piaget, 1970). Piaget began studying infant behavior in the 1920s. Many developmental psychologists have also found the behaviors he described in later studies. However, there have been further findings in these later studies that point to somewhat different timetables. They also further elaborate the processes involved in these infants' accomplishments.

In Table 1.2 (page 19) a list of cognitive developments as first described by Piaget was presented. The items on the list were rough descriptions, and the ages given were approximate. They were designed merely to suggest the accomplishments of a period. Along with that list, a list of linguistic behaviors that appear to coincide was presented. However, there have been controversies about the ages of cognitive developments, and about the conditions in which they can be observed. For example, the infant may imitate facial expressions in the first month of life but not imitate motor acts until several months later. The question then is not what is the age at which imitation appears, but rather, in what situations does it appear, and when does it appear in all situations. These various findings point to the importance of fully understanding the conditions under which a behavior appears and what this implies about what the infant "knows". For educators it also can suggest when the behavior can be elicited and supported.

Among the many skills acquired by the infant three important ones that are particularly germane to the interaction of linguistic and cognitive developments are the appearance of imitation, observation of causality, and object permanence. Imitation can play a role in the development of any aspect of language including the development of

phonology. Clearly the infant cannot echo all that he or she hears or sees. However, what is heard and seen can be approximated, and used by the infant to test how well his or her own behavior matches that of the caregiver. As stated, age differences from those Piaget described for the appearance of various cognitive accomplishments have been found by some researchers. However, it is possible that the differences in the ages found for the accomplishment of a cognitive task can be attributed to differences in the conditions used by these researchers and those used by Piaget. These varying results are reported in a chapter on cognitive development in a book that thoroughly describes cognitive developments over infancy (Rosenblith, 1992).

As stated, imitation might play an important role in several aspects of language development such as pragmatics and phonology. Taking one's turn in conversation interaction might be affected by the idea of causality. For example, the notion that cooing or babbling can engage the caregiver in a vocal interaction is a causality notion. "I do X and Y results". Object permanence is said to play a very important role in lexical acquisition. Conversely, some researchers suggest that the linguistic abilities of the period may have an effect on the cognitive abilities. For example, learning to label objects and events may have an effect on object permanence. At the least, there seem to be interactive effects between the two sets of developments. And both sets of behaviors are highly dependent on communication interaction, exploration by the child of the environment and the child's development of memorial abilities.

The ability to remember develops over this period in terms of the amount remembered and the kind of stimuli that can be remembered. Caregivers interacting with the infant, and an environment containing objects and events that the infant can interact with, are crucial to developments in all these areas. However, infants have been found to turn away from too much and too complex information. Some caregivers seem very sensitive to the cues of over-stimulation given by the infant and others less so. But the cues of fretting and turning away seem fairly clear, and can be used by any caregiver as a signal to reduce the frequency and pace of interaction.

## **2.4 Emergent literacy**

There is now a compilation of studies that indicate that literacy begins to emerge very early on. Educators have stressed the importance of book reading to infants. This reading can play an important role in oral and signed language acquisition as well as in the development of

literacy. There are many books that have been suggested for reading with infants. Research suggests that the selection of books for reading to infants should place emphasis on the relation between spoken or signed utterances and the visual content of text. These books emphasize the relation between this visual input and sound and sign language, and the ease with which these books can be used in many one-to-one interactions. The quality of these books for reading to infants has been rated by educators and librarians as well as developmental psychologists. Further, the qualities of the good reader in interacting with the listener have also been studied. These include making the relation between the visuals in the book and its text clear, allowing questions, eliciting responses to questions, and relating the text to the infants' and toddlers' experiences. Teaching these abilities has become part of the training of some infant and pre-school teachers

In addition to reading books to infants, providing them with the opportunity to "write" can also begin early on. There is a relation between the two strands of development, and both are based on language knowledge. Language comprehension is necessary for language production, but the two processes interact with each other. Learning to label objects and events fosters an awareness of the relation between sound or sign and meaning. Similarly the beginning of the development of reading and writing is "print awareness" or the notion that print forms can convey meaning. This awareness can begin in infancy if infants are exposed to written materials, and are allowed to interact with writing materials. The beginning processes that are involved in learning to read and write have been described by a number of researchers as emergent literacy (Teale & Sulzby, 1986).

In some cultures and linguistic environments reading books to infants and toddlers by caregivers is not a usual activity. In a study of two immigrant populations within a Portuguese big city it was found that caregivers did not read books to their young children (Villas-Boas, 1999). However, in the study, books were provided to the families, and visits to the home by research assistants engaged siblings in reading to their younger brothers and sisters. The outcomes of this study will be discussed in greater detail as we discuss early elementary education. Here we simply note that older siblings can play an important role. Exposure to reading and to writing can take place in the school environment regardless of practices at home, but there can also be encouragement of reading in the home. This can be done by interaction between teachers and parents, sharing of written materials, and discussions of ways in which reading to the child can take place in the home.

## 2.5 Educational implications for infants acquiring more than one language

There are various ways in which a child becomes bilingual. The two most common ways are by each parent speaking a different language to the child, or the family speaking a language different from that of the environment. Many immigrants to English-speaking countries arrive not knowing English. When their children attend an infant daycare center, or are exposed in various ways to the language of the environment, the children begin learning another language. Some families do not have to, but choose to, raise their children bilingually. Each parent may speak a different language to the children. Other parents speak one language to the children and hire nannies or send children to nursery school to introduce the second language. Alternatively, the children may be sent to bilingual nurseries. These are the various ways in which an infant may be in the process of acquiring more than one language.

Infant and toddler teachers need to be knowledgeable about the ways in which learning more than one language can affect the child's acquisition of language. They also can be of help to the caregivers of these children. Negative attitudes are reflected in fears on the part of teachers and parents about bilingualism and code-mixing. Greater understanding on the part of parents and teachers of early bilingualism will prevent discouragement about preserving a bilingual environment that can, in fact, be an asset (De Houwer, 1995). There is a fear that bilingualism may retard the child's language development, and when children mix their languages, a natural phenomenon of bilingualism, caregivers' fears increase. Code-mixing might be seen as a sign of linguistic confusion.

Often fears about bilingualism lead to language policies that may really cause problems. For example, a Chilean family alternated the use of Spanish and English with their firstborn for two years. They were consumed with fears and doubts as to what would be the best for him. That is, should they develop his heritage language or English, the environmental language? The child was referred to a language specialist because they were concerned that he was not developing normally. Illness of the grandmother back in Chile was the best thing that happened to this child's language development. He spent two months in Chile, while his mother cared for the grandmother, totally immersed in only Spanish. Upon return to the United States, having received a rich and consistent input in one language, the language specialist found no problem in his development. Contact with English-speaking peers and



adults in the nursery contributed to his speedy development of English. Having gained confidence in their child's ability to become bilingual, the parents continued using Spanish at home.

Bilingualism is not detrimental for children. On the contrary, high levels of bilingualism are correlated with higher achievement in a variety of areas that affect academic learning at a later age: metalinguistic awareness, the ability to formulate scientific hypotheses, cognitive flexibility, deductive reasoning skills in mathematics, and better scores on reading tests (Lee, 1996). Bilingualism in childhood affects the ability to learn additional languages later in life (Penfield & Roberts, 1959).

Unfavorable attitudes toward a language can affect language development. When a language is not important in a particular society, parents may neglect it at home. This can affect children's language development as a whole. A Portuguese-speaking educator, working with Azorean families, trained mothers to use their Portuguese at home in ways that provided a rich language environment for the children. These mothers had largely focused on the fact that Portuguese was not important in the American context, and had neglected the language at home. The educator encouraged the mothers to talk a lot to the children in their native language. She encouraged them to express in Portuguese the recipes for foods when they were cooking together, and to recount in Portuguese playground activities, and visits to grandma. She suggested that they label their milk cartons, cereal boxes, and rice packages with Portuguese words. She encouraged them to get magnet letters for their refrigerator and form words with them in Portuguese. This home language enrichment had a positive impact later on these children's English language and literacy development.

Adults who know two or more languages, or who have to learn another language for livelihood purposes, make decisions about what language to use in the home for personal reasons; for example, for professional advancement. Decisions about what language to use with the children in the family should be based on what is known about child bilingualism and second-language development rather than on what is best for adults learning a second language. Parents and teachers should focus on language development (regardless of specific language) and the wellbeing of the child. They should consider what is most comfortable and best for the child. We will be making a list of specific recommendations concerning language use at the end of this chapter, but will present an example now.

Angélica's English had practically vanished after spending three months in a Spanish-speaking country as a young toddler. The parents

realized her need to relearn English but also sensed her fear and discomfort in an all English-speaking daycare program. Instead of the usual one parent-one language home policy both parents spoke Spanish at home. This made the home a safe environment where she was understood, and could understand at all times. In addition, her mother, who had always spoken Spanish to her, spent an hour a day “teaching” her English. After a month her English fluency returned. At this point the father went back to speaking English and the mother stopped the English lessons. Use of Spanish, her strong language, helped continue her language development. Often parents do the opposite in the circumstances described above. They force the use of English at home, based on their own struggles to learn a second language and their felt need for maximum practice. They forget that as adults, unlike the child, they already have one well-developed language, and can afford to focus their efforts on the second only.

Educators can be helpful to parents in making the decision about what language or languages to use at home. Educators can discuss with parents what is best for the child at the moment, and ask them to consider that their own language proficiency can act as a good or poor model. Most important is to be consistent. For example, a Latin American wife and her American husband decided that it was easiest to communicate in English when in the United States, and in Spanish when spending time in Latin America. When their first born arrived they decided to each speak their own language to the child, regardless of the language they used to communicate with each other. They felt it would be best for their child to be bilingual, to receive input from a native speaker, and to consistently hear one language or the other.

The language proficiency of non-native speakers of English should weigh in their decision to choose their second language as a means of communication with their young children. Sometimes parents are fluent speakers of English and can help their children. In other cases, the parents themselves are new to English as well and can do little to help the child with this second language. A Norwegian-speaking mother, fluent in English, was frustrated with her child’s nursery experience. The teachers knew little about bilingualism and about language learning, and only taught her 2-year-old son to name objects in English. The mother decided to start an English-speaking lunchtime at home. She spoke only English and the child was allowed to speak as much English as he could. He code-switched to Norwegian when unable to express something in English. This practice enhanced his language development by offering a richer adult-child interaction

than the one provided by the teachers. The parents continued to use Norwegian as their main language of interaction during the rest of the day.

A different case illustrates the dangers of using the second language when the adults are not fluent in it. A Vietnamese college professor and his wife decided to switch to using English with their 2-year-old son when they moved to the United States. Neither was fluent in English. These parents made the decision that using English, even their limited version, would be advantageous to the child. Their son developed an English-sounding language that was practically incomprehensible. The parents did not consider the fact that the model of language they provided was neither accurate nor consistent. When their second child was born, they wisely chose to speak Vietnamese to her, and to send her to a daycare center where she could learn English from native speakers.

Historic and political factors affect parents' choice of language with their bilingual children. Saunders (1983) always used German with his children. Using an acceptable foreign language in Australia was not controversial. Elena, who spoke French, was reprimanded by a passer-by for speaking a language other than English to her toddler in a playground in the United States. A host of social and political factors present in the United States influenced the passer-by's reaction to a mother's desire to bring up a child fluent in more than one language. Ionna, a Greek-speaking Cypriot fluent in English, wanted to raise her child bilingually. Her husband spoke Greek and she spoke English to her son at home. However, when outside the home, the mother was concerned about speaking English. She thought people would see her use of English as unnatural. Part of her hesitation to use English may have its origins in the fact that Cypriots often associate English with their long British domination.

Even under negative outside pressures, parents must place the welfare of their child first. Teachers need to be careful not to reflect these external pressures in their behavior with children or in the advice they give parents. A teacher with many Spanish-English bilingual children in her classroom encouraged fearful parents to continue to use Spanish at home. She assured them that bilingualism was not detrimental and the children's English development would be fostered at school.

Numerous studies of children raised bilingually attribute their problem-free linguistic development to the fact that there were separate sources for each language. These studies recommend that parents and teachers should use a language consistently to communicate with children. It is important to note that whether or not adults in

the child's environment mix their language, children will code-switch for all the reasons that were discussed in Chapter 1. A few studies report normal language development in children raised by adults who mix their languages (Genishi, 1981). There is also disagreement as to whether parents' code-switching influences their own children's code-switching. Some studies note that parents' code-switching does influence their children's. Others show no correlation. Yet others claim that more important, in terms of the child's language development, is the parents' reaction to the behavior. If children code-switch and, regardless of this, the parents continue the conversation they encourage the behavior. If they appear not to understand what is said in the other language, they encourage consistent use of one language. It should be understood that when parents always follow the lead of their children, and switch to the language the child chooses, fluency in the heritage language might be placed at risk, since most children tend to favor the environmental language.

Although the research is not conclusive, there are benefits to separation of languages by having different sources for each language, and for these different sources, using a language consistently. When adults do not mix languages the child is exposed to a broad sampling of the language and the functions of each language. In addition to helping language development in each language, this separation and consistency helps children have external cues for language choice. Upon seeing a particular person or place children automatically know which language to use. This kind of knowledge can be enhanced by nursery games in which the children are cued by dolls in various settings and asked about their choice of language.

It is a common myth that learning a second language very early in development is easier for children than learning it later. An American family who moved to France was surprised that it took their 2-year-old child 3 years before he achieved any fluency in French. Early learning may not always be a happy experience. One of the first things this child told his mother was about his "French fright." When he attended a French-speaking nursery he hardly spoke and often resorted to aggressive behavior (de Jong, 1993).

Teachers in infant and toddler care facilities must be aware that sudden immersion in a different language can be a scary and unsettling experience for some children, no matter how young the child is. The most common reaction of these children is not to talk at all. A Japanese mother reported that the teachers in a daycare center worried that there was something wrong with her 2-year-old child's development because

she would not talk. Usually there is nothing wrong with the child and conferencing with the mother can make this clear. In these cases it is important to accept the child's inability to initially communicate in the school setting, and continue to provide second language input. Asking the mother, or another adult who speaks the language of the child, to come and do some activities in the school can demonstrate to these children that the use of their home language is accepted. Acceptance of the home language by native speakers of English encourages children to want to learn English.

## **2.6 A special bilingual case: education of deaf children**

For many years deaf educators in English-speaking countries, and in others as well, insisted that deaf children be taught language through the auditory channel; that is, through sound amplification and lip-reading. The current educational techniques that have been suggested for these children is simultaneous communication of speech and sign, or beginning with sign and then learning vocal language as a second language. With a technique called total communication, interaction takes place when the child's hearing is amplified, and the message is presented both vocally and through sign. This creates some complications because there are real differences between the segmentation, timing and rhythm of presentation of spoken and signed messages. A sign system entitled "Signing Exact English" is designed to overcome some of these problems, but problems still remain. An alternative to this procedure might be titled a process of second-language acquisition. The deaf child is initially taught sign language and then introduced to the spoken language after some competence in their "first" language (sign) is achieved. Both approaches lay heavy emphasis on the child acquiring knowledge of a sign system.

In another approach, a device designed to send auditory signals to the brain, a "cochlear implant" device, is now being used with infants. This device has been very helpful with individuals who have lost their hearing after acquiring language. Having underlying knowledge of the language helps these individuals to convert the signals sent through the device into a stream of speech. It also helps them to monitor their own speech. It is currently being extensively tested with infants and young children, and some success has been achieved in these children recognizing and producing a set of closed words.

New trends promote a bilingual approach using ASL and written English. This change in educational policy may be partially due to data

collected on the academic performance of deaf children of deaf parents. These children are exposed to sign in infancy, and develop sign language knowledge the way that hearing children acquire knowledge of spoken language. This has been found to give them an advantage in learning to read and write. The reading achievements of deaf children exposed only to amplification and spoken language is, on the whole, about the fourth-grade level. Those factors that make a deaf child a good reader have also begun to be explored by a number of researchers, but no final answers are available.

## **2.7 Educational implications for infants with developmental disabilities**

Much of what has been said about how linguistic and cognitive development can be stimulated by caregivers and the environment applies to children with those developmental disabilities that we discussed in Chapter 1. There are, obviously, additional needs that these children have. Given the mandate that an adequate education be provided to all children, including those with special needs, various techniques have been developed to help these children acquire through-the-air and written language knowledge. We discuss below the techniques that have been suggested for use with each of the populations.

Heavy emphasis on what has been termed alternate communication systems has been adopted by those who educate cerebral palsied, developmentally challenged, and autistic children. A discussion of alternate communication systems appears in Alberto et al. (1983). As previously stated, with the cerebral-palsied children, the problem is the opposite to that of deaf children. They may hear without difficulty and also comprehend what is being said to them, but have great difficulty in articulating language. Both simple and very elaborate communication boards have been developed for these children. The simple boards may require pointing to an appropriate sequence of symbols so that a message can be conveyed. In those cases where pointing is too difficult alternate means have been developed. An eye camera tracks their gaze toward the appropriate sequence of symbols. The symbols "speak" so that an auditory signal is generated as the message is composed. These leaps in technology have made communication with children who cannot speak a real possibility but such devices are expensive and used primarily with older children who can quickly learn to use them. These children, in infancy, may begin to learn how to communicate in

alternate ways by caregivers interacting with them and naming items while pointing to items in a display. A sequence of items should be designed to meet the frequent needs of children during this period of development; to express hunger, thirst, toileting, movement, approval, and so on.

For autistic children, who may be also be developmentally challenged, and for children who are solely developmentally challenged, sign language has been found to be either a useful substitute or a bridge to vocal communication (Bonvillian et al. 1981). Some of these children have greater success with visual symbol and signed systems than they have in learning to produce words. Speech production requires very rapid movement of largely unseen or subtle use of articulators (tongue, lips, jaw) whereas the movement of the hands and facial expression can be clearly demonstrated. For children in these groups who have problems in learning a sign language, simplified sign systems have been developed or alternate systems of the kind described above may be used. Research has shown that having some system of communication is very important for the psycho-social development of these children.

In addition to providing some means of through-the-air communication, vocal or visual, having such a system of communication can help in these children's acquisition of literacy. Just as with normally developing children, having knowledge of a language is crucial for these children learning to read. As with all children, being read to plays an important role in these children's becoming literate. The visual stimulation of books that relate communication with visual input and with print can add to the communication expertise of these children.

## **2.8 Summary of educational interventions**

In the preceding chapter Table 1.2 presented a summary of cognitive and linguistic developments over the first 2 to 3 years of life. In this chapter we have discussed educational interventions that are suggested for normally developing monolingual and bilingual infants as well as for those who are not developing normally. We summarize some of these suggestions here. Before doing so we wish to stress the importance of an adequate early assessment of the development of all infants. An adequate assessment is discussed in an occasional paper (number 3) from the Erikson Institute, entitled "Child Assessment at the Preprimary Level." (The website of the Institute [[www.erikson.edu](http://www.erikson.edu)] is a

good way to access the paper.) The findings discussed in the paper are that early assessment is utilized in a large percentage of state-funded pre-kindergarten programs. The assessments that are most useful are those that are linked to the school curriculum, employ observational techniques, are supported by teacher training programs, and involve parent communication.

The suggestions we make for supporting language development of these very young children are, in essence, a replication of communication interactions by caregivers in the home that have been found to be of help in language development. The following is a list of some these suggestions, and possible language outcomes. Although we present an additional list for children who are from a bilingual environment, all of the educational suggestions made for monolingual children are equally appropriate for bilingual children. Finally a number of suggestions for interactions with special-needs children are presented if these children are a part of the nursery classroom. In many cases those children we have described are accompanied by special-needs aids.

#### *Some interventions with normally developing children*

1. Use lots of vocalization interaction during the early months. This can lead to turn taking.
2. Use stressed, clearly intoned, and repeated utterances. This can lead to turn taking and active participation.
3. Refer to objects and events and qualities within sentences while showing and speaking to the child. This leads to lexical development.
4. Attend to and acknowledge the child's reference to objects, events and qualities. This leads to further lexical development and good affect.
5. Read to the child. This can help in emergent literacy.
6. Provide opportunities to scribble and draw. This can help in emergent literacy.

#### *Additional suggestions for interventions with bilingual children*

1. Reassure families that bilingualism is possible, desirable and supports language development.
2. Speak to bilingual children in the same manner as to monolingual children. This will expose the child to English in a natural way.
3. Address and include children who speak another language. This helps English language development even if they do not initially understand.



4. Use language consistently at the nursery and reassure parents that they should do so in the home. This helps bilingual language development.
5. Suggest to parents that providing a good model of a language will assist children.
6. Help parents make the appropriate language choice for use with their child.

*Suggestions for interventions with special-needs children*

1. Work cooperatively with the aid that accompanies the child.
2. Interact as normally as possible with these children.
3. Be aware of both the techniques that can be used to communicate with these children, and the particular constraints that these children have in processing language information.

# 3

## Language Development in Early Childhood – The Pre-school Years: Ages 3–5

### 3.1 Introduction

The pre-school years are considered to be the years from approximately 3 to 5 or 6. Not all children in these years have formal schooling. Kindergarten programs that usually encompass the year from 5 to 6 are not available to all children in the United States nor to children who live in other countries on this continent and in Europe. There are, however, many pre-school programs of various kinds in many countries that enroll children aged from 3 to 6 years. Some children will enter pre-school or kindergarten knowing another language in addition to English. Others will be fluent in a language other than English or in a variety of English other than Standard English. School will be their first intensive exposure to Standard English.

During this period of development dramatic changes occur in children's knowledge of language in all areas. This is accompanied by dramatic changes in all aspects of their development; that is, cognitive, social, and biological. Some of these other developmental changes appear to be due, in part, to the children's increasing linguistic competence. This, in turn, in interaction with new experiences, affects the kinds of uses to which they put their language knowledge. In this chapter we describe both kinds of changes – changes in linguistic knowledge and changes in language use. We will describe linguistic acquisitions within components of the language, and also the interactions among the components. There is clear evidence that development of knowledge in one area of language affects knowledge in another area and vice versa. Children acquire knowledge of language not in bits and pieces but across the board as they mature. We will emphasize certain aspects of change because we think they are most amenable to educational

intervention. Another important linguistic change that occurs is a developing awareness of the categories and relations in the language. This awareness has important implications for education.

Among other topics that will be discussed in the chapter are the characteristics, advantages, and difficulties of children developing two languages. We will also address early literacy and a group of children who have been described as early readers; that is, readers who have not had formal schooling in literacy. Variations in development due to variations in the socio-economic status of families, and exposure to more than one dialect and language will be discussed. Finally, we will add a brief discussion of the language development of children with developmental problems who are not identified earlier as "special." These children are found in "regular" pre-school programs. They are children who suffer from chronic *otitis media* (middle-ear infection), which can lead to mild hearing losses, and those who are specifically language-impaired or language learning-impaired.

### 3.2 Developmental changes in language knowledge

There are many changes that have already occurred by age 3. As we have indicated, by age 3 or 4 children are able to engage in a form of "conversation" with both peers and adults. This is due to the very rapid changes in their language knowledge that have happened over infancy. The pre-school period is another one of very remarkable change. There are dramatic advances in lexicon, phonology, semantics, and pragmatic development. Pragmatic development will be partially discussed here and in the section on developments in language use. Pragmatic developments discussed in this section are concerned with the increases in structural knowledge that allow the child to engage in an increasing number of speech acts.

This period can be described as the one concerned with acquiring the rules of a specific language or languages in the case of the bilingual child or second-language acquirer. Second-language learners use a variety of strategies to cope with the structure of the new language(s). Prior to this time there are some universal trends in development that are due to cognitive, biological, and experiential factors that are shared by all children. Particular experiences begin to play some role in the latter part of infancy and become a much more powerful influence over the pre-school years. Some examples in each area of development are presented below, as well as a discussion of interactions among areas.

### 3.2.1 Interaction of phonological, lexical, and semantax development

As the infant approaches the second half of the first year, his or her phonological repertoire (the sounds babbled) begins to increasingly reflect the speech sound repertoires in the environment. Perception of speech sound differences also begins to be affected by the sounds in the environment. As described, the infant's ability to perceive differences between possible speech sounds narrows toward the end of the first year of life. As the child enters the pre-school period a large number of words have already been acquired and the composition of these words influence what speech sounds the child perceives and produces. The latter ability is very much affected by the ease with which particular words can be pronounced. Speech perception is certainly affected by the frequency and length of words that the child is exposed to. Words heard frequently are more easily perceived than those heard rarely, not only because of the familiarity of the phonological sequence but also the familiarity of meaning. There is an interaction between phonological recognition and recognition of word meaning with the one supporting the other.

The process of speech sound production in this period is one of closer and closer approximation to the adult model using various strategies to make words as clear as possible. Ease of articulation and the motivation to produce preferred words continues to affect production of words. Perception is also affected by the nature of the morpho-syntax of the language. In English many markers of tense, person and number are added to words. In other languages other devices such as infixes and even freestanding words may be used more frequently than additions to the ends of words to denote these meanings. In addition to learning to recognize words as such, children learn how to recognize these markers. They then learn how to produce words that have these markers. The speech sound composition of words affects which markers are added to the word. If the word ends in a +voice sound, the sound added is also +voice (/z/). If the word ends in a –voice sound the sound added is also –voice /s/). If the word ends in a strident sound two sounds are added to separate the strident sounds (/siz/ or /ziz/). Similar types of rules are followed for past-tense markers. Some examples of sounds added in English are listed below.

#### *Plural*

1. Two bagz
2. Two bats
3. Two roziz

*Possession*

1. Dad'z hat
2. Mike's foot
3. Sis'iz umbrella

*Present tense*

1. He runz
2. He walks
3. He kissiz

These aspects of morphological development are a product of the interaction of semantax knowledge and phonological knowledge. There have been many studies of this development that indicate that children have some level of awareness of the rules that are required to convey the meaning intended by use of these markers in a sentence. This is evident in some of the generalizations they make when they use irregular nouns and verbs as in *feets* and *comed*. Measures have been developed to assess children's knowledge of these markers. Many of them are based on a classic study using nonsense syllables, the so-called "Wug Test" (Berko-Gleason, 1958).

By the time the child reaches the end of the pre-school period most words are clearly pronounced. Even children learning English as a second language have a good chance of acquiring accurate pronunciation of words at this early age, particularly when English is the language of the country where they live. Children begin to master words that start and end with what are called consonant clusters as well as words composed of consonant-vowel-consonant such as *bag*, *hat*, *push*, and *pull*. Initial and final clusters, as in some of the examples that follow, can mark differences between words. Words such as *snow*, *slow*, and *stow* as well as words such as *bang* and *bank* use changes in phonological segments to distinguish among words. Final clusters also can be markers of tense and number, as described above. Phonological similarities among words initially, medially, and finally form rhyming classes of words. Such wordsets as *hat*, *fat*, and *cat*, *cake* and *gate*, and *bag* and *sag* share these phonological similarities. Awareness of the phonological composition of words as well as relations among members of the phonological rhyming classes plays a very important role in beginning reading. This ability is utilized in activities that emphasize rhyming of words. Although the child uses various techniques to begin to read text, the ability to decode plays a crucial role not only in the initial stages of learning to read but throughout the process of acquiring reading competence. The technique used is described as "decoding", or sounding

out a word because in the initial reading of a word its phonological segments are sounded out. In the case of bilingual learners the languages influence and support each other, as we will see in greater depth in Chapter 5.

### 3.2.2 Lexical and semantax development

The many aspects of lexical development studied during this period include words in a variety of syntactic classes. Nouns or verbs may play a principal role in the beginning of lexical development, depending on the language the child is exposed to. It is during this period that adjectives, articles, adverbs, and quantifiers – those words that modify nouns and verbs – are acquired. There is further modification of objects and events that occurs with the acquisition of pronouns and prepositions. The lexical developments that take place in each syntactic category interact with the structures that are acquired. Initially the structure of the sentence is quite simple and these categories are omitted. As they are added, fully well-formed sentences that include categories that were previously omitted begin to appear with greater and greater frequency. It should be noticed that these additions increase the length of the sentence. An example of this increase in sentence length appears below. The parts of a speech that are realized in each example are indicated.

“That hat.”	Noun + Noun
“That a hat.”	Noun + Article + Noun
“That’s a hat.”	Noun + Verb + Article + Noun

In addition to the expansions that occur to simple sentences the child learns how to convey intents by the addition of other types of modifiers. Two of the frequently used ones are negative and question modifiers, and some examples appear below. Excluded is command, another frequently used speech act, but one that is realized in many ways. It should be kept in mind that different languages and dialects have different ways to express these intents, but these are intents that all children wish to express. Some examples in English appear below. Structures that convey negation and question begin with the simple addition of a negative word and question intonation. Then negative and question words (*not* and *what*) are added. These words are then put in the right place in the sentence even though putting them in the right place requires moving words around in the sentence. Finally, fully well-formed negative and question sentences are used.

"That no hat."	Negation
"That hat?"	Question
"That not hat."	Negation
"What that?"	Question
"That is not a hat."	Negation
"What is that?"	Question
"That isn't a hat."	Negation
"Is that a hat?"	Question

In Figure 3.1 the structure of simple sentences at the end of this period is indicated.

Second-language learners new to the language have various strategies to cope with the new language. One strategy is imitating the interlocutor. For example, Homer repeated the question with falling intonation to respond.

J: Is Mark at school today?

H: Is Mark school today (to mean yes he is at school) (Wagner-Gough, 1978, p.164).

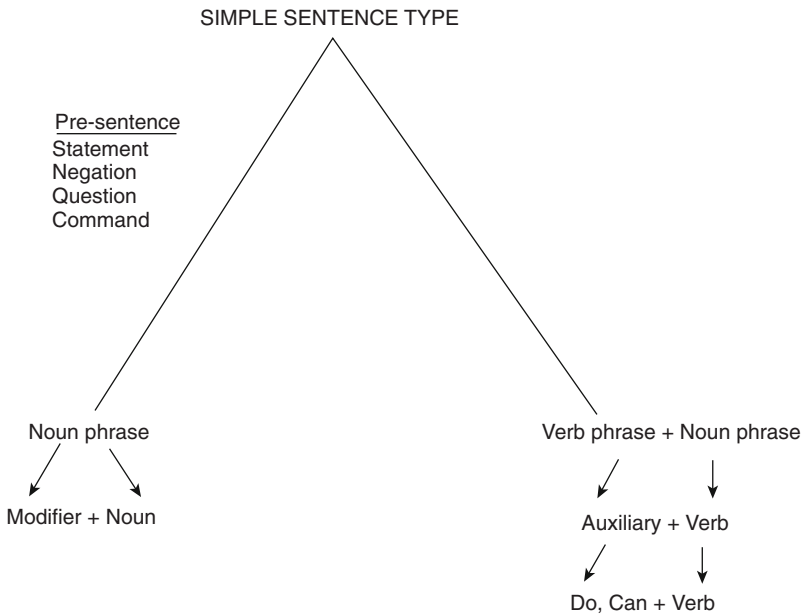


Figure 3.1 Simple sentence structure

Another strategy is to memorize chunks they have heard. Commands such as “push me” (while at the swings) or “stop it” are learned very quickly on the playground. These children also exhibit rules in process, such as using *bringed* for *brought* as native speakers do. Sometimes they simply produce a noun + verb in all situations that require a subject and verb without using an auxiliary. (I need, I want, I done – for I’m done (I’m finished); I going – for I’m going).

Children expand their utterances, and begin to acquire different verb types (transitive and intransitive). As verbs are acquired that can be modified by clauses, simple sentences are expanded into more than one underlying sentence. There are two ways in which simple sentences are expanded. One way is to conjoin sentences and another is to embed one sentence into another. Conjunction early on is just putting sentences together one after the other. Later what children can do becomes more sophisticated, and parts of one sentence or the other can be deleted or moved around, and listeners understand what parts have been moved or deleted. There is an interaction between different types of verb acquisition and embedding. Verbs that are called *state verbs* can take embedded clauses. Some examples of conjunction and embedding appear below.

#### *Conjunctions*

“I played with Tim and we went to the park and I came home.”

“I played with Tim and Joe.”

“Tim and Joe played with me.”

#### *Embedding*

“I like the boy who kissed me.”

“I think (that) you’re mean.”

“I know what he likes.”

Figure 3.2 below is a graphic representation of these structural developments.

When bilingual children encounter a difficult or ambiguous structure in one language, they often use their other language as a relief strategy. For example, Hildegard had difficulty with the position of the verb in subordinate clauses in German. It usually, but not always, goes in the final position. Until she was 5 years old, she used the more unambiguous English word order (Leopold as cited in Müller, 1998). This linguistic resourcefulness is called *transfer* and will be further developed in Chapter 5.



Combined Sentences

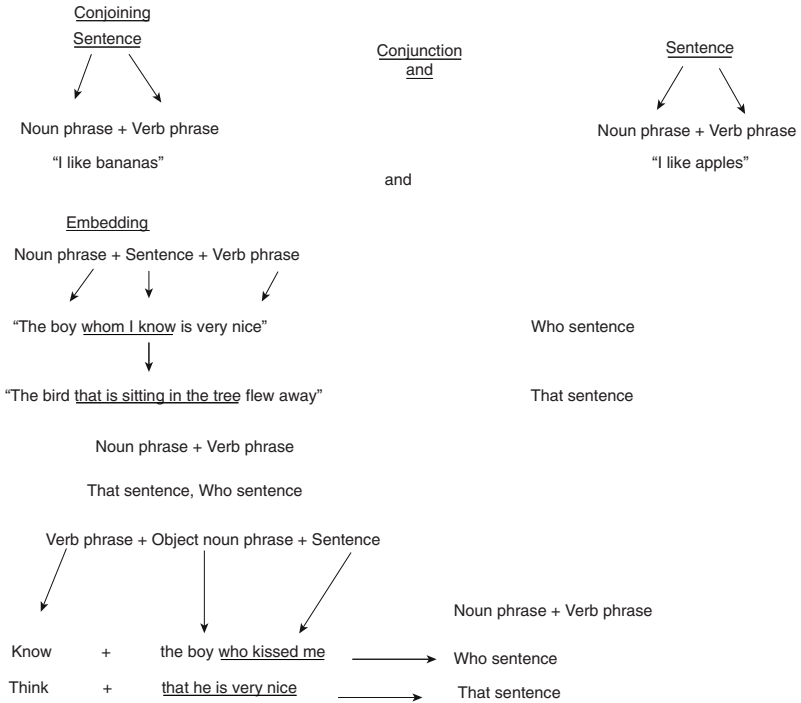


Figure 3.2 Further structural development

This is a period of very rapid lexical and semantax growth. Children who start acquiring English as a second language during this period acquire vocabulary at an even greater speed, allowing them to catch up with their native-speaking peers. Average sentence length, a very rough measure of semantax development, grows. It has been found in many studies that at 2 years the average length of an utterance is 1½ words, and by age 3 is 4½ words. After that this measure of semantax development is no longer an appropriate measure of semantax growth. Length alone does not measure the increasing complexity of the utterances being produced.

Working with two languages seems to give bilinguals an advantage in their understanding of how language works. Studies of children 4 to 9 years old have shown that bilinguals show an advantage over monolinguals. However, socio-economic background plays a role in the

development of these abilities (Ben-Zeev, 1977). These differences among bilingual children may be related to the fact that educated bilingual parents may do more with languages than those who are not, or that low SES parents may not be proficient bilinguals. Bilinguals understand at an earlier age that the name of an object is not inherent to the object. For example if you show a bilingual a pencil and tell her that it is called an *airplane* and ask her, does an airplane fly she will say no, while a monolingual will at this age period say yes. Bilinguals, who are used to having more than one word for an object, understand that names are arbitrarily assigned to objects (Ben-Zeev, 1977).

The rate of acquisition of new words over the entire pre-school period grows enormously. It has been found that at first grade children have from 4,000 to 6,000 words. These include words with and without pre-fixes and suffixes such as *unhappy* and *happiness*. One researcher has aptly named this rapid acquisition "fast mapping" (Carey, 1978). During this time the child needs few exposures to a new word to add it to her vocabulary if it is not too difficult to perceive or pronounce. These are words that are primarily monosyllabic or bisyllabic, fit in with the words already learned in terms of their phonological composition, make clear reference to objects and events, and are interesting. However, using the word does not mean that the child has acquired a full definition for the word.

The process of the acquisition of meaning for words just begins during this period, and then continues to develop over the ensuing pre-school years and beyond. At first the meanings for words the child uses denote a specific object or event or attribute. Words then take on categorical meaning. For example, the word "chair" may be used to refer to particular objects that people sit on, and the word "cup" to refer to objects that people drink out of. A bilingual Puerto Rican child used *ambulance* for all vehicles with flashing lights, including police cars and fire trucks. An early stage of categorization includes the notion that all objects that are referred to as *chair*, *cup*, and *ambulance*, even if their outward colors and sizes may vary, have the same name. This is an important development; that is, that not all things that look somewhat different have a different name. Further this is the beginning of the child's ability to develop an understanding of the hierarchical relations among words or how they fit into categories. A somewhat later but still very early ability is that of understanding that there are super-ordinate categories of words such as animal, furniture, eating utensils, and so on into which words like *cat*, *chair* and *cup* can fit. Interestingly, in Vietnamese the language facilitates this process by adding a classifier

before the noun. For example *apple* and *pear* include the fruit classifier (Dien, 1998). Use of classifiers can be found in sign language as well (Wilbur, 1979).

This increasing knowledge of various semantax structures, of words and of the meaning of words comes from multiple sources. One source is the interaction between semantax and lexical knowledge. Learning new words and the meanings for these words can be derived from the sentence structures in which these words appear. Communication interaction among children and adults and other children continues to be an important source. An additional source is exposure to new experiences and topics of discourse. Some favorite new topics in pre-school are dinosaurs and space. New lexical (vocabulary) items abound in discussions of these topics. Finally and importantly, story telling and book reading play a very important role in the development of semantax and lexicon.

Bilingual children's vocabulary in English may not be as expanded as their monolingual peers even among children who enter a pre-school knowing both languages. As we saw in Chapter 1, bilingual children often develop an amount of concepts equal to or greater than that of monolinguals, but they may develop the vocabulary that represent concepts in one language and not in the other, depending on the context in which they acquired the vocabulary. English vocabulary will develop faster after starting school, unless bilingual children attend a bilingual school.

Input is particularly important for vocabulary development. Exposure alone, regardless of particular experiences, supports phonological and syntactic development to some extent. Vocabulary, on the other hand, requires a wide variety of experiences so that relations between words and objects and events can be determined. Words need to appear in appropriate contexts to be learned. Bilinguals are not equally exposed to each language and therefore they do not have the same experiences in each language. For example, children raised in German and English in Australia knew most terms related to cars in German because that was the language that the father used. Thus, different semantic fields may be developed in each language and the size of these fields will also be different.

