

ENVIRONMENTAL ENRICHMENT AND EXPRESSIVE LANGUAGE:

A CASE STUDY OF A TOTALLY BLIND E.S.L. STUDENT.

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**Diploma Programme in Education of Visually Impaired Children,
The University of British Columbia, 1984**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN EDUCATION**

in

THE FACULTY OF GRADUATE STUDIES

(Department of Educational Psychology and Special Education)

Faculty of Education

We accept this thesis as conforming

to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

May, 1990

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Date *April 27, 1990*

ABSTRACT

This study investigates the acquisition of English in a nine year old totally blind student (Amanda) who has English-as-a Second Language (ESL). The study demonstrates the intricate relationship between language and interactive experiences. This case study will show the contrast in expressive language before and after a transition into a grade four class. In this classroom, Amanda was expected to participate and interact with her teacher and classmates.

Data was collected on videotapes from 1980-1987 and language samples were recorded from 1988-1990. Additional testing was also used to determine post transitional development. Language samples were analyzed and results of pre and post means of Mean Length of Utterance, Complete Sentence Usage, Function Word Usage, Braille Letter Recognition, and Braille Writing were determined. Results indicated that significant improvement occurred in Amanda's expressive language following transition into the grade four classroom.

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ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to my thesis advisor, Dr. Sally Rogow and to the other members of my committee, Dr. Ron Jarman, Dr. Marg. Csapo, and External Examiner, Dr. Bernard Mohan for their encouragement and assistance. To all of them I acknowledge, with much gratitude, the many hours of time and effort spent on my behalf.

I would also like to extend my thanks to my relatives and friends, especially David, who offered support and understanding. Appreciation, in particular, goes to my parents who provided continual encouragement.

CHAPTER 1

This study is an investigation of the acquisition of English (both oral and written) by a nine year old totally blind student with English-as-a-Second Language (ESL). The child, who will be referred to here as Amanda, is from a Chinese-speaking family. Learning two languages poses one set of problems; blindness, another. Amanda's progress in developing competence in language usage demonstrates the importance of high levels of interaction with persons and objects (hereafter referred to as "level of interaction") as a necessary precondition for language usage, as well as the problems of second language acquisition. The problems of English-as-a-Second-Language among blind children have not been documented. The study will demonstrate the intricate relationship between language and "levels of interaction." It will indicate the kinds of enrichment and interactive experience which facilitate blind children's acquisition of a second language. It is the contention of this study that high levels of interaction with persons and objects is a powerful factor in learning how to use language-- whether it is a first language or an acquired one.

The issue of how children learn the complex structure and meaning of the language they hear has commanded a great deal of attention in recent years. Much progress has been made in understanding the process of language acquisition in young children. Children acquire their native language in a sequential manner (de Villiers and de Villiers 1978; Dale 1976). Most children learn to talk with little difficulty. What appears to be necessary for language to develop is the ability to hear language, to have

language models, and social interaction (de Villiers and de Villiers, 1978). By the time they are three years of age, most children are speakers of their native tongues.

Many researchers believe that language development is a consequence of experience and interaction with the world. The literature indicates that there is a correlation between language and the "level of interaction" (Fraiberg, 1968; Cline and Cardinale, 1971; Wilkinson, 1971; Lloyd, 1972; Moor and Bliss, 1975; Curtiss, 1977; Garvey, 1977a; Donaldson, 1978; Moskowitz, 1978; Harley, Henderson, and Truan, 1979; Harris and Smith, 1980; Lucas, 1980; Smith, 1982; Bruner, 1983; Mills, 1983; Carrow-Woolfolk, 1985; Landau and Gleitman, 1985; Harley, Henderson and Sandford, 1987; Rogow, 1988). Children's "level of interaction" in their environments provide the foundations for language development. Children learn the language of the home by hearing it spoken. In order to have something to talk about, they need to be actively involved in a variety of experiences and social interactions (Curtiss, 1977). A child cannot talk about events or objects if he does not have anything to which to attach meaning. From high levels of interaction with persons and objects, language is born.

This fact is particularly true of blind children whose awareness of events may be hindered by lack of sight. A blind child needs a high level of interaction to teach him about his environment. Without this interaction with persons and objects, descriptions of articles or events simply become meaningless words. Many researchers believe that blind children, given opportunities to engage in high levels of interaction with their world in a meaningful manner, will acquire language at a rate comparable to their

sighted peers (Matsuda, 1984; Fraiberg, 1968; Landau and Gleitman, 1985; Rogow, 1986a; Lenneberg, 1967; and Harley, Truan and Sandford, 1987). Indeed studies of language problems among blind children illustrate the profound importance of first hand learning and environmental interactions. Motivation to speak is grounded in having a communicative partnership. Infants are in dialogue with their parents long before spoken language emerges (Bruner, 1983).

Since this is a case study, it is important for Amanda's early background and infancy, early childhood, and past and present school experiences be discussed.

BACKGROUND OF SUBJECT

PROBLEMS IN INFANT YEARS

Amanda was born in February 1980 and was of normal birthweight (6.5 lbs). She was diagnosed as having congenital primary anophthalmia. This is a rare condition in which the optic orbs do not develop and is most often bilateral, as in Amanda's case. The orbits are usually small, but well formed. The bone structure of the orbital cavity, eyelids, eyebrows and structures that support and protect the eye are present. Failure of the eye to develop can occur alone-without damage to other areas of the brain. There were no demonstrable indications of brain damage, although several medical reports have described Amanda as having a slightly smaller circumference of her head (microcephaly).

Amanda experienced extended hospital stays immediately after her birth (between February and October 1981) because of feeding and swallowing problems. One physician informed the family that she was severely neurologically impaired and advised that Amanda be placed in an institution. Although they were confused and grief stricken, Amanda's parents refused to give up their daughter. The family's strong religious (Catholic) beliefs sustained them. They received a great deal of support from their Church and the Grey Nuns. In addition, the family was supported by the Canadian National Institute for the Blind, (C.N.I.B.), family worker and the Chinese Community Crisis Team. Social Workers in the Chinese Community provide support to families and help non-English speaking families make use of the generic services. The language barrier combined with the cultural attitudes often, however, make those services less effective.

Amanda's mother had taken some medication during the early months of her pregnancy and was fearful that she had caused Amanda's blindness. She did not speak any English at this time. The absence of appropriate and consistent advice delivered in the Chinese language delayed the beginnings of active intervention. The family had little knowledge about blindness or the learning potential of blind children.

Few expectations were placed on Amanda. Since her parents were overwhelmed by fear for Amanda they felt it was their duty to care for this "child of God." Social services to the family focused on supporting the mother to ease her depression and anxiety. The issue of Amanda's educability was not stressed. Amanda had two older sisters who were four

and nine at the time of her birth. Amanda's sisters played with her, but they were so much older and had little in common with the young Amanda. No one besides the U.B.C. Special Education students spoke English to Amanda. The students spent only a few hours each week working with her. Amanda's parents, sisters, and baby-sitters all spoke Chinese.

The Catholic Order of Grey Sisters, Chinese Community Crisis Team, and Human Resources provided family support, but could not offer educational assistance. Amanda's mother was receptive to having Special Education students from U.B.C. in her home to work with and stimulate her daughter. When Amanda's mother could see Amanda's responsiveness for herself, she began to relax and enjoy Amanda.

In contrast to her delay in language, Amanda's motor development was unusual for a totally blind child. At about the age of one year, Amanda began to crawl. Her muscle tone was good and she loved physical activities. When she wanted, she crossed midline with her legs and arms, alternating with left and right side movement. She walked with support at one and a half years of age. She loved to be held high in the air and be moved quickly in space. Amanda walked by placing both of her hands on the wall and did a lateral sidestep down the hall. She walked well and navigated about her home holding on to an adult's hand. She was taught to trail the wall by a student teacher. As soon as she could trail the wall by herself, she walked independently (Video tape #2, October, 1982). A chant-"Amanda is trailing the wall. She's trailing the wall in the hall." was used to encourage her independence.

Amanda moved freely around her home. She was familiar with landmarks such as the fridge, stove, and sink in the kitchen, furniture in the livingroom, and bedrooms. Amanda's language comprehension was indicated when she led her student-teacher to a requested place. She responded immediately when asked "Where is the kitchen?", "Show me the fridge.", "the stove", and "your bed." At two and a half years of age she walked well (Videotape #3, taken in October, 1983). She also climbed up and down the stairs inside her home independently by crawling. At the top of the stairs she would turn around and go down backwards. She also walked up and down the stairs using alternating feet while holding the hand of an adult.

LANGUAGE DEVELOPMENT

1) RECEPTIVE LANGUAGE

Although she was not speaking, Amanda understood requests in both Chinese (Cantonese) and English (Videotape #2, October, 1982 and Videotape #3 taken October, 1983). The diaries kept by student teachers provided further evidence of Amanda's ability to comprehend language.