### 3.3 Developments in pragmatics

In conjunction with all the developments in language knowledge that occur over this period, there are also important changes that occur in

language use. These developments indicate that children have an increasing ability to retrieve their language knowledge in appropriate ways for different communication aims. Among the many situations in which this new knowledge can be applied is in school settings with both teachers and peers. To carry on a conversation is one ability required. Another called upon in some activities is the ability to tell a story. These two competences are just beginning to blossom during this period, and from the point of view of adult listeners are not very successful. Although there is a long way to go before they become polished, these abilities begin in this period.

How one tells a story and how one converses with others, both peers and adults, is a product of the child's culture. There have been many interesting studies of how developmental differences and cultural differences manifest themselves in these behaviors that has been labeled *connected discourse* (Hoff-Ginsberg, 1997). Below is a brief summary of some of the developmental findings in terms of initial and later behaviors in conversation and storytelling.

#### *Conversation*

1. Initially, conversation among peers is much shorter in length than between child and adult.
2. Initially, responses are not necessarily contingent (related to what has been said or done).
3. Initially, staying on topic lasts for only one or two turns.
4. Later, turn taking continues for longer (from 2 to possibly 12 turns) in both child-child and adult-child conversations.
5. Later, responses become more contingent in terms of what is said and done.
6. Later, staying on topic lasts longer than a few turns.

#### *Story telling*

1. Story telling appears but much of it is imitative and short in length.
2. Story telling becomes longer but not very cohesive for some time.

A brief glance at the developmental changes indicates that one of the important factors in bringing about these changes is greater facility with language. Further, as with all skills, practice improves performance so that more opportunity to engage in these activities leads to greater facility in performance.

A variety of purposes begins to be met by the interactions among peers, beyond conversation on a topic. One purpose is to engage in

cooperative play with peers. Invitations for participation (“Let’s get the trucks.”) and role assignment (“I’ll be the pilot and you’ll be the other pilot.”) play an important role in the social development of pre-school children. Bargaining by 5-year-old children can be very sophisticated (“I have a very nice cookie today.” “Do you have a cookie?” “I’ll give you this cookie if you’ll give me one of your candies.”) Many of the roles and functions learned in cooperative play enhance social development. Children learn how to take turns and share. It also enhances cognitive development. Children engage in mathematical, spatial, and other types of visual comparisons in play situations. Interactions contain terms such as bigger, smaller, next to, beside and on top of, as well as actual numbers (“I’ll take two of these,” and so on). Children are no longer just using the speech acts of stating, negating, questioning, and demanding in their interactions with others, although they obviously continue to engage in these acts.

In the case of bilingual children ability to participate in play will be related to their own language proficiency and that of their playmates. If their playmates speak the same heritage language they may use it to interact. For example a group of dominant Mandarin speakers in an English-medium pre-school tended to play among themselves. They used their L1 as a way to enter the group, and rejected children who tried to enter the group using English (Feng, Foo, Kretschmer, et al., 2004). The use of Mandarin allowed them to benefit linguistically and cognitively from play.

Other children may code-switch. Code-switching tends to be systematic and for a purpose. Angélica played mostly in English except when addressing dolls. Then she switched to Spanish. Yet other L2 learners may find themselves surrounded by English-speakers or speakers of a different language. Some of these children are able to engage in play with English-speakers using their social skills and limited second language. Other children find it very difficult and remain isolated. Yet others do better with children who are also L2 learners even if they do not share a common language.

There is cultural variation in conversational interaction and in story telling. The structure of story telling can vary among cultures to some extent, as can conversational bids. The turn-taking cues (it’s time for a response), and who should speak next, as well as paralinguistic cues (facial expression, gesture, and intonation) vary among cultures. These differences in style and in paralinguistic cues can become areas of difficulty in child–child and adult–child interaction. Different styles can lead to lack of comprehension on the part of listeners or

participants. Different uses of paralinguistic cues can lead to unwillingness to listen on the part of conversational partners. In some cultures it is important to develop a theme in a story and stick to that theme. In other cultures it is important to provide background information as one tells the story and this leads to diversions from the theme. Different cultures vary with respect to the role of participants when a story is being told. In some cultures one person tells the story while others listen. In other cultures while a person tells a story the others participate.

One paralinguistic cue that has been studied extensively in children and adults from different cultures is maintaining or not maintaining eye contact in conversation with others. It is easy to see how this one difference can lead to misunderstanding among listeners and conversational participants from different cultures. The terms *variation* and *somewhat different* are used because there are either few or many marked differences in these behaviors among cultures, but they are not totally different. This can sometimes be confusing to participants in a conversation when there are only minimal differences. Below is a summary of the cultural variations that have been observed in the pre-school conversations and the story telling of pre-schoolers.

#### *In conversation*

1. Turn-taking cues are somewhat different.
2. Paralinguistic cues are somewhat different.
3. Participants are assigned somewhat different roles.

#### *In story telling*

1. Cultural variation in topics (these are based on experiences).
2. Cultural variation in the structure of the stories told (sticking to the theme or elaborating and returning to the theme).
3. Cultural variation in role of storyteller and listeners.

It has been suggested by some researchers that in addition to differences in strategies used in connected discourse, there are also differences among different cultures in the principal methods that are used to learn. In some cultures using language to categorize is the most usual means to learn about and to remember things. In some other cultures, primarily rural ones or those without schooling, visual categorizations rather than verbal means are used to learn and remember (Cole & D'Andrade, 1982). Another researcher has suggested that this is not just a cultural variation but rather an individual variation; that is, children

have different ways of viewing the world and learning about the world (Gardner, 1983). Both types of findings have important implications for how to best approach learning by various kinds of learners.

### **3.4 Awareness and early literacy**

In this period of development, awareness of language categories and relations is also just beginning. Children are becoming aware in all areas of language. Over the pre-school years awareness develops further. There have been several studies which indicate that children are aware of what the “correct” rules of sentence formation are if the sentences are short enough. They are also aware of whether a word is from their own language or another, and whether one should speak in a certain manner to certain listeners. The techniques for determining the child’s awareness are usually judgment tasks such as asking them, “Is this a good thing to say?” “Who do you think said this?” “Which one is the good talker and which one the not so good talker?”. Initially there appears to be intuitive awareness of whether “this is a good thing to say.” Judgment is based on intuition and the sense or meaning of an utterance. “Ball the roll” is not a good thing to say because it doesn’t make sense. It’s only later that judgment is based on awareness of a word-order rule. A typical response might be “You don’t say that. You say, ‘Roll the ball.’” The advantage of acquiring a second language at an early age is the development of this intuitive awareness of what is right or wrong.

Emphasis is being placed on these awareness abilities because of their important role in both further language acquisition and in literacy development. Studies have found that there are a number of factors that play an important role in early literacy. Only one of them is awareness of the relation between the printed and spoken word. However, in one study that compared a group of children who were equal in terms of SES, amount of time spent reading, and visits to the library, those children (aged 3 to 4 years) that showed an early awareness of how to say things and how not to say them in terms of syntax and phonology were early readers. Children who were delayed in acquiring this ability to judge were also later in acquisition of reading.

Bilingual children outperform monolingual children in metalinguistic awareness tasks. Even Mandarin Chinese-speaking children, using a different writing system, outperformed monolinguals in metalinguistic tasks, once they acquired the new writing system (Bialystok, 1997). Working with two languages seems to give bilinguals an advantage in

their understanding of how language works, although socio-economic background among bilinguals plays a role in the development of these abilities. As said, this may be related to the fact that educated bilingual parents may talk more about languages with their children than those who are not as educated. Bilingual children are better at explaining how the size of such words as “ox” and “mosquito” differed from the size of the actual referent (Göncz and Kodzopeljic, 1991). They realize that a small word does not have to apply to a small object and vice versa. Advantages in performance by bilinguals seem to disappear after age 6. It is possible that the lack of support for bilingualism, once children enter school, thwarts bilingual advantages (Garcia, Jimenez, & Pearson, 1998).

### 3.5 Language proficiency, development, and loss among bilingual learners

As described in Chapter 1, some children are raised in two languages. Other children hear a language other than English at home. Pre-school attendance is their first intense encounter with English. These children go through various stages of second-language acquisition ranging from silence to productive language. A more extensive explanation of these stages can be found in Chapter 5. The development of the second language and maintenance or loss of the mother tongue depends on a number of personal and external factors (see Table 3.1). Personal

*Table 3.1* Individual and external factors affecting language development and loss

<i>Individual factors</i>	<i>External factors</i>
– Age	Situational Factors
– Motivation	– Linguistic
– Attitude	– Cultural
– Level of L1 development	– Social
– Education	– Political
– Aptitude	– Economic
– Personality identity	Family
– Resilience	Peers
	Schools
	– Climate
	– Curriculum
	– Instruction
	– Assessment
	– Quality of Personnel



factors include age, motivation, attitude, level of L1 oral and written, educational history, aptitude, personality, and identity. The influence of these factors will be addressed throughout the book. They influence bilingual children of all ages.

In addition, family, peers, and the school experience also influence language development of bilingual children. Families provide different levels of support to their children. Education, SES, language and literacy proficiency, and cultural values of a family affect what the family can do to assist their children's development. For example Genesee et al. (2004) report on a bilingual child suspected of having language development problems. The school could not provide an immediate evaluation but the parents, who were educated and with financial resources, hired a bilingual speech pathologist to test him immediately.

As bilingual learners grow the influence of peers is stronger. This influence can be positive, such as facilitating the development of the second language and adjustment to the new culture. Or it can be negative, such as, for example, promoting the notion that succeeding in school is "acting white." Schools can have a positive influence on the linguistic and identity development of children who speak a language other than English or use another dialect. Schools can support children's development by creating a safe and caring school climate, providing access to a complete and demanding curriculum, using instructional strategies that facilitate learning of and in the second language, using fair assessment procedures, and hiring personnel who are knowledgeable and willing to educate these children (for a thorough review of these factors see Brisk, 2005).

Situational factors, including linguistic, economic, social, cultural, and political also influence what happens to bilingual and second language learners in a particular social context (for a thorough study of these factors see Brisk, Burgos, & Hamerla, 2004). For example, the amount of use of each language in the environment of the learner will influence development (linguistic factor). The financial resources of the school they are in often influence the academic success of students (economic factor). Attitudes toward speakers of a language or dialect often correlate with their academic performance (social factor). Cultural differences in the types of adult-child interaction between family and school influence the children's behavior in school. These differences create conflicts and inaccurate perception of bilingual children (cultural factor). Foreign relations with the country of origin have proven to be a powerful factor in the attitude and treatment of immigrant children. This in turn can affect their performance (political factor). For example, attitudes toward Arabic-background families have

turned negative in the United States after the destruction of the twin towers in New York City in 2001.

All these factors will affect each child differently, helping to explain the great variation in second-language development among children who speak a language other than English. They do not only influence the development of the second language but the loss of the first. Maintenance of the heritage language in English-speaking countries is particularly difficult at this point in history because English is the preferred international language. The promotion of other languages becomes less important in these countries. Only children who attend bilingual programs or annually visit their heritage country are able to maintain the development of their heritage language.

### **3.6 Pre-school language acquisition by children with developmental problems**

The children discussed under this heading in chapter one are children who exhibit very clear problems during the first 2 or 3 years of life. The children to be discussed under this heading in this chapter are children who have problems that are difficult or even impossible to detect during the very early years of life depending on the degree of their disability. Some of these children suffer mild to moderate hearing losses due to chronic otitis media (frequent middle-ear infections) in addition to their other problems. These other problems have been labeled as a learning disorder, or delayed speaking (children delayed in talking), or specifically language impaired (SLI). Learning-disabled children may be diagnosed as language and/or math learning-impaired, or, in addition, attention-deficit and/or hyperactive. Late talkers are children who appear to be developing normally in terms of comprehension of language but are very slow in producing it. There are other children in this category who are not only slow to speak, but also, when they do speak do not articulate clearly. Some of these children have been categorized as being dyspraxic (their articulation is very clumsy). SLI children are those who show a large discrepancy between their language development (it is quite delayed), and their cognitive development which appears to be normal.

As one can see there are a number of language comprehension and production behaviors that vary among these children; some exhibit more comprehension difficulties, others more production difficulties and still others both kinds of difficulties. It is in the pre-school period, ages 3 to 5 or 6 when there begins to be clear evidence that these

children are encountering difficulties. When this occurs, there are a number of standardized tests of language development that may be used by the school speech pathologist for measuring their problems. Some of these tests are referenced at the end of the chapter.

Not all children who have frequent episodes of otitis media give evidence of language problems. There are a number of factors that determine which of these children will have problems. These include number of episodes and degree of hearing loss suffered during these episodes. Socio-economic status, which can affect health care and quality of input as well as quality of education, are factors that can also play a role. At different stages of development there are different signs that these children are in trouble. During this period the most overt signs of problems appear in their difficulty in attending, and their phonological and morphological (markers of plural, tense, etc.) production behavior (Menyuk, 1992). A researcher encountered a number of Spanish-speaking children with language problems who had suffered from frequent episodes of otitis media. Parents were unaware of the effect of this health problem on their children's language and teachers often wrongly attributed their problems to second-language learning.

The other groups of children named above all appear to be suffering from some form of central nervous system disorder, which has affected their ability to comprehend and/or speak. Techniques for brain imaging have provided some evidence of such a brain anomaly in some SLI children and some children labeled as having language learning problems. The distinction between these groups is not always clear. However, SLI children seem to primarily have difficulty in their morphology and semantax development while children in the other group have problems in all areas of language.

New techniques have been developed, such as MRI (magnetic resonance imaging), which allows clearer views of the structures of the brain, and of the brain as it functions in various tasks. Other data collected indicate that these children come from families in which such disorders are prevalent. The disability seems to be inherited. That this can be a familial disorder adds to the notion that there is involvement of the central nervous system as the underlying cause. However, there are differences in the types of language problems that are suffered by children across groups and even within groups. This points to possible underlying differences in how their nervous systems have been affected, and the degree to which they have been affected.

As stated above, in a number of cases these children also suffer from chronic otitis media. This is not surprising because otitis media is a very

frequent childhood disease. This condition can make these children's language problems worse. Further, many of the children who suffer these oral language learning problems also have difficulty in learning to read. This is also not surprising in that reading acquisition is based on oral language knowledge, and the ability to bring this knowledge to awareness. In a study of pre-school children at risk for language development problems, owing to a number of factors a large proportion of the children exhibited delays in reading acquisition as compared to children who did not have an at risk background. One outstanding risk factor was having an early diagnosis of a language problem even though the problem had apparently disappeared. Another risk factor was premature birth. One of the language behaviors most predictive of later reading problems was difficulty on a brief examination of language awareness (Menyuk, Chesnick, Liebergott, et al. 1991).

Another group that appears to catch up in language development at 3 or 4 years, but also exhibits reading problems as they mature, are late talkers. The individual differences among these children, with known or suspected central nervous system problems, present a challenge to pre-school educators. Regardless of causes, the language difficulties these children display can be assessed, and intervention programs undertaken. Some early intervention techniques that have been proposed for these children will be discussed in the next chapter.

Some behaviors of children acquiring a second language may be confused with language disorders. For example the silent period has been confused with elective mutism, typical phonological and semantax errors of second language learners may be interpreted as evidence of language problems. When vocabulary is tested in only one language, bilinguals often fall short in comparison with monolinguals for the reasons we have explained. Therefore, it is very important when assessing bilingual learners not to misinterpret their behavior.

A way to determine if the child is specifically language impaired (SLI) is to compare his or her performance with that of monolingual speakers with SLI in either language. If a bilingual child's language looks like that of a monolingual speaker with SLI, it is grounds for concern. The difficulties with either of the languages may differ from language to language.

It is also helpful to test children in both languages. As said, at the end of the chapter we mention tests that can be administered in English and in Spanish. When there are no tests available in a language, family and community members or bilingual teachers and speech pathologists may be able to help. These people have experience working with child

speakers of the same language, and may notice differences in patterns of development as compared to children without SLI. They can also identify cultural differences responsible for unexpected behaviors (Genesee, Paradis, & Crago, 2004).

There are certain beliefs that can cloud judgment of bilingual students' language development. The assumption that all bilinguals are low performers may lead someone to ignore children who actually have SLI. Assuming that children of immigrants born in an English-speaking country are fluent in English upon entering school may lead someone to the belief that low proficiency is due to SLI. About 50 per cent of the children entering school in the United States who have low proficiency in English have been born in the U.S. but raised in another language. Before jumping to conclusions when observing children with low literacy skills, it is important to investigate the role of literacy in the child's family. In a number of cultures it is not a priority. Thus children enter school with limited literacy experience but it does not mean that they have problems.

## **Tests of early monolingual and bilingual language development**

**Peabody Picture Vocabulary Test:** Third Edition, American Guidance Service Inc. – For children ages 2 to 6 and up.

**Expressive Vocabulary Test:** American Guidance Service – For children ages 2 to 6 and up.

**Clinical Evaluation of Language Fundamentals (CELF):** Psychological Corporation – For children ages 3 to 6.

**Preschool Language Scale-3 (PLS-3):** Zimmerman, I. L., Steiner, V. G., & Pond, R. E. (1992), *PLS-3: Preschool Language Scale-3*. San Antonio, TX: the Psychological Corporation. For children 2 weeks to 6 years 11 months of age. The test is available in English and Spanish.

**Bilingual Verbal Abilities Test (BVAT):** Three subtests from the *Woodcock-Johnson-Revised Tests of Cognitive Ability*: Picture Vocabulary, Oral Vocabulary, and Verbal Analogies. These three subtests have been translated from English into 18 languages. Provides assessment in 18 languages plus English. Riverside Publishing CO.

**<http://www.riverpub.com/products/clinical/bvat/home.html>:** For children 5 years old to adult.

# 4

## Pre-School Language Education

### 4.1 Introduction

There have been numerous studies that indicate that a “good” pre-school education is crucial to further healthy development and academic success. The early grades in school require expertise in a number of areas. The pre-school period is looked on as that time when preparation for the school years takes place. In particular, children who come from a variety of backgrounds can catch up with other children whose backgrounds prepare them very well for the experiences to come. In addition to children who need to be readied for school experiences are children with some of the language development problems discussed in Chapter 3, who are delayed in their language development. Others with more severe problems will have special education programs developed for them. In addition to catching up the purposes of pre-school education are to enhance development in all areas: linguistic, social, and physiological. However, we will focus on those activities that are designed to enhance linguistic development and literacy in all children.

In the United States the Head Start program is one special program that was designed to help children from lower SES families to do this catching up. In 2003 36.4 percent of the children enrolled were from the following backgrounds: American Indian (3.1 percent), Hispanic (30.5 percent), Asian (1.8 percent), and Hawaiian/Pacific Islander (1 percent). The program is concerned with young children from 0 to 5 years and, thus, includes infants as well as pre-schoolers. In the year 2003 Head Start’s seventh national research conference was held. The central focus of that conference and others that have taken place is a discussion of strategies that have been developed to enhance competencies. To summarize, some of the specific stated goals of the

conference were to focus on ways of developing competent children, and on how to achieve better understanding of the role of families, schools, communities, and cultural context in shaping development. There are special provisions in some pre-school programs for children who come to school knowing a language other than the native language of the country. In addition, there are also special education requirements, which vary somewhat from state to state, that require introduction of special treatment for children with developmental problems, including problems in language development, during these pre-school years.

There is a great deal of variation that exists in the educational experiences of children who attend pre-school programs. There is general agreement amongst educators as well as developmental psychologists that the pre-school years are as crucial, if not more so, than the infant years in terms of productive development and in predicting later outcomes. Therefore, many types of programs have been developed to ensure this productive development. We will concentrate on the nature of language programs that enhance development of language but refer to the other aspects of development that may contribute to progress in other areas. We will discuss pre-school experiences that are said to play an important role in literacy as well as oral or signed language development.

Teachers must insure that bilingual children are included in learning activities. In a kindergarten classroom in England, Pakistani children were given very different opportunities to learn relative to teachers' perceptions of their capability and of parents' interest in education. Those perceived as "ready" and with interested parents were provided rich literacy experiences, while those perceived as not ready and with parents uninterested in education, were not. Teachers' perceptions were actually inaccurate and merely based on children's and parents' English language proficiency (Huss-Keeler, 1997).

In the case of bilingual learners programs must also decide on the language(s) of instruction. In some programs all the instruction is in the native language of the children, in others all the instruction is in English, and in still others the instruction is in both. Bilingual pre-school programs vary with respect to the students served and the distribution of the languages. Some programs serve only speakers of languages other than English, some serve mixed groups of English as well as non-English speakers. Some programs are flexible as to the amount of each language used, while others have strict guidelines with respect to amount of time given to a language and the particular language a teacher uses (Tabors, 1997).

Quality of instruction and learning rather than just language make a difference in the outcomes. The Carpinteria project in California offered Spanish-speaking preschoolers a program based on an interactional approach to language and concept development. Teachers also worked closely with the families. Except for 20 minutes of daily English instruction, all the instruction was in Spanish. While tackling problems, the teacher constantly probed the children about the “what” and “why” of their actions. These children performed comparably with monolingual English speakers in kindergarten readiness tests. They did better in English and Spanish language tests than other Spanish speakers in local daycare centers in which both languages were used. “So long as [children] are developing cognitive skills and school is perceived as a place where learning occurs,” children will learn English and succeed academically (Campos & Keatinge, 1988).

## **4.2 Activities to enhance developmental changes in structural knowledge**

The activities that have been proposed as enhancing structural knowledge are both general in nature, and specifically designed to enhance development in a particular aspect of language. Examples of activities that enhance language development in general are the opportunities provided to listen to well formed language and to use language. These activities are story telling by the teacher and child, and story reading by the teacher. These are topics that will be discussed in greater detail in the section on pragmatic development. Here we will simply point out that the story telling that seems to engage children during this period, and which allows them the greatest success, deals with topics concerning their own experiences. These include such topics as going to visit the doctor or family members, having or going to birthday parties, going to or participating in an athletic event or going to a restaurant (McDonald’s perhaps). Story telling and reading by the teacher can cover a much wider range of topics, and can introduce children to new areas of knowledge. There are activities that can enhance development in particular areas of language and these will be discussed next.

### **4.2.1 Enhancing semantax development**

Semantax development includes increasing knowledge of word meaning and the structures in which words can appear. Second-language learners may already have a concept and they just need to learn the word in English, or they may be acquiring the concept and word at the



same time. The theories that have been developed to account for the acquisition of word meaning point to the multiple ways in which such meaning is acquired. Certainly, one way in which children learn the meanings of words is from observing associations between words used for objects and events in the environment. For example, early learning about the names for body parts takes place when the caregiver points to these parts and names them.

Second-language learners need to learn the new word but also where it applies in English. For example, the word *leg* can be used for both humans and animals while in Spanish there are two separate terms, *pierna* for humans and *pata* for animals. The moral of the story appears to be that the references for words should be clear when new words are being introduced. Children come to school knowing different sets of words that may differ to some extent even though they are presumably users of the same “native” language. However, even though the language may be the same, the experiences of the children may differ because of cultural variation. Topics of family discourse may vary because of this variation. If the children know a different language the set of words they know may be close in meaning to the words known by children speaking the native language of the community. If they are bilingual they will have sets of word knowledge that represent items in their two languages.

There are additional ways in which words can be taught. All the experiences of a child can be a source of learning new words. For example, book reading on the part of caregivers is one such additional way. Explicit teaching of words in some families may be another source of variation in children’s knowledge of words before they enter school. Bilingual parents often ask children to give the translation equivalent of a word they are using to make sure they know it in the other language. Children have also been observed to request such equivalents in the other language, either in English or the home language.

A variety of cultural experiences such as visits to museums can introduce children to new words. Watching television and going to the movies is an additional source of word learning. Bilingual learners will develop their vocabulary in each language relative to the language used in connection with the particular experience.

There are a number of features of words that are a part of that word’s meaning. A word like “nose” for example is not just a body part. It also serves a function and is related to a set of particular verbs such as “smell” and “blow”. There are links between nouns, verbs, and some other parts of speech that usually go together. They are semantically

connected and also syntactically connected. Some adjectives go with some nouns; certain adverbs are related to certain verbs, and so on. These connections indicate aspects of the meaning of words. Some simple examples follow.

You eat bananas. You don't usually eat beds.

Beds are soft. Beds are not usually sour.

This is a tall building. This building is not usually fat.

You can cook soup. You can't usually cook erasers.

The boy ran quickly. The boy usually doesn't run blue.

Word meaning is partially defined by the various roles it plays in a sentence. An effective way of teaching new words is to use these words in sentences, and to call upon children to use words in sentence contexts. Topics that introduce the children to a new area of learning should use the vocabulary of that new area in sentences that describe the roles and functions of different words. Asking children to judge whether or not a word is being used "correctly," and whether the sentence as a whole is correct or not, also helps in learning meaning in terms of relations among words in a sentence. Some of the things you might say and other things that you would not say, as in the above examples, might compose the material you would use in the task of judging whether a word is being used correctly or whether the sentence is correct or not. Asking children to replace or add words in these sentences is another kind of task that requires thinking about the meaning of words and relations of words in sentences.

Not only do words have a set of meanings that define the word, they are also related to other words in a hierarchical fashion. Some words are super-ordinate to others and some words are subordinate. One simple example is the word "animal" which is super-ordinate to "cat" which is subordinate to "Siamese." These categorical relations among words can be composed of many items (things you eat is another example). They also can be limited to one instance (mother). Talking about and thinking about these categorical relations can add to the child's knowledge of the meaning of words.

Still another aspect of word knowledge is the relative meanings of words. For example, words that describe place and size are relative in meaning. Words such as "under" may mean under everything or under something. A ball under a box under a table is an example of relative use of the word. The understanding of words such as "here" and "there" depends on who is using these words. To speakers the word "here" means close to them. To the listeners the word "there" is close to the speaker. A word such as "big" is a comparison word. Some things are big in relation to other things. This is also true of such words as

“tall,” “small,” and their synonyms and antonyms. The relative meaning of these words can be shown visually, and thinking about relative meaning can be fun. An elephant is big compared to a mouse but little compared to a skyscraper. In some languages these relative meanings are expressed very differently, causing extra difficulty for those learning English as a second language. For example, in English the referent for *I* and *you* changes depending who is the subject and who the object.

*Child:* Are you [father] going to play with me [child]?

*Father:* Yes, I [father] will play with you [child] later.

In Vietnamese, however, words indicating interpersonal relationships are established and do not change depending on who is the subject and object. Thus the referent will be clearly indicated and does not change with function. The equivalent statements in Vietnamese would be “Is father going to play with child?” “Yes, father will play with child later” (Dien, 1998). It is helpful for such students to label the referent in stories with lots of personal pronouns.

A list of the features of words that children begin to acquire during the period when initial meanings are learned, which is during pre-school years, is quite substantial.

1. Referential (the word “dog” refers to a kind of animate object, usually my own or someone’s pet).
2. Associational (the word “dog” is associated with the words “cat” and “horse”, etc.).
3. Categorical (“dog” and some of the other words associated with it are “animals”).
4. Relational (words such as “big,” “little,” “here,” “there,” etc.) are different in meaning depending on situational context).
5. Different kinds of words can play different roles in sentences (syntactic roles and varying semantic roles i.e. subjects and actors, verb and action, etc.).

All of the different meanings can be explored by providing visual and spoken or signed contexts. As we know, a rich vocabulary plays an important role in the acquisition of literacy. One other aspect of word knowledge is its phonological composition. That aspect also plays an important role in literacy acquisition.

#### 4.2.2 Enhancing phonological development

This entire section needs to be prefaced by the statement that different dialects have variations in the phonology of the “same” words. Dialect development is an early and lasting development and, most markedly,

affects phonological representations. However, it can also affect other aspects of linguistic knowledge. This dialect variation need not affect reading acquisition in that differences in pronunciation of words need not affect recognition of words. For example, if you pronounce the word “pin” with a long /i/ sound as in “peen”, this need not affect your recognition of the word having the same meaning as a child who pronounces the word with a short /i/. This will be discussed further when literacy acquisition is discussed. If in a classroom there are children who speak different dialects, teachers need to be aware of the differences and can discuss different ways of saying the same thing. There is an initial awareness of parts of language (sounds, words and structures) that can be utilized in talking about dialect differences.

Learning the A, B, and Cs has been related to more successful development of literacy at a later time. Both knowing the letters and recognizing their visual representation make children more aware of the relation between letters and sounds. Having alphabet books to look at and reading alphabet books aloud plays the dual role of recognizing and relating. Some children are very familiar with the alphabet before they enter school, and others are not. This is a reflection of different types of early experiences. That is, some children are exposed to many books before they enter school including alphabet books. Others are not. The children’s television program “Sesame Street” was designed to expose children from many environments to letters and their sounds. Other countries have the same or similar programs. Having many books available for all the children can compensate for a difference in children’s early exposure to letters and their sounds. These books could be taken home for caregivers or siblings to read.

Families who regularly use a language other than English at home should be encouraged to read books in that language, if available. It is always best to encourage parents to read in the language or languages in which they can provide good models of phonology. For example, in a Chinese family the grandfather always read in Chinese, his best language, while the parents, both fluent bilinguals, read in the language of the book chosen by the child, either Chinese or English. Teachers should be aware of the language abilities of family members and make recommendations accordingly. Inappropriate recommendations can result in problems. For example, reading aloud turned into an unpleasant experience in one family. The young mother used inaccurate English pronunciation, but felt obligated to read the English books sent from school. However, she became very upset at her son every time he corrected her pronunciation. The mother felt her authority

undermined and that her son was acting disrespectfully. But bilingual children have little tolerance for incorrect language. They either correct it or switch to the interlocutor's more fluent language. In such cases, teachers should encourage mothers just to read in the native language. They should point out to them that literacy in the native language will support acquisition of English literacy. If the parents want the children to practice English, either an older sibling or other relatives or acquaintances fluent in English could fulfill that job.

It has been found that there are a number of activities that enhance phonological development perse not just the acquisition of literacy. Parts of some speech and language tests are auditory discrimination tasks. These tasks require children to listen and to say whether words are the same or different or to identify words while pointing to pictures. Children discriminate or identify minimal pair words such as "pig" and "big" or "moon" and "spoon". In addition to testing auditory discrimination such tasks may help in recognizing, early on, children who vary in their basic phonological knowledge. This includes children who have speech sounds that are different from the mainstream dialect or language. These tasks might also indicate which children may have mild hearing problems that might interfere with their language comprehension abilities as well as those with more severe problems.

Activities such as rhyming words and putting together separated parts of words enhance phonological development. The sequence of development of these abilities is first syllable discrimination and segmentation and then segmental discrimination and segmentation. Activities to enhance phonological discrimination should be sequenced in this way. Data indicate that young children do these tasks more successfully with meaningful phonological sequences than with nonsense syllables. Therefore, to begin with real words should be used. At a later age nonsense syllables can be used.

Bilingual learners may have difficulty with such activities not because they lack phonological awareness but because they have difficulty with the English language. For example, it is very easy in Spanish or Portuguese to break up words into syllables and put together new words with the resulting syllables. Breaking up *fo-to* (picture), *ca-sa* (house) can be used to put together new words such as *foca* (seal) and *toca* (touch). Many syllables in Spanish and Portuguese words have a simple consonant vowel structure that is easy to mix and match. Moreover, there is a one-to-one sound-letter correspondence. The English system is more complicated, hiding the phonological awareness skills these children may already have. If the children have

developed phonological awareness through their native language, they may not need formal instruction in English since research has shown that they transfer their phonological awareness knowledge acquired through L1 to English word recognition (Garcia, 2000).

It has also been found that putting words together is easier than pulling them apart. Exercises can be presented to put together sounds into a word before there are exercises to pull the word apart into its various sounds. Multi-sensory experiences seem to enhance segmentation: that is, use of visual cues as well as auditory ones is helpful in getting children to understand that words are made up of sounds. It is easier to put together and pull apart words that have initial consonant clusters than those that have final consonant clusters. Some examples of these activities appear below. In each instance, the teacher acts as leader and then asks the child or children to participate.

1. Think of words that rhyme with “cat”; think of words that start with /k/.
2. Put together win/dow; tap out the words in win/dow.
3. Put together k-a-t.
4. Here are cards that stand for k-a-t. Point to the cards as you say “k-a-t.”
5. Here are cards that stand for s-k-a-t, Point to the cards as you say “s-k-a-t.”
6. Here are the cards that stand for k-a-t-s. Point to the cards as you say “cats.”

Thinking of a word in certain circumstances, like those above, can be difficult for a child new to English. Rather than being asked to think of words it would be easier for the L2 learner to choose from a set of words those that start with a certain sound or those that rhyme with a given ending.

The task of removing parts of words and saying what is left is more difficult and would come after the tasks given above. All of these tasks are designed to make the children more consciously aware of the sounds that make up words and can be thought of as pre-literacy tasks but, obviously, can and usually do accompany literacy development.

To enhance the development of morphology (markers of number and tense) questions can be asked about “What do we say when there are two of something?” That “something” can vary in final consonant so that different endings are required (bag, mitt, rose). The same technique can be used to elicit tense markers (What do you say when you

are talking about “something” you did yesterday? Visual as well as auditory representation of the markers of number and tense can be presented to the children.

Giving the children examples of “correct” and “incorrect” ways of saying something is a technique that can draw their attention to morphological markers. Studies have shown that children of 3 and 4 years are able to judge whether the sentences are correct or not, or alternatively, are produced by “good” speakers or not so good, or “funny” speakers. They usually do not, as yet, have the ability to explain why it is not correct or is said by a funny speaker. Again, it needs to be kept in mind that there is dialect variation in this kind of knowledge. In fact, differences in judgment by different children in the class might be a topic of discussion of differences in the way people talk about the same things. The following are some examples of use of syntactic markers correctly and incorrectly.

“I see the blue leaves.” ..... “I see a blue leaves.”  
“Yesterday I went to the movies.” ..... “Yesterday I go to the movies.”  
“He has two balls.” ..... “He has two ball.”  
“ That’s mommy’s shoe.” ..... “That’s mommy shoe.”

Some bilingual learners may not be able to identify what they said as incorrect because of L1 influences. For example “He has two ball” may sound perfectly correct to Chinese or Spanish speakers. In Chinese the plural is marked only by “two” and not by the added plural morpheme. Many dialects of Spanish drop the “s” at the end of plural words. Even if they know it is there, they do not pronounce it.

#### **4.2.3 Enhancing pragmatic development**

Activities that appear to develop pragmatic competence or the ability to use language for a number of purposes seem to stem from two sources. The first is through what has been called narrative means. These include hearing stories through the air and by having storybooks read, and children telling their own stories. The second source is play. We discuss story hearing and telling first.

Children become familiar with some rules of conversation when listening to stories about interaction among characters in the story. Conversational rules can be represented in stories that have characters verbally interacting with each other. Having conversations about the stories between teachers and children, and among the children, leads to familiarity with the structure of classroom discourse, an important

aspect of classroom behavior. Teachers can involve the children in interaction with him or her by asking them to respond to questions about the stories. Conversation among peers can be encouraged by asking members of the class to respond to the answers obtained to teacher queries. Encouragement of interaction among the students can provide lessons in listening to each other and in taking one's turn in conversation.

For second-language learners, interaction with teachers and peers is essential for language development, especially for children who mostly use their heritage language outside school. Often these children remain silent. In order for interaction to take place the learners need to be fully accepted in the classroom community. Lack of English-language proficiency and knowledge of culture can get in the way of group inclusion. For example, Shoua asked, "Why Michael funny?" when she saw a picture of a smiling father produced by a classmate. She actually meant, "Why does this person seem to be having fun?" or "Why is this person smiling?" But her misuse of the language upset her classmates because the picture was not supposed to be funny, and led them to isolate her (Hawkins, 2004). Teachers need to broker between native and non-native speakers to facilitate group inclusion and interaction. Classroom communities that raise the status of second-language learners and foster their inclusion as full members of the community (regardless of English proficiency) are ideal environments for the development not only of pragmatic skills but also of all language skills. Such classrooms encourage second-language learners to be daring with their new language and affirm their identity as bilingual individuals.

Telling one's own stories can provide experience in engaging in conversation with peers and adults if interactions between story-teller and others are encouraged. Telling one's own stories allows selection of topics that are of interest to the story-teller. As said previously, familiarity with the topic leads to a more fluent telling. It also can encourage expression of thoughts in a sequenced manner if there is feedback from the group. The conversational interactions that can be provided by hearing stories and telling stories allow children to practice using the set of parameters that makes conversation interaction successful. These include such factors as listening to others, taking one's turn, and responding appropriately. An additional plus of narration activities is that familiarity with stories provides knowledge of the structure of stories or so-called story grammar. This knowledge of structure is said to play an important role in beginning reading. Teachers must be aware that the structure of narratives greatly differs in different cultures.



Often teachers think children's stories are disorganized and do not stick to the topic. These stories, however, are following discourse patterns of the children's communities. Teachers must learn to listen and allow the children to tell their stories in their own way. American discourse patterns can be explicitly introduced later in their education.

For example, Hawaiian children are used to constructing a story as a group. This is known as "Talk Story." One child may start narrating an event and others who participated in the experience will join in. They fluidly contribute to the narrative without stopping to ask permission to take a turn. This style of narrative has been successfully translated to the teaching of initial literacy in the Kamehameha schools in Hawaii. As teachers read a story aloud and discuss it with the class, they allow students to contribute to the dialogue when they feel they have something to say. Questions are not directed to specific students. In Talk Story style several students engage in the discussion without waiting for clearly defined turns. This congruency between the teaching strategy and students' style of narrative discourse has resulted in successful acquisition of reading (Au, 1993).

Free play in pre-school usually involves participation in a number of activities that represent life situations; that is, cooking, cleaning, building, fire-fighting, drawing, etc. Role-playing in these situations calls for quite sophisticated use of language. Often children imitate the more mature language they have heard from adults engaging in these kinds of activities. When playing mommy, daddy, teacher, and so on, children are learning about the activities that members of their society engage in, and also practicing the kind of language that accompanies these activities. Interaction between children and adults in these settings can further the children's knowledge of conversational participation. Adults can ask for clarification of what the child is saying and, in this way, call on the child's awareness of how the interaction can be clarified. Children have been found to speak more clearly as well as more loudly, and to rephrase what they have said when asked, "What did you say?"

For bilingual learners, differences in cultural experiences may obstruct incorporation in free play activities. For example, when Shoua (mentioned above) joined a group of girls playing in the house center, she engaged in what Hawkins (2004) calls "parallel play." The girls were playing with Barbies and making references to the movie "Toy Story," two features of the American cultural experience foreign to Shoua. She played house with the dolls as the other girls did, but carried out conversations with herself and imaginary partners imitating language and

cultural patterns learned at home. Teachers can intervene and help bridge the language and cultural gaps. In this example, the teacher might include the child by asking all the children about Barbie. The teacher might also bring in a book about "Toy Story."

Among the many activities that take place in the pre-school years there are three principal ones that are particularly important to learning about language. One of these is frequent communication interaction between children and teachers, and among children. Another is calling upon children's budding awareness of the categories and relations in language. Many of the tasks which require judgment of the "goodness" of particular aspects of language that were described above are examples of such activities. Familiarity with books and what is in them is still another factor in enhancing language development across the board. So-called "emergent literacy" in the pre-school years is based on familiarity with texts.

### **4.3 Emergent literacy**

Over the last 20 years a large body of evidence has been gathered which indicates that literacy begins with a child's experiences in infancy (Teale, 1984). Being read to and observing others reading begins early in some families. Familiarity with books is the driving force that starts literacy off. Well before learning to read themselves some children have great familiarity with books and others do not. The school setting can play a vital role in making all children familiar with books. The obvious way is, of course, reading to children, but there are also other ways in which schools can play a role. One other way is by bringing families into the process: encouraging family members to take children to libraries to take out books, or by supplying them with books that can be read at home. Siblings who know how to read can be encouraged to read to their younger sisters and brothers if working parents indicate that they have only limited time. Siblings who are familiar with the language of the schools can be of great help in families in which the adults have limited knowledge of English.

Learning about the purposes for reading aloud in a family from another culture can help the teacher understand how a family's values toward their language, culture, and education. For example, a Chinese family when interviewed mentioned many reasons for reading aloud to their child in both Chinese and English. These reasons included: preparing the child for school, providing opportunities to practice the home language, entertaining the child, and, most important, moral

development and passing on cultural values (Wan, 2000). It is interesting to note that in terms of preparation for school the grandfather, who only read in Chinese, gave the child practice in being able to sit and listen to an adult. So behavior rather than just learning English was seen as an important skill for school.

When children are read to a great deal, a process called *print awareness* begins. Print awareness and phonological awareness are developed by exposure to written text in any language and can be transferred to a second language (Garcia, 2000). Second-language learners still need to learn which letters represent which sounds in the new language. When children are surrounded by print in the home, in the ambient environment, and in school, they frequently will ask what a print sequence "says" if they are encouraged to do so. Through this process of asking and being told what a print sequence "says" they begin to recognize that print sequences represent words. Children from other cultures do not always have this advantage because the language they use does not relate with the language they see in print. Children raised in low-income communities cannot count on a rich literacy environment. Neuman and Celano (2001) observed that low-income communities did not provide many literacy resources in the form of material available for purchase or in libraries or schools. They also noted that street signs were of poor quality, either missing letters or covered with graffiti. Such signs were hardly good sources for developing emerging literacy. In these cases print exposure needs to be increased in a number of ways.

It has been found that children's own names, located in various places in school and on various objects, is very attractive, and can be one source of developing print awareness. While learning to recognize their names they can simultaneously be encouraged to write their names. Ashton-Warner (1963) taught Maori children in New Zealand to read in English by using what she called "organic words." As children said words to her, she wrote them on cards. As she wrote each letter, she sounded it out. She argued that her success in promoting literacy was due to the fact that she taught children using their own words, rather than those established by the school curriculum or suggested by the teacher (see "Word Cards" in Brisk and Harrington, 2000 for a detailed explanation of the procedure).

Children can also be encouraged to engage in other writing activities. They can be shown how stories can be written by putting pictures in a sequence, as happens when using some rebus materials. They can be asked to tell a short story that the teacher records and then reads back to the children. It has also been found that writing and reading

familiar print sequences act as reinforcement for each other. Bilingual children benefit from expressing themselves initially through drawings to which the teacher, or at a later time, they themselves can add writing. Drawing allows them to put their ideas down without having to struggle with their second language.

Some children begin to read in the pre-school years. There are many factors that may play a role in this accomplishment. Some of them have been listed above, such as being read to a great deal, and being told what the print around them “says.” The data obtained on the factors that may play a role in being an early reader indicate that such activities may bring about an early awareness of sound–letter correspondences. Awareness of such correspondences is the beginning of reading. As stated, an early process in reading is what has been termed decoding, that is, sounding out the sequence that the letters represent. Figure 4.1 is a graphic representation of the beginning process.

As Fig. 4.1 indicates the child first brings to conscious awareness the word that the letters represent. Initially, this might be done sound by sound. Then a process of word recognition takes place. Some words require recognition immediately because they cannot easily be sounded out. Eventually words that are initially sounded out become very familiar and then are automatically recognized. Such visual representations of words are part of the child’s lexicon or vocabulary. A word such as *cat* is first recognized when heard and its meaning accessed. Then as the written word is sounded out its meaning is accessed. As the written word becomes familiar it is recognized visually and its meaning accessed immediately. In this way, the written form of the word becomes part of the child’s lexical knowledge

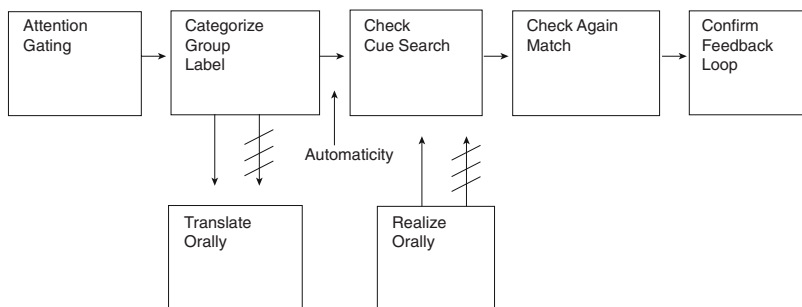


Figure 4.1 Processing model

of the word. Early awareness of what written sequences “say” is a crucial aspect of learning to read. Children who achieve such awareness early on become early readers.

Frustrated by schools’ inability to develop literacy for bilingual learners, Robert Lado (1980) used the principle of presenting the written word with the oral to educate low-income children in a bilingual pre-school. Children attended the pre-school beginning at age 3 until they were 5. During the first year-and-a-half they were taught reading in Spanish and during the last year-and-a-half they were taught to read in English. By the time they entered the first year of schooling these children were fully biliterate and well prepared to cope with English-only instruction.

#### **4.4 Getting to know bilingual children and their families**

As we saw in Chapter 3, the development of a second language depends on a number of individual and contextual factors. To understand how these factors are influencing the language and literacy development of these children, teachers need to learn about them. Finding out about the children can be done through teaching strategies (Brisk & Harrington, 2000) and by communicating with their families. If the teacher knows the language of the family or if parents are fluent in English, communication is easier. Cultural values and pragmatic rules may still get in the way of smooth communication. For example, parents in certain cultures may object to valuing individualism over collectivism (Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001). In England, Indian parents’ style of interaction appears rude to school personnel. Typically, when starting a conversation, they go to the point, skipping initial salutations. If parents and teachers do not share a common language, or if the parents are embarrassed to use English because they feel that they are not fully proficient, then communication is harder. Resorting to other bilingual people to mediate is a good strategy. Schools may have personnel proficient in various languages. Often community organizations or other family members, including older siblings, can help families interact with teachers (Huss-Keeler, 1997).

Teachers should discuss bilingualism with parents. Some families understand and are supportive of bilingualism, others are fearful and confused. It is paramount that families and teachers understand that bilingualism is not detrimental and that consistency of language use is helpful for children. Often parents assume that teachers oppose the use of heritage languages at home and will not reveal what they really do

at home. This can change when teachers show an interest in the children's language and culture. When Joseph's parents found out that the teacher had read some books about Korea, their native country, they came to the school for the first time and asked to see the books. During that visit the teacher found out that Joseph was fully fluent and literate in Korean. The parents, however, were not sure that they were doing the right thing for Joseph. The teacher reassured them that Joseph's knowledge of Korean was beneficial and invited them to come and share their culture with the class. Recognition of Joseph's other language and culture and incorporation in the curriculum as well as clarification of the benefits of bilingualism to his parents had a positive impact on Joseph's academic and social development.

#### **4.5 Bilingual children in the context of an English-medium class**

Second language and literacy development depend on language use and opportunities to learn. Entering a classroom context where an unknown language and unknown cultural patterns prevail is a frightening experience for children, and even for some parents. Teachers must create a classroom environment where second-language learners are accepted and their language and culture is respected. For example, a kindergarten teacher started each day with a different language *hello*. Every morning as the children gathered around the world map, one country was selected and children learned how to say *hello* in the language of that country. Many of these countries were represented in the classroom.

Children react very differently to an intense experience in an unknown language. Some try to use the little they know right away, others remain silent for a long time. Teachers must be sure to include the silent ones in the classroom activities through activities that allow them to perform but are not threatening. A recent arrival from China was able to participate in the Word Card activity described earlier. All she needed to know every day was one word to feel like a full member of the group. Such "low-demand" activities – supporting meaning with non-linguistic props, modeling the language as children point or do something, and repeating new terms – are among the activities that help newcomers (Tabors, 1997). Creating classroom routines allows students to expect what will happen next. Once they learn the routine, second-language learners can pay attention to the substance and not the procedure involved in the activity. Teachers must be careful not to

make changes through quick verbal explanations. Second-language learners may become confused and unable to follow directions (Tabors, 1997).

Children's silence is not always due to lack of knowledge of English, but to limited understanding of pragmatics. Rules on how to use language in interactions, particularly in the classroom, vary by culture. Some students are expected to mostly listen to the teacher. Others do not like to be called on to answer, but prefer to solve problems in groups, and report when ready (Philips, 1972). Such children may not respond when a teacher addresses a question directly to them.

When children share a language, they should be allowed to use it. The native language plays an important role in thinking things through, solving problems, and planning for writing. When there are no other speakers of the language in a particular classroom but there are in upper grades, teachers can organize cross-age projects (Brisk & Harrington, 2000). Older students are paired with the younger students and these older students read books aloud to the children. If the pair of students shares a language, they can use this language to clarify comprehension of the book and allow expression of feelings and thoughts.

Another helpful approach to increase bilingual children's participation in English-only classrooms is to give native-speaking monolingual classmates tools to encourage the participation of bilinguals. Hirschler (as reported by Tabors, 1997) taught pre-schoolers to initiate interaction, to speak slowly and enunciate well, to repeat when there was no response, to request clarification, and to recast their statements when there was no response. Interactions between native speakers and second-language learners increased considerably. Some girls took the task of helping bilingual learners very seriously.

Teachers need to create classroom contexts where children are allowed to develop an identity as bilingual bicultural people and where the process of second-language acquisition is supported by teachers and classmates alike (Hawkins, 2004). In such contexts the cultural knowledge of children and parents from various ethnic groups is incorporated in the class curriculum and students are encouraged to help each other. Mockery for lack of knowledge or incorrect use of English is unacceptable. Monolingual speakers should also be taught to accept code-switching by bilingual learners. Code-switching is helpful to bilingual speakers because if they do not know how to say something in English they can continue the thought by inserting words in their other language. Together with native speakers they can search for the words, providing a good language-learning opportunity. Bilinguals code-switch

also to assert their identity, to call others' attention, as well as other purposes important in the discourse. Monolingual students should accept it and understand the purpose. Teachers could even create lessons: for example, point out that José just called your attention by code-switching to Spanish and ask the monolingual children what devices they use to call others' attention.

#### **4.6 Children with language learning problems**

Many or even most of the language learning activities that are recommended for normally developing children in pre-school are also recommended for children with language learning problems. One outstanding problem for children in pre-school may be difficulty in hearing that still remains undetected. We have already discussed some of the difficulties that children may experience because of chronic middle-ear infections. Depending on the nature of the health care that children from different environments receive, the incidences of chronic otitis media may occur without adequate treatment. Parents' concerns about these children should be heeded. A physician and an audiologist should see them, if this has not already occurred. In addition, there are some children who suffer more consistent hearing losses ranging from moderate to more severe. Determining the presence of hearing losses in pre-school children, and treatment of these hearing losses, can be of enormous help to their academic success. Some of these children need to have hearing aids fitted. All may need to have special treatment in group settings. There are data that indicate that the hearing losses of some proportion of these children go undetected until they enter elementary junior school, and for some of them even after that. Some behaviors such as talking too loudly or not paying attention when called on might indicate a hearing loss, and not bad behavior. If there is some suspicion on the part of parents or teachers that the child is having problems hearing, the child should see an audiologist and then a pediatrician if the audiogram obtained indicates a loss.

Something that can be of help to these children early on, as well as adequate medical treatment, is an effort to control ambient noise. Also, they should have the greatest opportunity to be close to and look at other participants in conversations. This latter allows the child not only to hear better but also to have a better opportunity to read lips. Control of ambient noise is admittedly difficult to bring about in pre-school group settings, but this can be of benefit to all children. Having a good ratio of adults to children in these groups, which provides more



opportunities for face-to-face conversations for all children, would also be of benefit to all.

Children with communication problems due to other kinds of difficulties need to have the attention of special educators who are familiar with the kinds of problems that they have. Children with special needs have, over the years, become increasingly integrated into regular classrooms, and teacher's aids of various kinds both people and devices have also become more integrated into "regular" settings. In pre-school settings, one-on-one interaction between these aids, the special educators and the children who need their help, is recommended. Such one-on-one interaction at later ages is also recommended but becomes more prohibitive as either classroom size increases or as their special needs require special types of intervention. As stated, early intervention is crucial to later good outcomes. Some of these children will continue to need special help over the school years, depending on the nature of and severity of their problems. However, some other children can achieve normal development over the early school years. If early intervention is effective, they might not need continuous special intervention.

Among those who might benefit from such early intervention are late talkers and children who have been labeled as SLI (specifically language impaired). With these children, beginning intervention in pre-school may help not only in ameliorating later problems in oral language, but, also in learning to read. Some treatments that have been suggested for these children are the same activities suggested for normally developing children in pre-school. These are exercises that foster awareness of various categories and relations in language. However, these activities might have to take place one on one with these children, and, probably, should take place much more frequently. A trained speech therapist can provide a model of appropriate activities that can then be taken over by teacher aids. As said, some helpful activities for these pre-school children are those recommended for children without problems. Not only do these activities need to be presented much more frequently, but also in smaller chunks, and more slowly, when used with these children. There is a recent book that discusses intervention with specifically language impaired children by L. Leonard (1998).

We have already discussed some of the alternate communication systems that have been developed for children whose language development is more severely affected. Cerebral palsied children, autistic children, and some developmentally delayed children have been found to benefit from these alternate systems. Some of these systems require

computer programs for their use. This is clearly the case for cerebral palsied children. These systems are designed to track eye gaze. Appropriate words are generated when children look at particular panels in a display. Another system called "EagleEyes" codes movements of muscles around the eyes in interaction with a computer display to carry out various academic tasks. For example, the child can select a sequence of letters to spell a word, and can even correct the spelling. These words are then spoken (DiMattia, Curran, & Gips, 2001).

Sign language as well as other graphic systems of an appropriate kind that do not require computers have been recommended for some of the autistic and developmentally delayed children. Some special educators are aware of these children's needs and of the communication systems that can be of help to them. Adequate training is a requirement for all who attempt to teach children, both those who are normally developing and those with problems. Although some school settings and systems do not have adequate funding to make computer requirements a possibility, these specialists should be aware of alternate means for communication.

# 5

## Language Development in Early Childhood – The Primary School Years: Ages 6–9

### 5.1 Introduction

In this chapter we will discuss those aspects of language development that mark developmental changes in the years from age 6 to 8 or 9. In many U.S. school systems these years include grades 1 through 3 or 4. The years of development that we have termed early childhood is, once more, a period marked by very dramatic changes. Such changes occur both in language knowledge and in the medium through which language knowledge is acquired. It is during these years that most children learn how to read, and this can have a profound effect on what they know about language. In fact, learning to read can enhance conscious awareness of the categories and relations in language. Earlier language development consists largely of intuitive knowledge of these categories and relations, although some level of conscious awareness can be elicited even in 2-year-old children.

These very young children are aware of overt mistakes in language such as reverse-order short sentences. They say it's wrong when asked about a sentence such as "ball the roll" but answer "because" when asked why. Three factors appear to play an important role in the development of consciousness or the ability to talk about categories and relations in the language. These are 1) further maturations of the knowledge of language already acquired, 2) schooling in general, and 3) learning to read in particular. In the case of bilingual learners, handling two languages heightens their language awareness.

As in previous chapters we will discuss dramatic changes in structural knowledge of language and then present some data about changes in

uses of language. We will discuss only dramatic changes since those aspects of language development we have already discussed simply increase in some sense. For example, vocabulary grows as does sentence length. In addition, these behaviors also become more automatic; that is, more easily accessible in both comprehension and production. This might also be considered a dramatic change. Other dramatic changes that occur are the result of the more formal schooling that occurs in the primary grades. Conversational interactions within the school setting among students and with teachers and aids are of a different kind than that which occurs in the home. For children schooled in a new language these differences are more pronounced not only due to language difference, but also to cultural differences in conversational interactions. Learning to read and reading impact structural knowledge and also pragmatic knowledge. In texts of various kinds children can learn about conversational conventions, topics of discourse and discourse of an explanatory or descriptive kind. Overall, this period can be described as becoming more competent in all aspects of language knowledge and use. The role of literacy on these developments will be highlighted.

Children for whom English is a new language need to learn that language to function in school, both socially and academically. Beginning in first grade they also need to learn to read and write in this new language. In this chapter we will discuss how knowledge of the first and second language plays a role in literacy development of bilingual learners. In addition, children need to learn the new perspectives introduced in a new culture that may be different from their own. Further discussion of code-switching will also be included.

The chapter will also describe language development, both spoken and written, by children with various states of knowledge of the language being used in school. This may be due to not being exposed to English before they enter school. These can be monolingual children knowing another language, and bilingual children who know languages other than those of the school. They also can be second-language acquirers who have little or no knowledge of the school language or those who have varying degrees of knowledge of the school language. Accompanying these various states of knowledge of the school language can be distinctive cultural differences.

There are a number of language problems that begin to emerge during these years. Many of these problems become very evident as the child becomes involved in the process of learning to read and write. There are, however, other problems that involve speaking and listening

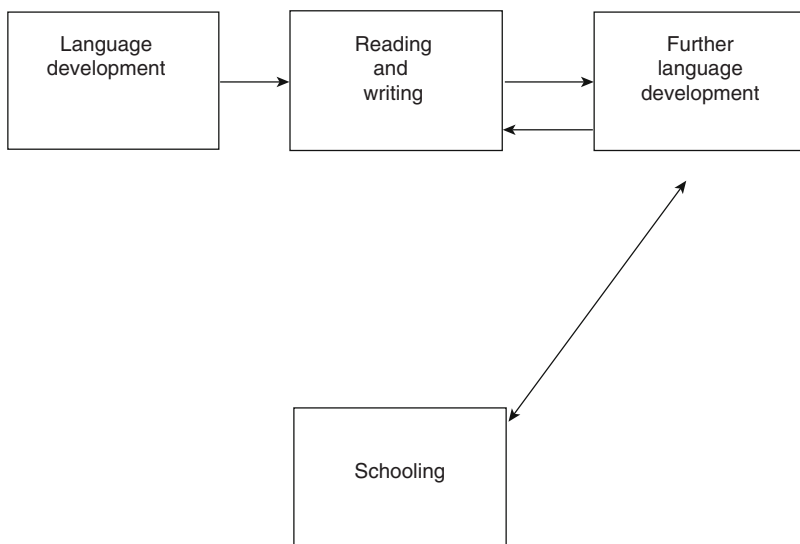
as well as reading and writing. These problems have been characterized as “learning disabilities,” and may include mathematics problems. The root of these problems may be based on the difficulties that children experience in comprehending and producing oral language. It is true that some children experience their greatest difficulties in mastering mathematics and not in spoken and written language, but there are probably associations in these two areas of difficulty. For example, difficulties in dealing with mathematical word problems might be due, in part, to difficulties in processing language.

The final section of the chapter will discuss these children who have identified oral and written language problems. These children have been variously labeled as SLI (specifically language impaired), dyslexic (specifically reading impaired), learning disabled, developmentally delayed, children with sensory integration problems, and children with Asperger’s syndrome. These children are, in fact, those whose difficulties are not immediately obvious when they are younger as is the case with cerebral palsied, deaf and blind children.

## **5.2 Highlights of structural development**

A shift occurs in the kind of language the child hears in school during the early elementary grades. Several researchers have remarked on this shift as a change from home talk to school talk. This shift requires comprehension of different types of semantactic structures than many children have previously heard, even in pre-school. School talk exposes the child to a different vocabulary and to different semantactic structures. The child hears orders and instructions that may contain quite complicated syntax and vocabulary. The child also hears explanations of cause-and-effect relations that may describe both social behavior and scientific knowledge. All of this new talk requires an expansion of semantactic knowledge.

As stated, at the beginning of the elementary school years there is already a sizeable knowledge of vocabulary. One estimate of the lexical items that are known by children in first grade puts the total at 8,000 to 13,000 words that are produced as well as understood (Templin, 1957). Research in the last half-century has pointed to an increase in the number of vocabulary items that children understand. Historical data indicate that exposure to an increasing number of sites of information (for example, the internet, computer games, as well as a wealth of books and films especially for children) leads to an increase in the size of the vocabulary. Although the cited estimate is an early one, it



*Figure 5.1* Relations among sources of knowledge

indicates quite a large range of lexical knowledge (8–13,000). This, in turn, indicates that there can be a large difference in vocabulary knowledge among children. This difference might have increased as some children's experiences with words have grown widely while those of others have not because of various environmental differences.

The size of vocabulary in the native language predicts reading comprehension in English for second-language learners. Given the role of lexical knowledge in acquisition of syntax and in reading, these differences can affect acquisition of knowledge in both these areas. However, learning both new semantactic structures and to read can positively affect the child's lexicon, and catch-up can occur. The relations among these areas of knowledge positively benefit learning in each of them. Figure 5.1 indicates the relations that exist among these sources of knowledge. Therefore, second-language learners benefit from being introduced to English both orally and in writing.

One dramatic change that occurs over the early grades of elementary school is an increase in the automaticity of use of structural knowledge. This increase in fluency takes longer in some children than in others. Second language learners may find acquisition of these new structures particularly difficult because they do not have the vocabulary or the basic structural knowledge needed. In addition, the types of structures

Table 5.1 Highlights of structural development from 6–8

<i>Category</i>	<i>Change</i>	<i>Examples</i>
Syntax	Sentence length increases	I see the boy who I played with yesterday.
	Combining structures becomes more frequent	She likes me to do homework before watching television.
Morphology	Prefixing and suffixing increases	Unhappiness, disapprove, discussion
Lexicon	Use of abstract categories increases	Liberty, vast, imagination
	Synonyms and antonyms used more widely	Large, big, huge; small, little, minute
	Multisyllabic words appear more frequently	Disappointment, unhappiness
Phonology	Stress rules of language acquired	<b>History, historical, Influence, influential*</b>

\* The examples of stress on a syllable is indicated in bold

used with increasing frequency also change; that is, both types of development occur. Some notable changes begin to make clear the role of various cognitive and social factors in the growth of the amount of knowledge acquired, the fluency with which this knowledge is used, and in the type of knowledge acquired.

Developments in each of the areas from first to third grade are summarized in Table 5.1. In the area of syntactic development sentences become longer due to increased knowledge of sentence structures that combine single sentences. In the area of morpho-syntactic or morpho-phonological growth knowledge of how to derive words by a combination of various kinds of suffixes, and prefixes develops. In the area of lexical knowledge there is an increase in words that represent abstract categories, knowledge of a sizeable number of synonyms and antonyms and increasing knowledge of multisyllabic words. And in the area of phonology prosodic knowledge, or how to stress syllables in words of various lengths, grows.

It should be noted from the above examples that developments in one area affect developments in other areas. The acquisition of knowledge about how to derive new words by prefixing and suffixing, the expansion of syllables in words, and the acquisition of appropriate stress rules are all related to each other.

While native speakers of English or fluent bilinguals are making such progress, children within two years of being initiated to English as a

second language still struggle with some basic aspects of the oral language. Children have difficulty with phonology, vocabulary, and grammatical structures. But most of the typical errors of the early stages of L2 development include grammatical morphemes.

Many of the phonological errors at these early stages of development are the result of transfer from the native language. For example, Japanese L2 learners have difficulty distinguishing the /r/ and /l/ sounds and may pronounce *row* as *low*. One young Japanese L2 learner avoided words with the /l/ sound and code-switched to Japanese instead.

To compensate for their limited vocabulary, L2 beginners choose general-purpose words and use gestures to clarify. For example, one young Spanish-speaker often used *go + this way* with a hand gesture to indicate *jump, run*, or other movement verbs. Another strategy is to paraphrase indicating the meaning. For example, a child who did not know the word for zoo, said to the teacher, “My mother brought me to the animals. They live there.”

Errors in word order, which can differ from language to language, are, again, mostly transfer errors. For example a Spanish-, French-, or Vietnamese-speaker will say “the house white” following the Spanish, French, or Vietnamese rule to put the adjective after the noun. Although the possessive constructions *the car of my father* and *my father’s car* are both accepted in English, the former is more natural in some languages. Beginner French- or Spanish-speakers prefer the first form because it matches how the possessive is done in their languages.

In the initial stages, L2 learners omit many morphological markers, although sometimes they make a mistake in their use. For example “And one time I give to him carrot” (Genesee et al. 2004, p. 123). *Give* is missing a tense marker, *to* is incorrectly inserted, and the plural marker *-s* is missing. The correct sentence would be “And one time I gave him carrots.”

Below is a list of the most common errors of grammatical morphemes in young L2 learners in Canada reported by Genesee et al. (An extensive list of examples can be found in Genesee et al., 2004, pp. 124–7). Teachers of students of many ages throughout the world report similar errors in learning English.

- be-copula: I dunno if she my grandmother [*is* missing]
- be-auxiliary: We playing hide and seek [*are* missing]
- Past -ed: I open my eyes [opened]
- Irregular past: I take my sleeping clothes [took]; I didn’t sawed [see]



- Past tense form + auxiliary *do*: I didn't sawed [see]
- Prepositions: "no eating bus" [*on* and article missing]; "I have two Zach on my classroom." [used *on* instead of *in*]
- Plural -s: "I have two Zach on my classroom." [Zachs]
- Determiners: "and it gots basement" [*a* missing; gots for has]; "I can eat the ice cream" [*the* unnecessary]
- Possessives: "Sleeping beauty dress was..." [beauty's ]; "just not like my's" [mine]
- Third person -s: "He want some ice cream" [wants]; my dad don't wanna watch TV" [doesn't]
- Auxiliary *do*: "how you say that?" [How do you say that?].

As children develop their second language they make fewer of these errors. At times, they may use morphemes correctly and incorrectly in the same sentence. They do this either because the rule is still not established (which also happens in younger monolinguals for the same reason) or because they know some sentences by heart. For example, an 8-year-old Mexican American child telling about his cousin chasing a snake said, "He grab a stick and he hit it with it...he grabbed something like a knife and killed it" (McCabe & Bliss, 2003, p. 77). First he omitted the *-ed* in the past and then he used it correctly. In another case a child said: "My name is Tomo. He Peter." The first sentence was memorized, but the second sentence showed the typical omission of the copula.

There is great variation in the rate of acquisition of these aspects of language due to personal and contextual factors explored throughout this book. Phonology, the one aspect of language that young second-language learners acquire best, still can take up to 2 years in some children. Genesee et al. (2004) studying L2 children in Canada concluded that after 2 years less than 50 percent of the children had acquired accuracy of grammatical morphemes comparable to native speakers and only 50 percent were within the low range of vocabulary development. They also found variation among the grammatical morphemes themselves. Children tended to acquire *-ing* and plural *-s* early and the past tense and third-person *-s* later. This mirrors early English acquisition by monolinguals.

### 5.3 Stages of second language acquisition

To summarize briefly, there are four broad stages of second-language acquisition: L1 use, silent period, telegraphic and formulaic use, and

productive language use (Tabors, 1997; Genesee et al., 2004). L1 use can be a very short period, even a few days, especially in a school environment that does not foster languages other than English. The realization that people do not understand the L1 often results in children refusing to speak. Despite these generalizations there is great variation among children. Some skip the silent period altogether while others remain there for a long time. A first-grade teacher reported on a Haitian girl who was very talkative in Haitian Creole during breaks with her friends, but remained silent in class for the entire year.

Some children, especially the social ones, become very skilful in using telegraphic and formulaic language. They use one-word utterances and phrases that they hear a lot, such as “I don’t know” when asked a question. They manage to communicate well with others, often giving the impression that they know more English than they actually do. For example Paradis conducted a conversation with a child from Chile asking him questions about his grade, his teacher’s name, whether he liked school in Canada and so on. The child sustained the interaction for a number of turns with one-word utterances “two, Mrs. Munro, yeah, and so on” (Genesee et al., 2004, p. 133–4).

Children start producing semi-formulaic sentences or phrases such as *I want + noun*, often promoted in the classroom, and then move on to the fourth stage at which they produce phrases and sentences of their own applying the rules they are internalizing. This type of language or interlanguage, as it is called, is systematic and rule-bound but not native-like. The errors may be found among children of different language backgrounds (developmental errors) or among children of a specific language background (transfer errors) (Genesee et al., 2004). It is not always easy to distinguish between these two types of errors. Regardless of the type of error, it is important to realize that they are a normal phenomenon of second-language learning and often reveal the children’s interpretation of the new language.

Over time these errors for the most part disappear and children raised in a second-language environment are expected to become like native speakers in conversational ability. It does, however, take time.

Some people think that when young children learn a new language they “soak it up like a sponge.” There is considerable research evidence showing this popular belief to be false, and it is important for professionals working with L2 children to be aware of how long it can really take to acquire native-like competence in a second language, in order to have realistic expectations of children’s performance (Genesee et al., 2004, p. 133).

## **5.4 Pragmatic development or becoming competent users of language**

Another remarkable expansion of linguistic knowledge is in the area of pragmatic knowledge. If given the opportunity, children's communication in a school setting can mature in several ways. These developments continue through the middle childhood years. For L2 learners culture and language proficiency influence pragmatic development. Culture influences the way discourse is organized and language proficiency is needed to produce the extended chunks of language that are needed in pragmatic activities such as conversation or story telling.

One way pragmatic knowledge matures is in taking the perspective of another. Again there is an interaction between lexical knowledge and another area of linguistic knowledge. Understanding the differences between "know" and "think," and differences between "should," "could," and "would," or so-called verbs of mind and state of mind can help children understand the perspective of another when they are addressed or when they address others.

In a very early study of conversational development (Dorval & Eckerman, 1984) it was found that it takes a long time to for this ability to develop. By fifth grade, although children converse in a manner that indicates that they are listening to each other (their comments are related to what the others have said) they are still not consistently taking the perspective of the other. There is an interaction between what they talk about with each other (the domain of discourse) and their ability to be consistently relevant in their interactions. This will be discussed further in the chapter on educational intervention.

L2 beginners are still struggling with distinguishing the language appropriate for different contexts and addressees. A native speaker may know the way to say something in a polite and an informal way whereas an L2 learner may know only one of them. For example, a recent arrival third-grade Portuguese speaker exclaimed, "Stop it," wanting the teacher to stop erasing the homework assignment on the board because she had not finished copying it. She had learned the phrase from classmates while in the playground and was unaware of the inappropriateness of using a command in the classroom with a teacher.

Another way in which pragmatic knowledge grows is in development of the ability to engage in connected discourse on a topic. One product of this increased ability is to be able to tell stories that convey appropriate information in a sequenced manner. Another is the ability to explain various kinds of different data, that is, data that is both social

and scientific. Children's story telling in first grade puts a great burden on the listener. Stories are often told without beginning with a setting for the story. In telling the story children at the beginning of this age period may also be unclear in reference. The following excerpt from a child's story makes both these problems clear.

"They went for a walk. He climbed up a tree. He fell down and he cried. It was sad. He didn't want to climb trees again."

We really don't know what the story is about from this excerpt. We don't know who *they* are, where they went for a walk, who *he* is that climbed the tree, and who fell under what circumstances. The entire story never clarifies actors and circumstances. Over the primary school years, children do learn the structure of adequate story telling. It is important to point out that different cultures have different formats for story telling, but formats from all cultures do not leave listeners in the dark.

Narratives in other cultures may differ both with respect to structure and language (see McCabe & Bliss, 2003 for a good analysis). Transfer of the cultural values and linguistic characteristics of L1 begin to appear in L2 narratives. Resulting narratives are often interpreted as inability to create flowing and logical discourse. In another chapter we presented the talk-story based on Hawaiian children's style of story telling. What follows is the description of some general patterns found among Spanish-, Chinese-, and Japanese-speakers. It is important to keep in mind that there is variation within each of the groups.

Spanish-speaking children are often raised to co-construct narratives with the adult, thus their narratives are embedded in the dialogue. When asked to elaborate about a point they are more likely to add what happened to a family member. For example, when a boy was asked to elaborate on his narrative about being stung by a bee he went on to say "Then my brother got stung" (McCabe & Bliss, 2003, p. 74). Family members are very important and appear prominently in their narratives. Children often stop the story thread to describe the relative mentioned. The structure of narratives by Chinese and Japanese children is usually concise including facts without much detail. The listener is supposed to interpret and add the necessary information to make it clear. Being explicit is interpreted as thinking that the listener is not smart enough to understand. Requests for elaboration result in adding new experiences rather than giving details about initial statements.

Other characteristics of L1 appear in L2 stories. Japanese-speakers use lots of conjunctions. Narratives in English by Japanese children include a number of sentences joined by conjunctions. Spanish-speakers tend

to use the continuous tense rather than the past and often skip the subject pronoun, both accepted features of Spanish narratives. A 6-year-old Salvadorian child telling about trying to catch a cat said, "I was almost catching it and [it] kept running... [I] did not get to it" (McCabe & Bliss, 2003, p. 74). The pronouns in brackets were omitted, because in Spanish the verb is declined, making the subject clear. The pronoun is always present in English.

When functioning in the second language and struggling to form sentences "attention to superficial aspects of sentence form or meanings in the processing of narrative texts may interfere with the construction of a mental model and, consequently, result in the production of unrelated statements" (Gutiérrez-Clellen, 2002, p. 190). Lack of fluency is therefore not evidence of lack of the ability to narrate but difficulty with the vocabulary and structures of the L2. For example a 6-year-old Spanish-speaker relating a story when he was asked if he had ever been in a hospital explained, "There was um a doctor because... there was some, uh, somebody in trouble. They were in trouble" (McCabe & Bliss, 2003, p. 81). The child did not seem to know the nouns to identify the people in trouble. Nor could he form the type of sentences needed to explain the kind of trouble, the reasons for the trouble, and so on.

Explanations, both social and scientific, are another area in which marked growth in connected discourse can be observed over this developmental period. A great deal of research has been carried out over the years examining children's descriptions of scientific phenomena and solutions to moral dilemmas. This latter behavior – solutions for moral dilemmas – is of great interest to current educators because of the incidence of various kinds of violence in school settings. Much of the research in both these areas, explanations for scientific phenomena and solutions for moral dilemmas, was and is the product of Piagetian studies. Piaget examined how children view such things as causes for day versus night, and summer versus winter. He also examined how children would solve such a dilemma as stealing bread to feed hungry persons (the *Les Misérables* dilemma).

The Piagetian notion was that scientific explanations improve and solutions to moral dilemmas become more appropriate as children "decenter," that is, when children can take the point of view of others, and develop knowledge of objective cause and effect. Some of the same problems that listeners have with comprehending early stories also exist in the explanations for various scientific phenomena that are provided early on. For example, in describing why we have day and night

or seasons, early descriptions are tautological. Until the child begins to acquire scientific knowledge the early explanations consist primarily of "because" like statements. "We have day because the sun comes up, and we have night because the sun goes down or the moon comes up." Sometimes culture is stronger than development. For example McDiarmid (1991) recalls a discussion with fourth-grade Yupik Eskimo students about what might have caused the school walk-in refrigerator to break down. They discussed the cooling system, compressor, and gasses. The teacher explained the scientific principles of the cooling system. Finally the teacher asked, "So, why did the walk-in break down?" One of the students who had been most involved in the conversation replied, 'Ghosts.'"(p. 257). Myth rather than science explained unknown events in this student's culture.

Early solutions for moral dilemmas are also "because"-like explanations. Children at 6 years and earlier are aware of what is right and wrong, and can select an appropriate behavior as a solution to the dilemma. However, many studies of children in this period indicate that they provide reasons for behaving well that are related to punishment. One should not do something because if one does it then a punishment will follow. Over this period children begin to acquire knowledge of "abstract" reasons for appropriate behavior. These reasons include notions of morality (one should not do to others, etc.), justice (all people should be treated equally) and so on. Like scientific explanations, social/behavioral explanations develop throughout this period and well into middle childhood and adolescence. Education, in and out of school, plays an enormously important role in both these areas of development. Information provided by models and conveyed through spoken, written and visual language conveys these moral messages.

Highlights of pragmatic development from first to approximately fourth grade are indicated in Table 5.2.

An aspect of pragmatics unique to bilinguals is the alternate use of their languages or code-switching (see Romaine, 1995, for an extensive explanation of code-switching). It is a very common phenomenon among bilinguals, particularly when communicating with other bilinguals. Language switching is more common in oral than in written language. Code-switching is more frequent when speaking the non-dominant language in the society. Thus, a Chinese/English bilingual in Australia will more likely code-switch to English when speaking Chinese than vice versa.

Table 5.2 Highlights of pragmatic development from 6 to 8

Category	Change
Conversation	Begin to take perspective of other Begin to make relevant responses to making relevant responses
Story Telling	Begin to be listener friendly to being listener friendly Begin to follow Story Grammar
Explanation	Begin to move from only personal reference to abstract knowledge

These switches can occur within the discourse, that is the person starts in one language and then switches to the other. When asked a question by the teacher, 2 Spanish-speaking girls would huddle and discuss the answer in Spanish and then turn to the teacher and answer in English. Code-switches can also occur between sentences, or even within sentences when only a phrase or word is in the other language. "Yesterday *es mi* birthday," announced Blanca when she walked in the classroom. Code-switching is not evidence of language confusion. On the contrary, code-switching ability develops as children grow. Children learn quickly where code switching is acceptable. For example, they will not code-switch in an English-speaking class, except when sometimes speaking with another bilingual classmate. The amount of switching may be related to whether children are raised in an environment where there is a lot of switching or not. For example in Montreal code-switching is discouraged whereas in Ottawa code-switching is common.

Code-switching is not random, but rather governed by functional and grammatical rules. The reasons for this switching are many and well documented (Romaine, 1995; Zentella, 1997). Children often code-switch when they do not know the equivalent expression in the other language. Eva wrote a paper in Spanish using an occasional word in English: "Algunos viernes tenemos *girl scouse*, música, ciencia" (Fridays we have Girl Scouts, music, science). Her experience with Girl Scouts had been only in the United States, so she did not have an equivalent in Spanish. Topic is a frequent reason for code-switching. Arabic students found it easier to talk about Ramadan in Arabic but about smoking in English. Other reasons include: a word comes more readily in one language, or there is a desire to express an added meaning by changing language, or the speaker wishes to signal identity. Children

may code-switch to exclude others or to create privacy from others. Angélica, who usually spoke English with her mother, would code-switch to Spanish to persuade her mother, a Spanish-speaker.