A language stimulation program using nursery rhyme routines was developed for Amanda (Rogow, 1988). Nursery rhymes such as "London Bridge" were paired with specific motor patterns. Amanda initiated the nursery rhyme routines by any sign action such as moving into position, vocalizing, or taking the adult's hands. Amanda consistently responded to the nursery rhyme routines and indicated her preferences for certain

rhymes such as "London Bridge". These social routines had well defined beginnings and endings and provided a framework in which Amanda learned to anticipate and express intention. Amanda enjoyed these games and began to use the signals consistently. She enjoyed listening to rhymes and songs and used the action patterns as clear signals to indicate which ones she wanted to play (Videotapes*4, June 1983, and *5, July 1983).

Other activities involving language responses were developed. There was emphasis in English comprehension. For example, Amanda was taught "ballet" movements to develop concepts of "forward", "backward", "front", "below", "next to", "side to side", "up", "down", "big step", "first position", "above", and "small step" (Videotape *5). Amanda learned these concepts quickly and took great interest in the movements.

Receptive language was also indicated by her responses to demands such as "Get your taperecorder for me", "Turn around", "Stand up", "Let's go to the stairs", "Where's the fridge?", "Turn the page", and "Hold your head up". Amanda also showed her knowledge of names of body parts and directions and knew the names of most body parts; "nose", "arm", "hand", "finger", "head", "neck", "hip", "knee", "ankle", "mouth", and "ear" in both English and Cantonese. Amanda's mother noted that some instructions were better understood in Chinese than in English but in contrast she knew both English and Chinese words for familiar objects in the home. These included, "pot", "sink", "bed", "book", "water", "glass", "mother", "father", and "sister". It is estimated that Amanda's receptive English vocabulary was about one hundred words at this time.

2) EXPRESSIVE LANGUAGE

Amanda's expressive language was delayed. She comprehended far more than she expressed. Amanda spoke her first words at two and a half years of age. At the age of three, she had a speaking vocabulary of twenty to thirty words, but used these as single word phrases. She was not fluent and combined gestural indicators for communication. For example, she nodded her head "yes". She also used objects to communicate, such as taking a milk carton out of the refrigerator to show that she wanted a drink of milk. Amanda seemed to understand the need to communicate, but relied on signals, body movements, and gestures to do so. She did not use verbal communication to request, regulate, or otherwise influence her environment.

SCHOOL EXPERIENCE

1) PRE-SCHOOL EXPERIENCES

There was little variation of routine in Amanda's life. She rarely went outside of her home and interactions with persons and objects was minimal. Outings in the community, other than attending Church were non-existent. Her family protected her and she was not taken shopping or to visits in other people's homes. At four years of age, Amanda was still not using verbal language (Cantonese). She was registered in a parochial preschool at that time, where there was a highly academic program with an emphasis on English language skills. Amanda was accompanied to the

preschool by her nanny who stayed by her side. Because she was not as mature as the other children, the teachers made no demands on her.

The following year there was a change in the preschool program with a teacher who encouraged Amanda's participation. This teacher took a personal interest in Amanda and often phoned her at night to encourage her to talk. Amanda made some progress during this year, but still did not speak freely. She replied to questions, but did not offer information. At the end of the school year, a decision had to be made about where Amanda was going to go to Kindergarten. The Sister Principal of the parochial school encouraged her parents to enrol Amanda in the Public school system, where there was a Resource Room program for blind children. Amanda was enrolled in the Resource Room in September 1986.

The Resource Room program was located in a school in a middle class community a long bus ride away from Amanda's home. Two teachers alternated the Resource Room program and a teacher's aide was employed. Amanda's time was divided between the Resource Room and the Kindergarten class. Each year, there were different children and teachers at the Resource Room. The wide variations of the children's needs, performance, and ages, made it difficult for Amanda to establish continuous relationships. Amanda also had a number of teachers with whom to relate. All instruction was one to one. Amanda was taught mobility and self-help skills by one adult and braille reading and writing by another. For the most part, Amanda spent the majority of her school day in the Resource Room with three other students. She did make one close relationship with another child, who unfortunately, moved away at the end of the 1987 school year.

During her second year in the Resource Room (1987-1988), Amanda spent more time in the kindergarten classroom.

At the age of six years, Amanda was still not able to express her needs verbally. This resulted in frustration and anxiety and Amanda had frequent tantrums in school. Amanda's behavior combined with her low language level led to low expectations. During the time Amanda was enrolled in the Resource Room, her family grew to include two younger brothers. There were now six children in the family as well as an elderly grandmother and Amanda's mother was too busy to give Amanda the extra time she needed. She was not satisfied with Amanda's progress, but was uncertain what to do about it.

In December 1988, three months into the school year, the Resource Room was closed. Amanda was placed in a class for severely disabled non-verbal children in another school. In the Primary Life Skills classroom the students were non-verbal and two or three years younger than Amanda. The classroom teacher felt the placement was inappropriate for Amanda. Materials were highly visual and designed for sighted mentally handicapped students. Amanda's parents had not been consulted about the move and her family was upset about this placement. During this time, the author was appointed as Amanda's itinerant teacher.

Generally, Chinese people entrust the school with educating their young. They seldom question the teacher's ability or authority and view involvement in the school system as "meddling" or showing a lack of confidence in the school system. Amanda's mother, however, felt it was

important for the school to be aware of her unhappiness with the placement and made her views known.

The only reading instruction Amanda received at this time was the daily hour she spent with the author. The reading instruction was isolated from the rest of her program. Amanda was capable of academic work and desperately needed to be moved to an academic setting. She had a much better command of English than she showed. She was sociable and enjoyed the cooking and swimming programs. Because Amanda was anxious to make friends in the classroom, she began to mimic the non-verbal children and it was feared that she would regress.

Amanda was given orientation and mobility instruction (by the author) within the school and she learned the layout quickly. A route only had to be shown once for her to learn it. She went for walks to a restaurant, bakery, grocery store and drug store nearby. She learned to use her white cane and enjoyed feeling independent. Amanda looked forward to "mobility days" and learned mobility concepts quickly and efficiently. She also enjoyed shopping and talking with the people she met.

After months of negotiation, it was arranged for Amanda to be integrated into grade four at that school. The grade four teacher welcomed Amanda warmly and responded with enthusiasm. She felt Amanda fit into her classroom. Amanda showed interest in the other students and, more importantly, began to express herself verbally. Her progress in the fourth grade prompted yet another move, this time to a class in her community school.

In September of 1988, Amanda was moved to her neighborhood school where she was placed in a grade four transition class. There were fifteen other nine year olds in the class. All of the children had English as a second language and some had other learning problems. One of Amanda's classmates was her neighbor-a situation Amanda had never before experienced. She was now able to invite a friend to her home to play. Amanda had friends among her classmates. The parents of the children in Amanda's class also accepted her. During the parent-teacher interviews in November 1989, many parents commented that it was good for their children to know Amanda.

2) PRESENT ACADEMIC PROGRAM

The present academic program was designed by her grade four teacher and the itinerant teacher for the Visually Impaired (the author). The goals for Amanda include:

1. reading and writing skills,
2. English proficiency,
3. socialization, and
4. independence skills.

Classroom activities were adapted so Amanda could be "just like the other kids". Amanda is encouraged to be responsible for her work in the classroom. She is expected to do her braille worksheets when the other

children were doing their seatwork. During silent reading, Amanda goes to the Listening Centre, where she listens to "talking books".

Oral language is encouraged and Amanda is encouraged to participate in all classroom activities. The school program is age-appropriate and functional. Amanda is reassured and rewarded for talking and being responsible in the classroom. Amanda's potential was evident when she moved to her neighborhood school and was integrated into an age-appropriate classroom where there is encouragement and positive expectations.

Amanda was shown how to skip, play Hop Scotch, Checkers, Snakes and Ladders, and Tic Tac Toe; games other children were playing. As an adjunct to the school program, a student teacher was hired to provide out-of-school experiences and to discuss these experiences with Amanda to enrich her language development. The student teacher took Amanda on community excursions such as trips to the Science World, eating at McDonald's, going on the Sky Train, and swimming at the local Community Centre. Children need something to talk about as well as the basic knowledge of how to put words together.

It is difficult to separate the strands of culture and the "level of interaction" from the process of language acquisition. In Amanda's case, it is the author's premise that a high level of interaction with persons and objects is indeed a stronger influence than either blindness or cultural difference. As the research shows, the association between language and the "level of interaction" is an important variable for language acquisition. This is the

theoretical premise of the thesis that will be documented in the following pages. The improvement highlights the important relationship between experience, self-concept, and language development. Chapter Two will include the literature review.

CHAPTER 2

LITERATURE REVIEW

The literature to be reviewed in this chapter is divided into seven headings:

1. Language Acquisition
2. Language and Interaction
3. Language and Blind Children
4. English as a Second Language (ESL)
5. Reading
6. Braille Reading
7. Chinese Culture and Attitudes Toward the Blind

1. LANGUAGE ACQUISITION

"Human beings can lead fulfilling lives without sight, hearing or mobility, but without a means to communicate with others, life becomes lonely and empty of meaning" (Rogow, 1987, p.195). It has been said that the voice reflects the inner man; the real self. According to Bruner, (1983), children need to have a working knowledge of the world to give them semantic targets to enable them to make distinctions from their acquired speech. It could be stated that the terms in which the world is organized are the same as those which organize language. Oral language is used by children to interpret what they learn through interactive experiences. They use language to gain new information and for self-expression. Language

enriches the meaning of interactions and contributes to understanding the real world (Bruner, 1983).