Some children are raised in communities where code-switching is a way of life. Zentella (1997) describes the Puerto Rican barrio in New York City where “radio, TV, telephone, juke box, older and younger siblings, adults’ conversations – all in two languages – crowded in on the children’s activities, talk, and daydreams” (p. 80).

Formal texts may switch languages to establish the cultural identity of a character. The children’s book *Sing, Little Sack* is a story written in English about a Puerto Rican girl. Spanish is used occasionally to highlight the child’s culture. For example, the lullaby her mother sang to her as a child is in Spanish, as well as expressions such as *mi niña* (my child), *mamá* (mother).

## 5.5 Learning to read and write

The processes by which children learn to read and write has been studied for a very long period of time. The conclusions that have been reached are, however, at least triple in nature. There are those who put great emphasis on decoding; that is, sounding out a word based on its spelling or orthography. Others suggest that the process is largely based on the ability to develop recognition of certain sequences of symbols. Still others put emphasis on discovery based on what is termed psycholinguistic guessing or relying on the context of a word to guess what a word might be. Yet others believe the process is interactive. The top-level process of psycholinguistic guessing may interact with bottom level processes to bring meaning. Research with L2 readers has shown that over-reliance on either top- or bottom-level processes, caused by limited knowledge in one or the other, interferes with comprehension. For example, a fifth-grader, unable to decode details, used her world knowledge to declare that the story was about a grandparent coming from Italy to visit the family. The story was actually about an aunt coming to the U.S. for health reasons. Another student, with good command of vocabulary and structure in English, interpreted the sentence “although housewives still make the majority of volunteer groups” as women volunteering to be housewives. This student had no concept of what a “volunteer group” was (Carrell & Eisterhold, 1988).

A different notion of reading being interactive implies that the author and the reader co-construct the text; the author with his or her intended meaning and the reader with his or her own background



knowledge. For example, a group of Japanese students read a story about a man from the perspective of his dog. The author used the word *creature* to refer to the man and meant it to be funny. The Japanese students did not find it funny because for them *creature* had the connotation of simply a *being* and not a monster or strange-looking being.

Obviously how children learn should be related to how they are taught. Therefore, some of the arguments that exist about how children learn to read have led to arguments about how reading and writing should be taught. All these possible bases for learning to read should be kept in mind as the teaching of reading is discussed.

Figure 4.1, in the last chapter, presented a model of the process of learning to read that is espoused by a number of experts. As that model suggested, beginning reading takes place in stages. Being read to exposes children to the purpose of reading, structure of texts, and directionality. The child may also be exposed to isolated words and practice on recognition of these words but this is not reading. It is symbol recognition. Nevertheless such practice may play a very helpful role. These words are often presented in rhyming groups (cake, lake, make, etc.). This practice may help the child see the relation between letters and sounds and perhaps begin the process of developing awareness of the relation between sounds and symbols. A very helpful book in understanding this relation in the beginning stages of reading is a book we have already cited, *Beginning to read: Thinking and learning about print* (Adams, 1990).

As the model indicated the first stage in reading a word is to decide what a word is. The format of text in books is helpful in this regard. Words on a page are separated by spaces, sentences begin with words that have an initial capital letter and the sentence ends with a period (full stop). In sum, punctuation formats can help in the reading process. After deciding what the word is it may be decoded by sounding it out. When that is done reference is then made to the child's internal lexicon to get at the meaning of the word. However, some words are very difficult to sound out. In reading a sentence there may be more than a few words that cannot be sounded out. The sentence: "The boy is sleeping in his bed." contains words that are good candidates for sounding out (boy and sleeping). Other words in the sentence are good candidates for simple recognition (*the* is a good example of when simple recognition is required). Finally there is a good word in the sentence for psycholinguistic guessing and using background knowledge (*bed*). Bed is a good place to sleep in and begins with the sound /b/. To summarize, when reading a sentence in a text the child may recognize some

words by sounding out, others by recognition and others by psycholinguistic guessing and using background knowledge. A child may use all three strategies to get at the meaning of a sentence in a text. The strategies interact to facilitate comprehension.

The decoding process that is referred to most often as being crucial to beginning reading may develop in time into a recognition process: that is, great familiarity with what a word becomes when you sound it out, may become, in time, automatic recognition of that word. Over time we not only develop sound–meaning relations which we store in our lexicon, but also orthography–meaning relations: that is, we remember what words look like. We no longer have to sound out words like “boy” even though it is a good candidate for sounding out. As reading expands, new vocabulary words are encountered. These might have to be sounded out as children go beyond primers to reading different kinds of books on many topics. As they learn more about the derivation of words from prefixes and suffixes, they sometimes use the pronunciation of a word as a vehicle for deriving meaning. We as adults sometimes sound out words that we are not familiar with. This may especially be the case when we are learning about a new field.

For second-language learners it is helpful to hear a native speaker read aloud. Often L2 learners cannot get at the meaning because they do not know how the words sound. Their own attempts may lead them to incorrect pronunciation so they do not recognize the word. For example, pointing at the word *because* in the text, José claimed not to know it. When the teacher read it aloud, he recognized the meaning instantly. Conversely, if second-language acquirers always sound out a particular word with incorrect pronunciation, they do not recognize the word when somebody says it correctly. Sara had always read *scratch* as /*escratch*/, when reading to herself, a typical way Spanish-speakers pronounce words starting with s+consonant. When the teacher used the word *scratch*, Sara did not recognize it.

This process of bringing linguistic units to awareness by sounding out is not only true of words but also phrases and sentences. We may say a string of words aloud to get at the meaning of a sentence. Saying the words, phrases and sentences aloud (perhaps not loudly) helps us to develop awareness of the meaning of what we are reading. We use this awareness to sub-vocally access stored meaning or to engage in online psycholinguistic guessing.

Research over the past few decades indicates that writing can enhance the child’s reading ability and therefore should be introduced early. Moreover, in writing children control the language and therefore

they control the level of difficulty. This is in contrast to previous notions about writing being postponed for some period of time until the child achieves the motor abilities required in writing. When writing a word awareness of the relations among orthography, sound, and meaning become more obvious. Children develop an awareness that certain letter combinations are acceptable in a particular language. For example *brond* would be accepted in English and *boronda* in Spanish. They also develop an understanding that letters represent sounds. Spacing, directionality, use of punctuation, and capitalization are also reinforced through writing. These conventions are different in different languages. This is why research suggests that writing helps in reading. The beginning stages of this process may be what has been termed "invented spelling." That is, some children, when engaged in writing a story, write what they hear rather than spell words in a standard manner. Invented spelling indicates that these children are actively engaged in figuring out sound-spelling connections. Some lovely examples have appeared in the reading/writing literature which indicate various levels of linguistic insight. Some of these examples are discussed below.

Words whose final syllable is a consonantal sound are spelled with that sound representing the syllable. Such words are *pals* for *palace*, *butr* for *butter* and *botl* for *bottle*. Vowels are nasalized before nasal sounds and, therefore, don't require that the nasal sound be spelled out. Such words are *bad* for *band* and *sad* for *sand*. Words that contain a vowel that sounds like the letter are represented by the name of the letter. Such words are *gat* for *gate* and *lit* for *light*. In many languages the name of the vowel is always identical to the sound. Thus second-language learners apply this rule very often. For example, *xu* for *shoe* (Vietnamese), *plees* for *please* (Spanish). Sometimes they use the vowel in their language that represents the sound they need. For example a Brazilian child spelled *keep* as *kip*, because in Portuguese the name of /i/sounds like the English *e*. This cross-linguistic transfer of sound/grapheme correspondence is very common among second-language spellers. In the Vietnamese example above *xu* is used for *shoe* because the sound /sh/ is always spelled <x>. A Russian child spelled *swim* as *cwm*, since <c> represents the sound /s/ in Russian. Fashola, Drum, Mayer, and Kagan (1996) observed that Spanish-speakers used their knowledge of Spanish spelling when trying to spell unknown English words, making their errors highly predictable.

Some researchers placed a great deal of emphasis on the usefulness of invented spelling in learning sound-orthography relations. In the case

of L2 spellers, invented spelling reveals how they hear the words. For example, a Brazilian child always spelled *sometimes* as *sawtimes*. It also indicates whether they have acquired syntactic and morphological rules. For example “The kids laft [laughed] at me.” wrote a fourth-grade newcomer demonstrating that he had not acquired derivational constancy, i.e. “ed” is a morpheme that marks the past and it is spelled the same regardless of whether it sounds as /d/, /t/, or /ɪd/.

It was suggested by some that invented spelling was a necessary stage in learning to read and write. However, since a number of children do not engage in invented spelling and yet learn how to read and write this conclusion does not seem justified. As with reading, where children have been found to use various strategies in reading text, the same may be true of writing. Different children might approach writing in different ways.

In contrast to those who have suggested that children should be encouraged to use invented spelling, there are those who suggest that it should be discouraged. The notion is that invented spelling will interfere with accurate spelling. Again, there are few data to support this notion. Further, it is important to support the child in the use of those strategies which he or she finds helpful, and which do not interfere with the learning process. Examples can always be provided of the “usual” way to spell and to contrast the usual with the invented way. Abundant reading and writing as well as instruction help children acquire writing conventions. The following sentence written by a fully bilingual 7 year old shows a combination of invented and conventional spelling, “Plees [please] do not come in. This is a priveit clob [private club] for evree wan [every one].”

As was indicated previously these processes interact with each other and support each other. This is true of listening and speaking and of reading and writing. Talk is helpful for writing. Interaction among students and between the teacher and students helped third-grade bilingual writers co-construct text. Students helped each other, adding details to their writing. The teacher, through questioning, assisted students to develop their stories by expanding on the themes, making them aware of their audience, and clarifying genre. In that classroom students “write with and through talk” (Tuyay, Jennings, & Dixon, 1995, p. 106).

## 5.6 Initial reading and writing in a second language

Of special interest to teachers of reading to children with varied linguistic backgrounds are the following factors:

Background and contextual factors influence the acquisition of literacy in a second language

Children learning to read and write in a second language need three kinds of knowledge: language, literacy, and world knowledge. In addition, the status and use of their home language in the context where they are learning their second language will affect their success.

In this chapter we will focus on phonological processing and spelling. In later chapters we will address reading comprehension and composing written text.

In order to learn to read and write in a second language, children need to have oral ability in the language. They particularly need the ability to use academic discourse and know vocabulary. This does not mean that when a child is introduced to the second language upon entering school, oral language has to develop first while reading and writing wait their turn. All language skills can be developed simultaneously because they reinforce each other (Hudelson, 1984).

Literate language knowledge is the type of language register that particularly impacts the road to literacy. This knowledge is acquired through experiences such as listening to book reading, story telling, and interactions with adults using this type of language register. Verhoeven (1994) studied Turkish children taught to read in Dutch and others taught to read in Turkish. Both groups applied their oral and reading comprehension ability in the language of instruction when trying to perform in the other language. Durgunoglu, Nagy & Hancin-Bhatt (1993) and Verhoeven (1994) believe that cross-linguistic transfers are a reflection of bilingual children's metalinguistic competence.

Literacy knowledge includes the formal properties of print and understanding that print encodes meaning and that written forms are invariant. Learners need to understand the alphabetic principle, i.e. that symbols represent sounds, and they need to develop metalinguistic notions of structure, word, and sounds of the language. Of particular importance is phonological awareness or the understanding that the words break up into units of sounds. These skills can be acquired through any language, particularly one the child already knows. Literacy knowledge is acquired through the native language transfer to the second language, and it is one of the strongest predictors of L2 literacy acquisition. Children who are literate in a language with a different script also have an advantage but often not as much as when the language has a similar script (Cummins, 1991).

Being literate in another language helps in different ways, relative to the type of language. For example children who learn to read in

languages with shallow orthographies, that is correspondences between sounds and symbols that are very regular, usually perform better in most reading tasks than comparable age students learning to read in English as a first language. Thus, these children are ready to transfer these skills to English and can in some cases perform better than native speakers of English (Geva & Siegel, 2000; Rickard Liow & Poon, 1998).

In spite of all the advantages of being literate in the first language, children learning to read and write in English as a second language still need to acquire the idiosyncrasies of the English language, such as specific sound–letter correspondence, semantax, vocabulary knowledge, and text structure.

### **5.7 Language problems in the primary grades**

The children we will discuss in the final section of the chapter suffer from delayed or different oral language development, which, in turn, negatively affects their written language development. Their delayed or different written language development also negatively affects their oral language development. As a reading researcher once put it, the rich get richer and the poor get poorer. Many of these interactions are explored in a text that presents the results of a conference concerned with children with oral language and written language problems (Grimm & Skowronek, 1993).

In the present day there are many integrated primary school classrooms. Some of the children in these classrooms may exhibit a number of problems that are language related. Clearly, children who are developmentally challenged will have problems across the board in processing and using language and, also, in learning many aspects of the school curriculum. Two outstanding language problems, per se, that children may have are being SLI (specifically language impaired) and being dyslexic (having great difficulty in learning to read). There are other problems that children with “learning difficulties” may have either in conjunction with or separate from their language learning problems, such as having an attention deficit disorder or having an attention deficit disorder and being hyperactive. There are children who are dyspraxic (have difficulty in articulating clearly), children who are labeled as having Asperger’s syndrome (roughly put, a mild form of autism), and those labeled as having sensory integration problems. Some of these children have very evident language production problems while others have language problems that are covert. It is very important that these children have their behavior and learning difficulties adequately

assessed. Teachers need to have a clear understanding of the learning difficulties these children will encounter in the classroom.

Implicit in the above paragraph is the fact that the classroom teacher needs help from various school specialists to determine a particular child's language learning problems as well as their other problems; that is, an adequate assessment is required as well as an adequate treatment plan. The teacher needs help in designing and carrying out classroom activities that will be successful in helping these children. Among the school specialists that will be needed are speech pathologists, audiologists, special educators, reading specialists and guidance counselors. Acquaintance with the child's medical record and communication among teachers, parents, and special educators are of vital importance. Each source provides an important perspective on the child.

The language problems encountered by these children can vary in severity. They can also vary in terms of the specific aspects of language that these children have problems with. For example, children with Asperger's syndrome do not have many overt problems with comprehension and production of the structures of language. Their principal problems are in communicating appropriately with their peers and the adults in the school setting and elsewhere. Problems in communicating with peers can have a very isolating effect on these children. SLI children may have both language comprehension and production problems. However, many have greater degrees of difficulty in language production as compared to language comprehension. Assessment instruments have been designed that can tease out the nature of the language problems that these children have. In the case of dyslexic children, there are reading tests that are designed to determine the nature of their reading difficulties. Standardized tests are usually used to determine the speech and language problems of monolingual English-speaking children. A list of oral language tests appear at the end of Chapter 3 and a list of reading tests appears at the end of Chapter 9.

There are many questions about the use of these tests with linguistically diverse populations. In the past few decades there has been a real effort on the part of educational researchers to separate children who have language learning problems from those who are second-language acquirers, or are dialect users. Previously, many speech pathologists in the United States and elsewhere had many of these children as part of their language disorder case load. Having the tools to distinguish children with marked dialect variation and/or varying degrees of knowledge of the school language from children who have the language learning problems we have described above is not an easy task. The

effort is ongoing. In the United States fair assessment of children speaking an African American dialect is an outstanding problem and a helpful text on this subject is Van Keulen, Weddington & Debose (1998). A much broader text examining assessment of children from diverse backgrounds is Farr & Trumbull (1997).

Children acquiring a second language exhibit behaviors that may be confused with learning disabilities such as refusal to speak, difficulty with pronunciation and syntax, and limited vocabulary. As the language develops many of these limitations disappear – a good sign that there are no disorders. Sometimes language errors “fossilize” and the learner continues to use them regardless of instruction. Fossilization is more common among older learners. For example, a speech pathologist was discouraged that a high school senior would continue to pronounce the /th/ sound in *there* as /d/ after several months of work with her. This may be a product of the dialect of English the child has learned. Another way to check whether it is a language disorder or not, is to investigate if the learner has the same problem in their native language.

The use of “authentic assessment tools,” defined as those that examine children as they are in the process of learning, and measuring their progress in this learning is discussed in Farr & Trumbull (1997). This approach to assessment has been very much influenced by a Russian developmental psychologist, Lev Vygotsky (1962). Vygotsky introduced the notion of “zone of proximal development.” He was talking about an assessment based on where the child is in terms of what he or she knows about a body of knowledge to be acquired, and the effect of a teacher’s intervention. It might be knowledge of plural and past tense markers in oral language development, or how to decode a list of words in learning to read. To assess the child’s learning potential, techniques are devised to teach the child the category or categories to be acquired. What is measured is how long it takes for the child to acquire the body of knowledge, and what forms of intervention are needed to accomplish this. The latter aspect of assessment (the forms of intervention that may be helpful with particular children) will be discussed more fully in the next chapter on education in the primary grades.

Despite the fact that there is variation in language knowledge among the children in these populations with language problems, there have been some general findings about the language development of these children during this age period. Several studies examining these children’s abilities to process language have come to the conclusion that there are stages in development at which these children seem to



experience great difficulty. These are the stages that require both additions to structures acquired and operations that move the order of structures in the sentence to positions that are different. There are also certain aspects of language acquisition which appear to create particular difficulty for many of these children but not all. The following is a list of the types of difficulty these children may have.

*Structurally*

1. Sentence combining
2. Morpho-syntactic difficulties in accurately marking number and tense
3. Lexical development limited to types of vocabulary items acquired earlier, comparatively few multisyllabic words
4. Difficulty in discriminating among lexical items that are phonologically minimally different from each other.

*Pragmatically*

1. Limited to direct speech acts
2. Limitations in interpretation of the paralinguistic cues of intonation, facial expression and gesture
3. In story telling and retelling omission of episodes and confusion in sequences
4. Even in those that can explain, explanations, as in story telling, have omissions and are composed of confusing sequences.

# 6

## Early Childhood Language Education: The Primary School Years

### 6.1 Introduction

Children are very ready to acquire further knowledge of language during this period. They are interested in language and this interest can be piqued by activities that require them to think about and talk about language. Some of these activities are specifically designed to increase knowledge of the structural aspects of the language, its phonology, morphology, lexicon, and semantax. There are other activities that are designed to enhance children's pragmatic competences; their ability to engage in conversation, to tell stories, and explain. This is also a time when children develop their ability to read and write. Oral language knowledge and literacy become more important tools for learning academic content.

There may be children in the classroom who have different levels of knowledge of the language that is used in the classroom. There also may be children in the classroom who have particular language problems, both oral and written. Despite this variation among the children, all can be involved in activities that can lead to further knowledge of the structures of language, awareness of the categories and relations in language, and use of language to tell, explain, and narrate. It is these activities that will be stressed in the discussion of language education for the classroom. It should be kept in mind that language knowledge changes remarkably over this period. Each of the activities suggested needs to be geared to different levels of competence over this stage. We will try to indicate these varying levels in our discussions of the activities. To facilitate the participation of all children, regardless of level or

language proficiency, teachers must create a workshop atmosphere in the classroom. In such an environment everybody is a learner as well as an expert in something. Students feel confident to participate regardless of their ability. Languages other than English are accepted as important to the learning process.

Issues in the education of bilingual children and second-language acquirers will be discussed throughout the chapter. Although good instructional practices help bilingual learners, language proficiency and culture need to be taken into account. There are children who have specific needs that differ from that of the average child in the classroom. This may include gifted as well as delayed children.

## **6.2 Activities to enhance development of pragmatic knowledge**

Learning how to use language appropriately requires using it, and there are multiple ways in which children can be called upon to use language in the classroom. During the primary grades listening to stories, and then either re-telling those stories or telling their own stories is an activity that all children in the classroom can engage in. The children's level of competence should be taken into account in choosing stories to be presented as well as the children's interests. The topics chosen, the length of stories, and vocabulary and structures used, should play a role in the selection of stories. If L2 learners are completely new to the language, teachers should not force them to perform. Alex, a new arrival from the Czech Republic, told stories to the class in Czech using his own storybooks in Czech. Showing the pictures and with gestures he conveyed meaning. Other bilingual students can be helpful in these initial stages. Although there were no other Czech speakers in the class, Alex was helped by other bilingual learners in sympathy with his situation.

As students begin to produce language, they can share stories in small groups. They can share with the whole class after rehearsal. Oral production is difficult for L2 learners because they need to focus not only on what they will say but how they will say it. Writing stories before sharing allows L2 learners time to work on both ideas and language. A tutor worked a few times a week with five L2 learners in a second grade class. She helped the students create and illustrate stories using large sheets of paper. The students practiced their stories before sharing them with the whole class. The quality of the products raised both teacher's and students' expectations of the L2 learners.

Show-and-tell activities are, by definition, self-monitored. Such an activity not only requires the ability to tell but might also require explanation, depending on the nature of the topics assigned for show and tell. For example, asking children to talk about how their favorite game should be played would call upon explanatory abilities. Classroom participation can be elicited by teacher-generated questions while telling stories to the children, after listening to stories retold or generated by the children, and certainly after show-and-tell activities. Then children should be asked to generate their own questions. The teacher's questions can act as a model for student-generated questions. Michaels and Foster (1985) experimented with student-directed sharing time. They felt that for classrooms with children of different cultural backgrounds, such student-directed sharing time was better than teacher-directed sharing time unless teachers are aware of cultural differences in storytelling style. Their research demonstrated that when students' and teachers' discourse style did not match, the teacher interrupted, misunderstood, and mis-assessed the students. Teachers expected talk to be focused on one topic only and to be composed of simple descriptive prose. Stories were supposed to have a beginning, middle, and end. They considered their students' episodic discourse style disorganized. For L2 learners one way to develop narrative abilities that conform to the new culture is through writing. Writing is a productive skill that allows time to think, consult, and notice contrasts.

Teacher-generated questions should require more than is usually required by yes-no questions. They should call on children to think and talk about the topic of the stories, the settings, and the events that were important in terms of the outcome of the stories and about what was learned from the stories. For example, the following took place as a teacher was helping a group of bilingual third graders write a story about extraterrestrial travel:

*T:* What planet are you going to?

*JC:* Jupiter.

*T:* How are you going to get there?

*JC:* A rocket.

*T:* And what does the rocket look like? (Tuyay, Jennings & Dixon, 1995, p. 99)

The nature of the stories will vary from grade to grade, but many of the techniques developed for use with simple stories can then be applied to more complex and lengthier stories. Initial activities with stories can be

followed by other activities such as listening in order to find answers to questions about the stories, and writing answers to the questions. Reading short versions of the stories may be possible for some children. The use of narrative by the teacher and students in the classroom in these situations can be helpful in guiding the activities of reading and writing narrative. These abilities should be called upon early on so that students become accustomed to reading and writing as well as listening and telling. The children's different levels of competence should indicate when simpler activities can move to more complex ones and by which children.

Now, happily, children in primary grades are exposed to many different ways to think about the world. They are taught science, geography, history – and perhaps even government – in these grades as well as reading, writing, and arithmetic. Hopefully, they are learning how to get along with each other. These are some of the topics that will make up the content of their advanced classes when they move on to the later grades. Each of these areas in the primary grades is usually presented with a wide variety of types of input. These can include live demonstrations, books, and other visual presentations via videos. Trips to museums and other community areas of interest (for example, the fire station) also provide input about these topics.

Real-life experiences and visual presentations are very helpful for second-language learners. Teachers can take advantage of these experiences and presentations when teaching vocabulary, pragmatics, and semantics to students. Gibbons (2003) recommends moving students through a continuum of experiential learning, teacher-guided oral reporting, and writing tasks. For example, students can work on science experiments in groups, and then each group, supported by the teacher, can report on what they learned. Finally, students can write their reports. The stage when students are reporting orally to the teacher is crucial because the teacher coaches students on how to shift to a more literate form of discourse while simultaneously teaching vocabulary and structures. Students later apply this knowledge to the writing task.

To develop explanation abilities, children can be asked to participate in experiments, usually within a group in the classroom. Teachers can demonstrate or describe, as the various topics within each area are discussed or shown. For example, the experiment might involve showing the children how different colors can be mixed to create a new color and how this might be applied to dough. These demonstrations and descriptions can model what the structure of an explanation consists of. Again, the teacher acts as a model. Then children can then be asked

to demonstrate or show a particular topic within an area. They can then be asked to read about a topic and then questions asked about that reading which again go over the structure of an explanation. They can then be asked to write an explanation for what has been observed. This attention to scientific, mathematical, and social explanations early on can help children when advanced topics in each area are demonstrated, or they are asked to read material that is more complex in each area.

Second-language learners usually do better working in small groups or “rehearsing” what they are going to share later with the whole-class. For example, the cooperative strategy Think/Pair/Share (Kagan, 1992) allows for thinking and consulting time. After the teacher asks a question of the class, students take a few minutes to think individually, discuss it with another student, and then are ready to participate in a whole class discussion. Two young Spanish-speakers would always sit together and discuss their ideas in both Spanish and English before responding to the teacher in English. Another teacher after asking a major question will give the students time to jot down their answers on scrap paper, before beginning class discussion. Semantic maps where the main idea is written on the board and the class suggests related topics and subtopics is very helpful. It gives L2 learners time to draw on their background knowledge, learn related vocabulary, and participate with little language.

Discussion about various issues (behavior in the classroom, politics, treatment of others, who are heroes, scientific explanations of all kinds of events, etc.) can be focuses for classroom participation. Conversational discourse within the classroom can provide important experience about listening to peers as well as the teacher, and to taking the perspective of the other. Such experiences can, in this way, be very helpful in the development of pragmatic competences. Such discussions can also provide important data about vocabulary and structures in the language.

Dialogue journals are an alternative strategy especially helpful for students who dare not talk. A dialogue journal is a conversation in writing that the teachers carry out with individual students (Kreft Peyton, 1990). Teachers do not correct language but can model forms in their responses. This strategy has been successfully adapted to be used bilingually. One bilingual teacher allowed a newcomer to write in Japanese. In her response the teacher wrote in English, first paraphrasing the student’s writing and then giving a short response. As the student started acquiring English she wrote more words in English until at the end of 8 weeks she wrote everything in English. In other cases

students write in English with an occasional word or phrase in their native language. A teacher who knew the students' language included the word in English in his response. Students used these words in English from then on.

Many books concerned with the teaching of the language arts provide interesting ideas about activities that can be used in the classroom to exercise narrative skills and conversational competence. (One such recent book is edited by Flood, Lapp, Squire and Jensen, 2003. Of special interest on this topic of activities that can be used in the classroom to teach language arts are some contributions in Part IV of the *Handbook*, Environments for language arts teaching, and Part V, Research on teaching specific aspects of the language arts curriculum.)

### **6.3 Language demands on second-language learners in a classroom**

A classroom context demands an enormous amount of knowledge of language that can be overwhelming for second-language learners (Fillmore, 1982). Teachers must be aware of these demands and they must facilitate and scaffold comprehension to avoid miscommunication and unnecessary disciplining of students. Students need language to comprehend the teacher and to participate in class. In this section we will discuss the oral language demands of a classroom because it is assumed that by this age most students know a great deal about language. Second-language learners may know some English or they may be just at the initial stages of learning the language.

Students need to comprehend when the teacher is regulating behavior and exchanging information. They need to understand explanations of procedures, statement of rules, turn-allocation, and reprimands. Procedures are particularly difficult for L2 learners. Helpful strategies include writing instructions on the board or on a chart that is read aloud rather than just stating them. The activity can be modeled for the whole class. The teacher should approach L2 learners immediately after giving instructions to check on comprehension. L2 learners who speak the same language can be grouped so they can use their native language to help each other. Native speakers other than the teacher (a fellow student or aid) might be used to model the activity. Reprimands can be problematic because different cultures use different ways to discipline. Children of other cultures may interpret the teacher's reprimands as too harsh or too weak. Some discussion of why the reprimand was given may help to clarify the situation.

Students need to understand instruction that includes explanations, descriptions, examples, definitions, relating old and new information, and summaries. To facilitate comprehension teachers should not rely on oral language alone to convey the meaning. They need to present key vocabulary orally and in writing, and use pictures and real objects. Teachers should have students work in small groups in which English and the native language are allowed to clarify meaning. Parents or bilingual tutors can introduce topics, using the students' native language to facilitate comprehension when the material is presented in the second language. Cross-age projects (Brisk & Harrington, 2000) using older learners to teach younger ones can be particularly helpful for both the older and the younger learners. Cross-age projects allow older learners to work with material for younger ages that may be easier and more comprehensible to them. In this way the tutoring is of benefit to the older learners. For the younger students it can be helpful because of the one-on-one teaching situation and also because they may be paired with older learners who speak their native language.

L2 learners need to understand and respond to elicitation–evaluation sequences. Teachers may request specific information, opinions, examples, definition, descriptions, or explanations. Students need to understand the request and respond appropriately. L2 learners react in different ways to such demands. Some stay silent for fear of making mistakes or because they did not understand. Others want to look as if they understood so they promptly raise their hand but when called upon say nothing or say “I don't know.” Others act out in frustration. This often happens with boys, particularly if they are bright and were good students when schooled in their native language.

Students must also be able to initiate dialogue to provide information, explanations, descriptions, and narratives. As mentioned earlier, participation in oral interactions helps the student develop concepts and academic language. Therefore teachers need to scaffold this participation and organize the classroom to encourage classroom interaction. Pair or group activities that require all members of the group to work and help each other are more helpful than whole class or individual activities. For example, one teacher who had a group of five “silent” L2 learners spent time with the five. She required that each day of the week one of them had to narrate something. After a few weeks of developing confidence in the use of English they began to participate in whole-class and small-group discussions with other students. Liz, a fourth-grade teacher, had a student who misbehaved during group work and was sometimes rough with his classmates. Liz asked the



students to write a story about their names. This boy's name was the same as his grandfather's who was killed in Kosovo. Helping him share his life story and experiences changed his classmates' and his own perception of himself. As a result his behavior and relations with classmates changed dramatically.

Cooperative learning activities allow L2 learners to learn and practice before performing for the teacher or a larger audience. For example a teacher asks a question to the whole class (or gives a different question to each group), allows students to discuss possible answers within groups and then calls on a student to answer. The Jigsaw is a great way to break up material into small parts and give L2 learners the opportunity to be experts. They also must learn material and be able to communicate in their second language. For example, when teaching the senses the teacher forms "expert" groups for each sense. The teacher provides materials to each group. The students work in groups with the teacher's assistance until they really understand their chosen sense. Students are then regrouped. Each group has at least one member who has studied one of the senses. The experts teach the rest of the group. Individual students should be able to report what they have learned about all of the senses.

#### **6.4 Further learning about the structures of language**

Here we will discuss some activities that are designed to specifically enhance knowledge of a particular aspect of language. There are several developments that play an important role in learning to read words, for example, the development of phonological awareness. Further, development of the rules for phonological derivation can also have an important function in word recognition and writing. Still further, as has been found in innumerable studies, knowledge of the meaning of lexical items is also vital for word recognition. Reading, of course, is not just a function of recognizing words. Learning more about the semantics and pragmatics of language also fosters the ability to read and understand narratives and explanations in various texts and to write narratives and explanations. These activities are designed to increase awareness of and, in this way, control of these categories and relations in language. Finally, some of these activities are of particular importance to children in the classroom who are having some difficulties in acquiring such knowledge. Under the heading of special populations in the classroom further use of these activities with the children will be discussed. Although many of these further activities may be carried out

by special educators with children in smaller groups outside the classroom, the teacher's knowledge of these activities can be of use to both the teachers and the children.

How the various linguistic tasks are presented to children can vary with the age and competence of the children. Initially models of activities need to be presented for the younger and less competent children. Repetition of these activities is also required with these children. As the children grow more competent, tasks can be given and children asked to carry them out without a model being given. For example, initially the task of segmenting a word into its sounds can be modeled by the teacher. Also, visual cues can be provided of the number of segments in a word. Later, children can be asked to segment a word into sounds by themselves. The complexity of the task can grow as the words become more complex both phonologically and semantically.

Phonological awareness is of great importance in beginning reading and teachers are usually aware of different means for creating this. Researchers have found that getting children to segment words into sounds and then reconstructing the segments as a word is useful in enhancing phonological awareness of a word's composition. This is especially the case when new words are being introduced. Relating segments to visual cues such as matching cards to segments can be helpful. Research has also found that the phonological tasks most related to reading are those that require children to produce the remainder of a word that has had a syllable or segment deleted. First producing the whole word and then the remainder of the word that has parts missing can be helpful in these tasks. Re-synthesizing a segmented word may also be helpful as a beginning type of task. For example, it is easier to re-synthesize the segmented word c-a-t than it is to segment it. It is easier to put in the missing syllable in a sequence such as *brella* than to segment the syllables in the word *umbrella*. In all these tasks a meaningful word should be used. For example, words that were collected from the students when using the Word Card instructional approach (see Chapter 4) can be used in these tasks.

Clearly lexical knowledge is extremely important in understanding spoken and written sentences. Such knowledge can cue meaning. It helps L2 learners with reading when they know the words both orally and in written form. When learners know the words they are more likely to sound it out accurately and thus get the appropriate meaning. When L2 learners try to sound out a word they do not recognize they may pronounce it incorrectly and thus not connect it with the word they know orally.

There are several activities that can be helpful in lexical retrieval. Groups of words can be presented that are related to each other in terms of semantic domain such as colors, animals, etc. and children asked what these words have in common. Such words can be presented orally, in picture or in written form and for L2 learners in all three forms. They can be asked to recall a list of words that are related to each other in terms of semantic domain using the semantic domain as a cue. This provides them with the experience of using their semantic knowledge to retrieve words. For second-language learners word families are a productive way of learning vocabulary and of learning the different grammatical functions of words. Often these students learn one form and then they apply it to all syntactic classes. For example, a French-speaker wrote about a *mystery* and a *mystery* [mysterious] person.

Context plays an important role in understanding the meaning of words. Words presented in a sentence context that makes plain the meaning of the word can be very helpful. Finally, asking about the meaning of a word can get children to think about and to talk about meaning. A task which requires children to think of a word when a definition is provided extends the semantax knowledge that is called upon. For students of other cultures the approach Vocabulary Connections (Brisk & Harrington, 2000) is helpful because it draws on their own understanding of the words. Before reading a selection the teacher chooses 5 to 10 words that are important in understanding the text. After the students look the words up in the dictionary, they talk about what these words mean to them. The teacher can act as a cultural broker when the meanings for the students are different from the meanings intended by the author. In addition, this strategy encourages students to understand the meaning of words in connection to comprehension of the whole text. Jimenez, Garcia and Pearson (1995) showed that a poor bilingual reader focused on trying to find the meaning of words just for a particular word's sake but not in order to understand the text.

Getting children to think about relations in sentences can make them more aware of their semantactic knowledge. This can be done in several ways. One way is to get children to judge whether sentences are right or wrong. A next step would be to get them to correct sentences that they think are wrong. These sentences can vary in terms of the errors they contain. For example, errors of morphological marker "I see a trees" can be a sentence type used early on. Later the error may be within a more complex sentence and require more sophisticated knowledge of semantax requirements "I like the pajamas what my

mother bought me." With time the sentence comprehension abilities required can increase in complexity as can the type of error.

The way in which the task is presented can also vary as indicated above and the mode of response required varied from verbal to written form. Alternately, teachers can use the reformulation strategy. After students write something and have done revisions to take care of organization and clarity, the teacher rewrites the piece as a native speaker would without grammatical and spelling errors. The students then compare the two versions and discuss the differences. This "noticing" of the language helps both native speakers and L2 learners understand how the new language works (Swain, Brooks & Tocalli-Beller, 2002). Teachers can teach mini-lessons related to the particular structural problems found in the students' language. Students might be asked to keep a notebook with mini-lessons to refer to when trying to solve problems the teacher has already addressed.

Another task that increases semantax awareness would be to ask them to answer questions about sentences. The sentences can vary in complexity as children become more mature and more competent. For example, simple conjunctions can be used first ("Joe played with Mary and Jim." Who did Joe play with?). Later embedded sentences can be used (My mother liked the girl who was wearing the red hat." Who was wearing the red hat?) "Before" and "after" sentences (such as "Before he left the house he put his coat on." Or "After ...") can be generated and children asked what happened first. Later logical relations can be explored in sentences such as "He broke his leg because he went to the hospital."

One other task that has been found to be useful in increasing awareness of relations in sentences is an oral Cloze task: that is filling in missing words in sentences ("The boy... in the chair." or "...saw a Christmas tree.") The written Cloze procedure is a task that can follow at a later time, and has been used frequently in studies of children's reading ability. However, an oral Cloze procedure will give the children the opportunity to exercise their knowledge of a variety of structures in sentences.

The following is a list of the activities in each area that we have described above and of which we have given examples. A fuller discussion of these examples appears In Menyuk & Chesnick (1997).

### *Phonological tasks*

1. Filling in missing parts of words.
2. Segmenting words into sounds.
3. Reconstructing segmented words.

*Semantax tasks*

1. Teaching vocabulary.
2. Judgment of grammaticality and correction.
3. Answering questions about sentences that contain various subject–predicate relations, and temporal relations and logical relations.
4. Oral Cloze then Written Cloze.

**6.5 Developing literacy in the first and second language**

Good strategies for promoting literacy help both native speakers and second-language learners. For the latter, issues of knowledge of language and culture need to be considered as well. In these early years students dramatically grow from barely being able to read and write their names to reading and writing to learn content areas. For second-language learners the challenges are related to age of introduction of the second language, literacy background in their native language, and fluency in the second language. There is great controversy about what is the best approach to promote literacy. As we saw in chapter 5, L2 learners need background knowledge as well as literacy and language knowledge. Earlier we referred to a study that was carried out with a class of first-grade children whose families were immigrants to Portugal (Villas-Boas, 1999). The families were originally from Cape Verde and Goa. Mothers or siblings read to the children books supplied to the families by the project. Also, the children were taken on visits to museums and participated in other cultural activities. It was found that their reading abilities were significantly better than that of students in the other first-grade class who had not received this treatment. This project enriched the children's background knowledge and gave them practice with reading and language. Intensive exposure and practice with meaningful texts in meaningful contexts encourage literacy development. L2 learners also need explicit instruction on how the English language works. Approaches that scaffold comprehension and decoding can be used in the early stages of reading development. For example, showing the pictures in a book before reading makes students guess what the book will be about. This can also be used to teach essential vocabulary as pointing and labeling characters and objects that are pictured is a very useful first step. Another successful strategy in early reading is Shared Reading, where the teacher and the students read together looking at a common text. The teachers point at the words as they are being read. This process is repeated until the students can read the text fluently. The Language Experience Approach where the teacher writes narratives that the children dictate and then practices reading

them with the students is very helpful for young native speakers and L2 learners of any age. If the teachers know the L2 learners' native language then they can encourage them to use their L1 when they cannot find a word or expression in English. Later the English equivalent can be pointed out. If students produce recurrent language errors, the teacher may point them out and make sure students are willing to make the change. For example a student dictated "If I were rich, I will buy a car for my mother, I will buy a bicycle for my brother..." At this point the teacher repeated, "I would buy a car..." and asked the student if it sounded better. He accepted and went on to add several other sentences using "I would."