Communicative competence can be defined as "the ability to participate in conversational dialogue, anticipate and respond to the listener's need for information, formulate and convey that information and enjoy the reciprocity of social exchange" (Rogow, 1981, p. 197). Communicative competence is participating in conversation and responding to the listener's need for information, formulating and conveying information and enjoying social exchange. Communicative competence combines knowledge of both language forms and functions, and is illustrated by the child who can ask and answer questions, declare, command, make requests and participate in conversation (Rogow, 1982).

Speech

The production of single-word utterances represents a giant stride on the road to language acquisition. Within a relatively short time and with almost no direct instruction a young child will acquire the language of his caregivers. Language acquisition is facilitated by non-verbal forms of communication. Natural gestures are a form of surface signalling. Skelly, (1973), describes natural gestures as facial expressions and body postures which convey meaning to a viewer. Speech emerges as an extension of the child's earlier signaling system. These signs are social signals. Bates, (1979), states conventional signals are the first steps toward representation of language.

Theoretically, certain sounds of infant's vocalizations (babbling) are reinforced when parents recognize them as elements of their own language. The evidence that preverbal babbling can be increased and shaped by appropriate reinforcement supports the learning theory of language acquisition (Schwartz, Rosenberg, and Brackbill, 1970). Auditory, visual, and tactile reinforcement administered alone or in combination increase the frequency of infants' babbling. Babbling is also affected by certain characteristics of the reinforcement. For example, the pitch of spoken words has been shown to influence the pitch of babbling. When seven month old infants heard high-pitched vowels, the pitch of their babbling increased. Children vary in their rates of development. Age, is not a good indicator of language development (Webster, Steinhardt, and Senter, 1972).

As children learn to combine phonemes (the smallest sound units) to express words (morphemes), they also begin to use inflections (bound morphemes). Inflections signify plurality, possession, verb tense, subject-verb agreement, and comparative and superlative forms of adjectives. In the first two years of life, children spend a great deal of time putting words together and forming sentences. After the age of two, the basic process is refined and word sounds, words, and sentences are produced. Although refinements continue throughout life, generally children acquire a whole language system by the age of five (Moskowitz, 1978).

Around eighteen or twenty months of age, children begin to put words together. Children assign meanings to the words and sentences they hear spoken. They also imitate what they hear and are reinforced for imitating sounds. Adult responses to the speech of their children are powerful

reinforcers especially when adults indicate that they understand children's intentions. The more receptive the adults have been, and the more accurately they have interpreted, the better the children are able to perceive the relationships between sounds and their meanings (Stern, 1977).

Language performance consists both of encoding and decoding which include phonological, morphological and syntactical responses (McLean, Yoder, and Schiefelbusch, 1972). Encoding, or speech production, is synonymous with the production of language. Speech production begins with the intention of saying something (McLean, Yoder, and Schiefelbusch, 1972).

Decoding or language comprehension or receptive language is the understanding of a language. Through the receptive process the lexicon or vocabulary and grammatical structure of a language are comprehended (McLean et al., 1972). Children often comprehend more than they produce. Expressing ideas is harder than understanding the message (Swallow, 1982).

Vocabularies are expanded through interactive experiences as children build categories of objects and events. Vocabulary acquisition is gradual and directly dependent upon a child's level of cognitive knowledge. Words are the smallest semantic units in the language. Selecting an appropriate word is related to the level of vocabulary development. Difficulties in semantic development often results in communication problems that affect both academic and social development. Since pragmatic language is based on semantic development, the language difficulty may really be a disorder in their semantic development (McLean et al., 1972).

Language is a symbol system and can be analyzed in terms of:

1. its phonology or sound structures,
2. syntax, or the organization of words in utterances,
3. lexicon or vocabulary, and
4. pragmatics or usage of language.

Phonology

Phonology is the sound system of the language. The rules of phonology govern how sounds are put together to form words. Phonemes are the smallest sound units. Meaningful symbols of reference are formed from the distinct patterns and sequences of the phonemes. The true units (or words) of language are the groupings of phonemes into meaningful units called morphemes. Words are morphemes. Morphemes are the smallest unit of meaning. In the word "largest", for example, the word "large" is a free morpheme because it can stand alone in a sentence and "est" is a bound morpheme because it must occur in association with a word. Bound morphemes are sound units that are not words by themselves, but have meaning. Bound morphemes in English are suffixes and prefixes (de Villiers and de Villiers, 1978).

Syntax

The organization of words into sentences is governed by "rules"; the grammar or syntax of language. The rules of syntax govern how words are put together to express meaningful utterances. Children do not learn sentences as memorized sequences, but rather, derive the rules for

combining words into sentences (McLean et al., 1972). The rules that govern English language structure include the following:

a) Word order: refers to the order in which the words occur in the sentence. Word order is possibly the most important cue for a child learning to express semantic relations (McLaughlin, 1978). For example: "The dog bit the man" has a different meaning from "The man bit the dog". Children who have not mastered syntactic rules have problems both in decoding and encoding language. Both Crystal (1976), and Carrow (1974), rely on children's acquisition of syntactic rules in their language assessment instruments.

b) Morphemes and bound Morphemes: The lexicon is the vocabulary of a language. Its morphemes are the smallest units of meaning. There are two types of morphemes:

a) free morphemes or words that stand alone,
b) bound morphemes or units of meaning when tied to words (morphemes).
For example of the plural "s" or possessive "s", as in "Billy's coat". Examples of Amanda's bound morphemes include: "Sarah's" and "somebody's" (Appendix pp.94-95). The rule for expressing a plural is to add an "s" to words denoting people, objects or events. English also uses the bound morpheme "s" to denote possession. Children tend to generalize the plural rule and say "foots", "mans", or "feets" (Dale, 1976).

c) Function words: are morphemes that function in relation to syntactic rules. They do not represent persons, objects or events. They function to represent linguistic relationships. Examples of function words

are "the", "a", and conjunctions. Conjunctions are the connectives between and within clauses. Conjunctions such as "and" and "or" produce compound sentences. The past tense of a function word is acquired after the progressive and present tenses. For example, the progressive tense ending in "ing" as "He going." is acquired before the third person singular ending such as "He goes." The "s" itself is acquired long before the past tense endings, as in "He goed." Function words that have grammatical but not lexical meanings include conjunctions, auxiliary verbs, prepositions, and plurals.

d) Auxiliaries: syntactic rules govern the use of auxiliaries, such as the verbs "to be", "do", "have" and "go".

e) Prepositions: indicate both spatial and time relations and includes "to", "in", "at", "by", and "with". Prepositions are acquired in the course of mastery of spatial relationships.

Pragmatics

Pragmatics is the study of "the rules governing the use of language in context" (Bates, 1976, p.420). Pragmatic rules are acquired together with the semantic and syntactical and phonological aspects of language. Pragmatics is concerned with the ways in which language is used. Language is used to serve a variety of functions, such as requesting, regulating or describing. Communication is the main pragmatic function of language. Studies of pragmatics illustrate how speaker's intentions affect the uses of language (Lee, 1979). The child learns most of what he knows about the

rules of conversing through the first-hand interaction with others in a variety of situations (Garvey, 1977a).

Comprehension problems occur when a child has not established a relationship between linguistic forms and the meanings they denote. Carrow-Woolfolk, (1985), noted how important it is to establish this association. Children generally have mastered oral language before they learn to read and write (Carrow-Woolfolk, 1985).

Children's responses to "Wh" questions such as "what", "why", "where", "when" and "how" indicates language comprehension. Children often respond to this type of question with phrases or ellipsis to questions (de Villiers and de Villiers, 1978). Ervin-Tripp, (1970), suggests that interactive experiences together with the development of concepts of time and space are necessary for these concepts to develop. In the case of "why" questions, Ervin-Tripp, (1970), suggested that without adequate "levels of interaction", the child would be incapable of formulating explanations.

2. LANGUAGE AND INTERACTION

Language is a system of representation and children must interact with events and activities in order to represent them (Moskowitz, 1978). Language competence is a result of the child's "level of interaction" with the world. Piaget maintained that cognitive development provides a framework for the acquisition of language. High levels of interaction with persons and objects is the basis for the development of language skills (Sinclair-de-Zwart,

1969). The intricacy and interdependence between language and the "level of interaction" is shown by the work of Fraiberg, (1968); Cline and Cardinale, (1971); Wilkinson, (1971); Lloyd, (1972); Curtiss, (1977); Garvey, (1977a); Donaldson, (1978); Moskowitz, (1978); Harris and Smith, (1980); Lucas, (1980); Smith, (1982); Bruner, (1983); Mills, (1983); Carrow-Woolfolk, (1985); Landau and Gleitman, (1985); and Rogow, (1988). Lucas noted that:

"Perceptual and functional knowledge is acquired through the interaction of the child in the environment which has an impact on the cognitive physiological structures. This interaction between the environment and the child takes the form of sensory input (taste, touch, vision, audition, smell) that is processed through a series of sorting skills (discrimination) and integrating skills (perception). The integration of this perceptual material results in bits of semantic information or semantic features being cognitively recorded for future use" (Lucas, 1980, p.3).