Teachers can scaffold the composition and production of text by letting students draw their narratives first and then add as much writing as they can, or they can dictate the text they want to add. When teachers use instructional practices that allow students creativity, their initial writing shows different stages comparable to oral development. If the children can already write in their first language, they use it. As they learn English, they begin to dictate. Their first attempts at their own writing are often labeling items in their drawings, later single short sentences appear. Xiaopeng, a recent arrival from China, had learned some Chinese writing in kindergarten. She requested permission to use Chinese to label her first drawings in an American classroom. Later, she drew a butterfly and dictated, "I like butterfly." Then she began to write herself. She drew the waves of the sea with some fish and turtles. She wrote "water" next to a wave, labeled the turtle as "turtle," and the fish as "fisis." In another piece she drew a tree and a duck, labeled each and then wrote below "duck eat apple."

Mary, a teacher working with a number of bilingual learners, adapted the Rhetorical Approach (described in chapter 8) to help her first-grade students write coherent pieces about a topic. For the first writing project they worked as a whole class. They brainstormed possible topics, purpose, and audience. Once these were decided, they volunteered what they were going to include in the piece while Mary wrote it on chart paper. Then they worked on organization and editing. Once the piece was finished they sent it to the intended audience. Subsequently, students worked on individual projects assisted by a partner and the teacher. Students went from writing stories that began with them waking up and ended with them going to bed, with some mention of the central topic in the middle, to writing coherent stories about a topic.

The reformulation strategy mentioned earlier in connection to teaching structures can be used in teaching students spelling as well. In

addition, children need to learn that English is not only spelled by sound but also based on the morphology of the language. For example, Alejandra wrote an account of her visit to the Natural History Museum. Several times she wrote the word *exhibit* as *exibit*. The teacher rewrote the first sentence, “There was a very nice exhibit...,” and asked her to compare it with what she had written. Once Alejandra noticed the difference, the teacher asked her to look for other instances of the word. In addition, they thought about and wrote together other words in the family such as *exhibition*, *exhibited*, *exhibits*, *exhibiting*.

There are many approaches to teaching literacy. It is important that the tasks are related to meaningful language and have a real purpose. Combining literacy with content area helps keep students interested in the task. Letting students choose their books and the topics for writing motivates students and helps teachers know their students and their interests. Choice is very important for children of other cultures because it allows them to express their own ideas and experiences.

## 6.6 Learning about language by children with problems

We have learned a great deal about possible causes for the language problems that children experience during these early grades. We now know about the various biological differences that can cause behaviors labeled as autistic, Williams syndrome, and developmentally challenged. There are genetic factors that affect the brain development of the children who have been so labeled. This has been learned from the extensive research that has been carried out using sophisticated techniques for gene analysis and for measuring these children’s brain functioning. Additionally, we know that the language problems of some children diagnosed as being SLI and dyslexic may be due to genetic factors as well. We know this because there are parents and siblings in these children’s families that suffer from the same problems. Further, some of these children continue to have speech and language problems throughout their lives.

Knowing the causes for the various language-development problems these children have does not provide simple and easy answers to how these children should be taught about language. In addition to knowing about cause, we also know that the degree of difficulty these children have in learning and using language can vary within each population. This has also been found with children described as ADD (attention deficit disorder) and ADHD (attention deficit hyperactive disorder). There is no population of children who have been labeled in these various ways that is totally homogeneous. This seems entirely

reasonable because there are probable and even known differences in the patterns of brain development and function of children within each of these populations. This complicates the teaching task even further.

Having stated this it would seem impossible to make recommendations for language rehabilitation that would fit all children. However, there have been a number of therapeutic programs developed by various educators that seem to be of help to a number of these children. We cannot discuss these programs in detail here. However, several things seem to be common to these programs, and these commonalities are the things that will be discussed in this section of the chapter.

Multi-modal presentation of language data is one commonality of language intervention programs. In an earlier chapter we talked about alternate communication systems that have been adapted for use with some of these populations. These alternate communications systems continue to be of use with those children who find it very difficult or impossible to acquire vocal or signed language. This is also true of written language when presented in the usual way. Although the communication systems they acquire might differ markedly from a natural spoken or signed language, they do provide a method of telling others about needs, feelings, and thoughts.

It will only be added here that the computer has played an enormously important role in the development of many new systems that are employed with children who have very limited speech perception and production abilities. But the expense of using them, within a school, for children who need them, sometimes makes it prohibitive for schools to acquire them. We have discussed less high-tech ways in which communication systems can be set up. The moral of the story of the success of these systems is that children can employ the modalities that they have available to substitute for those that they do not have. In general, a multi-modal (sight, sound, feel) presentation of language data can be of help to all children.

Providing the data needed to think about and focus on the language processing that is required for acquiring an aspect of language may be sufficient for some of these children. The activities described earlier in the chapter provide a framework of the types of tasks that can be useful. What is needed with these children is repetition of examples so that the children can practice the behavior being required. Some children may need few repetitions, and other children may need many repetitions of various tasks. For example, how you segment a word into its sound components, how you look for the subject of a sentence, how



you use context to figure out the meaning of a word, may be tasks that require a varying number of repetitions depending on need.

Providing clear models of the behavior that the teacher wishes to elicit is another of the commonalities of intervention programs that have been developed. These models seem to be a beginning stage that is especially required by those children who have more severe oral or written language problems. Providing examples, as indicated in the tasks described in the previous section, may be needed. One such model might be reading along with children who have reading problems. Working in small groups, questions about what is being read can be answered by the modeler and then asked of the children. Asking questions about what is being read is another way in which models can be provided. Mixing above-average and below-average students in these small groups may also be of help.

In both repetition of tasks and modeling, another commonality across programs seems to be to keep the data to be worked on small in size and short in the processing time required. In all situations work should be carried out on meaningful data so that knowledge from experience can be used to supplement the bald task requirements. For example familiar words should be used for segmentation. Sentences that make sense in the real world ("The mother fed the baby.") should be used in finding the actor, the act, and the acted-upon. Short stories on familiar and popular topics should be used when asking questions about what is being read.

In summary some of the commonalities across intervention programs appear to be the following.

1. Modeling of the behavior required.
2. Demonstrating strategies to be used in various tasks for encoding and recall of material.
3. Any number of repetitions of the task to be carried out.
4. Keeping the material simple and short to begin with and then gradually increasing both aspects.
5. Making the material meaningful.

# 7

## Language Development in Middle Childhood: Ages 9–13

### 7.1 Introduction

Roughly speaking, the years of middle childhood are considered to be from 9 to 12 or 13 years. The developmental changes that occur in both linguistic and cognitive achievements as well as physical development over this period are dramatic. Cognitive and linguistic progress, on the surface, is not as dramatic as physical and social development. This last aspect, social maturation, has the greatest impact on both linguistic and cognitive development. Further, this is the period during which children's conscious awareness of what they know about language, and what they are doing with language, flourishes. These developments can be used to great advantage by educators. Children become aware of the strategies they use to solve problems, and begin to use them with greater deliberation. This might be considered the "wise guy era" in terms of linguistic behavior. For example, children during this period produce puns and tell and appreciate jokes that may be truly funny. This is a clear indication of awareness of language and its uses.

This development of conscious awareness leads to some of the marked changes that occur in language development during this period. However, much of structural language development seems to be an extension of earlier language behaviors. That is, children who are developing normally become more facile in their use of language as a whole. They articulate better, their sentences become more complex, and their word use becomes more varied. In addition, there are some changes within each area of language which indicate that new types of knowledge are being acquired. We will, again, divide the discussion of new language knowledge into aspects that are concerned with language use

(pragmatics) and those concerned with knowledge of the structural aspects of language. Again, we will limit our discussion to what might be considered new types of knowledge in each area.

What we have said above applies to children, both monolinguals and bilinguals, who have achieved the level of competence in language knowledge and use that we have described in previous chapters. This may not be the case for children who come to school knowing a language other than English, and have varying degrees of knowledge of English, the school language. These children may also have varying levels of knowledge of their native language, depending on their educational histories. Although it is true of all children to some extent, it is especially the case with these children that age alone is not indicative of what they may know about their native language or English. Previous experiences they have had with their native language (for example, are they readers of their first language?) and experiences with the target language (English), need to be considered. More advanced knowledge of language evident in native speakers of English make it more challenging for L2 learners who need to catch up in order to handle school work. We will discuss areas of difficulty and transfer from the native language. We will also present contextual and personal factors that affect L2 learners' acquisition of language and literacy. A section on assessment outlines the difficulties of clearly and fairly assessing bilingual learners' performance.

We have examined the early language development of children with varying developmental problems in previous chapters. As described, these children's language development problems have ranged from severe restrictions on the development of either signed or vocal language to more-or-less normal development. This is the case for both their cognitive and linguistic development. However, some of these children's neurophysiological problems lead to marked differences in the route they take to language development. This route may be somewhat or very different from that of average development.

The degree of variation in the language development of children with problems depends on the nature of their disabilities. Because of the marked differences in language development of certain groups of children we will not discuss their further development. We include in this group cerebral palsied children, Williams syndrome children, autistic children and children who are very severely developmentally challenged. These children are probably receiving intensive educational experiences outside of the regular classroom and, perhaps, some experiences within the classroom. Programs that have been designed to

enhance their development of communication abilities require a much fuller description than we have included in previous chapters.

We will restrict the discussion of the language development of special children to those who most certainly will be part of any classroom. These are SLI children, dyslexic children and those with language learning problems because of neurophysiological causes. These causes are currently being explored in a number of studies of brain behavior and genetic factors. The further development of language use and knowledge by these children will be discussed in general and emphasis placed on their reading and writing development. This is the area in which their difficulties most seriously impede their academic performance. Reading and writing development will also be a part of the discussion of the language development by native speakers of English and second language acquirers, as well as children with developmental problems.

## **7.2 Achieving greater competence in pragmatics**

The changes that occur which indicate greater consciousness in language use affect two types of pragmatic behavior. These are conversational style and the types of speech acts that begin to be used with increasing frequency. We will discuss conversational style first and then the development of speech acts. As said earlier, much of this further development depends on social cognition.

Conversational interaction at a younger age does not involve long turns by participants. Also, topics change abruptly, and children do not always respond appropriately to their conversational partners. These three factors change over this period:

1. Conversational turns are longer.
2. Topics are maintained for a longer time.
3. Responses in conversational interaction become more appropriate.

This happens very gradually. In an early study, already cited, that examined the conversational interaction of children in grades 2 to 12, it was found that children in grade 5 (those aged approximately 9 to 10 years) used conversational turns that were only minimally related to what was said before (Dorval & Eckerman, 1984). This behavior was reduced in adolescents but had not completely disappeared. Therefore, at the beginning of this period conversational interaction is still far from being lengthy or fully responsive to what has been said previously.

There are other aspects of conversational turns that develop in this period. In addition to longer and more relevant turns, participants are better able, or appear to be more willing, to take the perspectives of the other participants. Depending on the child's culture, this can appear early or later during this period. An important aspect of taking the perspective of others is the ability to listen to others. Rules for listening to others and for turn taking are defined by the culture of the participants. This is important to keep in mind when any one classroom can be composed of children from different cultures.

The final aspect of conversation that changes markedly during this period is the topics of conversation. Topics become more socially oriented rather than just activity oriented when peers communicate. However, topics of conversation are dependent on context. Talking with one's friends is a different activity from debating a topic in a classroom. How children accommodate their linguistic style (types of sentence structures used) and their forms of address to others (degree of formality in address) to these changing contexts is also a reflection of developmental change and of culture. The changes in conversational interaction that have been noted are not just the result of increasing facility in the use of language. They also reflect greater awareness of society's rules about conversational interaction. Cognitive developments as well as linguistic developments are taking place that lead to increased awareness of the rules of conversational interaction, and increased taking of the perspective of others. Some have appropriately labeled this cognitive growth as social cognition.

Another component of increasing pragmatic competence, which also seems to reflect awareness of the rules of language use or social cognition, is the increasing use of indirect speech acts. These acts indicate that children are becoming aware of the various ways in which language can be used to convey meaning that is not immediately evident in what is said. Questioning, demanding, and stating would be considered direct speech acts in that the structures used convey both the intent of the message and its meaning. Some of the indirect speech acts used by children and adults have been extensively studied. In many of these studies the focus has been on telling lies, appreciating puns and telling jokes, and expressing sarcasm. All of these acts change in time from early childhood to middle childhood and on to adolescence. Examples of some of these changes appear below.

Children's humor at an early age is based on physical events such as a fall on a banana peel, or pies in the face. However, there need not be

any eliciting event. Laughing by one child in a group may be contagious, and the other children in the group may start to laugh too. During this later period children begin to appreciate riddles (for example, *What has four wheels and flies?*) and jokes that tell a story and have a surprise ending. Appreciation of some riddles such as the above, and some jokes, may rely on the double meaning of words. Others may rely on alternate interpretations of sentence meaning. This knowledge depends on conscious analysis of the language being used. Some bilinguals use their knowledge of two languages to make cross-linguistic jokes. For example, when her mother asked Angélica to set the table, she refused. Her mother angrily repeated "Ponga la mesa!" (Set the table) to which she responded "Why? It's already there!" In Spanish *ponga* means both *set* and *put*. She chose the meaning of *put* to make the joke. Less fluent bilinguals, however, can experience great difficulty with jokes because they have not mastered the language nuances and cultural knowledge needed to understand and produce jokes. A Japanese student claimed that her inability to understand jokes made it difficult for her to make friends with American students.

Early lying on the part of children often doesn't take into account the context in which the lie is being expressed, and is usually used to escape punishment. A child telling his mother that he didn't mess up the chocolate cake she just baked, while his face and hands are smeared with chocolate, is an example of early childhood lying. Although middle childhood lying is also often used to escape punishment, the child is more sophisticated about the context and lies more effectively. Further, children during this period have also been found to lie to protect others as well as themselves.

Being sarcastic requires being aware that one can say something but mean the exact opposite. For example, one child might say to another, "*That's a really great thing you said,*" and mean that what was said was awful. Sarcasm can be conveyed by using paralinguistic cues (facial expression, gesture and intonation) in special ways. Appreciation of sarcasm appears to be more difficult for children than lying and telling jokes. Perhaps this is because the situations in which sarcasm is used by peers is less frequent than the other indirect speech acts described. Sarcasm is an indirect speech act more frequently used by adults. It is important to note that sarcasm and also irony, which is even more indirect than sarcasm, are techniques used in the books that the child might be expected to read. Lack of familiarity with these speech acts again points to the very important role that communication interactions can play in bringing about awareness of various kinds of

indirect speech acts. Indirect language is very difficult for second-language learners. Sometimes teachers use sarcasm with their students, greatly confusing children new to the language. For example, when a student spilled something during a science experiment and the teacher said: "Nice job there, Pedro," the child did not understand why the teacher was complimenting him.

In summary, there are several marked advances in pragmatic knowledge in this period of development. Children are 1) engaging more competently in conversation with their peers and others in the environment, and 2) understanding and producing indirect speech acts. These indirect speech acts are jokes, puns and riddles (different kinds of humor), lying more effectively, and, to some extent, learning about sarcasm and irony. Understanding and producing these last kinds of behavior is still difficult for even the oldest children in this age range.

### **7.3 Achieving greater awareness of components of language**

#### **7.3.1 Morphological development**

During the middle childhood years, greater awareness of components in each of the structural areas of language (morphology, lexicon and semantax) is achieved. This greater awareness leads to greater mastery in the use of these components. A large part of this development of greater awareness is, of course, caused by reading and writing. Reading allows language to be contemplated by the reader. It does not disappear, as does spoken and signed language. Writing requires bringing to conscious awareness what one knows about language in order to realize it as written words.

In the area of morphology a greater awareness of correctness in usage is achieved. This ability makes children more sensitive about whether or not the forms used to denote time, number, and relations are correct, and whether pronoun and preposition use is correct. Theoretically, this ability would allow children to edit their spoken and written productions more effectively. However, spontaneous corrections, especially in writing, need to be encouraged during this period.

The largest gain in morphology in this period is the ability to produce derived words that are composed of prefixes, suffixes, and infixes and to understand the relation among them. We've already discussed the nature of some of these forms. Below is a list of some simple and some more complex derived words. The simple derivations don't change the stem of the word whereas complex changes do so. As can be seen in this list additions of prefixes, suffixes, and infixes, as well as stress shifts and

vowel changes, alter the syntactic class of words as well as their meaning.

#### *Simple derivations*

Unhappy    Unhappiness – syntactic class change, adjective to noun.

Disappear    Disappearance – syntactic class change, verb to noun.

#### *More complex derivations*

Sane        Sanity – vowel change and syntactic class change, adjective to noun.

History     Historical – stress shift and syntactic class change, noun to adjective.

**Contract**    **Contract** – stress shift and syntactic class change, verb to noun.

The above list does not include all possibilities. Some derivations seem very evident while there are others that are more obscure, such as the relation between *sign* and *signal*. The mastery of derivations, that is, their conscious use begins in middle childhood and continues on into adolescence. The sequence of development of such mastery is, as one might suppose, from the simple to the more complex to the more obscure. Having this ability and increasing this ability over time affects the amount of vocabulary available, which, in turn, affects reading and writing. The possible ways in which children acquire knowledge of derivational rules will be discussed in the next chapter on language education in middle childhood. Second-language learners need not only to develop the morphology of English but must realize that often the sounds change but not the spelling. For example, the first /c/ in *electric*, *electrician*, *electricity* does not change but the second does. It is pronounced in three different ways. Students may be used to more shallow orthographies in their languages and they may expect the orthography to change with the sound changes.

### **7.3.2 Semantax development**

By the time the child reaches middle childhood there seems very little left to learn about the semantactic aspects of language. Many researchers believe that basic syntactic competence, at any rate, is achieved during the first few years of early childhood. However, one can propose that there is a distinction between basic competence and elaborated competence, and the descriptions of basic competence can vary. Elaborations of competence will be discussed in this chapter.



Research in sentence comprehension and production has indicated that it is during the years of middle childhood that difficulties with particular sentence types are overcome. These sentence types are those that involve certain types of embedded sentences in which relations between subject and predicate are represented in different ways. The kinds of relations that are described in these sentences are one product of the verbs used in the sentences. These verbs describe relations that reverse the usual order of relations in English sentences: that is, subject + verb + object. Additionally, these verbs can make it more difficult to determine subject and object in the sentence. These types of sentences can continue to cause difficulty even in adolescence because they describe relations in unfamiliar ways. Further, understanding and using these types of structures have been found to be the product of level of education. Some examples of these sentence types are listed below.

1. Joe asked Bill to go.
2. Joe promised Bill to go.

Sentence 1 is ambiguous. It is not clear who went, and in sentence 2 the usual order of the subject being near the verb has been reversed. Joe is the one who is going.

1. Flying planes can be dangerous.
2. The doll is easy to see.

Sentence 1 (the famous sentence) is ambiguous. It is not clear whether the flying planes cause the danger, or if the flying of planes is dangerous. In sentence 2 there is no ambiguity. It is easy for us (the missing subject) to see the doll. However, subject-less sentences can create comprehension problems. The use of pronouns in sentences with certain verbs can lead to ambiguity as well. In the sentence "Bill believes that he is sick" it is not clear who *he* is. As indicated above, ambiguity of sentences can stem from different sources and can lead to difficulties in comprehension. Changes in the usual order of structures in sentences, or sentences having missing structures can lead to difficulties in comprehension. The final source of difficulty that will be discussed may be changes in ordering that do not lead to ambiguity, but are difficult to process because of their length and missing parts. Some examples follow.

1. The tiger the lion chased ran up a tree.
2. The girl the boy kissed started to blush.

3. The cake was baked by mother, and the pie by grandma.
4. John likes playing baseball and Bill does too.

Some studies have shown that even mature users of the language have difficulty in comprehending some of the above sentence types. These difficulties are not due to any innate problems, but, rather, differences in educational experiences. That is, those with better or more advanced education do not have these difficulties. This indicates that education can have a marked effect on further semantax development.

All the above structures are quite difficult for second-language learners and cause them problems when trying to comprehend text. For example, children struggle to find the referents in long texts with lots of dialogue. In addition, other aspects of semantax, long acquired by native speakers, are constant source of problems for second-language learners. Some are pervasive in most learners regardless of how long they have known their second language, such as the continued difficulties with the use of prepositions and articles. Learners more new to the language will show difficulties similar to the ones stated in Chapter 5, such as omitting the morpheme <s> to mark the third person singular and <ed> to mark past tense, using *he* for *she* and vice versa, not using the irregular past tenses, changing word order according to their own native language and so on. Often second-language learners know the correct form and are able to repair their speech or writing. Even when they do not, the error does not always reflect problems in comprehension. For example, a child may say *he* while thinking of the correct referent, a female, or the child knows the action is in the past even when the verb is missing the ending *ed*.

### 7.3.3 Lexical development

What happens to a child's vocabulary (the number of words and types of words known) is, as always, a function of the areas of knowledge the child has been exposed to, or to learning in general. Some of the growth in this area is widening experience by virtue of new learning in academic areas such as English language arts, science, and social studies and, of course, in reading in these subject areas and in others. Vocabulary knowledge is another aspect of verbal ability that correlates highly with reading comprehension. L2 learners need to have vocabulary to be able to read. In turn, reading helps them to develop vocabulary. Vocabulary knowledge in their native language also impacts English reading comprehension (Carlisle, Beeman, Davis, & Spharim, 1999). Germanic and Romance languages share many lexical cognates

with English, facilitating vocabulary acquisition. Romance languages share many of these cognates particularly in academic language. For example, *delicate* and *satisfied* are *delicado* and *satisfecho/a* in Spanish. False cognates can cause problems, though. *Embarazado/a* is *pregnant* in Spanish and not *embarrassed*. Vocabulary transfer is not always assured. Students must be educated to know this type of vocabulary in their own language and they must have high regard for their bilingualism. When children see their native language as an impediment to learning English, they do not necessarily take advantage of L1 knowledge that would help them transfer (Jimenez, Garcia, & Pearson, 1995).

Culture influences the meaning of vocabulary. For example in the United States *yellow bus* is not simply a bus painted yellow but it also has the connotation of a school bus. In the U.S. school buses are painted yellow. An immigrant child needs to acquire these additional meanings. Vocabulary in social studies and English literature is difficult for L2 learners because of the cultural knowledge needed to understand it. For example, a group of Central American students encountered the word *plantation* in a history book about the Civil War. When the teacher asked them what it meant to them, they responded that it was a field to grow crops. The word *plantation* did not connote to them slavery and the 19<sup>th</sup> century South that is embedded in the American cultural experience.

In addition, there are characteristics of the words or word combinations that make certain vocabulary harder to comprehend and acquire for L2 learners (see Table 7.1). As indicated in Table 7.1, acoustic similarity between *consonant* and *continent* confused Liz's fourth-grade students. She was explaining something about consonants and they thought she was talking about continents. Depending on the language background some words are much harder to pronounce in English. Another recent arrival was bewildered when he heard, "Sunday you will play baseball," since to the best of his knowledge he was not playing baseball on Sunday. The interlocutor actually said, "Someday you will play baseball." Word length can be a problem especially for speakers of languages that are mostly monosyllabic like Vietnamese. English orthography makes words such as *beautiful*, *Wednesday*, *picture* difficult. L2 learners often learn one word class and they apply it to more than one. Where most languages will use phrases or clauses, English uses compounds. The compound "three-legged race" that appeared in a math test was a source of great trouble for L2 learners. Blending, acronyms, abbreviations, and clippings are prevalent in English and a great source of difficulty for L2 learners. Homophones (equal-sounding

Table 7.1 Sources of lexical difficulties for L2 learners

<i>Lexical characteristic</i>	<i>Example</i>
Acoustic similarity	continent, consonant; Sunday, someday
Pronounceability	herbivorous, hypothesis
Word Length	encyclopedia
Orthography	laughed, Wednesday, beautiful
Syntactic class	the mystery person (mysterious)
Compounding	candy apple red
Blending	brunch, chocoholic
Acronyms	AIDS, MCAS
Abbreviations	FBI, KFC, SAT
Clipping	prof, math
Homophones	eye, I; see, sea; right, write; seam, seem
Homonymes	tear, tear; live, live
Multiple meanings	point, run

Adapted from Birch (2002).

but different words), homonyms (equal spelling but different sounding words) and words with multiple meanings can be understood in context yet they still can cause confusion. One child relating about her trip to Washington wrote, "I sea the White House" (see). The high-school computer teacher told a Cape Verdean student "Right click," referring to which side of the mouse to use. The student wrote *click*, instead.

In addition figurative language such as metaphors and idioms are cause of great difficulty for L2 learners. For example, a French-speaking student in fourth grade thought that the writing was perfect when another student in the class commented, "it makes perfect sense that the author would write..." A test item asked the following: Which paragraph in the story explains what it means to "have a green thumb?" Unless students know the idiom, they will try to figure out how the thumb of a character turned the color green. Idioms take a long time to acquire. It is easier to achieve comprehension than production. L2 learners do not necessarily store idioms as a unit but as an analyzable chunk. For example an L2 learner said, "Kill two birds with a rock," instead of "Kill two birds with one stone." Despite this difficulty, L2 learners attempt to use idioms because it gives them a great feeling of accomplishment.

There are multiple sources of input that can increase vocabulary. Music listened to and films viewed are just two of these. These inputs have occurred earlier on in the child's life but during this period social

drives are increasing the importance of these sources. In addition to an increase in the number of words known and the types of words known, there are changes that reflect a new type of knowledge. These are reflective of changes in the lexicon that go beyond number and types of words. It is these developments that will be discussed. It is important to emphasize that many of these further developments begin in early childhood. However, during middle childhood the frequency of their use increases and, most importantly, a conscious awareness of what their uses mean is developed in this period.

One area of change is an increasing knowledge of the functions of various connectives in new contexts. Understanding connectives in general goes along with the more frequent production of sentences that are composed of two sentences, and that describe a relation between two propositions. Some examples of understanding in old contexts are presented below.

1. If you do your homework you can watch television (conditional).
2. You can go to the movies but not to Jimmy's house (disjunctive).
3. You shouldn't play the music so loud because it gives me a headache (causal).
4. While you're doing your homework you shouldn't be watching T.V. (temporal).

There are other conditional, disjunctive, causal, and temporal terms that are different from those given above. They fulfill similar functions. The important developmental change is that relations between the two propositions of the sentence involve more than social situations. For example, some describe scientific relations ("The sun rises because...") and also an understanding of more abstract notions about social relations ("You are doing wrong if you hurt someone's feelings"). The findings about the growth of connectives is that these terms are first understood in everyday social situations before scientific, logical, or moral situations.

Multiple meanings for words also develop over this period. Some research has indicated that there are two strands to this development. One interesting one is the understanding that adjectives like *sweet*, *sour*, *hard*, and *soft*, and, also, adjectives like *fast* and *slow*, can be applied to people as well as objects and events. The different meanings for these terms are indicated by the sentence contexts in which they appear. In addition, there are a large number of words that can literally mean

different things depending on context. Only a few examples of these words are given below, but they make clear that many words can fulfill different roles in sentences.

1. *Chair* that you sit on and *chair* of a committee.
2. *Foot* of a person and *foot* of a table.
3. *Hit* somebody and *hit* the books.

As indicated in the above examples, words with double or more meanings can come from different syntactic classes and categories of meaning.

For second-language learners the multiple meanings of words, especially differences between ordinary use of language and uses of words applied to subject matter areas, is further complicated by the differences with their native languages. For example, *table* translates as *mesa* in Spanish when referring to the piece of furniture but as *tabla* when used in math. In turn *tabla* means *board* in everyday language.

The final developmental change in lexical development that will be discussed is changes in the definition of words. This is an area that has been fairly well researched. However, there are still many questions about the process and about what brings about changes in the process. How children use words in their spoken and written language during different age periods has not been extensively studied. Instead, there have been many studies that examine what children would accept as meaning for different types of words. It has been suggested that example-based or experiential meaning is used as a definition initially. For example, the word *dog* has the meaning of the many dogs that have been seen, and have been called *dog*. Then presumably characteristic meaning develops: that is those features that are usually found in dogs such as four-legged, furry and barking. Eventually words are understood in terms of defining meaning, that is, the meaning given in dictionaries. At the end of the middle childhood period is when such definitions are beginning to be acquired.

## 7.4 Use of language in reading and writing

As described earlier, oral language knowledge is necessary for understanding written text. The process of reading requires bringing to conscious awareness various aspects of that knowledge. Initially phonological awareness is required in reading words. Structural awareness is necessary in reading sentences. Awareness of the structure of

continuous text is necessary in early reading of short paragraphs in primers. This continues to be the case in the reading that is required in middle school. This reading is now focused on subject areas. In addition, there can be reading for enjoyment in school as well as outside of school.

A well-known researcher in the field compared reading in upper elementary and middle school to reading in early childhood, as developing from reading in order to learn how to read, to reading in order to learn (Chall, 1983; 1996). This is a product of changes in required reading in upper elementary and middle school associated with the introduction of subject areas and the texts related to these areas. The language in texts that are usually assigned in upper elementary and middle school are structurally different from narrative texts. Students are less familiar with explanation than with story telling. Such texts present a number of propositions in an area, then arguments that are in support of or against the propositions. A conclusion is reached based on how well the arguments support or refute the propositions. The language used in these texts can be composed of complex sentences that strain memory in various ways. They are lengthy and contain many conjoined and embedded clauses. Explanation often requires these types of structures.

As described above, children begin to use these more complex sentences more frequently in middle school. Learning about these more complex structures comes about because of their more frequent use by teachers in classrooms, and because of the texts they are exposed to. In fact, reading these more complex sentences more frequently contributes a great deal to children's understanding of more complex language. Again, there is a reciprocal relation between oral language knowledge and reading. In addition to reading explanatory text more frequently than earlier on, children receive greater exposure to varying genres in literature, such as novels, mysteries, essays, poetry, and plays.

The extent of background or cultural knowledge related to the topic addressed in the text facilitates comprehension for L2 readers. For this reason previous education and age play a very important role in second-language learners achieving literacy. This knowledge may not be culturally congruent with author or audience who are native speakers of English, the second language. This can lead to misinterpretation or miscommunication. For example a Cambodian fourth-grade student, quite fluent in English reading, was confused when she came across the term *Red Coats* when reading about the American Revolution. She understood the conflict between the British and the Americans but got

confused with what she thought was a third group with an awkward name. Her classmates born and raised in New England did not need any clarification and the text did not provide one.

Along with reading more widely, students are given writing assignments that require that they write in the explanatory mode as they are asked to write the “main ideas” and the conclusions in the texts that are assigned to them. Just as reading develops over time so does writing. It has been found that early writing is usually composed of putting down what you say. More advanced writing has readers in mind. The early writing of simply putting down what you say is altered so that written communication can be understood by readers who don’t have the opportunity to ask for clarification. This is similar to the shift observed in story telling at an early and later age. Children need to recognize that written language is different from oral language production in order to progress from talking about the here-and-now to talking or writing about events that have not been shared by listeners or readers. Gibbons (2003) observed 9- and 10-year-old L2 learners in Australia. Teachers scaffolded their language development by allowing them to do science experiments and discuss what was happening. They reported orally to the teacher, who had not watched their experiment and did not know what happened. Later the students prepared a written report. Students moved from saying “Look, it’s making them move,” where *it* and *them* are only clear to those watching the experiment, to explaining to the teacher, “We found out the pins stuck on the magnet.” Since the teacher had not watched the experiment, they had to be more precise and use the vocabulary they were learning. Later they wrote, “Our experiment showed that magnets attract some metals,” reflecting their ability to generalize what they had learned (p. 252).

The progress L2 learners make in writing depends on the students’ academic and family background, the instruction they receive, the amount of English they know, and their own willingness to learn. Even if students have been schooled in their native language they may not have received instruction in writing that is comparable to how writing is taught in schools in Australia, England, or the United States, for example. In many countries teaching writing is limited to copying or following strict formulas. Valdes (1999) proposes several stages in the development of writing based on her observations of new immigrants aged 12 and 13. At the initial levels students display some familiarity with words and provide personal information. Later they display an increasing amount of information with more detail and support for their statements. In terms of organization students move from short



unconnected sentences to longer more connected sentences. Only in the latter stages does the sense of audience appear. Grammaticality and correct spelling in the second language takes a long time to develop.

Initially students rely on their L1 knowledge to organize sentences and to spell. As their knowledge of English increases their writing becomes more accurate. For example an early writing by Manolo read: "This is the naight the Hallowen much people go to the strets for candies..." (Valdes, 1999, p. 163). The sentence goes on without breaks but the reader gleans the information about what happened. His spelling of the word *night* shows the influence of Spanish, his native language. The overuse of the article *the* reflects a typical problem of L2 learners. Two years later Manolo wrote: "The war was between Mexico and France, France was wining they were getting closer to the castle. On the top of the castle the Mexican flag was still flying" (p.165). The piece goes on for several rather well-developed paragraphs with only a few problems of clarity of expression, grammar, and punctuation. Valdes demonstrates that the nature of the instruction and the teachers' perception of the students' abilities greatly influence the progress students make.

Both types of activities, reading and writing, require an advanced knowledge of the structures required in such assignments, the appropriate forms for composing in such assignments, and the topics to be covered. We suggest that both types of activities require specific teaching, and will be discussed in the next chapter. Second-language learners may be new to the language in these middle childhood years. They not only need to learn English, but they need English to be able to learn in subject-matter areas. Their ability to read and write is essential for their academic development.

## 7.5 Contextual and personal factors affecting L2 language and literacy development

Contextual factors outside the control of the learner and personal factors such as attitude, motivation, and sense of identity influence language development and language loss. These factors are particularly important in this age period because of the increased socialization that naturally occurs in the middle school years. Education level of the family can impact the background knowledge of the learner. Educated families are more likely to foster literacy and to use academic discourse. They have the means to purchase books and the knowledge to foster habits that support school learning. Learning to become literate in a

second language where the learner's home language is a language with status is an easier task than when it is not. Status of languages affects how native speakers of the language are viewed by society. Consequently it affects teachers' and peers' views of the children in school. External factors interact with personal attitudes toward the languages and motivation to learn the second language and maintain the first. Attitude and motivation also affect children's sense of identity and willingness to use the languages, which in turn, influences language development. Positive and negative attitudes toward each language combine in children in a variety of ways and change over time. Some children have positive attitudes toward both. Others feel positively toward one especially the second language when it is the important language of the society. Yet others are ambivalent about both (Gardner & Lambert, 1972). Children with a positive attitude toward both languages usually perform the best in second language as well as in other school subjects. Positive attitude toward the native language and willingness to use it supports second-language development. The opposite is also true. Mexican American students who believed that losing Spanish was a precondition to learning English did more poorly, on average, in English proficiency tests (Hakuta & D'Andrea, 1992).

Gardner and Lambert (1972) distinguished between integrative and instrumental orientation. Individuals with integrative orientation want to learn the language to socialize and share in the culture of the speakers of that language. Learners with instrumental orientation have practical reasons for learning the language: for example, to pass an exam. Motivation to learn a new language and maintain the first is considered an important factor in language proficiency and language loss. A meta-analysis of Gardner and associates' studies revealed that attitudes, motivation, and orientation had a positive effect on second-language achievement. Motivation had the greatest effect while instrumental orientation had the least (Masgoret & Gardner, 2003).

In order to learn a language, motivation is not enough; learners need to practice with native speakers. If native speakers are unavailable or unwilling to practice English with them, progress becomes almost negligible. Zanger (1987) interviewed bilingual high-school students who, except for their ESL teacher, had no contact with speakers of Standard English in their neighborhoods, schools, or workplace. These students stayed in ESL programs for years because of their limited progress in English, especially academic English. Motivation to maintain and develop the native language also needs to be supported. Language vitality, or the status and prestige of the language among peers, families,

and institutions, encourages children to want to continue to develop the home language. Literacy in the native language, through access and formal teaching, further supports fluency (Tse, 2001).

Students confronted with two cultures make different identity choices. Four types of patterns emerge depending on the languages and cultures individuals choose to embrace: integration, assimilation, segregation, and deculturation (Berry 1983; Taylor, 1987).

Integrated students accept both languages and cultures with ease. For example, a group of Italian immigrant students in Canada freely used English or French at school (depending on the language of the school) but switched to Italian within the family and community. They developed their second language to high degrees and were successful in school both academically and socially (Bhatnagar, 1980).

Assimilated students embrace the societal language and culture at the expense of their home language and culture. In some cases immigrants are assimilated to groups without social standing. For example, Haitians in the United States are assimilated into the African-American community, which in turn is segregated. Portes and Rumbaut (2001) labeled this phenomenon "downward assimilation."

Rejection of the host language and culture results in segregation. Often this segregation is cultural but not linguistic. The children learn English but do not associate with English-speakers. Cultural segregation may be promoted by parents who are frightened by the characteristics of children reaching adolescence in the host society. For example, Punjabi students in California learned English but did not achieve social integration with Americans. Parents wanted their children to succeed academically and learn English but frowned on social relations with Americans because they associated American teenagers with drugs, gangs, and school apathy (Gibson, 1993). There is often a struggle between children who want to assimilate and parents who push for this partial segregation.

Students who abandon their language and culture may become deculturated because in addition to losing connection with their own ethnic group, they fail to connect with English speakers. Marta, a fifth-grade Mexican American girl, rejected Spanish and was ashamed of being Mexican. She insisted on speaking English only even with monolingual Spanish speakers. Nevertheless she did not socialize with English speakers because they did not accept her (Commins, 1989). Having lost their identity and unable to feel part of the host culture, deculturated individuals develop feelings of anomie, a lack of belonging, and marginality.

Children of immigrants who are not able to embrace their own culture and who have formulated their identities around rejecting aspects of the mainstream society may be drawn to gangs. ...Gangs offer a sense of belonging, solidarity, protection, support, discipline, and warmth.

(C. Suarez-Orozco & M. Suarez-Orozco, 2001, p. 108)

Reception in the new society is another factor that affects students' identity and school performance. Often society develops negative images of particular groups. Children are very perceptive of these social prejudices. For example, a 13-year-old Haitian girl said, "Most Americans think that we are thieves" (C. Suarez-Orozco & M. Suarez-Orozco, 2001, p. 97). Children react in different ways to how they see themselves perceived by individuals or the society, called *social mirroring*. Some are resigned and passive. They believe people think they will not succeed so they do not. Others act out and become as bad as they believe society thinks of them. Yet others react with optimism and daring. That is, they work hard to succeed and show society that they are capable (C. Suarez-Orozco & M. Suarez-Orozco, 2001).

Attitudes, motivation, and identity are factors that affect L2 learners of all ages but these issues are particularly salient during the latter part of middle childhood through early adolescence. Children's acquisition of the social and academic second language is affected positively or negatively by these factors. Children who maintain their bilingualism and develop ties with the host society while maintaining their cultural ties with their ethnic group tend to fare best (Portes & Rumbaut, 2001).

## 7.6 Assessment of bilingual learners

Definition of language proficiency, influences of culture, and nature of tests need to be considered for a fair evaluation of bilingual students' performance. Cummins (2003) suggests that students' second-language performance needs to be considered with respect to their ability to interact socially, to perform academic tasks, and to their knowledge of discrete language skills. In addition, he suggests the particular context where the language is being used, and the automaticity of language skills need to be considered. Cummins (1984) distinguishes between context-embedded and context-reduced language situations. In the latter, the meaning is conveyed only through language making the task more difficult while in the former things other than language support communication. For example reading a book about baseball is

context-reduced, but getting an explanation about baseball while playing the game is relatively easier. Not knowing the discrete language skills makes language use and comprehension cognitively more demanding than when the language is known and the learner only needs to focus on the message. Thus, the nature of the situation and the knowledge of language needed for the situation will vary. A learner will perform very well in one but not in the other. A student can do very well in a context-embedded conversation with English-speaking friends but fail to understand the science text.

Accurate evaluation of bilingual learners' ability is difficult because schools test mostly in English, their second language. Development from these middle childhood years on is even more problematic because the linguistic and cognitive demands of school and the environment keep increasing. To obtain credible results in tests of academic and cognitive ability, students should be tested in their stronger language. Bilinguals process information more quickly and accurately in their stronger language because they concentrate on understanding the item rather than decoding the language. Testing in the home language is helpful when students have received instruction in the tested content area in the home language (Abedi, Hofstetter, & Lord, 2004). Content area tests in both English and the home language produce higher scores than tests in English. Bilinguals often learn some things in one language and other things in the other. The opportunity to follow assessment instructions in both languages and to respond in either language affords bilinguals a greater chance to succeed. Bilingual Spanish-speakers who took the National Assessment for Educational Progress tests bilingually performed better than they did when the test was in one language. Testing in both languages is an appropriate method for determining if children have language development problems and need special assistance.

When skills in a particular language are not being assessed, bilingual students should always be given the choice of the language in which they want to give evidence of their ability. Writing projects, responding to tests of reading comprehension, and demonstrating content knowledge can be done in any language. When students are forced to do it in their second language it becomes a language-proficiency test rather than evidence of literacy ability or content knowledge. Ideally, when interpreting academic tests in English, results should be given separately for accuracy of content and accuracy of language. For example, a student may demonstrate comprehension of the content of a particular test item but may use incorrect morphology. Errors in language form

should be differentiated from knowledge of content of subject areas. Teachers need to make clear what the students' language difficulties are as opposed to their lack of knowledge of content.

Numerous types of accommodations have tried to overcome the language barrier that standardized content area tests in English create for students not yet fluent in English. A review of various strategies concludes that the most promising strategies are simplifying the language but not the content of test items, use of customized glossaries (definitions or paraphrases of potentially unfamiliar or difficult words), and providing sufficient time (Abedi et al., 2004).

Although language is a major factor in test results, culture and familiarity with tests can also interfere with bilingual children's ability to answer items in tests. For example, the "stories" that provide context for math problems are often unfamiliar to students. Recently, the writing prompt for a standardized test given in Massachusetts asked students to recount what they did on a "snow day." There had not been any snow days in the previous winter so any children who arrived from warm climate countries had neither experienced nor heard the term "snow day." Some children are not familiar with multiple-choice tests, true/false, or other forms of test. Practice in test formats has shown to greatly increase success.

## **7.7 Language development of children with language problems**

A number of studies of the language development of SLI children, dyslexic children and those with language learning problems indicate that some of these children's problems can persist into adolescence and adulthood. As described earlier a particular type of disorder (SLI) has been found among the family members of children with this problem (Rice, 1996; Tomblin, 1989), indicating that certain genetic factors may be involved. There is evidence that such genetic factors play a role in other forms of language disorder listed above. However, findings also indicate that there can be variations in the types of language problems that specific children have in each population, and the degree of severity of their problems. This makes describing a pattern of language development that can cover all the children in a group a very difficult task. There are, however, some outstanding characteristics within each population. It is these that will be described.

Children who are developmentally delayed (cognitively impaired to some extent) have problems with all aspects of language. Children who

have been diagnosed as being SLI primarily have difficulties in oral language development, but, also, have problems in learning to read. Children who have been diagnosed as being dyslexic have primary problems in learning to read, but also have oral language problems. As more and more data are gathered on these children there is increasing evidence that both oral and written language problems co-exist in these populations. This makes it important that both the oral language processing of these children and their reading abilities should be assessed. Their oral language difficulties within groups can vary to some extent, but many of the children in the SLI and dyslexic groups have particular problems with complex semantax and the phonology of multisyllabic words (Menyuk & Chesnick, 1997). Having difficulties in phonology means that lexical acquisition is delayed. In addition to these problems, children who have been identified as learning disordered have difficulties in pragmatic competence (Donahue, 1995).

Each group of children may display particular difficulties within an area. Further, as said previously, there is variation among the children in any of the populations. However, an outstanding problem for all children who have been categorized in these ways is making a smooth progression across developmental stages in processing categories and relations in language. They seem to get stuck at earlier developmental stages. This may be due to a variety of problems related to encoding and recalling messages of increasing length and complexity, that is, a memory problem.

The association between letters and sounds or in decoding has been pointed to as the primary difficulty of dyslexic children. The question arises as to whether or not they are ready to bring to conscious awareness what they know about the phonology of words, a requirement in decoding or if they have speech discrimination problems. Difficulties in discriminating among sounds have been identified as an area of difficulty for both SLI and learning disabled children. This kind of problem can lead to delays in both lexical acquisition and in semantax. All these children have probably been identified early and have been receiving special intervention from speech therapists and reading specialists. However, there are language activities in English or Language Arts classrooms that can be of help to these children. These will be discussed in the following chapter.

Children who have been raised bilingually or have acquired a second language later also have language difficulties. The problem for professionals and families is to determine when a linguistic behavior reflects normal second-language acquisition and when it is the result of

language impairments. First, it is important to remember that certain behaviors are typical of bilinguals and should not be seen automatically as evidence of a disorder. Among these features are code-switching, negative transfer, more limited vocabulary than monolinguals in each individual language, and fossilization of grammatical features. Code-switching is normal behavior for bilinguals and learners will do it to more or less a degree depending on what is allowed in the environment. Genesee et al. (2004) observe that the code-switching of bilinguals with disabilities is different with respect to grammar and appropriateness of use. Second-language learners' language looks different because they often work with less vocabulary and their grammatical structures are inaccurate. Many of these features change with time and explicit instruction.

As we have seen throughout the book, there are numerous external and individual factors that affect second-language acquisition. These can foster or delay second-language acquisition. Children may behave in ways unfamiliar to those not knowledgeable about bilingualism and second-language learning. For example, in Anglo-Western culture children are treated as important conversational partners and are expected "to actively engage in, initiate, and maintain talk with adults" (Genesee et al., 2004). Schools expect children to show off their knowledge. When children come from cultures where they are expected to learn by listening to adults and they do not respond to Anglo-Western teachers, they may be mislabeled as having learning problems. For example, Connie, a first-grade teacher, was extremely concerned about a Cambodian child who would not respond to her during her one-to-one guided reading lessons. When she added a friend to the group, the child became very responsive addressing his comments about the book to his friend.

Another factor that affects bilingual learners' language development is the inconsistency of policy on language use by schools and/or families. Bilingual learners are best off when their families and schools provide them with consistent use of both languages. Parents need to make a decision on which language they are going to use with their children and keep it up. Schools that use more than one language for instruction need to decide when the languages are going to be used and follow these decisions. If schools are vague, teachers independently make decisions that can result in a language-use rollercoaster. For example the kindergarten may decide that is best to use the home language only, the first-grade teacher considers English, the L2, more important and focuses on that mostly, the second-grade teacher is appalled by the



children's inability to read in their home language and focuses on that language, and so on. Typically by the time they reach fourth grade these children are behind in both languages.

A number of strategies can help clarify whether children learning a second language are indeed language-impaired. These were outlined in Chapter 5. These same strategies, such as assessing in both languages, comparing performance with native speakers of either language with problems, and the time needed to learn the new language, help determine whether children are having developmental difficulties or are behaving like typical L2 learners. Determining whether a bilingual learner has language impairments is not an easy task. Families and educators have to guard against both rushing to label the child as impaired and neglecting to do so by attributing the difficulties just to problems in second-language development.

# 8

## Language Education in Middle Childhood

### 8.1 Introduction

Language education in middle childhood should take place across the many different classrooms that students attend, and to some extent it does. That is, science, social studies and mathematics study should also include focus on how children are discussing what they are doing, how they are reading assigned texts, and how they are carrying out their written assignments. Many teachers in these areas do focus on the accuracy of their students' writing. Fewer spend much time on how well students are absorbing the material in their texts as indicated by classroom discussions, or concentrate on preparing students for this reading. Much of the work on further language development resides in the English or Language Arts classroom. However, this chapter will discuss language activities that can be used to enhance further development across the subject areas.

As indicated in the previous chapter, there continue to be developments in language knowledge that take place over the years of middle childhood. Many of these developments can be labeled as increased awareness of the categories and relations in the language. This, in turn, can lead to increasing awareness of the communicative nature of the language itself – how it can be used to carry out various tasks. However, children vary in their ability to bring to conscious awareness what they know about language. They also vary in their ability to use effectively what they do know about language. This is a reflection of differences among children in their background language experiences and, also, their personal language abilities. In terms of this latter

difference among children, their degree of fluency in the use of the language can vary. Much of the previous developments over the developmental periods we have talked about appear to be universal in many aspects.

All children who are developing normally are able to perceive and produce the speech sounds of their language. They are able to produce and comprehend structures that conjoin and embed propositions according to the rules of their grammar. They are able to carry out many of the direct speech acts described. The educational experiences that are described here are designed to help all children achieve the level of language awareness that is beyond intuitive knowledge and is required to continue to learn about and use language effectively. Additionally, the use of oral language knowledge to enhance reading and writing competence will also be discussed. The bulk of the discussion in this chapter on language education will be concerned with ways of improving awareness of language categories and relations by all children in all aspects of language use. However, teaching reading and writing will receive emphasis as well because of the important role that these activities play in helping to achieve awareness.

Somewhat different approaches are needed to teach awareness to children who are bilingual or second-language acquirers. These children may vary a little or a great deal from each other and from the native speakers of English in the classroom. The second-language acquirers may have different levels of knowledge of the classroom language because of the various reasons we have mentioned. A primary one is differences in language knowledge among these children because they may have entered the educational system at different ages, and their previous language education was very different. The bilinguals may be ahead of the monolinguals in their consciousness of language categories and relations given their knowledge of two systems and how they are related. Bilinguals' ability to read and write content-area texts largely depends on their knowledge of vocabulary and of the topics addressed in the text.

The discussion of children with language development problems will also focus on ways to achieve further progression in their language development. Since these children often have accompanying problems in reading and writing, discussion of ways in which these abilities can be enhanced in these children will make up part of the discussion of their language education.

## 8.2 Achieving awareness of structural categories and relations in the language

When the new linguistic description labeled generative or transformational grammar first appeared in the 1960s, it was suggested that teaching children linguistics, that is, how to analyze sentences in terms of transformational grammar, would lead to their using better grammar. The results were not very auspicious. Calling upon children to be consciously aware of the structures in sentences from the linguist's point of view did not remarkably improve their use of grammar in speaking, reading, and writing. Asking them what they do know about the language intuitively seemed to bring about better results.

There were two ways in which grammar was traditionally taught. One way was to get children to parse sentences by labeling their parts. Another way was by having students determine the errors in sentences and to label those errors. More modern teaching of grammar has graduated to asking children to learn by doing. The principal way in which doing can take place is, of course, by writing. In this way they produce evidence of what they know or don't know about language. Teachers edit this writing and point out errors. While these activities certainly do create a degree of awareness of language structures, they are, on the whole, largely passive in terms of heightening awareness. Asking children to judge the correctness of spoken instances of the language involves active, online processing, and recall.

What is important to keep in mind at this stage of development is that awareness of aspects of language is a function of the types of language experiences that children have had, and the nature of the language learned. That is, some children have had the experience of reading widely and often and conversing with others a great deal, whereas others have had comparatively little experience in using oral and written language. Further, a particular child's dialect is what he or she is familiar with. Therefore, awareness may be limited to processing of structural categories in a single dialect. However, if they have had extensive experiences in listening to and interacting with speakers of dialects other than their own, they will be able to achieve awareness across dialects. School integration plays a vital role in this process.

Some activities that directly heighten awareness in various domains of language are activities that ask for judgment of the correctness of various forms of language and for correction of forms that are in error. The focus of attention can be very narrow to begin with and then be gradually widened. Initially children may be asked to judge whether a

number of words are spoken correctly or incorrectly according to the dialects that are used in the classroom. They can then be asked to correct the pronunciation of words they think are incorrect. Engaging in this activity in the spoken mode provides experiences in listening. It also allows comparisons of speech differences that are not possible in the written mode. The observations made by the classroom teacher about some of the differences in pronunciation in the classroom can make up the list of comparisons. Some examples of comparison of sounds in words appear below. The list can obviously be expanded. In this list differences between long and short vowels are represented as well as changes in plural forms that vary across dialects.

1. *pin* and *peen*.
2. *mary* and *merry*.
3. *hot* and *hawt*.
4. *roofs* and *rooves*.

Judgment activities can then be expanded to sentences that are correct or incorrect in terms of both their structure and meaning. Again, teacher observation of the difficulties that the children have in both spoken and written sentence formation should be used to develop the list. Another activity related to the above is to ask children to expand the list of words and sentences generated by the teacher. That is, the children may have observed other variations of speech and language, and its use, that the teacher has not.

Different types of tasks were used in a study examining the relation between children's abilities to carry out a number of "metalinguistic" tasks and their reading ability (Flood & Menyuk, 1983). The various tasks were designed to elicit conscious awareness. The study included children in grades 4, 7, and 10 as well as adults. The overall finding was that there was a significant relation between children's ability to carry out the various tasks requiring conscious awareness of language categories and their reading ability. The various tasks included judgment of errors within sentences of various kinds. Some errors were minimal and others more serious. The following are some examples of errors:

1. I like the shirt what by mother bought me.
2. Playing games are a lot of fun.
3. He wanted to play much.
4. Joe likes apples but he likes bananas.
5. He broke his leg because he went to the hospital.

6. The Martian ship unintegrated when it hit the atmosphere.
7. He broke the window by a hammer.

Mistakes can also be embedded in short stories, and children asked to monitor the story for these mistakes. Judgment of and correction of sentential and paragraph errors can then be presented in the written mode.

Other types of metalinguistic tasks used in the study were asking students to paraphrase various structures including passive sentences and dative movement sentences. For example:

1. John sent every girl a valentine. Every girl was sent a valentine by John.
2. His mother was waiting when he arrived home. When he arrived home his mother was waiting.

Finally, students were asked to tell what was ambiguous about a number of sentences.

1. The boy played with the dog while he was eating. Question: Who was eating?
2. Do you want a tiger to chase you or a lion? Question: Who do you want to be chased by? Another question: Who would you prefer to be chased, you or the lion?

In the study cited above these types of tasks were presented both orally and in written form and in sentence and paragraph contexts. As said, there was a significant relation between reading ability and performance on the various tasks. That is, those students who performed well on reading tests did well on the tasks. Students who performed significantly more poorly on the language tasks attained below average scores on the reading tests.

In addition, below-average readers performed at the same level on these tasks throughout the grades and on into adulthood. That is, unlike the above-average readers there was no improvement in their abilities with time. Given these results, it was thought that programs designed to enhance the awareness abilities of all students in a classroom might bring about positive changes in students' oral-language and written-language processing abilities.

Similarly, when working with L2 learners, researchers have experimented with ways to have them notice errors in their own interpretation of text or in their writing. The strategies tried include the titles

Dictogloss, Reformulation, or Stimulated Recall. Reformulation was described in Chapter 6 and is particularly helpful for development of language structures and spelling. It is a good strategy to use when helping students edit their written work. For Dictogloss the teacher reads a text aloud a couple of times. Students are then encouraged to take down as much as they can as the teacher reads the text for a third time at normal speed. Following this, students work in pairs comparing their notes and creating a new text. Two pairs come together to compare their resulting text and then produce yet another. Finally they are given a copy of the original text to compare with their final version (Gibbons, 2002).

Lindgren and Sullivan (2003) worked with 13-year-old Swedish students writing in English. The students used the JEdit computer program that records everything students write and also includes changes they make in the text. The students replayed their writing session in pairs with a teacher. During these stimulated recall sessions, they discussed their writing, the changes, and the difficulties. This process was repeated following students' text revisions. Most of the changes the students made in their writing could be traced to the stimulated recall of their own writing. Valuable discussions about language took place. For example, on several occasions a student had missed out the space between two words, e.g. *musicschool*. While discussing and changing such errors, the student commented on the difference in compounding between Swedish and English. Discussion about their own use of L2 language, while attempting to improve output, helps raise awareness of the new language. In this way students learn how this new language works.

Thus, we are advocating that students need to be made aware of the structures of English and we have suggested some effective ways to do it. If second-language learners do not receive this explicit instruction in English, either they do not progress quickly or they learn from one another resulting in an English that deviates from Standard English. These students become very fluent in this version of English but schools often mislabel them as ESL students. Fillmore and Snow (2002) quote a 12-year-old Cambodian student who had gone to school in the United States for 8 years. His English included: missing the copula ("they more comfortable"); overusing the progressive ("they don't really talking"); and omitting the *-s* in the third person singular ("the teacher call on them") (p. 32). As we saw in Chapter 5 these are typical errors of L2 learners in the initial stages of development. For these children, however, these errors have become permanent features of their dialect.

### 8.3 Achieving awareness of pragmatic devices

A great deal can be learned about the pragmatic devices that are used in conversation in various contexts by reading novels and plays. This will be discussed at greater length in the section on reading and writing. More direct approaches to teaching students how to converse appropriately in various contexts can be used if the children are asked to converse in the classroom. A possible way of teaching students how to converse appropriately is by setting up conversational contexts in the classroom and asking students to improvise. The contexts provided should vary in terms of the participants (peers or teachers or parents), and the physical situation (school, home, etc.) How well the conversation goes can be judged by the class on the basis of several factors that have been previously discussed. These factors might include how persons of different positions are addressed, the appropriate choice of language in terms of degree of formality needed among the participants, how well participants took turns, and how well they responded to conversational bids.

A strategy that has been widely used with L2 learners is instructional conversations. For these dialogues between the teacher and a group of students (preferably small), the teacher selects the topic in cooperation with the students. It is important that in these conversations the teacher listens carefully to the students, guessing the intended meaning, and helping students verbalize what they want to say. The teacher keeps the students focused on the topic of conversation without dominating it. For example, a teacher had planned a lesson on sacrifice. Students were going to discuss, read, and write around this theme. Previous to reading a story that illustrates the concept, she asked the students what sacrifice meant to them. As various students attempted answers, one student started a very elaborate and disorganized retelling of an episode of *The Simpsons*. In her responses the teacher kept prodding the student to connect what was happening in the story with the concept of sacrifice. She challenged the student to consider that he may have been thinking about being grateful instead of sacrificing but did not object when the student insisted on his interpretation of the term. Continuous discussion on the topic after reading the story further clarified the concept. Finally the student said, "Giving something that you like," to which the teacher responded, "Okay, giving something that is important to you." She wrote the sentence on the board by the word *sacrifice* (Patthey-Chavez, Clare, & Gallimore, 1995, p. 10).



Instructional conversations help students understand abstract concepts. Through the collaborative interaction with students and teacher, concepts get defined. These conversations “can also help culturally and linguistically diverse students bridge the cross-cultural pragmatics of using language to communicate” (Perez, 1996, p. 174). As we saw in earlier chapters academic discourse requires students to focus on one topic. By questioning and helping students tie their discourse to the topic, teachers make students more familiar with academic discourse. Since beginner L2 learners tend to write as they speak, Valdes (1999) strongly recommends the development of oral language as an integral part of the writing class.

In addition to giving students practice in how to carry out a conversation under various circumstances, “how to” carry out various communication goals can be discussed and examples given. The “how to” list can include some tasks that require the use of indirect speech acts. The contexts of other fields of study can also be introduced. Assignments can be given to students to prepare themselves to carry out these speech acts.

1. How to persuade others to take a position in social studies.
2. How to provide an explanation of how things work in science or mathematics.
3. How to request help in any class and in any place.
4. How to lie altruistically in social situations.
5. How to tell a joke in social situations.
6. How to express dislike in social situations.

As stated initially, assigned readings in different classes can provide written evidence of examples of how these various indirect speech acts are carried out.

#### **8.4 The role of language knowledge in the teaching of reading and writing**

In the English or Language Arts classroom a great deal of time is appropriately devoted to reading and writing. How to go about improving students reading and writing ability per se is the focus of the teacher’s attention. How to help all students achieve greater competence in these two areas has been a concern of teachers over the years. Specifically, in teaching reading teachers work on getting students to comprehend a

variety of texts. These texts might be assigned or children may be given free choice of texts to fulfill varying requirements. The usual way of assessing how successfully students comprehend what they read is by asking them to write about what they have read. The written assignments can take several forms. For example, students may be asked to write a précis, or to outline main points, or to compare the positions taken by various characters' positions in texts. This writing requires skills beyond those required in telling or re-telling stories. The type of writing required has been labeled by several researchers as "academic" writing.

The most frequent suggestion that has been made to enhance students' ability to produce writing in the so-called academic genre is to ask them to read texts in different genres. However, simply requiring students to read a lot of material in different genres, and even to write a lot, does not bring about the hoped-for results in all students. Alternate approaches have been suggested that may be more helpful with students, especially those who exhibit some delay in the development of their reading and writing skills. These approaches may include teachers' modeling of the skills required in these tasks.

Another approach is outlining how a text should be read and how to carry out a written assignment. The outline of reading is composed of a list of major points that students should look for in reading the text. The outline of writing about what they have read consists of step-by-step summaries of major points in the text. Still another approach to preparation for reading and writing may involve a discussion in the classroom of the vocabulary and structures in the text. Providing an outline of how to read a text and how to write about it, and discussing how it should be read and written about, might be first steps which can then lead to an independent reading of a text and writing about it. Taking students through these steps to independence has been termed *scaffolding*. It is similar to the behavior of caregivers who use the language behavior of their infants to pose increasing linguistic challenges to their language-learning infants.

The term was also used by Vygotsky (1962) in his discussion of how students learn. He suggested that teachers should take students from where they are to where they would like them to be by giving them a high level of support initially, and then challenging them to increase their own efforts. As we have previously discussed, it is also a way to assess their abilities. Measuring the number of steps required by individual students to complete a task, and the number of repetitions required to complete a step can be used as a measure of students'

competence in carrying out any task. However, this is difficult to achieve for all the students in a large class, and requires one-on-one interaction. Breaking down the task into component parts, and then presenting the parts of the task from the simplest to most complex may be a better approach for a class of students. The differences among students in their ability to profit from assistance in terms of what they achieve as the task becomes more complex can provide insights into the students' abilities.

Two approaches that break up the reading and writing process are Reader Generated Questions (RGQ) and the Rhetorical Approach. These have been used effectively with second-language learners for content-area reading and writing (Brisk & Harrington, 2000; MacDonald & Brisk, 2004). The steps of RGQ walk the learner through the reading process by introducing the topic of the reading and exploring learners' background knowledge. Following this the students propose questions that they think will be answered by the reading and guess answers. Then they read the text, check their guesses, and do a final activity that helps synthesize the content of the reading. The Rhetorical Approach also starts with writers brainstorming on the topic. Then they define the purpose and audience, define subtopics, choose genre and organization, and decide on specific information to be included. Students then follow the steps of the writing process by writing a draft, revising, editing, and publishing. These approaches break reading and writing into essential components and develop good habits. At each step L2 learners practice the language and learn vocabulary and structures as needed. As stated above, native speakers also benefit from breaking up the task of reading and writing into essential components.

After guiding students' reading and writing in the various ways indicated above, the notion is that students can then guide themselves. Asking students "to think aloud," and underline and then look up words that they are having difficulty with as they read, may help to bring to awareness the problem areas in their reading. Saying sentences aloud may also help students to understand the structures in sentences used in the text. Asking students to prepare an outline before they write, and then to read aloud as they edit what they have written are ways in which they can guide themselves. These behaviors are transitions from teacher guidance to self-guidance.

Second-language learners will most certainly require help with vocabulary and figurative language. Vocabulary should be introduced in all content areas as the topic of study is introduced. In Chapter 6 we suggested strategies for teaching vocabulary. Figurative language needs to

be taught as well. Teachers need to explain idioms, metaphors, and similes in the context in which they are encountered and have students use and identify them. When comparing the literal and the actual meaning of an idiom, the nonsense of the literal meaning can be understood. Cartoons depicting the literal meaning are often used to teach idioms. For example, a cartoon with cats and dogs falling from the sky for "it's raining cats and dogs." The origin of metaphors can help explain it. For example, "the ship plowed the sea" comes from the similarity of how the front of a ship cuts through the water as a plough cuts through the dirt. Once the figurative language has been defined, students should be given oral and written opportunities to use idioms or create metaphors and similes. Students may draw pictures to illustrate idioms. The drawings can be collected and compiled into a class book of idioms. Students can add metaphors and similes to a piece they have written. Students should be encouraged to identify figurative language in what they read. The teacher can introduce an idiomatic expression a day and teach its literal meaning. A list of expressions can be posted in the room. Students can also be encouraged to share idioms from their native language.

Familiarity with the domain of the text has long been known to play an important role in comprehension of that text. It is not just familiarity with the vocabulary, but also familiarity with the milieu of the text: that is when, where, and how things are taking place in the text. Children will vary in terms of how wide their experiences of the world are. Both culture and socio-economic status play an important role in the width and depth of children's personal experiences. In this light, there has been increased interest in how children's social cognition plays an important role in reading. Reading requires not only an understanding of the language and the physical context of the text, but also the social milieu of the text. In some of the reading assignments given for the class there may be little familiarity on the part of some or all of the students of the social milieu represented in the text. Students of other cultures may see reading and writing differently. For example, Vietnamese parents prefer that their children focus on reading academic subjects in school. They are concerned that fiction includes values that may contradict their traditional values. Vietnamese students also have difficulty expressing their thoughts through writing. Writing is viewed as being prestigious and only wise persons should be writing (Dien, 1998).

When students are not familiar with the physical or social context of the text the comprehension of that text will be limited. Therefore, some

time needs to be spent in that preparation. There are several ways in which this preparation can take place. As stated, one way might be by having the teacher read a portion of the text and then engage in a think-aloud that models what the reader should do to comprehend the text. The teacher can ask him or herself questions about the text: What does the author mean in this paragraph?, Does this make sense to me?, What would I do in this situation?, and so on. Isolating potential vocabulary problems and discussing these in class may circumvent some problems in interpretation. Equally important would be a classroom discussion of the setting and the characters in the text. This activity may not only enhance comprehension of a text, but also enhance oral discourse abilities. Answering written questions about the text can bring to conscious awareness what the students know about the text. Writing summaries and then reading them aloud can do the same, and, also, allow the teacher to detect problems that the students may be having in comprehending the text.

In a paper entitled "Integration of language and discourse components with reading comprehension..." the authors argue that reading comprehension depends on many of the social cognitive processes that underlie oral discourse (Donahue & Foster, in press). That is, as indicated in the section on development of pragmatic competence, children can be made aware of the rules that should be observed in oral conversation. In like fashion, children can be made aware of the rules of interaction in the text by discussing with them the particular type of interaction that is taking place in a particular text. For example, if they are assigned a novel to read, the setting of which is 19<sup>th</sup>-century England, there should be discussion of communication interaction at the time and setting of the novel. In this way students will be able more easily to interact with the text themselves. Some examples of differences in the discourse rules of scientific explanation, narration of historical facts, essays, and poetry could be presented to the class.

Bilingual students have often been found to be at a disadvantage when compared to monolinguals with respect to the background knowledge needed to comprehend text. Socio-economic status and cultural knowledge influence general background knowledge. English-speaking middle-class students tend to have richer educational experiences and their cultural knowledge more closely matches the culture represented in the school curriculum. Field experiences and intensive reading can help bilingual students and L2 acquirers fill this gap. Also using these students' own cultural knowledge as a bridge to the new culture helps students make connections. For example, 19<sup>th</sup>-century

plantations in southern United States can be compared with *latifundios* in Latin America. These exploited the Indians in ways similar to those used by plantation owners of slaves.

While we have been discussing the teaching of how to comprehend written material, we have also been discussing how to teach writing. For example, we have suggested that the students prepare an outline of what he or she has been asked to or wish to write about. This outline is similar to the outline of the reading that takes place with different types of texts. An important additional part of achieving success in writing is to edit one's writing. One way of editing is to read to oneself what has been written either aloud or sub-vocally. Another way to edit is to have fellow students edit each other's written products. In this way students will be able to assess whether or not they have been successful in communicating with others. Editing should be emphasized as a very important part of the process of writing.

Paramount in the development of reading and writing is to have students do functional activities that encourage reading and writing for a real purpose. Creating a workshop atmosphere where students consult with each other and with the teacher is most helpful. For example, a seventh-grade music teacher tried a functional literacy activity in her class of 40 students, half of whom were Chinese with different abilities in English. Together they decided to write books on modern American composers. Groups were formed with native speakers of English and bilingual and monolingual Chinese students. Each group chose a composer, did research, and even wrote to the composers. Groups presented their initial research orally, and then wrote books using the process approach. The students engaged the computer teacher to help them produce and illustrate the books using the computer. They invited a local Chinese composer to visit the class. He was surprised at the number of musical technical terms the children were using. These students read and wrote with great enthusiasm not only during class but also after school. Even the most timid of the Chinese students participated in the oral presentations. The authentic nature of the activity motivated the students.

## **8.5 Language development and reading and writing of children with problems**

Much of the research on oral language development of children who have been diagnosed as being SLI or dyslexic indicates that these

children find the advances in language knowledge made during the middle childhood years particularly difficult. Among the several reasons that have been suggested to account for this particular difficulty are notions of constraints on the memory load that these children can carry to process language. Memory load is increased by the increasing complexity of the phonological, morphological, syntactic, and lexical knowledge that needs to be acquired.

The language problems of many SLI, dyslexic and learning-disabled children persist over the school years. What has been found is that there is variation in language competence among the children in these labeled groups during the middle childhood years as well as in those years before this period. Although the way to treat those with more severe difficulties usually falls into the domain of special educators, reading specialists, and speech and language pathologists, it is important that classroom teachers understand the nature of the language problems that these children have. Many of them spend at least part if not all of the school day in "regular" classrooms. To be helpful to these children the teacher should be aware of what has been found out about these children's difficulties in terms of their specific strengths and weaknesses in language processing. Teachers are aware that the language difficulties that these children have can play a deleterious role not only in these children's language behavior, but also in their performance in other areas, in science, math and social studies.

For the most part, the oral language and the written language activities that we have suggested in the sections above can be used with all children. Breaking the children up into smaller groups within the classroom so that language tasks can be presented at different levels of difficulty will allow modification of the activities to accommodate the needs of different groups. A teacher's aid can be of great importance in being able to do this. As we have stated before, all the tasks that we have suggested for monolingual and bilingual normally developing children can be used with these children who have language learning problems. However, three parameters of these tasks may need to be modified for these children. Modeling appropriate preparation for reading and writing needs to be repeated frequently. As new assignments are given the modeling of preparation should be repeated. The structure of the reading material assigned, its lexicon, semantax, and discourse structure, should be carefully examined so that required definitions and explanations are provided. Ways in which the material can be simplified should be considered. Sufficient amounts of time need to be

allocated to the tasks. The amount of time needed may vary across the group and, in fact, across the class. This can only be determined by observation of members of the group and class.

The further suggestion we have to make to the Language Arts teacher is to call upon the expertise of the educational specialists for ways in which language interactions should take place in the class. This can be done by having conversations with these specialists about particular children and about how they deal with the problems of these children in very small groups or one-on-one. The parameters of interaction that need to be thought about with these children are the complexity of the task and the amount of guidance the children will need to carry it out. An additional aid that these specialists can provide to the teacher is to come to the classroom and to model how they would present oral language, reading, and writing tasks to children at these ages. All the children in the class would probably benefit from such a visit.

In the case of bilingual learners, in addition to deciding on the proper intervention, educators and families need to decide on the choice of language. Genesee et al. (2004) suggest that when children live in a context where both languages are used, they are better off receiving intervention in both languages. If the environment does not give much support to the home language it would, of course, be more difficult to intervene in both.

Earlier we listed tests of language development during the pre-school and early childhood years that have been normalized with various populations of native speakers. Of course, there are tests of oral language development as well as tests of reading that are used with older children. In a paper examining the occurrence of language problems in the early years and subsequent reading impairments a number of these tests are referenced (Catts, Fey, Tomblin, & Zhang, 2002). Speech pathologists and reading specialists in the school system would be familiar with these tests.



# 9

## Language Development in Adolescence – The High School Years (Ages 13–18)

### 9.1 Introduction

Language development of students during the high school years has not received a great deal of attention from researchers. More has been learned about developments in this period through studies carried out by educators. Further, these studies are largely concerned with analyses of written language rather than spoken language. There are some exceptions and these are studies of pragmatic knowledge during this age period. The results of the written language analyses indicate that, in general, with age there is increasing use of sentence-combining structures. Sentences become lengthier and more complex. It is not surprising that there is no large body of research on structural language development in this period because, presumably, there are no longer remarkable changes in what students know.

In these years students are usually aged 12 or 13 years to 17 or 18 years. Much of the language-acquisition task has been accomplished by these ages. Some aspects of development have been completed long before this. The question then arises as to why language development during this age period should be discussed. One reason is that developments do occur, and this is especially the case with children who need to do some catching up in this period. They need to do this catch-up so that they will be better prepared for the next educational step, college or technical school.

These children have been developing normally over all the periods of development, but because of variations in their experience have yet to acquire certain aspects of the language. Differences in children in their

state of knowledge of the language might be due to individual differences in their abilities. It may be due to differences in their experiences with language, the kind of input they have had. It also may be due to differences in their education. The children, who can be very different from their age peers in their knowledge of the English language, are those who are in the process of acquiring English as a second language. One reason for that difference might be variation in the number of years during which they have been learning the language. However, this is only one of several reasons. There may be others. Both among native acquirers of English and second-language acquirers there may be differences in their reading and writing abilities. Immigrant or refugee children may be limited in their reading, writing, and academic abilities due to interrupted schooling. (Wars or economic conditions barred these children from attending school.)

We will discuss some developments of oral language knowledge that are still being acquired during this age period by a number of students due to these variations in development. As usual, this will include aspects of structural knowledge and of pragmatics. Some changes in lexical knowledge, which continue throughout one's lifetime, are quite dramatic during this period. There are some semantactic developments that are also dramatic as are some morpho-phonological developments. Reading and writing become the important bases for many of these further developments.

Another population that may exhibit wide variation in language development during these ages is students with language problems. Reading and writing may pose particular difficulties for these children. By the time they get to high school some of these children may be 4 or more years behind in their reading ability, and their writing abilities may be severely limited. A great deal of catch-up will be needed to bring these children to the reading and writing level that is needed for a successful college experience. It is also the case that some adolescents continue to have oral language difficulties into their high-school years and beyond. Their oral language difficulties affect their reading and writing abilities. Although we have not talked about this previously to any great extent, it is important to note that the language problems we have discussed in the later age periods beyond infancy – that is, SLI and dyslexia and a variety of learning disabilities – affect not only native speakers of English, but also bilingual children and second-language acquirers.

In this chapter we will discuss oral and written language development of normally developing bilingual and monolingual adolescents.

We will also discuss the development of reading and writing of academic language among these language acquirers. The effects on adolescents of second-language acquisition will be explored. Finally we will discuss the reading and writing problems of children with language problems.

## 9.2 Aspects of structural language development

As indicated above, the most dramatic changes in structural knowledge that seem to occur in this age period are changes in lexical development, an aspect of semantactic development, and an aspect of morpho-phonological development. In lexical acquisition, knowledge and use of additional words continues. These additional words may be those they learn in their various subject areas, as well as those that they acquire by experience with many sources; that is, the reading they do, the films and television broadcasts they view, and the music they listen to. The words they acquire may grow in terms of their length (an increasing number of multisyllabic words are acquired) and in abstractness. Every generation is exposed to a set of terms that seems to be unique to the times. A very clear example is a word such as *astronaut* that is a product of an era in which space exploration by man began to be possible. In lexical knowledge there may be similarities and also very wide differences among teenaged students in the number of words they know, the particular words that are part of their lexicons, the abstractness of the words they know, and the frequency with which particular words are used. Word knowledge, of course, plays a significant role in reading and writing.

There are two areas of further development in semantax. One of those areas is what has been termed figurative language, and knowledge of these kinds of language may blossom during this period. Metaphors, similes, and idioms comprise what has been called figurative language. Acquisition of the ability to comprehend and produce these figures of speech becomes much more evident in this period. There are abilities earlier on in development which appear to be precursors to the use of figurative language. Skills such as metaphor interpretation, formal definitions, and academic language sometimes transfer from L1 to L2, while other specific features do not. Students must then develop them in the second language. As we saw in Chapter 7, figurative language is very difficult for L2 learners.

During much earlier age periods there is evidence that children can make what is called cross-modal associations. That is, they can make

associations between color and sound, and between touch and color. For example, they can make an association between the color red and a loud sound, and between the color pink and something soft when they are asked to make choices among possible matches between colors, objects, and sounds. They do not make these matches spontaneously. As discussed, during an earlier period they can associate the characteristics of perceptual experiences with qualities of people. For example, they understand that people can be hard and soft, sweet and sour. They make these associations spontaneously in their speech and sometimes in their writing. However, during an earlier period of development they cannot explain why such associations can be made. During the later years of middle childhood and on into adolescence they can give such explanations. They have an awareness of the meanings of such terms, and of how they can be used to describe people.

During an earlier period of development children sometimes produce metaphors and similes as well as idioms, but they are usually limited to the use of well-practiced and often-heard examples. Idioms such as “break the ice” and “made a bee line” may be used early on but children may not understand the relation in these expressions to the behavior described (that is, socializing and heading straight toward something) and physical experiences (that is, cutting through obstacles such as ice and the flight of a troop of bees).