Studies of children living in large institutions indicate impoverishment of their language. In these environments there are fewer opportunities for interactions with adults and less variety of types of interactions (Curtiss, 1977).

3. LANGUAGE AND BLIND CHILDREN

It is interesting to study the language acquisition of blind children. In the absence of other difficulties blind children demonstrate neither delay nor confusion (Matsuda, 1984). Researchers working with blind children have called attention to the central importance of familial attitudes and

acceptance of the blind children. Lenneberg, (1967), found no linguistic differences between the blind and the sighted.

The congenitally blind child is confronted with integrating concepts about the world without the benefit of visual information. They must find meaning using their other senses. Texture, weight, temperature, shape and size formulate the tactual schema (Scott, 1969). Blind children see with their sense of smell, touch, taste, and hearing. This is actively experiencing--this is living and positive action rather than passive listening (Lloyd, 1972). Blind children must feel, move, and compare the world about them as well as actively listen to what is being described. Mills (1983), suggested that when experience is lacking, concepts cannot be learned. Delays occur not due to the lack of vision by itself, but because of its impact on the developmental process when there has been no intervention (Mills, 1983; Fraiberg and Freeman, 1964). High levels of interaction with persons and objects provide blind children with semantic bits of information and builds the basis for vocabulary development. Environmental awareness programs develop a child's oral language (Kurzahls, 1968).

"It is placing a child in an environment in which what he is experiencing has value and makes good sense to him, and helping him to progress from the effort he puts forth, which lays the vital groundwork for developing the processes through which a child grows into a happy, contributing adult" (Kurzahls, 1968, p.166).

During the early stages of development, blind children begin verbalizing in ways similar to their sighted peers. However lack of sight puts gestural communication out of the reach of blind babies. Parents must

learn to substitute gaze for touch signals. When blind children are spoken to and interacted with by adults, they begin to speak at the same time as sighted children (Fraiberg, 1968; Landau and Gleitman, 1985; Rogow, 1986a.; and Harley et al., 1987).

Anderson and Olson, (1981), suggested that blind children's descriptions of tangible objects reflect their dependence on non-visual perception. Children lacking vision may have different understandings of words, since their knowledge is derived from touch and sound. For example, Landau, (1985), with a sample of sixty-one blind children studied their understanding of the verb "to see". She found that blind children use the word similarly to the sighted, when "to see" means to "understand" rather than to see with one's eyes. Blind children require more experiences with objects to attain the same understanding a sighted child gains with a glance (Fraiberg, 1968).

It is more difficult for blind children to acquire some kinds of knowledge, particularly of objects and events beyond their realm of interactive experience. Harley, (1987), and Landau, (1985), found delays in word meaning which were attributed to lack of first hand interaction. When opportunities are provided for first hand "levels of interaction", object exploration and manipulation develops. Objects are then given names and vocabulary grows (Lenneberg, 1967; Fraiberg, 1968).

4. ENGLISH AS A SECOND LANGUAGE

De Villiers and de Villiers, (1978), noted the controversy among researchers about the extent to which one's first language influences the learning of one's second language. Henne, Rongen, and Hansen, (1977), Huang and Hatch, (1978), and McCaig, Gray, McIvor, and Weihe, (1988), believe that a strong first base in a first language will build a foundation for the acquisition of a second. Learning a second language and having had experiences with a complete first language system facilitates learning. Typically a person learns a second language partly in terms of their first language.

Compound bilingualism refers to learning second-language utterances based on a first language. The compound bilingual is often less fluent in the second language and the expressions used are often related to the first language. Difficulties in phonology, vocabulary, and grammar of the second language, are often related to lack of mastery of the rules of the first language (Carroll, 1964).

There is some controversy in the literature about the efficacy of learning two languages simultaneously. Some researchers argue that if both languages are learned simultaneously just as unilingual children learn one, both languages may suffer (Carroll, 1964; McCaig et al., 1988; and Wilkinson, 1971). Other researchers argue that age is an important factor in second language learning and that the older the child, the more problems he may experience. The academic difficulties of ESL students are not caused by the use of another language in the home (McCaig et al., 1988).

Because the structure of Chinese is so different from English, there are some special problems. English is interpreted by Chinese-English bilinguals in relation to their combined past experiences in both languages (Aaronson and Ferres, 1987). In addition, when the child's parents have difficulty with a second language, they become poor second language models for their children. The differences between Chinese and English make English more difficult to learn for the Chinese speaker. For example the rule of structure of Chinese is very different from English.

Structural Differences between Chinese and English

Chinese word ordering is quite different from English. Chinese-English children take longer to acquire the basic word ordering principles than native English speakers. The structural differences between Chinese and English lead to differences in the processing of English words (Henne et al., 1977). McCaig et al., (1988), believe that depending on the age of the learner, it may take between five and seven years for Chinese language speakers to approach grade norm in English cognitive academic skills. They state that without language proficiency in English, ESL students cannot succeed in English-based academic programs. An ESL individual may comprehend the English language and know what he or she wants to say, but may not be able to formulate English sentences.

English content words are often inflected to indicate syntactic information, whereas Chinese words are not. This creates problems of agreement between singular/plural, noun/verb, and noun/pronoun

relationships for bilingual Chinese-English speakers. Chinese nouns generally have no number, gender, or case features. Verbs have no conjunctions to indicate past, present, or future tense and adjectives have no comparative or superlative forms. They frequently cannot be discriminated from adverbs (Aaronson and Ferres, 1987; Forrest, 1973; Henne et al., 1977). English prepositions tend to cause difficulties in writing and speaking. Chinese function words, including prepositions and relative pronouns are used in broader semantic contexts than English function words (Aaronson and Ferres, 1987).

Chinese equivalents of English prepositions are supplied by nouns and verbs placed before, after, or compounded with other substantives. For example, "in the sea" would be translated as "(the) midst (of the) sea" (Aaronson and Ferres, 1987). Other verb-like substitutes for prepositions are "enter" for "into" and "arrive at" for "until" (Forrest, 1973). The semantic topic of the sentence generally comes first. Chinese eliminates the "function" words in the brackets. "This tree (its) leaves are very big." "Yesterday (I) read for two hours." The function words are omitted when the sentence is not ambiguous without them.

Conjunctions such as "and" and "but" are often omitted from Chinese. Their functional role may be indicated by pauses in speech. The Chinese also do not have any exact analogues to English articles (Forrest, 1973; Henne et al., 1977). The use of articles in Chinese differs from their use in English. The definite or indefinite status of a noun is generally inferred, and based on context. It is not unusual for the new learner of English to omit articles in sentences where they are optional in Chinese (Henne et al., 1977).

Chinese has fewer pronouns than English. For example, "he", "him", "she", "her", and "it" in Chinese are all translated as "ta". "I", "me", and "my" are all translated as "wo" (Henne et al., 1977). Many Chinese pronouns serve as general noun substitutes and have less specific meaning than English pronouns. Personal pronouns are normally omitted except when required for the clarity of the sentence (Forrest, 1973). Generally, English words contain more meaning per unit, and meaning is less contextually dependent. Abstract words tend to occur less frequently in Chinese (Aaronson and Ferres, 1987).

Assessing children on formal language tests poses serious difficulties for the ESL students (Samuda and Crawford, 1980). Cummins, (1984), reported that Chinese minority students had difficulty on verbal sections of assessments, which alters final test results. In addition many test questions require knowledge of experiences specific to middle-class North Americans. ESL students who had not had similar experiences do poorly on these tests and reflect cultural and linguistic bias (Cummins, 1984).

5. READING

Skill in reading is related to skill in understanding spoken language (Carrow-Woolfolk, 1985). If syntactic patterns of written sentences are unfamiliar to the reader, the sentences will not be understood. The ability to reconstruct meaning is based on the reader's previous knowledge of how language works. This knowledge is also important in anticipating the

writer's message. The reader predicts meaning by using knowledge of syntax (Dale, 1976).

"Reading is the recognition of printed or written symbols which serve as stimuli to the recall of meanings built up through the reader's past experience. New meanings are derived through manipulation of concepts already in his possession" (Bond, Tinker, and Wassen, 1979, p.5).

It is generally assumed that learners have acquired oral language before they are required to read. This however, is not always the case. There are situations where one might be introduced to reading before one has mastered oral language. Background "levels of interaction" are powerful factors in determining what will be learned.

Reading, writing, listening, and speaking are inter-related. Carrow-Woolfolk, (1985), believes that if a subject has difficulty comprehending words and grammatical structures when they are spoken, they are likely to have difficulty comprehending the same structures when they are written.

Hampshire, (1981), noted a significant relationship between language and reading achievement. The ability to utilize the linguistic clues depends on the reader's level of language development. Word recognition is a primary reading skill. If a learner cannot recognize a word, they will not be able to predict what comes next. Most of the words the early reader will meet and recognize are those with which they are familiar.

"Reading is only one facet of language, and growth in language is only one facet of total child development. Each facet of language supports and strengthens all others. Growth in language should enhance total personality. Reading instruction must be planned and carried out from this perspective" (Harley et al., 1979 p.16).

Delayed language development can affect reading success. Children with limited communication ability, cannot be expected to be immediately successful with reading. This includes a variety of language acquisition disorders (Bond et al., 1979). Harper, (1976) noted that ill health during the first two years of life contributes to language and reading problems. Position in the order of the siblings, family bilingualism, and lack of stimulation are factors which may contribute to difficulties in learning to read. Children's success in reading depends on the vocabulary that has been developed and used to communicate ideas orally (Wilkinson, 1971; Mangold, 1982). Ultimately, the child's desire to read underlies success in reading (Harley et al., 1987). Durkin, (1966), presented evidence to indicate that children's readiness to read is clearly associated with being read to routinely in the home. The amount of exposure to reading is highly correlated with linguistic development in the years five to ten (Chomsky, 1972).

6. BRAILLE READING

Braille is a system of tactile reading. Braille letters consist of the presence or absence of a raised dot in any one of the positions in a 3x2 matrix. The shape can be felt by the pad of one finger. In order for proper

reading, the fingers should move smoothly and with even pressure over the braille dots. Braille reading requires controlled movement and coordination of the hands as well as the discrimination and sensitivity of the tactile sense (Millar, 1977). In learning braille, blind children memorize configurations of dots within the braille cell. They must learn to use braille contractions. This requires the child to recognize words that do not contain each letter as it does in print. Braille readers learn the short hand script of braille as well as the "spelled out" version of words.

There are differences between reading braille and reading print. Braille is read primarily letter by letter, rather than in chunks as one does when reading print. Tactual recognition tends to be more difficult than visual recognition (Mills, 1983; Millar, 1977; Pick, Thomas, and Pick, 1966). The tactual modality is more than just the sense of touch. It incorporates perception and integration through sensory exploration (Griffin and Gerber, 1982). Information via the tactile mode must be systematically acquired and sequentially developed in order for environmental stimuli to be meaningful. The blind reader must recognize the symbols for reading tactually as well as interpret their meanings in relation to other surrounding braille characters and also in the context of the material he is reading.

Initially, tactile learning begins through gross hand movements. These are later refined to include more detailed object exploration. Tactual awareness is learned most quickly when blind children are presented with objects from the environment around them. Awareness of tactual quality increases children's ability to explore and obtain meaning from objects. This in turn, helps them to make sense of their environment through the tactile

modality. If a blind child has a wide variety of preschool tactual-kinesthetic exposure and manipulation, then his readiness for academic learning through reading would be more advanced than children who have not had those experiences (Barraga, 1976).

Learning to read braille takes longer than learning to read print. Most children do not master the code until they are seven or eight years of age. Indeed some blind students are still mastering the code at nine or ten years. Sighted children are bombarded with print from a very early age, and blind children may not have any knowledge of braille until they go to school.

Success in braille reading, as in print reading requires a basic understanding of words (Mills, 1983). One of the biggest problems the blind child may encounter with reading are related to lack of high "levels of interaction". Sighted children are assisted in learning to read by illustrations, photographs, and drawings.

7. CHINESE CULTURE AND ATTITUDES TOWARD THE BLIND

Those alike in mind may differ in form. Those alike in form may differ in mind. The sage prefers what is like-minded and ignores what is alike in form. Ordinary men stick close to what is alike in form and keep their distance from what is like-minded. "We cherish and cling to what resembles us", they say.

Chinese Fable

In Chinese folk legends, the blind were feared and pitied. In the past, many parents kept their handicapped children hidden from society to avoid the pity and reactions of others. Exposure of the handicapped child was often considered to negatively affect the prestige of the family. Chinese immigrants in Canada generally settled within the Chinese community. Not only did they not speak English, but they adhered to Chinese cultural values. The family is central to Chinese cultural organization. The Chinese seldom go outside of their families to seek assistance. Many Chinese families, including Amanda's family, do not seek outside intervention until situations become highly critical (Jim, 1986).

While Canadian parents tend to encourage independence and self-reliance in their children, the Chinese tend to emphasize mutual dependence within their families (Hsu, 1970). Wolfe, (1978), wrote that Taiwanese mothers believe that children cannot be expected to learn much during their first six years. Many Canadian parents, on the other hand, are encouraging their children to read and write even before they reach school.

Amanda's progress in school demonstrates the complex effects of familial over protection and under-expectation, language development in blind children, second language learning, and the importance of rich school environments.

PURPOSE OF THE STUDY

The underlying purpose of this study was to identify how interaction with persons and objects in the environment affects a totally blind ESL child's 1) oral expression in school, 2) acquisition of English, and 3) development of skills in braille reading comprehension and writing. The methodology employed in gathering and assessing Amanda's progress in oral language and reading will be described in Chapter Three.

CHAPTER 3

METHODOLOGY

SUBJECT

The nine year old subject of this study, Amanda, is ESL, and totally blind. The language in her home is Cantonese. At the beginning of this study, Amanda had a marked developmental delay in oral expression.

DATA COLLECTION

Amanda has been involved in an ongoing research project since 1980 thus providing the author with background data. Several videotapes were made. The video recordings were taken between 1980-1987. Diaries, reports, and anecdotal records were kept and made available to this writer. Data was also collected using twelve language samples from 1988-1990. The study will compare Amanda's language competence before and after placement in a fourth grade classroom with age appropriate peers and a systematic daily enrichment program.

The methodology described in this chapter is designed to assess the language data derived from two main sources.

1) Video Samples

The first source consists of seven video recordings of Amanda interacting with adults at 1 1/2, 2, 3, 4, 4 1/2, 5, and 6 years of age. These videotapes which were taken of the intervention programs designed for Amanda, were

made available to the author. (The tapes were made by student teachers enrolled in the Diploma Programme for the Visually Impaired).

2) Language Samples

The second source consists of twelve language samples recorded by the author. The twelve language samples provided a record of Amanda's expressive language development before and after the transition into grade four. The data has been collected by the author who is Amanda's itinerant teacher.

The twelve language samples provided a record of Amanda's expressive language development before and after the transition into the grade four neighborhood class. The language samples provide a clear record of the development of Amanda's expressive vocabulary and syntax. The acquisition of syntax included analysis of noun phrases, verb phrases and clauses, and sentence structure. Language samples were recorded in a variety of situations; during mobility lessons, braille lessons with the author, and in conversation with her peers in the classroom and on the playground.

The author is responsible for teaching Amanda braille reading and writing. The author also adapts classroom materials for Amanda. As a consultant to Amanda's school program, the author works closely with Amanda's classroom teacher, classroom aide and other personnel involved in Amanda's school program. In addition, the author supervises student teachers for the Diploma Programme and often engages them in work with Amanda. As a result, the amount of data available is rich and continuous.

METHOD OF ANALYSIS

The models proposed by Crystal, Fletcher, and Garman (1976) and Carrow (1974) were used to analyze the oral samples. Language analyses have been developed in order to establish whether children have acquired the underlying rule patterns of their language (Crystal, et al., 1976; de Villiers and de Villiers, 1978).

The following aspects of language were examined:

- 1) Vocabulary-The language samples made it possible to trace the development of Amanda's vocabulary. This included a study of word acquisition and usage, word meanings, as well as grammatical types such as pronouns, articles, and adverbs.
- 2) Syntax-The acquisition of the rule-governed structures, noun phrases, verb phrases, clause and sentence structure.
- 3) Pragmatics-This aspect illustrated Amanda's usage of English for such pragmatic functions as request, description, and command.

Using the Crystal Analysis (1976), the language samples were examined in the following categories:

I WORD LEVEL- is an examination of the use of bound morphemes, articles, pronouns, and auxiliary verbs.

II PHRASE LEVEL- Noun phrases include articles, pronouns, and adjectives. Verb phrases include auxiliary verbs and adverbs. The development of the verb phrases precedes the full development of sentence structure (Garvey,1976b).

III CLAUSE LEVEL- this is an examination of clause structure which is a complete sentence or part of a sentence. A clause contains a subject, verb, and object.

ERRORS

The Carrow Elicited Language Inventory (1974), developed a protocol in which the following types of errors could be analyzed to unveil what children are able to do and what errors they make. Errors reveal the completeness of children's understanding of rules. There are five categories of error types: substitutions, omissions, additions, transpositions, and reversals.

Substitution- A Substitution occurs within a grammatical category when another word is substituted for the stimulus, regardless of the grammatical form of the substitution.

Omission- An Omission error occurs when an entire word is omitted and no other word is substituted in its place.

Additions- Additions are extra words that occur in the sentence.

Transpositions- Transpositions occur whenever a word appears in the wrong position in the sentence.

Reversals- Reversals are a special class of transpositional errors.

Jargon and Misarticulation- Nonsensical words used in conjunction with correct words within the sentence.

To determine if Amanda's delayed English speaking skills were related to her Chinese speaking skills, a Chinese language sample was taken, transcribed and analyzed by a native Cantonese speaker as part of this study. Since English is a second language for Amanda, it was important to determine her competence in her first language. There are two dialects of Chinese spoken in her home. Cantonese is spoken by her parents and siblings and Tai San is spoken by Amanda's maternal grandmother who lives with the family. Cantonese is the language used most often by her family, and so is the dialect that was used for the Chinese language sample.