Comprehension of similes and metaphors involves knowledge of word meanings, understanding of physical experiences, and familiarity with world and literary experiences. In addition, researchers have suggested that what Piaget termed the ability to carry out “formal operations” is necessary for this comprehension and use. The ability to engage in formal operations, according to Piaget, develops during adolescence and beyond, and is very dependent on the nature of the education individuals have received. Some of the examples of metaphor and similes presented below indicate why they may not be comprehended, or even though comprehended, still not explainable, until this later period of development.

1. His life was a ship constantly battling a storm.
2. My love is as deep as a puddle.
3. His head is like the Grand Canyon.
4. Sometimes you ought to feel like a tiger, and other times like a lamb.

The structure of the language used in metaphors and similes may not be very complex (as in sentence 2) but may create problems because of

expectations about meaning. They may also be ambiguous as in sentence 3. One reading might indicate that his head is very empty, and another reading that he is a very grand thinker. The experience of reading in different genres improves students' abilities to comprehend these kinds of figurative language. Asking students to write in different genres may improve their ability to explain figurative language because writing requires conscious awareness of the uses of language. Such language is frequently used in advertisements in written and visual presentations, and in many of the other sources of input to which these students are exposed. Younger children also encountered these many inputs, but it is not clear that they fully understand what figurative language means or how to use this language appropriately.

In adolescence and on into adulthood there are differences among the users of the language in their knowledge of certain semantactic structures as well as differences among them in the frequency with which they use complex structures. This is another area of oral language development that on one hand may play an important role in reading development, or on the other may be the result of reading a great deal. Some time ago comprehension of different complement structures by children was studied. There were some structures that were difficult for 10-year-old children and even adults to comprehend.

Some examples of these sentences are listed below.

1. John promised Bill to leave.
2. John told Bill to leave.
3. The student asked the teacher what to do.
4. The teacher told the student what to do.
5. The student asked the teacher to leave the room.
6. When she was sick Mary usually was unhappy.
7. She knew Mary was going to win the contest.

Various reasons have been presented to account for older students and adults having difficulty in their interpretation of these sentences. One explanation is that the verbs such as *promise*, *believe*, *think*, so called stative verbs take syntactic structures that violate expectations about the placement of the subject before the verb. The fact that these structures, like the passive, are rarely used in everyday discourse might also be an explanation. But in one study examining the processing of these structures by adults it was found that measured intelligence early on and education later in development affected understanding of these sentence types (Kramer, Koff, & Luria, 1972).

As indicated previously, in addition to variation among high-school students in comprehension of the above structures there are also differences among them in production and comprehension of various types of coordinated and embedded sentences. Some have difficulty, for example, in understanding subject-displaced sentences such as “The boy the girl hit ran into the house” and coordinated sentences such as “Unless he does his homework he won’t be allowed to watch television.” Difficulties with each of these sentence types arise from different sources of complexity. Processing sentences with displaced subjects requires keeping in mind larger chunks of the sentence than is usual. Understanding *unless* sentences requires understanding disjunctive propositions that follow from the use of *unless*.

The other aspect of language that appears to take some time to acquire is in the area of morpho-phonology. A number of studies have indicated that most children acquire knowledge of how to derive new meanings of words by adding certain endings to words. That is, they know how to change the tense of verbs, to pluralize nouns, and indicate possession with little difficulty during the elementary school years. Research that has examined children’s ability to apply these endings to nonsense stems (Berko-Gleason, 1958) indicated that children are aware to some extent of how these endings work. However, research has also indicated that during these years children have little awareness of other types of morpho-syntactic markers that are termed complex in that they are generated by changes that involve more than simple additions. Further, some of these morpho-syntactic changes also bring about changes in the phonological composition of words and indicate a meaning relation among words that share a stem. It is not until the high school years that awareness of the meaning of such relations is acquired as indicated by students’ ability to apply these various changes to different nonsense stems (Derwing & Baker, 1979). The following is a list of such derivations:

1. Derive agent by adding *er* to a noun or a verb stem (as in *cooker* and *shover*).
2. Derive an adjective by adding *y* to a noun (as in *funny* and *fatty*).
3. Derive an adverb by adding *ly* to an adjective (as in *happily*, and *quickly*).

There are additional derivations that children seem to be unaware of. With these derivations there is variation among children in their knowledge of what these changes in the phonology of words means. That is, some have an awareness of these relations earlier than do other

children. These are relations among words that are derived not only by adding to stems but also by varying vowel length, final consonant and stress (Myerson, 1976). The following is a list of these words in the order in which awareness of the relation was acquired in the cited study by children who were aged 8 to 17 years.

1. *relate* and *relation*.
2. *sane* and *sanity*.
3. *meter* and *metrical*.
4. *moral* and *morality*.
5. *history* and *historical*.

In this study there was a significant relation between children's conscious knowledge of these forms and their reading ability at all the age periods examined. The cause-and-effect relation between reading and these abilities cannot be parceled out. It may be that good readers read more and, therefore, acquire this knowledge earlier. It may be that having this knowledge helps children in the development of new vocabulary and in their word-attack skills. In any case helping students to develop these skills may have a positive effect on their reading. Second-language learners may attempt to pronounce the unstressed vowel with the same quality as when stressed (for example, the /o/ in history is often pronounced the same as the /o/ in historical by Spanish-speakers).

One other aspect of morpho-phonology that was examined in the past with both children and adults was the role of stress within a phrase to derive the lexical reference of that phrase. Meanings are changed by shifts of stress on words within a phrase that indicate whether the phrase is a nominal compound or adjective plus noun. The following is a list comparing nominal compounds and adjectives plus nouns. Stress is indicated by putting the stressed syllable into bold. The list includes two-part, three-part, and even four-part phrases. The ability to define the meaning of these phrases by paraphrase was examined.

1. **hot** dog and hot **dog**
2. **light** house keeper and light **house** keeper
3. **black** bird house and black **bird** house
4. black bird **tree** house

The studies that examined this ability included both children and adults. In the child study (Atkinson-King, 1973) it was found that some few children at age 6 could comprehend all the items in a list of

phrases composed of three terms (items 1 through 3) but some 13-year-old children continued to have some difficulties. In a study of adults (Geer, Gleitman & Gleitman, 1972) it was found that all adults could process items 1 through 3 but some had difficulties with type 4 items. Those who had no difficulties were college-educated adults, and those who had difficulties had little education beyond high school. These data indicate that there can be individual differences that affect the acquisition of structural knowledge of the language but, also, that education can overcome some of these differences.

For L2 learners of non-tonal languages these terms are difficult because in their own languages the differences in meaning are indicated more overtly by structural differences rather than stress differences. For example, in French the position of the adjective changes depending on which noun it is modifying. Thus, “black **bird** house” in French is “*la cage noir d’oiseau*,” while “**black** bird house” is “*la cage d’oiseau noir*.” Speakers of tonal languages are sensitive to stress and may have less difficulty with these structures. For speakers of a tone language, stressed sounds are like tones so they are always looking for difference in meaning. For example, they rightly consider *White House* and *the white house* as having two different meanings.

### 9.3 Further pragmatic development

There is some individual variation among students in the structural development of their language over the high school years. Despite universals in language development over the early school years there are also, of course, individual differences in earlier periods. These individual differences become more marked over the later school years as individual personality, and experiential factors, including schooling, begin to mark the students’ state of linguistic knowledge. There is a great deal of individual variation in pragmatic development during these later school years. In this area the students’ cultural background together with their linguistic knowledge affects how they communicate with peers and others in their environment.

Conversational rules that were acquired earlier are modified to reflect greater sensitivity to situational variables. Different registers have been acquired to make communication more effective in different situations. In addition, developmental trends that began earlier continue. Students are better able to take the perspective of the other, take a turn appropriately and respond contingently in conversations. However, the details of these behaviors are a function of their society’s rules, or their



ability to acquire the rules of the society in which they find themselves. The explanation provided by cognitive psychologists is that students of this age have “decentered,” a symptom of greater cognitive flexibility. Another explanation, a social one, is that this is the age period during which peer pressure is most evident.

Second-language learners, in addition, need to develop knowledge of the language. For example, the use of imperatives for requests (Shut the door) is a simpler structure but only appropriate for use with intimates. A wider audience requires the conditional (Would you close the door?), a more difficult language structure. These breakdowns in communication can be damaging for second-language learners because native speakers of English, unaware of the linguistic problems, may attribute the errors to personality. Second-language learners may be considered rude or uncooperative.

Besides being able to engage more effectively in conversation, students during this age period tell better stories and provide better explanations. These developmental changes are a function of increasing mastery of several aspects of the language that are required in these discourse situations. One development that makes story telling clearer is mastery of the use of anaphora. Students' stories are no longer filled with unclear references to *it*, *he*, *she*, *her* and *him*. They have learned the rule of first and second mention as in the following example. *A man went into a store. He wanted to buy a loaf of bread in the store. The man asked the clerk for a loaf of bread.* The articles and pronouns are put in bold so that shifts that are required are made clear.

Another requirement, that stories should have a beginning, a sequence and a conclusion (that is, a story grammar) has probably been learned before the high school years. However, there may be individual variation about when the rules are learned and which culture's rules are acquired.

Explanations require the use of a variety of conjunctive and disjunctive terms such as *because*, *although*, *unless*, *and not*, *but not*, *therefore*, *if*, *when while*, *during*, among others. There are different ages at which these terms are understood and used. The meaning of the propositions that take temporal, disjunctive, and conditional terms are understood after the meaning of propositions that take sequential and causal terms, and are also used in explanations at a later time. The use of different types of auxiliary verbs also mark differences in types of propositions used. In comparison to deontic expressions of obligation (*should*, *must*), permission (*can*, *is able to*), and prohibition (*can't*, *shouldn't*), epistemic expressions (possibility, ability, and probability) begin to be used

significantly more frequently in the high school years (Berman & Nir-Sagiv, 2004). Again there are individual differences in the time at which these terms are understood and used.

Below is a list of those pragmatic developments that occur during the high school years. These developments may or may not be evident among students during these years.

*In conversation*

1. Increasing sensitivity to situational variables.
2. Use of variable registers.
3. Better able to take perspective of other.

*In connected discourse*

1. Better organized narrative.
2. Clearer use of anaphora.
3. Increasing distinctions in linguistic forms for different genres.

## **9.4 Academic language development**

In the study referred to above (Berman & Nir-Sagiv, 2004) the use by children and adults of linguistic distinctions to differentiate between two genres, personal-experience narratives and expository discussions, was examined in their written language. This is one of the few studies that have used as subjects a wide range of school-aged children as well as adults. The children in the study ranged in age from 9 to 17 years. The adults were graduate students at a university. The overall finding in the study was that the lexical and morpho-syntactic measures used in the study showed distinctions between the two genres even at the earliest ages. However, with increasing age there was evidence of an increasing range of abilities to use appropriately contextualized and consistent register distinctions. In particular, there was an increasing ability “to inter-weave evaluative commentary and generalized statements in narrative texts and specific enumerations in expository text” (p. 378).

This type of writing has been characterized by other researchers as “academic writing.” There was a major cut-off point across different linguistic subsystems used in the high school age group in the study cited above. The suggestion is made that this is not due to a developmental progression in use of various linguistic forms but, rather, in learning about the increasing number of functions that language may serve (see Table 9. 1). For example, to function in science classes students need to

Table 9.1 Academic language functions

<i>Academic language function</i>	<i>Student uses language to:</i>	<i>Examples</i>
1. Seek information	Observe and explore the environment; acquire information; inquire	Use who, what, where, when and how information
2. Inform/describe	Identify, report, or describe information	Recount information presented, retell a story or personal experience
3. Compare	Describe similarities and differences in objects or ideas	Make/explain a graphic organizer showing similarities and contrasts
4. Order	Sequence objects, ideas or events	Describe/make a timeline, continue a narrative sequence
5. Classify	Group objects or ideas according to their characteristics	Describe organizing principles, where A is an example and B is not
6. Predict	Predict what will happen in a narrative, in an experiment	Before carrying out a science experiment, students predict the results
7. Analyze	Separate whole into parts; identify relationships and patterns	Describe parts, features or main information presented by teacher or text.
8. Infer	Make inferences; predict implications; hypothesize	Describe reasoning process or generate hypothesis to support outcomes
9. Justify and persuade	Give reasons for an action, decision, point of view; convince others	Tell why A is important and give evidence to support a position
10. Solve problems	Define and represent a problem; determine solution	Describe problem-solving procedure with real life problems
11. Synthesize	Combine or integrate ideas to form a new whole	Summarize information cohesively with new information into prior knowledge
12. Generalize	Apply ideas beyond immediate experience	After reading about pollution in their neighborhood, students express effects of pollution on city dwellers
13. Sequencing	State events as they happen	Use sequencing words (before, after, until, etc.) to indicate order of events
14. Evaluate	Assess and verify the worth of an object, idea or decision	Identify criteria, explain priorities and reasons for judgment, confirm truth

Adapted from Chamot & O'Malley (1994) with authors' additions

be able to describe observations, summarize results, inform others about investigations, and make explanations (Yore, Hand, Goldman, Hildebrand et al., 2004).

This development is presumably due to cognitive, social, and moral developments. This is a reasonable hypothesis. However, along with these developments, one key to learning about the functions of discourse is cued by learning about the linguistic forms that are used to carry out these functions. This learning may come about through specific experiences in oral and written discourse.

Academic language is very different from the conversational discourse used by adolescents. Reading, writing, and specific school experiences support this development. Second-language learners have great difficulty with this type of language. For them teaching content and teaching language must occur simultaneously if they are to develop the language and absorb the content. There are many sources of language difficulty in academic language, which have been summarized in Table 9.2 based on the research done in various disciplines. One of the greatest sources of difficulty in the content areas is the large amount of specialized vocabulary. For example, in high school biology students are expected to learn close to 10,000 words. This vocabulary represents new concepts that the students need to learn as well. Translating a term to facilitate comprehension only works if the student already knows the concept in their first language. Vocabulary in the content area may be similar to the one used in ordinary conversation but has a different meaning in the former context. For example, *operation* has a different meaning in math (add, multiply, etc.) than in non-math language (to operate a machine or operate on a patient).

A major source of difficulty for some students in social studies and English literature is the assumption of prior historical, social, and geographical knowledge. This knowledge is culturally based on the social context where real or fictional events take place. The relationship between participants and events is not always clear or stated (*the invasion caused great damage to the country*). Subordinate clauses rather than conjunctions are used to develop argumentation, making the text more difficult (Schleppegrell, Achugar & Oteiza, 2004). The vocabulary is usually abstract and hard to understand and explain. Grammatical structures are unusual. Schleppegrell et al. (2004) identify a number of features in the language of history books that complicate reading comprehension for L2 readers specifically, but may cause problems for other students as well. For example, participants are rarely expressed as individuals or people but rather represent categories or collectives

Table 9. 2 Language difficulties in the content areas

	<i>Text structure</i>	<i>Vocabulary</i>	<i>Semantics</i>
All content areas		Extensive specialized vocabulary Vocabulary with a different meaning in content area than in ordinary language	Passive voice Use of noun phrases Representation of participants Use of verbs instead of conjunctions Ambiguous conjunctions Use of past and past perfect tenses Importance of prepositions Comparatives Passive voice Reversals Logical connectors
Science	Sequence		
Social Studies/English	Relation between participants and events Organization of argumentation	Abstract, culturally related Language denoting cause and effect, comparison, contrasts Multiple terms for same meaning	
Mathematics	Problem embedded in a story		

(*Americans, Congress, authorities*) or even whole concepts (*taking the life of a person is considered a crime*). Instead of the more common conjunctions that signal cause-effect relations such as *because* (*the Spanish settlers lost land because of the treaties*) verbs, which carry the meaning of cause are used (*the treaties resulted in the loss of land for Spanish settlers*).

The language of mathematical word problems is a major obstacle for L2 learners who could be quite capable of solving the problem otherwise (Dale & Cuevas, 1992; Chamot & O'Malley, 1994). The mathematical problem is usually embedded in a story which contains concepts that may be unfamiliar to students. For example, a recent arrival from Guatemala was confused about a problem taking place in a Laundromat and the use of quarters. He was unfamiliar with *Laundromats* and *quarters*. Often these "stories" include numbers that are irrelevant to the problem, increasing the confusion. Words used ordinarily with a certain meaning are frequently used with a specialized meaning (*rational, irrational, column, table, operation*). A concept can be expressed with many different words (*sum, add, plus, combine, increased by*). Prepositions, which are difficult for L2 learners, carry key meaning (*divide into, divide by*). Other grammatical structures that can complicate comprehension are comparatives (*Maria earns six times as much as Peter*), passive voice (*each student in Mr. Lincoln's class was given a card with an equation written on it*), logical connectors (*if...then, such that, consequently, if and only if*).

## 9.5 Development of academic writing

Academic writing can develop over the school years, as children become socialized to produce it in school. However, different cultures have different rules based on their own philosophical ideas of the purpose of academic writing, and the responsibility bestowed upon writer and reader. Children are especially socialized to this form of writing during high school and college. Children who come from other cultures and have experienced higher levels of education in their culture have learned their own culture's approach to academic writing. This approach may be very different from the one expected in the U.S., England, Australia, and New Zealand for example. They will have difficulty in acquiring this new way of writing.

There is much debate in the area of teaching academic writing and contrastive rhetoric. One question is whether the writer needs to be changed or the practice should be changed. Should L2 learners be expected to acquire this new style of writing strictly or should they be allowed to develop their own style with influences from their own

culture? Another question relates to the feasibility of becoming a fully bilingual/bicultural writer. Some believe that in learning the second language's academic writing, the first language style is lost (Hinkel, 2002). Yet, others question whether there are real differences at all in academic writing. These differences may be more prevalent in traditional literature than in writing that is shared globally such as academic and business writing. Over time cultures influence each other, making the text structure more similar (Connor, 2002). However, a number of practitioners working with foreign students have noticed influences of the native culture and language in their academic text. In this section we will outline the characteristics of Anglo-American academic writing and some of the contrasts with other cultures that may explain features of L2 academic writing.

Some of the characteristics of the Anglo-American academic text – shared by other English-speaking cultures – include:

- Responsibility for clarity and explicitness falls on the writer.
- Text is deductive.
- The text has an overt persuasive nature.
- The paragraph divides ideas.

It is the responsibility of the writer to make the text clear to readers. Ideas must be explicitly developed. Usually the main idea is stated initially and the rest of the text attempts to convince the reader of the validity of this idea. Logical proof and justification of the writer's position aims at persuading the reader. Ideas are presented in a logical way, showing their connection and purpose of the text. Ideas are clearly developed in separate paragraphs. A number of rhetorical connectors (see Table 9.3) help in text cohesion.

The characteristics of Chinese, Japanese, and Korean text are dramatically opposed to those outlined above. Asian text gives the reader the responsibility of interpreting text, thus the writer does not have to be explicit or clear. Vagueness and indirectness is considered desirable and respectful of the reader's ability to interpret. Texts tend to be inductive with arguments preceding the presentation of the thesis. Persuasion is not overt but subtle. Ideas are strung together sequentially and not clearly separated in paragraphs (Hinkel, 2002).

Arabic writing is characterized by parallel constructions, high frequency of coordinating conjunctions, and extensive use of adjectives and relative clauses. Ideas are expressed and then repeated. For example, a Lebanese student will state an idea, followed by a sentence that starts with "in other words" where the original idea is paraphrased.

Table 9.3 Rhetorical features

<i>Feature</i>	<i>Selected examples</i>
Phrase-level conjunctions	Also, and, neither, yet
Sentence-level conjunctions	First(ly), Second(ly), etc., for one thing, to conclude, in addition, all in all
Logical/semantic conjunctions and prepositions	As well, because of, despite, for that reason
Exemplification	As, for example, especially, in particular, mainly
Hedges	
(a) epistemic adjectives and adverbs	According to, actually, clearly, somehow, somewhat, theoretically
(b) lexical	About, in a way, kind of, like
(c) possibility	By chance, hopefully, perhaps, possibly
(d) quality	As far as I/we know, as the saying goes
(e) hedged performative verbs	Would like to +performative verb
Rhetorical questions and tags	What is wrong with teaching persuasive writing?
Demonstratives	This, that, those, these
Emphatics	A lot, completely, definitely, exactly, indeed
Presuppositions	Obviously, of course
Fixed strings	
(a) phrase verbs	Kicked out, passed out, take on
(b) idiomatic expressions	Kill two birds with one stone

Source: Hinkel (2002).

Amplification and exaggeration are considered acceptable means of persuasion (Hinkel, 2002).

Romance languages and Russian include additional material that deviates from a linear logical argumentation. Finnish writers tend to put the main idea later in the text. Contrast between Polish and English writing shows that the latter uses “more direct, assertive, and positive positions” (Connor, 2002).

A feature of the text of L2 writers is the overuse of rhetorical devices that help with the cohesion of the text. Hinkel (2002) analyzed the use of rhetorical connectors by native and non-native speakers of English in great detail. We have summarized them in Table 9.3. This overuse can be explained in part by the fact that these are important devices in particular languages.

Coordination is the most common form of textual cohesion in most languages. Naturally L2 learners transfer this characteristic when writing



in English. Sometimes they are used where subordination would be more appropriate. L2 writers overuse exemplification in their attempt to make text more clear. Hedges are overused by Asian L2 learners because they soften claims. “Rhetorical questions are not considered to be appropriate in written academic texts in English because they can be excessively personal and subjective” (Hinkel, 2002, p. 153). In Chinese and Japanese writing these questions play an important role and appear with great frequency in their L2 writing. Demonstratives are discouraged in Anglo-American academic writing because they are too vague. In Arabic writing, demonstratives are the main form of text cohesion. Therefore, these L2 learners use them with great frequency making their text quite ambiguous. Emphatics are overused because they represent a simpler form of persuasion than developing an argument. Presupposition markers are discouraged in academic text. They are more typical of oral language discourse. Neither native nor non-native speakers use them much. However, L2 writers tend to use them more than native speakers. Phrasal verbs and idiomatic expressions are heavily used in English text. They are particularly difficult for L2 learners. Appropriate use demonstrates a high level of vocabulary development.

Fulfilling writing assignments also requires being able to write in different genres. Essay writing, which is often introduced in the high school years, has a required outline of its own. Exposure to essayists’ writing is a good way to introduce the subject in a writing class. The structure of various types of writing assignments such as narratives, essays, arguments, summaries, critiques, explanations, and so on, all have a structure that students can become familiar with by reading texts written in these different styles. There are three writing behaviors that are necessary when writing any type of text. These behaviors need to be practiced so they are kept in mind when writing. These are:

1. Outlining the material that will be written.
2. Taking the perspective of the reader as the writing is produced.
3. Editing as one goes along and certainly editing the finished product.

## **9.6 Reading development**

If all is going well, by the time the high school years are reached, students are in stage 4 of the development of reading abilities as described by Chall (1983; 1996). This is the stage at which students are able to read, and recall from their reading, a broad range of materials. In addition to

understanding the linguistic structures used in the text, there is the necessity of taking the perspective of the writer and of understanding some cultural variables that are different from their own. For example, assignments of different types of texts that have been written in different historical periods, and, perhaps, translated from other languages, may be written in language and style very different from that of the students. This, of course, may be a very marked problem for L2 acquirers depending on their level of knowledge of written English and previous educational experiences. We have touched on this point previously when discussing the shift that occurs in earlier grades in the types of texts that make up required reading lists (Donahue & Foster, in press). Analysis of these differences should precede the assignment of these texts.

The areas of difficulty discussed in connection with academic language are closely related to reading development. Many of the characteristics of the academic language cause great difficulty in comprehension of academic texts. At this age, for students in the early stages of acquisition of English as a second language, ability to read a text in the second language largely depends on knowledge of that language and educational background. For educated and literate students, reading development at this stage is mostly language acquisition and cultural development. They need to acquire vocabulary and structures in English. They need to understand the rhetorical organization of texts. Educated students bring their wealth of background knowledge to the task of comprehending text. The topics, however, are sometimes difficult because they may represent aspects of curriculum that were not necessarily covered in their previous education. Cultural familiarity in general makes a difference in comprehension.

For students with limited education or low literacy, the task of developing reading ability in the second language is much more difficult. Not only do they have to develop the knowledge of literate students described above, but they also need to become literate, particularly in school-based literacy. These students have managed to function well in their previous socio-cultural milieu without such knowledge. Upon entering English-medium high schools in a new society, their ability to function is greatly challenged. These students need to develop new understandings of the demands of academic life at the high school level, the function of literacy in school, and the demands for literacy ability in their new country. In addition, they need to develop the discourse of academic L2 language and acquire literacy strategies that will help them decode and comprehend text in the L2.

## 9.7 Age and second language acquisition

Children acquiring the second language by the age of 7 are able to reach native-like ability in phonology and semantics especially if they are learning the second language in a country where it is used as the main medium of communication. After that age there is a decline in ability even with children who have been exposed to the language for the same number of years. There is great variability among those that acquire the language from middle childhood on. On the other hand, children after 10 years (particularly those with a strong educational background) have been found to be faster learners of the second language because they have more background knowledge to support the acquisition of the L2 (Bialystok & Hakuta, 1994). Therefore, recent immigrant students at the high school level will have problems with acquisition of phonology and semantics. The facility with which they acquire the language will be related to their previous education in their native language and even some previous learning of English. Grammatical problems in English discussed in Chapter 5 appear in beginner adolescent L2 learners as well. These problems are more likely to persist in these older learners than in younger learners.

Problems with phonology are related to L1. Sounds that are similar in L1 and L2 are difficult to produce in a native-like way because the learner is using L1 as a model. For example, both Spanish and English have an initial /p/ sound. The Spanish is not aspirated (puff that accompanies the English sound). The English /p/ pronounced by a Spanish speaker may be confused with a /b/ which is not aspirated. Thus *Peru* sounds to an English-speaker as *Beirut*. The vowel system in English is usually problematic to most L2 learners because it has so many more sounds than in most languages. While English has 12 vowel sounds, most languages have between 3 to 5 vowels. Many L2 learners pronounce both *ship* and *sheep* as *sheep*. Among the consonants, /sh/ is difficult for Spanish speakers. They may pronounce both *sheep* and *cheap* as *cheap*. The phonemes /r/ and /l/ in Japanese are allophones or variations of the same sound. A Japanese L2 learner may pronounce both *late* and *rate* as *late*. In American English the /t/ in middle position is not fully pronounced. A Spanish-speaking student wrote *party* as *pari* based on how he heard the word. Consonant clusters that do not exist in the native language cause difficulty. For example, Spanish-speakers add an /e/ sound to clusters that start with an /s/ plus a consonant. Thus *story* is pronounced *estory*.

The most important aspect of pronunciation for L2 learners is how intelligible it is to native speakers. Prosodic aspects of pronunciation, such as rate, intonation, stress, and vowel length were the type of errors that native speakers most frequently named as getting in the way of understanding the speech of L2 learners (Derwing & Rossiter, 2003). Other phonological, morphological, and syntactic errors were considered less problematic and often were not even identified at all.

A source of difficulty for L2 learners in comprehending speech of native speakers is the fact that pronunciation in conversational speech can be quite different. L2 acquirers need to know what happens to words in fast speech as opposed to carefully articulated speech. The way they hear the spoken language is often reflected in their writing when they use invented spelling. For example, "I'm going to write a letter" was spelled "I'm gonna wrida leder," reflecting how the /t/ is produced medially, and the blending of the article with the verb.

## **9.8 Language problems in the high school years**

Oral language problems may continue into the high school years depending on the cause and nature of the problems. Students in "regular" classrooms may be dyslexic, SLI and/or learning disabled. Genetic factors which have brought about changes in the functioning of these children's central nervous systems have been pointed to as the principal reason why the usual interventions do not eliminate these problems. Some of their problems continue to involve phonological, morphological and syntactic and semantactic difficulties. Learning-disabled children exhibit marked pragmatic difficulties (Donahue, 1995). Because these aspects of these students' language problems have been discussed at length earlier on, we will focus on their reading and writing difficulties in this chapter. We will then focus on what has been suggested to help reading and writing remediation in the education chapter.

Although a group of children have been labeled dyslexic does not mean that all the children with marked reading difficulties have these difficulties because of genetic factors. Recent research has indicated that there is variation in the reading behavior that has been labeled dyslexic, and that there may be variations in the causes for reading difficulties. Among these causes may be the educational history of the child; that is, the interaction of background factors with the ways in which the child has been taught.

When a student reaches the high school years and is still reading the way students do at much earlier grades, there is a great need for dramatic intervention. This intervention may lie primarily in the hands of reading specialists, but classroom teachers should be aware of the nature of the reading difficulties encountered by the students. It is important to note that researchers have found that poor reading, or low level of literacy, is among the best predictors of later delinquency and criminal behavior (Kellerman, Fuqua-Whitley & Rivara as cited in Curtis & Longo, 1999). Along with literacy problems being prevalent among criminals are the oral language problems of various kinds that we have discussed. Educational intervention by the high school years becomes critical.

We have previously referred to Chall's book on the stages of reading (Chall, 1983, 1996). In addition to providing a model of how reading should develop over the school years, she and a colleague developed a methodology for diagnosing reading difficulties in students (Roswell & Chall, 1992). This assessment technique is designed to determine the level of development of students' reading from first grade through the twelfth grade with the model in mind. This test examines word recognition, oral reading of connected text, knowledge of word meanings, silent reading comprehension, spelling, and word analysis. It should be noted that all of these behaviors are related to aspects of oral language knowledge. These are reading behaviors that Chall and other reading researchers have identified as being crucial for reading success. There are a number of reading tests that also test these reading behaviors. Some other often-used tests are cited at the end of this chapter. The results of these tests are used by reading specialists to design their interventions. These results should be shared with the classroom teacher so that the intervention designed for the students can play a role in the classroom activities planned by the teacher. We will discuss some of the interventions that have been proposed by a number of reading specialists in the next chapter.

Along with reading problems, the students we are discussing also have writing problems. An outstanding one is difficulties in spelling. In addition, they have difficulties in undertaking writing tasks and in completing them in an organized manner. Their difficulty in undertaking writing tasks is partly due to their past history of failure, but not knowing how to get started is something that can be overcome by direct instruction. Past failure can also partially account for these students' reading difficulties. Explicit instruction in areas of difficulty will be discussed in the next chapter.

### **Some often-used reading tests**

Karlsen, B. & Gardner, E. (1985). *Stanford Diagnostic Reading Test*, 3<sup>rd</sup> Edition. San Antonio, TX: Psychological Corporation.

Language Assessment Scales (LAS and Pre-LAS; Oral and Read-Write).  
Monterrey, CA: CTB/McGraw-Hill. Test widely used in the United States to determine proficiency in bilingual populations.

Wiederholt, L. & Bryant, B. (1992). *Gray Oral Reading Test*, 3<sup>rd</sup> Edition. Chicago, IL: Riverside.

Woodcock, R. & Johnson, M. (1989). *Woodcock-Johnson Psychoeducational Battery-Revised*. Chicago, IL: Riverside.

*Woodcock-Munoz Language Survey* (WMLS) (in English and Spanish). Chicago, IL: Riverside Publishing.

# 10

## Language Education in the High School Years

### 10.1 Introduction

As we have indicated, the bulk of language development has occurred over the previous school years. However, not all high school students are equally prepared to take on the thinking and learning that is required during these years. Long before the high school years the problems in language development that particular children have should have been identified and appropriate interventions to help should have taken place. As pointed out in the previous chapter this is not always the case. Intervention does not always help all of these students. Further, students with hearing difficulties that are subtle and those who seem to be coping with learning problems might not have been found during the earlier years. Teachers whose training has made them sensitive to these possibilities might prevent these from being discovered so late.

Outside of these physiological reasons, there may be a variety of experiential factors that have delayed language development in high school students. The task of the high school language teacher is to exploit to the fullest extent what students have learned previously, and to prepare them for what may come next. Problems for the language teacher, probably the English teacher, arise from the variation in language abilities that exist in these students.

One way in which high school education has attempted to simplify the task of having to deal with variation is to have two “tracks.” One track is for students who are college-bound, and another for students who are going on to other kinds of experiences. In addition, within these two tracks, there are a variety of courses that differentiate between students. There are “advanced” courses for high-performing

students, and some of these courses resemble college-level courses and may give students college credit. There are a variety of possibilities that may exist in terms of language education in the high school years in terms of readings assigned and written productions required. Therefore, we will focus the discussion on how students, in general, can learn about those aspects of language, both structural and pragmatic, that we have discussed in the previous chapter. We will also discuss the teaching of reading and writing in connection to content-area instruction. With respect to second-language learners in addition to structural, pragmatic, reading, and writing development we will discuss teaching of pronunciation. Finally, we will discuss problems in reading and writing, as well as studying, and the various techniques that have been described by educators to overcome these difficulties.

## 10.2 Learning more about the structure of the language

The further developments of structural knowledge are composed of development of vocabulary and elaborations of previous knowledge that indicate a further awareness of some of the structural possibilities of language. This further development includes learning 1) to comprehend and use figurative language, 2) further development of some structures that provide additional opportunities for sentence combination and convey different meanings, and 3) further morpho-phonological or morpho-syntactic development. All of these developments enhance reading and writing competence and play a role in making these written language abilities more competent. Development in all of these areas can be assisted by asking students to think and talk about and to read examples in each of these areas, and to write examples of language structures in each of these areas.

Bilingual learners may need explicit instruction in these advanced language structures as well as in all the more basic ones, that is, those grammatical difficulties outlined in Chapters 5 and 7. Students may continue to make these errors when producing language spontaneously, but they can learn to repair their errors particularly in writing.

Besides the Reformulation strategy explained in Chapter 8, there are other ways to address teaching of language structures. One ESL teacher used television commercials. Students analyzed and applied these structures. For example, a MasterCard ad. enumerates the costs of various things parents purchase for children going to college. At the end it repeats a couple of times "Dropping your son off at college, priceless." This ad. can be used to discuss the suffix *-less*. Another teacher



developed mini-lessons based on those incorrect structures that appeared in the students' writing. After the mini-lessons, students were asked to go over their papers and make changes based on what they had learned.

Vocabulary development should be useful, and, therefore, should take place through an analysis of written texts in various areas of study. Examples from the various texts that the students are using in all their classes can be selected to form the bases for these analyses as well as those that are assigned in the English-language classroom. This will include texts that are in different genres. Not only will there be different vocabulary in the texts but also different structural compositions. Both the specific vocabulary that may be causing difficulties for some students and the variations in the structure of the text can be discussed. Teaching of vocabulary can begin by listing of items that are creating difficulties. The meanings of these items can be looked up in dictionaries and, also, discussed in the classroom. Some clues as to possible meanings should also be discussed. This would include discussion of the phonological composition of words, and what the sentential contexts of the words tell us about the meaning. Once a set of lexical items has been learned the students can be asked to generate written sentences that contain these words. Vocabulary knowledge is crucial to understanding both spoken and written language, and that knowledge should be expanded by adding items that are causing difficulties.

As the students engage in reading in different genres about different subjects the lexical items they encounter may become more and more rare. Frequency of use plays a very important role in vocabulary acquisition. Another approach to lexical comprehension might be to take some rare words and analyze their composition. This will also play a role in the development of further knowledge of morpho-phonology. Some few examples of more rare words that might be found in texts and their analyses are listed below.

1. misapprehension (three parts – mis/apprehend/sion)  
not-understand: noun-ending-*sion*  
related word: comprehension
2. antebellum (two parts – ante-bellum)  
before-war  
related word: antecede
3. discordance (three parts – dis/cord/ance)  
not-sounding together as in chord-noun ending -*ance*  
related word: accordance

Asking students to look up these words in the dictionary and analyzing their components might make them more aware of how the meaning of words can be derived from various combinations of parts. Also they can become more aware of the fact that these parts may be derived from sources that are not clear on the surface (for example, *cord* for *chord* or *signal* from *sign*). For students from Chinese and Vietnamese background this is an essential practice because they are used to words with one or two syllables only in their languages.

There will be many examples of figurative language in the reading assignments that have been made. Examples of figurative language can be drawn from the texts that have been assigned. The world of advertising makes special use of similes. Associations are drawn between products and various states – “cool as ice,” “strong as a giant,” “smooth as a flower petal.” Students can be asked to provide examples from their favorite advertisements. In addition, examples of various kinds of metaphors, similes, and idioms selected from the texts they are reading can be presented to the class, and students asked to analyze these examples and to discuss differences among them. In the previous chapter some examples of these developments were presented. The list can be extended by asking students to add to it. In this way the teacher can observe whether or not students have understood it. Students can then be asked to write sentences and short stories containing these examples of figurative language.

Looking up the source of the idiom can also be interesting and may help students remember it better. For example, the idiom *bury the hatchet* means to stop arguing or fighting. The origin goes back to Pre-revolutionary times in the U.S., when Native Americans in New England made peace with the “white men” by digging a hole in the ground and burying their tomahawks as a symbol of peace. The idiom *happy as a clam*, which means to be satisfied or content, is a shortened version of the original *happy as a clam in high tide*. It has its origins in colonial times in the Northeast of the United States. Clams could only be dug at low tide when a person could get to the mud banks where the clams live (Morris, W. & Morris, M., 1988).

As indicated above, vocabulary development and morpho-phonological development can occur together. Many of the new words that high school students have to learn about are multisyllabic words that are increasingly infrequent. These words come from different syntactic categories and are derived by varied combinations of prefixes, suffixes and infixes. The words that students have to learn to enable them to understand the various texts that they will have to read may become

increasingly rare. However, it may be important to begin work on understanding derived words by using more frequent words as examples of such derivation. The data of the studies described in the previous chapter provide some examples that might be used in class for analysis. One study cited used nonsense words. Real words should be used for analysis in class. Dividing the words into syntactic classes and asking students to think about the multiple ways in which new words can be derived from old and how this may change syntactic class is one approach. Another might be to think about how meaning changes by modifying the phonology of words. The table gives some examples of how this task might be carried out by organizing words into syntactic classes. How gaps can be filled in by appropriately changing the word might be part of the task.

<i>Nouns</i>	<i>Verbs</i>	<i>Adjectives</i>	<i>Adverbs</i>
relation	relate	relatedness	relatedly*
sanity	sanitize**	sane	sanely
meter	meterate*	metrical	metrically
moral	moralize	moral	morally
history	historicalize*	historical	historically

Key: \*questionable word

\*\*questionable relation to noun

Students can learn the meaning of more rare words by understanding how derivations of new words from the same stems with new prefixes, affixes and suffixes work. Such understanding can help students in their word-attack skills and in their reading and writing. L2 acquirers new to the language often know the lexical item for one syntactic class and apply it to all. The teacher can use the word the student knows, put it in a chart like the one above, and then teach the other lexical items or brainstorm with the class. For example, a Vietnamese high school student wrote: "If dad finds out about this, he will **chagrin** your status and **indignity** you in public which I can't see **happing** to you." In both cases, he used a noun where a verb belonged, but might learn about related words if a chart such as the one above was used.