The results of the Chinese sample indicated that Amanda was marginally more competent in Chinese than in English. As with English, when the Chinese sample was taken (September, 1989), Amanda had difficulty expressing herself.

The data derived from the language samples is discussed in two categories: Measures of Change and Descriptive Measures. Measures of Change indicate the areas of Amanda's data on a pre and post-transition basis. Descriptive Measures indicate Amanda's progress in English competence after moving to the grade four classroom.

MEASURES OF CHANGE

1. Mean Length of Utterance (MLU)
2. Complete Sentences
3. Function Words
4. Reading
5. Writing

1. Mean Length of Utterance

The Mean Length of Utterance (M.L.U.) is the average length of the child's utterance in morphemes (Dale, 1976). Both morphemes and bound morphemes are counted. M.L.U. is calculated as the total number of morphemes and bound morphemes contained in single utterances. This type of analysis is sensitive to the child's acquisition of morphemes, such as the plural or possessive "ed" and "ing". Words and inflections are counted. For example, "Amanda's coat" has a value of 3.0 M.L.U. There is one point for Amanda, one point for possessive "s", and one point for coat.

2. Complete Sentences

A complete sentence is characterized by a subject, verb and object. Using the language samples, the number of complete sentences Amanda used in the first language sample, October 7, 1988 prior to the transition into grade four will be compared with the number of complete sentences she used in the final language sample taken after the transition, March 5, 1990.

3. Function Words

Function words are linguistic conventions that have no reference to persons, places, or objects. Use of words such as "the", "or", and prepositions were counted.

4. Reading

Amanda's braille letter recognition skills were examined before and after her transition into the grade four classroom and the increase in letter recognition will be shown. Her letter recognition skills were recorded daily and the average number correct was graphed.

5. Writing

Amanda's progress in developing braille writing skills will be shown. Her braille skills were recorded daily and the average scores were graphed.

DESCRIPTIVE MEASURES

Descriptive data is important in indicating the progress Amanda has shown since the transition to her present school program. This data compliments the measured data in providing a record of increasing English competence. The data is described in the following categories:

1. Language Comprehension
2. Language Usage
3. Rhymes
4. "Wh" Questions
5. Auditory Retention and Organization

Data for descriptive measures were gathered from the following:

1. Language Comprehension aspects that are described include: response to requests, auditory conceptualization, final consonant discrimination, comprehension and memory for facts, inferring connotative word meanings, and auditory discrimination
 - a) Receptive Language refers to the ability to comprehend spoken language and respond to verbal commands.
 - b) Auditory Conceptualization here, examines responses to verbal commands by asking Amanda to show the right and left sides of her body. Examples include: "Put your right hand in the air." and "Place your left hand on your right leg."
 - c) Final Consonant Discrimination required Amanda to differentiate between words that had similar-sounding consonants at their endings. Examples of this test include: "rack/rag", leaf/leave", and "Moon/moon."
 - d) Comprehension and Memory for Facts required Amanda to listen to short passages and answer factual comprehension questions. Students who have short-term memory problems have difficulty with this area. Test examples include: "Tom's teacher made popcorn yesterday. What was made?, Who made it?" (popcorn, Tom's teacher)

e) Inferring Connotative Word Meanings required Amanda to listen to a short paragraph and identify and define nonsensical words from context. An example is:

"The happy little plotch ran to his master.

He wagged his tail and flopped his ears.

Then the plotch jumped up on his master's

lap and licked his master's face."

A plotch is a puppy.

f) Auditory Discrimination required that Amanda judge if the pairs of words presented orally were the same or different. Word discrimination indicates the ability to discern phonological differences between two words spoken in isolation. Some examples include: "read/dead", "work/work", and "bed/bread."

2. Language Usage consisted of the following categories: word definitions, sentence completions, sentence imitations, grammatic completions, semantic absurdities and word articulation.

a) Word Definitions- Amanda was requested to define series of words presented orally. Examples of this test and Amanda's responses: "Castle"-a castle means a king =0 points on the test and "Cow"- 'A cow is an animal.', 'It's an animal that it is in farm.', 'Cow makes milks.', 'The cow makes hay out of milk.', 'The cow eats hay.', 'The cow he eats um, he drinks milk out of um-he eats.' =2 points on the test.

b) Sentence Completion- Pictures were described to Amanda and she was given a series of incomplete sentences. Examples from the test include: "A bird builds its nest in a" and "You wash your hand and face with a bar of".

c) Sentence Imitations- This subtest assessed Amanda's ability to produce grammatically correct English sentences. The rationale behind this type of activity is children cannot repeat language structures which they do not know.

d) Grammatic Completion- The purpose of this exercise was to complete the sentence presented by the examiner. Examples: "Mary has a dress and Joan has a dress. They have two (dresses)." and "The shoes belong to the boy. Whose shoes are they? They are the (boy's). Amanda generally would not respond, which may indicate a lack of understanding of the request.

e) Semantic Absurdities Amanda was given a series of nonsense statements and she was asked to explain why the sentences did not make sense. Semantic Absurdities subtest include: "The mother fed the lullaby to her baby."

f) Word Articulation- Exercises were presented. For example, Amanda was requested to pronounce a series of single words correctly. Mispronunciation of words may indicate difficulty in listening rather than articulation problems. Test examples include: "tree", "dishes", and "bridge."

3. Rhymes will also examine integration of facts to solve riddles. Amanda was asked to identify mystery objects in a series of rhyming riddles such as "I am good to drink. I am white. I rhyme with silk. What am I?"

4. "Wh"Questions- To the following questions Amanda responded with full sentences. Responses earlier consisted of one and two word replies.

Question	Response
Who- "Who turns on your bath water for you?"	"You run it by yourself."
What- ".What kind of day is it?"	"It is sunny."
Where- Where do you eat your lunch?	"I eat in the cafeteria."
When- ".When do you have Music?"	"I have Music last period."
Why- "Why do we celebrate Thanksgiving?"	"Because we are thankful."
How- "How do you get to your piano lesson?"	"My Mommy and my Dad drive me."

(Appendix pp.127). The Appendix lists Amanda's responses to the questions separated into categories in the following manner: One-word responses, Two-word responses, and Sentences.

5. Auditory Retention and Organization Amanda was asked to recall information and reorganize information in the presence of distracting stimuli. She was also asked to correct grammatically incorrect sentences. Amanda was asked to identify the two words that were the same from a list of three. This test indicates oral word recognition. Amanda was also required to think of words that began with a certain letter. "Think of all the words that begin with the letter 'p'."

In addition to the Carrow, other tests were also given but since these were also not standardized for ESL blind children, it was felt scores would not reflect Amanda's language competence. The tests were given to Amanda by the author.

-The Test of Language Development-Primary (TOLD-2) (Newcomer and Hammil, 1988)- The subtests measure different aspects of spoken language such as Grammatical Understanding, Sentence Imitation, and Grammatical Completion. The Word Articulation and Word Discrimination subtests measure the ability of the child to correctly distinguish between words that sound similar.

-Evaluation Communicative Competence-A Functional Pragmatic Procedure (Simon, 1984)- is an informal approach designed to provide the examiner with information on the student's language processing abilities, metalinguistic skills, and functional use of language for various communicative purposes.

-Test for Auditory Comprehension of Language (TACL-R) (Carrow-Woolfolk, 1985)- measures auditory comprehension of word classes and relations, grammatical morphemes and elaborated sentence constructions.

-Listening Comprehension Skills: Inferring Connotative Word Meanings (Alameda County School, 1975)- requires careful listening to a make-believe story and to then define a non-sensical word.

The following chapter will discuss the results of the language sample analyses and contrast Amanda's language performance before and after her present program.

Chapter 4

RESULTS AND DISCUSSION

This chapter is a report of the results of the analyses of language samples and braille reading and writing skills. Amanda's competence in expressive language is described. Braille reading and writing assessments were also evaluated.

RESULTS

The results are reported in two categories: 1. Measures of Change and 2. Descriptive Measures. The Measures of Change are measures that indicate the areas of Amanda's data on a pre and post-transition basis. Descriptive Measures indicate Amanda's progress in English competence after the transition into the grade four classroom.

1) MEASURES OF CHANGE

All of the Measures of Change listed below are included in Figures 1-5 (pp.49-53). They all form ordinates on a interval scale, therefore the dates have been assigned to the language samples and evaluations.

The following categories of language were measured:

1. Mean Length of Utterance.
2. Complete Sentences
3. Function Words
4. Reading
5. Writing

1. Mean Length of Utterance (M.L.U.)

The M.L.U.s. were taken from 580 spontaneous utterances. Figure 1 shows the pre and post M.L.U. test results from October, 1988 to March, 1990.