Still other structural developments that have taken place in some high school students and not others are comprehension of certain types of complex sentences. Examples of these sentences can be presented in class and students asked questions about what they think the sentences mean and questions about subject and object relations in the

sentences. The students can then be asked to generate other examples of these sentence types. These are sentences that disturb the usual sequence of subject + verb or actor + action. Some few examples follow but several other examples were presented in previous chapters.

1. The tiger the hunters chased ran swiftly.
2. The student promised the teacher to finish the assignment.
3. Mary asked Joe to leave.

Finally, another structural development that some students have not mastered by the high school years is appropriate use of anaphora. The students can analyze text, from their reading assignments, that contains examples of correct use of anaphora. However, text that incorrectly uses anaphora may be even more helpful in gaining mastery of this narrative technique. After being given examples of correct and incorrect use of anaphora, students can be asked to generate a 3- or 4-sentence story that contains correct examples and then a short story that contains errors. Some examples of correct and incorrect very short stories appear below.

“John was very interested in American history so he went to the library to find books about the American Revolution. When he got there the librarian was very helpful and showed him where such books could be found. After examining the books, he selected two to take home.”

“John was very interested in American history so the boy went to the library to find books about it. When he got there he asked the librarian to help her find where they were. After examining them, he selected them and went home.”

In addition to simple examples of correct and incorrect use of anaphors, there are more complicated forms of anaphora that can be given to students to think about. For example, verb replacement as well as noun replacement by pronouns can be used to tighten text. Other techniques of nominalization can be used as well. Sentences such as the following can be used as examples:

1. Mary played the violin and Susan did so too.
2. Susan played the violin and so did Mary.
3. Playing the violin well was doing something that Susan and Mary liked. It was a very enjoyable experience.

Thinking about and using various forms of anaphora when they write can help students to write more smoothly and interestingly. Beginning

by examining the texts that have been assigned will provide some good models of the use of the technique. A helpful strategy for L2 learners as well as some L1 learners, who need special help, is to have them write above the pronoun the noun for which the pronoun stands.

The structural developments that need to be enhanced during the high school years are the following:

1. Further teaching and learning of the meaning of lexical items that are multisyllabic, rarer in occurrence, and perhaps specific to particular disciplines.
2. Teaching and learning new forms of word derivation that relate word meanings and can be helpful in word analysis and reading.
3. Further teaching of the structure of complex sentences that, because of their format of presentation of subjects and verbs and new verb meanings, place burdens on recall of the relations in the sentences.

It should be noted that when students are introduced to English at an older age, it becomes more difficult to acquire certain structures. It is practically impossible to obtain full accuracy with prepositions and articles.

### 10.3 Learning more about the pragmatics of language

There are three aspects of pragmatic development that some students accomplish by or even well before the high school years. One is selection of the appropriate register to use in conversation with others. Some students become more aware of the situational variables that should dictate the register that they use in conversations over the high school years. The term *register* is being used here as indicating degree of formality. As said throughout this book, cultural variation among the students affects such conversational behavior. The degree of formality that is employed in various situations is very much a function of the particular rules of a social group. This affects behavior in classroom interaction as well as affecting conversation outside it. Teachers should be aware of this possibility when they make observations about the amount of participation by particular students: that is, some cultures dictate reticence about offering one's own opinions while others encourage this behavior. However, all students should be aware of certain differences in degree of formality to be used with peers and with others, and, perhaps, with others that are related and those who are not, and so on.

Solomon and Rhodes (1995) report on how a high school teacher taught the academic register to his students through their classroom interactions. He would introduce the topic of discussion modeling academic discourse. Then he would pose a question to the class. When students responded inappropriately with respect to academic register, he repeated the response, but then went on to other students looking for alternative responses. However, when students began using academic language he further questioned them to go deeper and learn how to fully explain an idea. This teacher provided neutral evaluations when the academic language was not present ("OK, it's easier to live like this," p. 7) but when present he provided positive explicit evaluation ("Yeah, they were never in that type of environment, correct" p. 7). Thus, this teacher developed academic discourse by modeling and encouraging and assisting students who used it. He was politely indifferent with students who did not attempt the academic register.

Reading different narrative texts in which different times and different relations exist among the characters in the text can be used to point out how conversation takes place under these differing conditions. But these differences in times, places, and cultures need to be talked about and analyzed. This should be part of the preparation that students have when they are given some reading assignments that represent very different societal norms.

Discourse patterns between adults and children and in classrooms differ for different cultures. Certain interaction patterns can limit the participation of bilingual students in mainstream classrooms because native discourse structures are different. For example, Warm Springs Indians (Philips, 1972) consider address by a speaker to be general and not directed to an individual. Response to the speaker is not always necessary. Successful teachers would address questions in general to the class and let the students work them out, and then ask a group for the answer. When wanting to talk to an individual the teachers did it on a one-to-one basis.

Puerto Rican students (McCollum, 1989) use the traditional initiation-reply-evaluation (IRE) discourse patterns of American classrooms but there is much more informal give-and-take between students and teachers. For this reason Puerto Rican students have more difficulty in mainstream classrooms.

L2 learners new to the language will also need to learn how to use the language socially. Although not as important for learning content areas, it is very important in the development of the second language. If learners are afraid to interact with peers, they will not use English and

therefore they will not develop it. One approach to learning this language is to make these learners ethnographers of language. Students are assigned – either in pairs or groups – to observe native speakers using the language in different contexts. They take field notes of how native speakers use language and of the language they use. Then they use these field notes to discuss both the pragmatics and structure of the language. For example, L2 learners could watch a video of a class with native speakers of English interacting or they could observe students during lunchtime, both interacting with the cafeteria staff and among themselves.

Another aspect of increasing maturation in pragmatic abilities is, as stated, taking the perspective of another. Writing about their own personal experiences and reading what other students write about their personal experiences may encourage this development. Classroom discussions of what students have learned from presenting their personal narratives may pinpoint for some students how necessary it is to keep the reader in mind when writing. Without spelling out the situation, it may be difficult for classmates to understand these personal narratives.

Analysis of how characters in books interact with each other can also be used to point to those behaviors that are indicative of taking the perspective of the other, and those behaviors that indicate that this perspective is not being taken. How this can lead to misunderstandings and even armed conflict can lend dramatic emphasis to taking the perspective of the other or others.

Reading plays in which the various characters are listening to each other, or are not, and the consequences of not listening to each other, provide examples of what is meant by taking the perspective of the other. Engaging in classroom debates on assigned topics can provide real opportunities to analyze whether speakers are or are not taking the perspective of the other. Another aspect of taking the perspective of the other is to focus on the topic of conversation, and not to switch the topic until there is agreement that this can be done. This last aspect of taking the perspective of the other or others is affected by a third development.

A third development that can take place in the high school years seems to be a function of further maturation, experience, and acquisition of general knowledge rather than an increase in pragmatic competence. This is the ability to converse about a wider range of topics. This obviously can be influenced by what students are asked to talk about, and to converse with each other about, in school. Topics of

conversation do change to some extent over the middle school and high school years. The topics become less egocentric.

In summary, there seem to be certain pragmatic developments that are in the process of evolving during the high school years. They are:

1. Having knowledge of the different registers that are required in certain situations.
2. Learning how to take the perspective of the others in multiple ways such as listening to others, agreement about turn taking, and sticking to the topic.
3. Varying the topics of conversation from personal to societal to world issues.

We have pointed to various ways in which aspects of improving structural competence and pragmatic competence can take place. In most instances we have suggested asking students to engage in tasks that involve speaking and listening and also reading and writing. Reading and writing have been described as being an important part of each task. We have emphasized the need to employ all aspects of language comprehension and production, both oral and written, to carry out the analyses of language being recommended. By emphasizing reading and writing, as well as listening and speaking, we think that students can master all aspects of how ideas are communicated. Those adolescents who have difficulties in comprehending written and spoken language, that is, those with language problems, will be at a disadvantage in these further developments.

#### **10.4 Teaching the language of content courses**

Learning academic content may be difficult for students either because they do not have the background to understand the concepts or because they have difficulty with the academic language. Such may be the case for students who are new to the language and culture or for students with academic experiences that have not prepared them for high school courses. Teachers need to consider how they present the material, how they help students navigate difficult textbooks, and how they teach them to use written language.

To make the content area more understandable teachers should use the content objectives and not the textbook as the focus. In this way they plan a number of activities in addition to the reading of the textbooks as the means of transmitting knowledge. These activities should



start with connecting the main concept to be taught to the life of the students. For example, when discussing the American Revolution and the notion of loyalty to the king of England, Peggy asked her students whether they felt loyalty to the U.S. or to their country of origin. Their own feeling of conflict gave them a first-hand picture of how the people in the colonies were feeling. Then teachers need to elicit the students' background knowledge on the topic. For example, given the ninth-grade objective "Demonstrate an understanding that two fundamental forces acting in the Earth System are gravity and electromagnetism," the teacher writes the word *gravity* on the board and asks students to share their understanding of the term. Bilingual students should be allowed to consult among themselves in their native language and use bilingual dictionaries. Simultaneously, important vocabulary should be presented.

New material is best presented both orally and in writing. In addition, teachers should use non-linguistic ways of clarifying concepts such as pictures, real objects, or science experiments. L2 learners may comprehend to different degrees depending on their English ability. Group work facilitates comprehension because students can clarify and use their native language if classmates know it. Resources in the native language are useful for those students who have been educated in it.

In addition to presenting content material teachers need to develop language and culture objectives in their lessons to support the acquisition of academic language. For example, given the social studies objective "Identify and analyze the role of government in the economic system," the teacher may want to discuss laws such as child labor laws, minimum wage laws, and environmental regulations. Students from different countries can ask their families about similar laws or other laws in their countries of origin that affect the economic system and compare them with those of their host country. They can learn the terms and concepts of *pros* and *cons* and other important vocabulary. In comparing and contrasting situations they can use many of the rhetorical features presented in Table 9.3.

Content-area textbooks are usually difficult to comprehend. Darlington (1999) used literature to support the material of an advanced history textbook when working with Spanish-speaking students who have been in the country for no more than two years. Two novels, *Johnny Tremain* and *Across Five Aprils* and two personal narratives, *The Federalist* and *My Bondage and My Freedom*, provided a vivid context to understand the historical periods discussed in the main textbook.

Another way to handle a difficult text is for the teacher to start with a “text tour” of a chapter (Cary, 2000). In a text tour the teacher thinks aloud the process of reading the chapter. For example, the teacher may start by looking at pictures and graphs and wonder about the contents of the chapter. She may read the captions under pictures, highlight what looks like an important word, either because it is in the title or it is in bold. She may read subtitles, the first and/or the concluding sentence and so on. As she is carrying out the process, asking herself questions aloud, she may invite students to join in. Cary (2000) shows how in this non-pressured interaction the students and teacher had important discussions about the central theme of the chapter. Students contributed with their own experiences and thoughts about the central theme of the chapter. This activity allowed the teacher to demonstrate the process of handling content-area textbooks and elicited students’ background knowledge on the subject they were about to read.

Second-language learners have difficulty participating in class discussions, either because of lack of proficiency in English, or because they are afraid to be ridiculed. Note Cue (A. Manzo & U. C. Manzo, 1990) is a strategy that can scaffold the discussion of readings. This activity can take place before or after reading. The teacher writes on separate cards the questions, answers, and comments related to the key points in the text. Each card is entitled Question, Answer, or Comment. The teacher distributes the cards among the students in the class, and allows them to read them silently and think when it would be appropriate to use the material on the card. If there are students who are new to the language, they can work in pairs. The students then start asking the questions they have, and their class mates need to find the answers and appropriate comments. Initially the teacher may call on the student who has the first logical question as well as subsequent questions. Slowly the scaffolds are taken away. For example, students need to decide on their own when a question is appropriate; they are given a card with the title Answer but it is blank. The same can be done with comments and questions. The teacher takes away the scaffolding as s/he sees fit. Thus, students who are newer to the language may keep receiving cards with the questions, answers, or comments while others receive blank cards. Students are free to offer their own comments.

The cognitive academic language learning approach (CALLA) proposes that in addition to teaching content and language to L2 learners, they should be taught learning strategies (Chamot & O’Malley, 1986). Spanos (1993) used such strategies in connection with science and

math lessons. For example, to help students solve mathematical problems, he gave them a worksheet with the following directions:

- Choose a partner or partners. Write your names above.
- Choose a problem. Write the problem in the space below.
- One student reads the problem out loud. Students are asked to discuss the vocabulary and circle words they don't understand. Then they are required to write the words below.
- Use a dictionary for help. Ask your partner or teacher for help.
- What does the problem ask you to find? Write this below.
- What should you do to solve the problem? Add? Subtract? Multiply? Divide? Write this below.
- Solve the problem below.
- Check your answer below.
- Explain your answer to your partner(s). Write your explanation below.
- Explain your answer to the class.
- Write a similar problem on the back of this page.

(p. 392)

Following these directions allowed for practice of language, handling content, and learning strategies to solve math problems. While the teacher observed students during the process, he identified areas of difficulty in relation to language and to mathematics for further instruction.

Teaching writing connected with a content area can help both writing and the content area. Hildebrand (2001) proposes non-academic writing to help students acquire scientific knowledge. For example, students might be asked to write a series of postcards describing the trip down the human gut. Certain types of writing are essential to function in science such as descriptions, directions, explanation, and argumentation. In this way students can develop writing through the study of science. They learn to write arguments that require the ability to question, to interpret data, to make claims, and to provide evidence for those claims (Yore, Hand, Goldman et al., 2004). These literacy and cognitive skills can be applied to other areas such as literature and social studies.

Suggestions for teaching writing presented in earlier chapters can be also helpful in high school: for example, walking students through the oral-written continuum presented in Chapter 6. Students discuss

among themselves, present the results to the teacher orally using more formal language and vocabulary particular to the discipline, and finally produce a written report. The importance of this process for L2 learners is that it allows them to rehearse the language in various stages of difficulty from just using language with peers, then orally with the teacher, and then in writing for a wider audience. Another approach that scaffolds writing and allows for a lot of talk and rehearsing, is the Rhetorical Approach explained in Chapter 8.

In sum, to help students cope with academic learning they need a learning environment that allows for a lot of interaction in a safe environment, explicit presentation of a process, and the expectation that they will in the end be able to perform at high school level.

### 10.5 Developing study skills

All children may have problems in being able to study. Having difficulties in reading is not necessarily related to having problems in studying. Even good readers may have difficulties in studying. However, having difficulties in reading is a direct barrier to achieving an understanding of subject matter within an academic field.

Study is thought to lead to an in-depth understanding of the ideas in a field. Understanding the main ideas in a field is an ability that is necessary not only for grasping the meaning of the subject matter in the field but also for answering questions about that subject matter. Answering questions successfully is almost always the way in which performance in a subject area is measured. Academic success is closely tied to both adequate reading ability and the ability to study the subject matter in a field and retrieve information from that study.

The outlining in reading and writing that was discussed in a previous chapter not only aids reading comprehension and written productions, it also provides important guides for studying. A booklet entitled *A miniature guide for students on how to study and learn* (Paul & Elder, 2003) puts forth what the authors entitle "18 ideas for becoming a master student." The guide was written not only for students but also for teachers to help them understand how to aid student's studying and learning. Among those ideas are several which seem especially important for those who are struggling to comprehend written language. Among these are the following, in very loosely paraphrased form. These ideas can be found on page 4 of the guide:

1. Become a questioner. Engage yourself in lectures and discussions by asking questions.

2. Look for interconnections. Try to relate new learning to what you have already learned.
3. Think about the textbook as the thinking of the author. Explain the main points of the text to another student.

The thinking ideas that are proposed in the guide can be used both orally and in written form. Questions can be asked aloud and also written. Talking to oneself about the interconnections between what is currently being studied and previous study in a field can be followed by writing down what the relations are. Spoken explanation of the main points in a chapter of a text, or in an article, or short story can be followed by writing down what the reader thinks are the main points. Thinking aloud and then in written form can be used to study subject matter. So-called note taking is a skill that needs to be acquired when listening and when reading. How one should read in order to remember the important aspects of what one has read is a skill that should be mastered in the high school years.

## 10.6 Teaching pronunciation to L2 acquirers

Pronunciation is more difficult to improve with older learners. Some researchers maintain that learners need to discriminate new and different sounds in the language before they can learn to produce them. A number of strategies are recommended to help the acquisition of sounds such as:

- Presentation of minimal pairs, where only one sound is different (ship-sheep) in meaningful contexts.
- Answering comprehension questions that require discrimination of sounds.
- Explanation of difficult sounds. For example, placing the hand in front of the mouth to feel the puff in an aspirated /p/.
- Practice of both perception and production using communicative drills.
- Free production of sounds in communicative activities (González-Bueno, 2001).

Given the importance of prosody in the intelligibility of L2 learners' speech, researchers and practitioners recommend global instruction of pronunciation, including: word and sentence stress, intonation and rhythm, projection, and speech rate. Materials such as *Jazz Chants* by Graham (1978) and *Sounds Great* by Beisbier (1995) were successfully

used to train L2 learners. After 12 weeks of instruction, native speakers better understood these learners. In addition, their speech included more sentences than those learners trained in pronunciation of difficult phonemes. The learners who received instruction on individual phonemes did indeed have better pronunciation of individual words, but their speech was less fluent and understandable (Derwing & Rossiter, 2003).

## 10.7 Students with language problems

As stated earlier, some SLL, dyslexic and learning-disabled children have oral language problems that persist into the high school years. The only educational intervention that seems appropriate for some of these children is either special classes or special schools. These types of interventions should probably have taken place much earlier in their development. With these children a periodic evaluation of how they are developing should be required, and in many school systems these requirements are met. This is done so that plans for their further education can be developed. There are also school systems that take on the responsibility and the expense of providing these special classrooms, and the special educators they require. Some school systems may also pay the tuition of students in schools that provide the settings and conditions in which these children can learn.

When discussing the language education of children with language problems we have focused, in general, on the language education of children who can receive this education in the classroom. Although many of them may need aids in the classroom, and some also need special activities and sessions with speech and language, learning and reading experts, the bulk of their education takes place in “regular classrooms.” In this chapter we will continue to focus on such children. However, because of the nature of their problems, they may be very much behind their peers in reading and writing abilities. There are others among these delayed adolescents who are very much behind their peers in these abilities not because they have language problems as we have defined them, but because they have had different personal and educational experiences that have not prepared them for the challenges of high school years.

In a monograph that we have cited previously, entitled *When adolescents can't read* (Curtis & Longo, 1999) the authors put forth several ideas that can be helpful to language teachers who may have students who are markedly behind in reading (perhaps as much as 5 to 6 grade

levels). The notion that these poor readers can no longer be helped is negated by the fact that the proposed interventions in the monograph have been successful with adolescent poor readers. Importantly, the program has been successful in a number of school systems. The difficulties of this delayed population can be treated in groups, which make such intervention financially feasible for school systems. Continued one-on-one treatment for adolescent poor readers would place quite an economic burden on the system.

The program suggested is composed of several important components. An adequate assessment of students' development in areas of oral language and print processing that are necessary for reading is a crucial first step. We have already discussed several assessment instruments that are used by a number of school systems. The areas of testing proposed are word recognition, comprehension of word meaning, the ability to comprehend written connected discourse, the ability to spell words accurately, and the ability to analyze a word's phonological composition. This latter is the ability to sound out a word. There are bodies of research that point to the importance of these abilities in becoming successful readers.

The researchers/educators suggest that students with reading problems may be functioning at different levels of competence in each of these areas. Particular students might need a great deal of work in one area but not another. Overall a developmental approach is emphasized. After determining what students' reading strengths and weaknesses may be, specific interventions are suggested to help students in each of the areas. Although we have already discussed many of the activities that may help students in each of these areas, it is important that teachers keep in mind what they are. As stated, in the monograph, an important aspect of the interventions proposed is that groups of students may be taught using the techniques proposed.

The notion is that remediation should be focused on moving students from one developmental level to another in each area. Therefore, with students at the lowest levels, the non-reading students, the beginning intervention should focus on word analysis skills followed by working on word recognition. Students who have word analysis and recognition skills can receive direct instruction about how to determine the meaning of new words and the ideas and concepts that these words represent. They can then read text that contains these concepts and ideas, and discuss what they have read. Students who are at a more advanced reading level can be given assignments that require reading a wide range of texts, and be taught how to use the information in these

texts to integrate data and to solve problems. They can be taught to express this integration in writing. These latter are the types of abilities needed for the assignments that are given in many of their academic classes.

The program not only outlines the types of tasks that should be carried out at each stage of development but also emphasizes the importance of teacher preparation. Teachers should be able to directly instruct the students about what they should do as they confront each task. Following from this, students should know what is being expected of them as they carry out the task. The material to be used for each task should be designed to be challenging and age appropriate. Finally, progress should be measured by students being largely successful on the tasks but not necessarily perfect.

The value of such a program is that it presents ideas that can be very useful to teachers in many ways. It outlines, step by step, what a remedial program might consist of, and how each of the steps can be achieved. Further, it emphasizes the importance of understanding the development of reading competence and what that might be composed of. Whether or not one agrees completely with the description of the development of reading competence proposed, it is clear that such competence develops over time. It is also clear that students who are reading and writing very poorly are having specific difficulties in carrying out the behaviors required in reading. It is necessary that those who intervene have knowledge of the development of this linguistic skill, and what that skill is composed of. They also need to understand the nature of the difficulties the students are encountering in the acquisition of that skill.



# 11

## Trends in Development and Educational Themes

### 11.1 Introduction

The purpose of this summary chapter is to recall for readers a number of themes that we have talked about throughout. To this end we will review the trends in language development that can be observed over the lower school years. These developmental trends are a product of at least 4 factors. These are maturation in general, cognitive advances, environmental experiences, and education. All children continue to evidence change in what they know about language over these years because of these factors.

It is important that educators are aware that “all children” includes those who are acquiring two or more languages simultaneously or a second language later in their education, and those with language learning problems. Throughout we have tried to indicate that there is a fair amount of variability in children’s knowledge and performance ability during different periods of development and also universals in what they know and what they can learn during these periods. Thus, the differences across groups of children is one of degree rather than very sharp distinctions. Also, there is variation within groups due to differences in the factors, cited above, that affect language development in all children. These differences can speed up or slow down development and affect the ways in which they learn language. Students exposed to more than one language either from infancy or later on are influenced in addition by a number of personal and external factors. These factors affect both acquisition of English and development of their heritage language. Even the trajectories of siblings can be very different.

Throughout we have stressed the very important role that language plays in all aspects of development and in learning in all areas. During

each period of development there are changes in language knowledge that have affected academic performance. This influence is very clear in the acquisition of reading and writing knowledge. However, language knowledge also plays a role in understanding in mathematics, science, and social studies. Further, developmental changes in language knowledge affect the child's social development. These changes are very important in terms of how the children interact with others in their environment. We will review what the effects are.

We will also review what we have suggested is the role of the curriculum and the teachers in these developments. During each period of development teachers can be guides and provide challenges that foster developmental change in children's knowledge of language. They can work together with children's families to foster both academic and social growth in children. There are several aspects of development that teachers should have in mind as they play the roles of guide and challenger.

## **11.2 Trends of development**

### **11.2.1 Variation in development**

During each stage of development children are equally ready to acquire both structural knowledge of the language or languages in their environment, and knowledge of how that language or those languages are used. Despite a great deal of variation in every population of children during every developmental stage the readiness to learn is a shared ability. Although children who have developmental problems are not as equally ready as their age peers, they too can profit from the language challenges that are presented to them. These challenges have to be presented in specific ways that make it possible for these children to take them on. An example of this would be the use of an alternate communication system for cerebral palsied children. However, they, like normally developing children, vary in their abilities. The differences in learning abilities between native speakers of English and bilingual children can be due to how they go about learning language during the different developmental periods, when they start to learn another language, and the amount and nature of exposure to each language. The same is true of speakers of various dialects.

Some children with language problems are markedly different in how they go about acquiring this knowledge while others are only mildly different. For example, the principal modality used by deaf children to

initially acquire language is a signed rather than a spoken language. Children with moderate or mild hearing losses acquire a spoken language supported by hearing aids. Cerebral palsied children may require different means to express what they know about language given the constraints on their speaking abilities. They use an alternate communication system. Some children with language problems have these problems because of genetic factors and the same problems can be found in other members of their family. Others have difficulties due to some variation in their nervous-system functioning. The result is that the path of development of language may be markedly different or only mildly different.

As stated, there are individual differences among native speakers of English and bilingual language learners, as well as among language-disordered children. Some of these differences are due to innate characteristics: that is, some children are quick learners and others are slower. However, a large amount of the difference among these children in their language learning behaviors, are due to their experiences both in the home and at school. There are obvious differences among second-language acquirers of English who begin the process in the preschool years and those that begin it during the high school years. Some of them have previous literacy experiences while others do not. The past educational history of these children may make them more or less ready to take on the academic tasks posed by the school. In like fashion native speakers of English have had different home and school experiences, which also affect their readiness to take on these tasks.

Given these variations in development, the task for the teacher during these years is a complicated one. One way of being able to deal with this complication is to have some understanding of the variability of children in how they learn language during the school years. This requires that teachers learn about development as well as learning how to teach. It is also helpful to have access to and to seek the help of experts who are able to assess the linguistic, cognitive, and social abilities of children of various ages and can share this information with the teacher. There are other conditions that help the teacher in dealing with variability. Among them are small class sizes, teacher aids, support from native speakers of languages represented in class, and the aid of specialists such as speech pathologists and reading instructors. In the case of classrooms with children who speak different languages, collaboration with universities can provide student assistance from students who speak other languages and this can be part of their teacher preparation.

### 11.2.2 Developmental changes

Despite the variation among children in what they know about language and how they learn about it, there are also universals in development that occur as they mature. It is clear that infants and first-graders (not to mention high school students) are very different from each other in a number of respects in what they know about language and in what they produce. Outside of the obvious physiological differences occurring over time that lead to changes in how they produce language there are several language-learning differences which occur during different periods of development that need to be stressed. It is important to realize that developmental stage affects both those aspects of language that can be acquired, and the way the child or student goes about learning the aspects being acquired. Some examples will make this clear.

In infancy the child is busy acquiring knowledge of what words are, what they mean and how they sound. This learning is assisted by caregivers mentioning objects that are present at the time of reference and indicating the objects and events in varying ways. Infants are also realizing ways in which they can refer to something or demand or question. They do so by pointing or using other gestures, and by varying the intonational contours of utterances they produce. Thus at the earliest stage of life the child is engaged in communicating with his or her environment. The particular language(s) or dialect(s) the children develop depend on what is used in the immediate environment.

Children in early childhood are well on the way to acquiring a wide array of sentence structures from their native language that convey the intents they have in mind. They are also adding new words to their lexicons at a very rapid rate. In addition, they are clarifying what they perceive in the speech signal and in how they produce what they perceive. Perception and production of all aspects of the language are proceeding very rapidly during this period. Given the opportunity, they will learn from communication interaction not only how to convey various intents, but also the ways in which their socio-linguistic community does it. In addition, as they do this they become more and more aware of the multiple aspects of language that one can use to carry out intentions. This awareness makes them ready to carry out the tasks of learning to read and to write.

In middle childhood there is increased awareness of the parts of the language. Children become able to think and talk about these parts rather than simply using the parts to convey intents. They become more rapid perceivers and producers of language. They become better able to judge

the goodness of what they say and write. This increased awareness makes them better listeners, speakers, readers, and writers. Overall the changes that occur affect the length and depth of what they know about language.

In the high school years, if all is going well, they have acquired sufficient knowledge to communicate well in various situations such as school, home, and social events. Overall they are adequate readers and writers. They can read texts of various kinds and understand and recall what is in these texts. They can engage in academic writing that will involve them in various kinds of tasks such as writing essays, explanations, descriptions, cohesive stories, and arguments.

There are two aspects of development that need to be kept in mind when teaching language to children of various ages. First, there is a readiness to take on various linguistic tasks during different periods of development. The second is that as the child gives evidence of being able to carry out various tasks they should be provided with the opportunity to do so. Observation as well as standard tests can provide evidence of children's ability to carry out these various tasks. When children who have been raised in a language other than English enter school at any of these stages, their primary language development is disrupted as they try to acquire the second language in order to function at these expected levels. Level of education strongly influences the readiness for such a challenging task.

### **11.3 Role of language development in learning in all areas**

Throughout we have presented evidence that the child's language knowledge plays a crucial role in how they will perform in school. This includes how well they learn mathematics, social studies, and science. First, there is the necessity of understanding what the teacher is saying in all these academic areas. In addition, knowing how to read the language in these areas and to write about what they know plays a very important role in acquiring mathematical, scientific, and cultural knowledge. Reading and writing, in turn, is highly dependent on language knowledge. Being able to decode, understand the meaning of words, understand the meaning of sentences, and understand the structure of the various kinds of texts that they are required to read are dependent on understanding various aspects of language. Being able to write various kinds of texts is highly dependent on language knowledge. A reciprocal relation exists between oral language knowledge and written language knowledge. Children can learn new vocabulary

meanings, more about sentence structures and ways in which to engage in continuous discourse through written language. However, oral language knowledge gives the student the way to access what can be found in the written text.

In each of the study areas that are listed above a unique form of language is represented. A very obvious example is the language of mathematics, which uses a variety of terms dealing with arithmetic (*add, subtract, divide, multiply*), algebra (*is equal to*) as well as geometry, and calculus. However, there is a unique form of language in each subject area. A clear example of this is differences in vocabulary. But, in addition, how each area presents its ideas is unique as well. Teachers in these areas need to be aware of these differences in presentation. Language teachers can be helpful to other teachers and to students who must learn these different forms of language. Discussions across the curriculum can make clear some of the problems students are encountering in understanding the spoken and written forms of each subject. Even more challenging for content-area teachers is the presence of L2 learners. These students may not only need to learn the language particular to the content area but also basic aspects of English. All content-area lessons should include language objectives that will advance L2 learners' language development.

#### **11.4 Role of language development in social development and academic performance**

From the earliest stages of development pragmatic language knowledge as well as structural language knowledge is playing a role in social development. At these early stages, the baby is learning about turn taking, a crucial aspect of communication. Further, very early in development caregivers are providing feedback to babies about how they should interact with others. One of the earliest pragmatic competences taught is how to be polite to others. In our society early word acquisitions are *please* and *thank you*. Bilingual infants and toddlers also learn which language to use with whom. Throughout their development children are learning about the rules for turn taking in various circumstances. Knowing these rules helps the child in getting along with others in their environment and in making and keeping friends. Knowing how and when to take a turn helps the child to interact with both caregivers and teachers as well as with peers.

Turn taking is just one aspect of the role of pragmatic knowledge in social development. The counterpoint to taking a turn is responding to others' contributions to the discourse. Responding appropriately, that is, contingently is a very important part of keeping the conversation going. Sticking to the topic until there is mutual agreement that the topic can be shifted is also an important behavior to acquire in order to make and keep friends. Listening to others plays an important role in developing this social behavior. Both taking a turn and responding appropriately requires knowledge of the pragmatic rules of conversational interaction and, also, knowledge of the meaning of what is being said. Although it seems obvious, those who have difficulty in understanding what is being said may wish to participate in conversational interaction appropriately but lack the basic ability to do so despite sensitivity to the various cues to turn taking and responding in a conversation. Culture influences pragmatics making it a challenge for children new to the language and culture.

Knowing how to engage in various forms of continuous discourse is important in both social situations and in academic situations. Among those behaviors that play an important part in these situations is being able to tell an understandable story, and to provide an adequate explanation in varying circumstances. These might include describing how a game is played, how an experiment was carried out and what the results were, why certain natural phenomena occur such as daylight and summer time, why the U.S. Civil War took place and why a mathematical operation was carried out to reach a conclusion. These continuous discourse behaviors have a pattern that the speaker needs to be aware of in order to carry out the plan. Again the speaker needs to know not only what the pattern or structure of the behavior is in each of these circumstances, but also the language forms that need to be used to carry out these plans.

The continuous discourse behaviors described above need to be learned orally or through-the-air mode (sign) and then need to be transposed into written behavior. Although oral language knowledge can form a basis for this transposition, written language knowledge can support this oral language knowledge. As stated, a reciprocal relation exists between oral and written language knowledge.

For bilingual learners the presence of two languages also implies the development of identity. Achieving a bicultural identity has been identified by research as the ideal. The ability to function in the broader society as well as their own community impacts children's family relations and school performance.

## 11.5 Role of the curriculum

Planning for teaching language during different periods should keep two aspects of development in mind. The first is that development occurs in all aspects of language as children mature. The second is that, as said throughout, there is a great deal of variation among children during each period. Some of the principal causes of variation are experiential. Some are innate. The language experiences of the children before they come to an educational period can prepare them to varying degrees for what they are going to meet in the classroom. The second is the differences in their innate abilities to learn.

The differences among experiences that can lead to variation among normally developing children are variations in home environments. Use of language and literacy in some homes is more congruent with school ways than in others, giving an advantage to some children. Culture and education of the family influence this congruency with the schools' values and expectations. Not only is there variability in children's readiness for the school but in the schools' readiness for children with different experiences. Socio-economic status has been found to play a principal role in this preparation for school but environmental factors other than SES may affect the experiences of children at home and their readiness to learn. These factors are attitudes within cultures about what the roles of school or home or school and home in educating children should be.

The distinction among environments is primarily in the area of preparation for literacy. There are some environments that are filled with literate events. Children are read to extensively and participate in activities that support their learning about their environment and that of others. Such learning takes place not only through books, but also from activities that include films that provide information about that world, and other cultural events of various kinds such as theater, dance, concerts, and museum visits. The school can engage children in activities that they have not had previously to some extent. These types of experiences positively influence bilingual learners regardless of the language in which they take place. The school can also engage families in discussions about how family members can engage children in these activities. Schools must be sensitive to family and cultural values. Schools should complement what families do and not try to reject family practices in order to impose school practices. Schools should also value families' efforts to maintain heritage languages. Schools can also find out about families' practices and knowledge, and incorporate



them into the curriculum to make the home-school transition smoother. This is particularly valuable for children of different cultures. These children often find the school's content knowledge frighteningly unfamiliar.

We have discussed the delays in language development that are the result of various innate differences among children that are not immediately visible during infancy. These are children who are moderately hearing-impaired, SLI, dyslexic and language-learning impaired, perhaps with the accompanying conditions of attention deficit disorder or hyperactive disorder. These children are in various states of readiness to take on the academic tasks that a curriculum presents them with.

If the challenge for teachers is the variety of experiences among the children, and not problems in language development, the curriculum must be flexible enough to accommodate these differences in readiness. If children are more or less ready to take on the academic tasks that are planned for in a given age and grade period, special activities, which allow a period of catch-up, must be planned for them. A clear example of differences among children in their readiness to learn is in when and how children learn to read. This all-important process in academic performance is supposed to take place in the first grade. However, a number of children do not learn to read "up to grade level" until they are in second grade, and, perhaps not even then. These are probably children who are developing normally, but need much more practice in decoding, word recognition, word understanding, and reading for meaning. Sometimes immigrant children are behind in the acquisition of literacy because their schooling was interrupted by wars or economic hardship. All these children benefit from input from teaching aids in the classroom who can work with some children in small groups or even one on one. When working with L2 learners teachers must realize that the L2 language level is not a reflection of students' cognitive level. These students must be challenged but assisted with the new language.

For children with language development problems therapeutic intervention by special education teachers is required. It is probable that these children's language development has been assessed and educational plans drawn up for them. These planned interventions can take place in special classes and time periods. However, if asked to visit, these specialists can provide model lessons by interacting with all the children in a classroom. They do so in ways that provide classroom teachers with information on how particular learning tasks can be presented and reinforced. This can be of help not only to special needs children but all students.

It is clear that adequate assessments of what various children know about language during different periods of development and of how they process language is necessary for adequate curriculum planning for all children. This is true for children who are learning at a faster rate than their grade and age peers as well as those who are slow learners. Usually the curriculum for a particular grade and, perhaps, age period, is assigned to the teachers of that grade. However, there may be certain modifications that can be introduced into the curriculum to challenge the fast learners and not overwhelm the slower learners. These modifications can be made through various groupings in the classroom. The members of each group can be varied to include students of varying learning abilities within each group. Teaching aids, if available, can be assigned to the various groups. Peer tutoring, as well as special tutoring by teaching aids, has been found to help learners of varying abilities, both the fast and the slow learners.

### **11.5 Role of the teacher**

The particular teacher in the early grades, or teachers in the later grades that children have, play the most important roles in a child's educational life. Their expertise in several ways is crucial to the enterprise. They must have knowledge of children's development during different periods, and of how this development can affect what they can learn and how they can learn it. They must know about individual variation among the children in their classroom or classrooms. They must have knowledge of the subject matters they teach. They must have knowledge of how to teach in general and of how to teach particular bodies of knowledge. They must know about second-language acquisition. That is a large body of information that should be available to each teacher. Without this body of information the teacher is less ready to teach, and the learner, regardless of readiness, will not learn as well.

Earlier we talked about the teacher as challenger and guide. What the teacher offers to the children should challenge them sufficiently so that additional learning can take place. However, the teacher needs also to act as a guide in ways in which this new learning can be achieved. For L2 learners new learning includes the various aspects of English as well as cultural knowledge of the host society. For example, we have indicated a number of instances in which the teacher can provide a model of how a language task can be carried out. The teacher can also provide a step-by-step outline of what has to be done to accomplish the task. The amount of challenge provided and the amount of guidance needed

should, obviously, vary given the learning ability of various learners. This variability can be provided in various ways. Among the possibilities for doing this are various groupings of students in the classroom and the use of teaching aids as well as university preservice teachers. For bilingual learners, teachers must function as cultural brokers facilitating the process of understanding text and context. Teachers of the ethnic group of the children or bilingual teachers can help in the relation between school and home. They also support students in their teenage years when cultural conflicts within families increase.

Something we have not discussed outside of infant and pre-school programs is the size of classes and the number of adults in the class. In infant and pre-school groups size and number of adults in the group can be dictated, to some extent, by state laws that require adherence by programs in order to obtain licensing. Such controls, although found to be an important contributor to children's learning at all stages, are usually not dictated in public (state-run) school settings. This makes such programs as Head Start and the wealth of a community very important factors in the education of children. In the case of communities from backgrounds other than English the support for families outside school varies. Sometimes families live in ethnic communities with strong support from community organizations and churches. Families of educated immigrants often find assistance negotiating the new culture from local co-workers. Yet other families may find themselves isolated or assimilated by local communities with little power or resources to provide support.

Optimal language and literacy development in the language of instruction is a desirable outcome. This development depends on internal characteristics of children as well as instruction and family support. Children and families largely influence school success. However, educators can have a significant impact. This impact depends on their expectations, instructional and assessment practices, and willingness to help all children regardless of language and cultural background or individual abilities to succeed. In this book we have presented an overview of the development of children since birth until the end of high school to help educators understand this development. We have also provided suggestions for instruction to support such development.

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