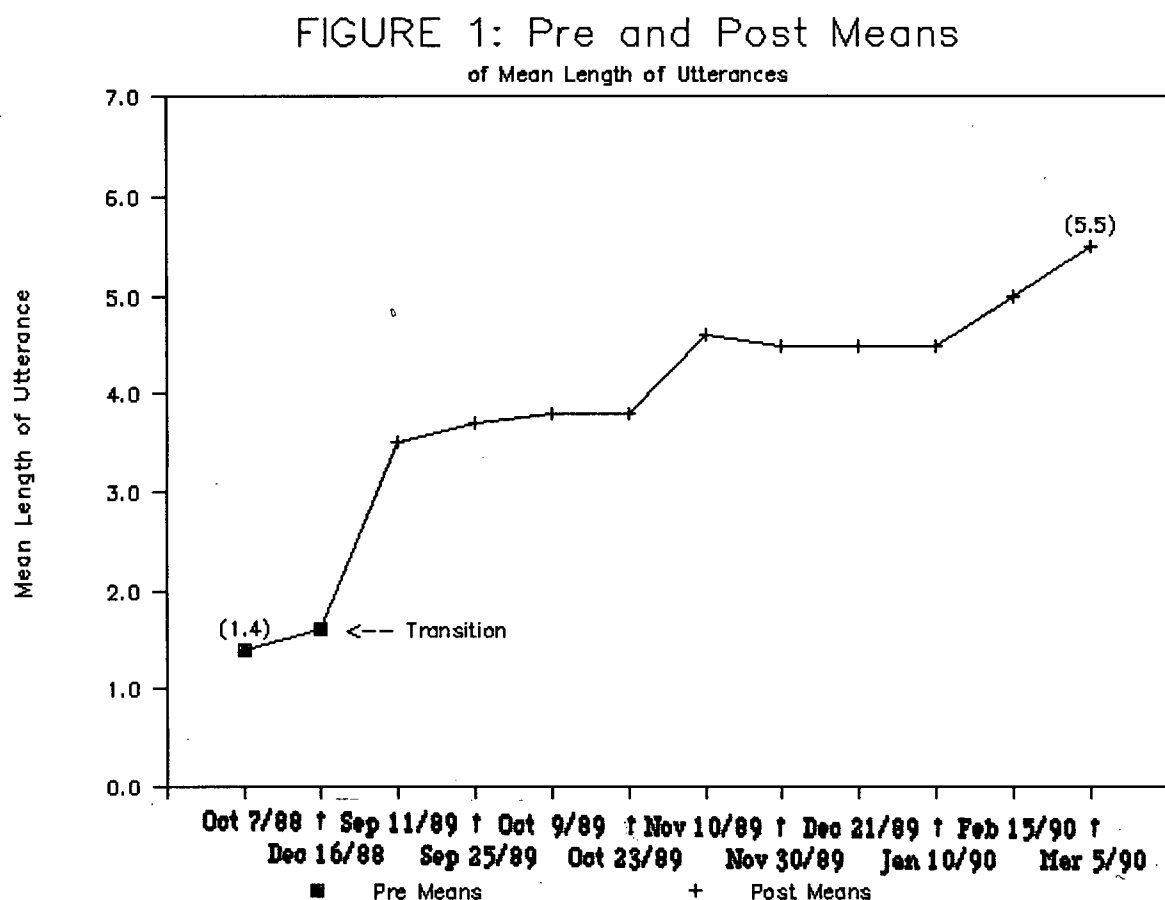


Figure 1 shows the increase in M.L.U.

2. Complete Sentences

Figure 2 shows the Pre and Post transition means of Complete Sentence Usage.

FIGURE 2: Pre and Post Means
of Complete Sentence Usage

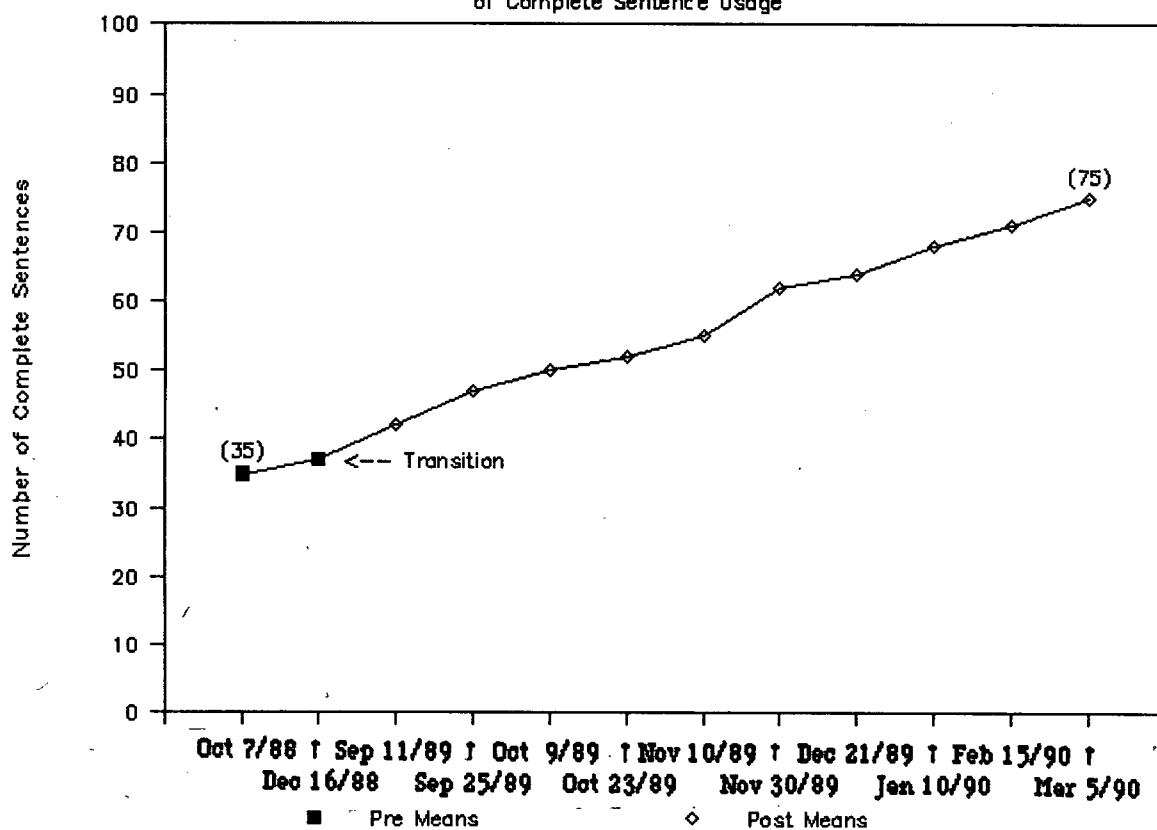


Figure 2 shows increase in the number of Complete Sentences.

3. Function Words

In the first language sample, October 7, 1988, function words were rarely represented. Figure 3 shows the increase in use of Function Words.

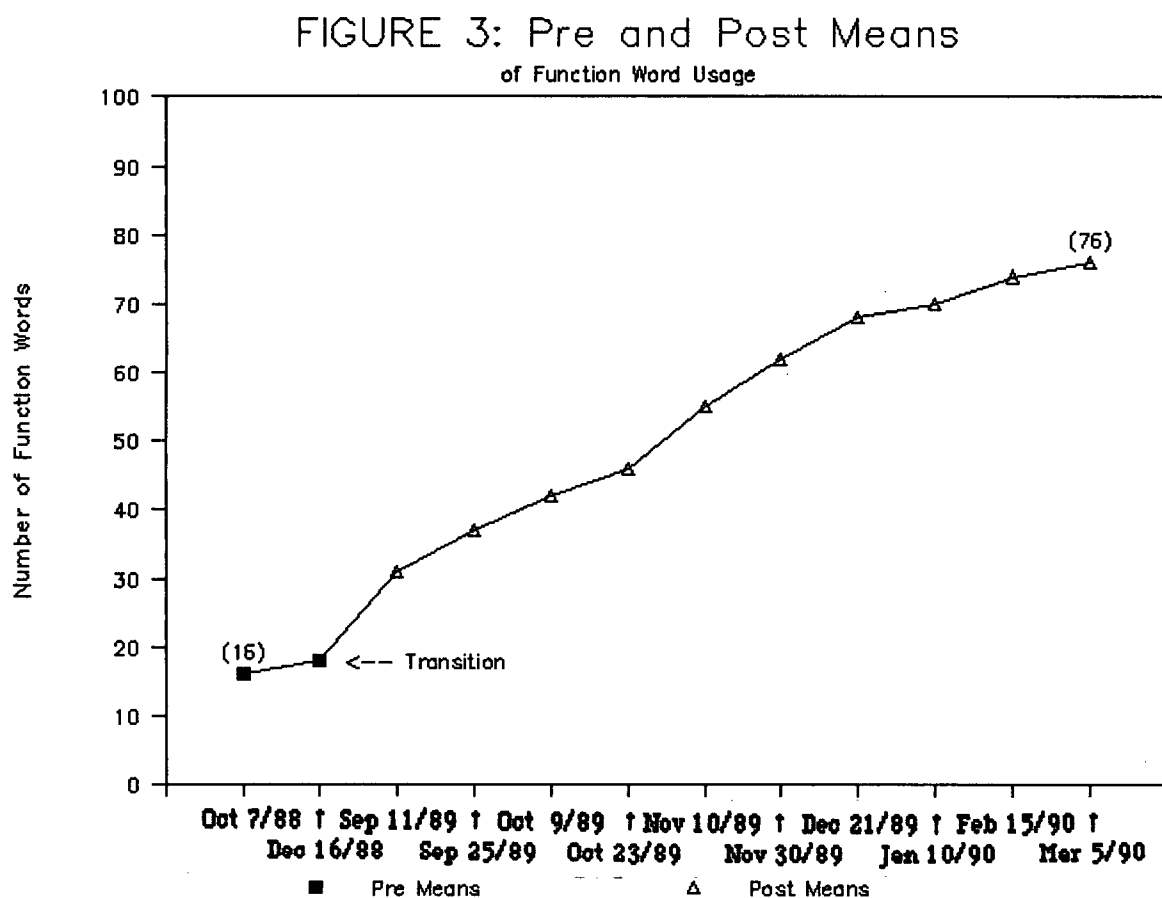


Figure 3 shows the Pre and Post transition means of Function Word Usage.

4. Reading

Braille Letter Recognition

Figure 4 shows Pre and Post means of Braille Letter Recognition.

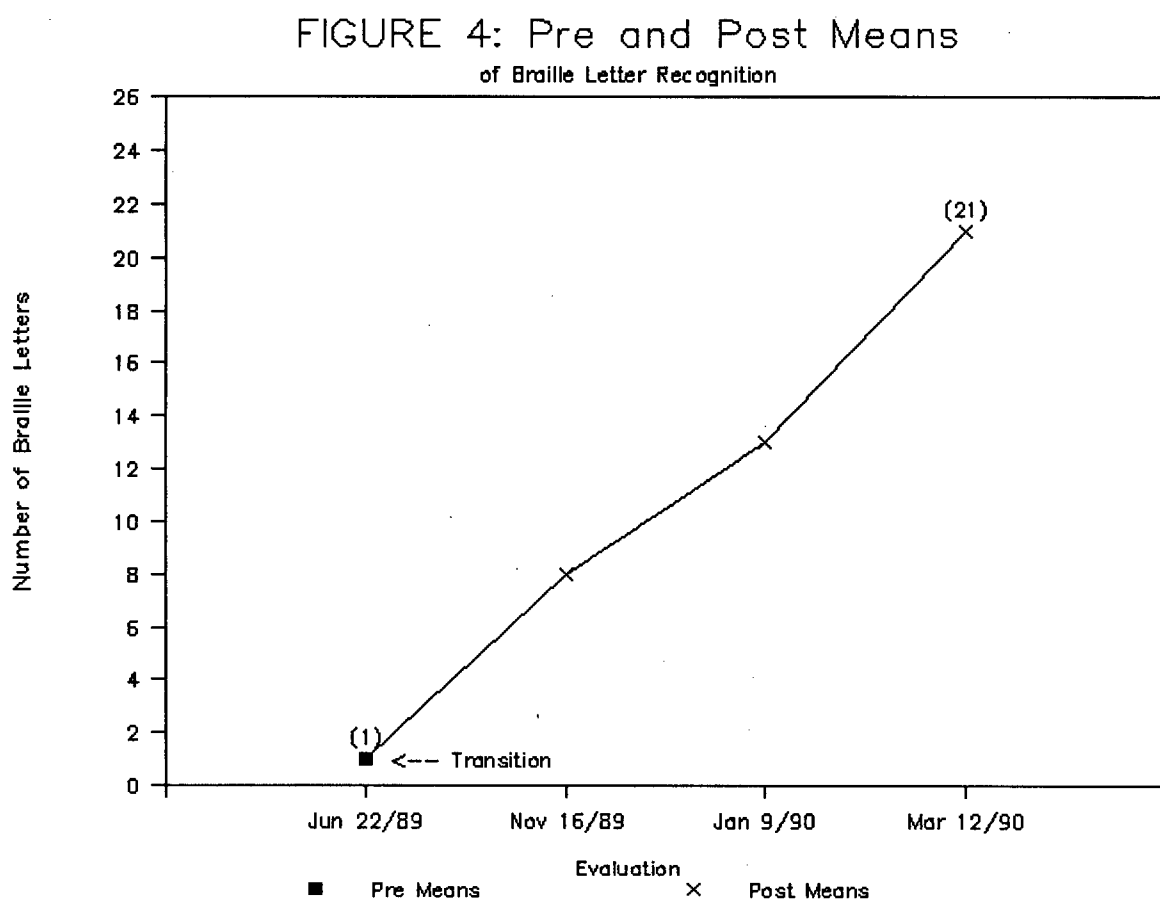


Figure 4 shows the increase in Braille Letter Recognition.

5. Braille Writing

Figure 5 shows the Pre and Post means of Braille Writing Skills.

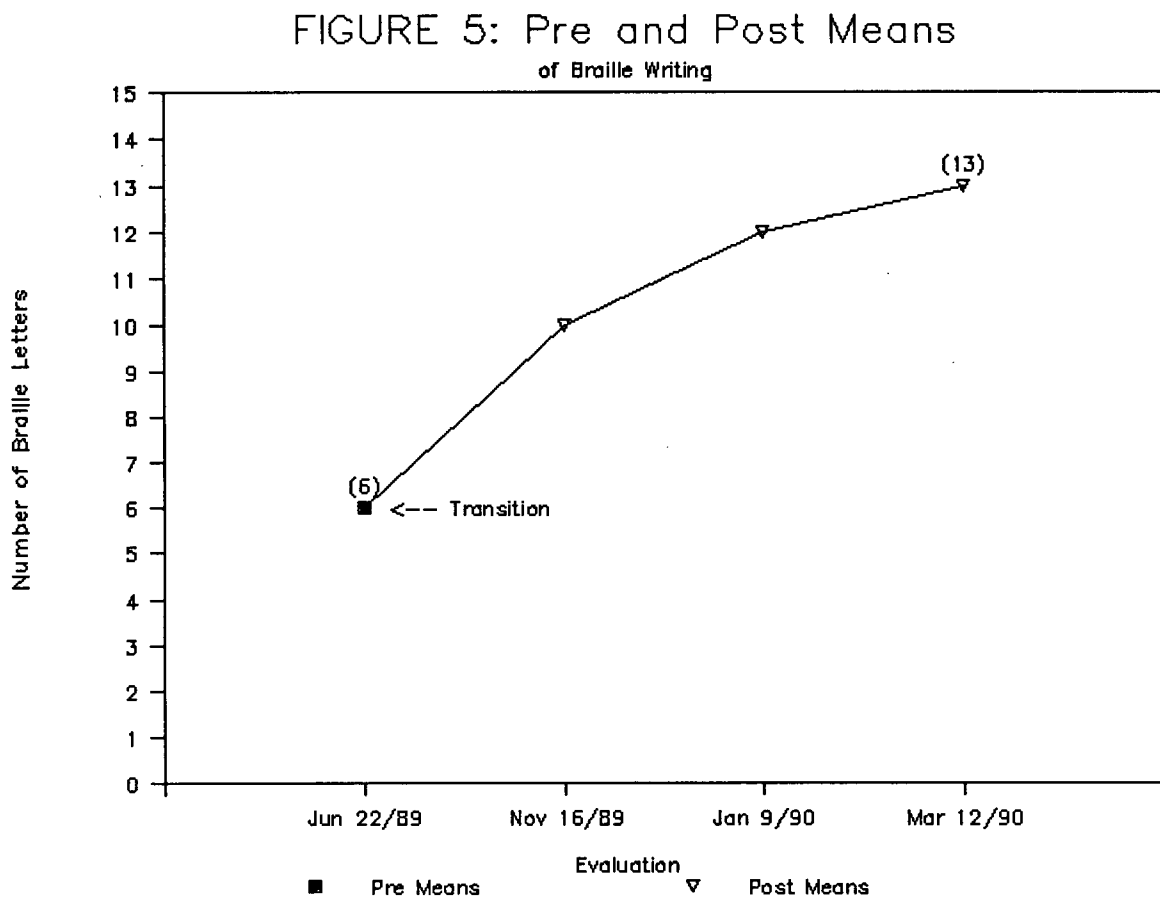


Figure 5 shows the increase in Braille Writing Skills.

11). DESCRIPTIVE MEASURES

Descriptive measures are reported in the following categories:

1. Language Comprehension
2. Language Usage
3. Rhymes
4. Responses to "Wh" Questions
5. Auditory Retention and Organization

1. Language Comprehension

- a) Receptive language ability was well developed in the early years. Amanda understood the various commands and concepts that were presented to her. In Videotape #6 (1984), indicated Amanda's ability to comprehend ballet instructions. Student teacher diaries from 1984, noted her ability to understand verbal instructions such as "Where is the fridge?" and "Turn around."
- b) The Auditory Conceptualization subtest, posed no difficulty for Amanda. An example includes: "Put your right hand in the air."
- c) Final Consonant Discrimination required Amanda to listen carefully to the final consonants of the examples given. This was a difficult task for Amanda.
- d) Comprehension and Memory for Facts were well done.
- e) Inferring Connotative Word Meanings, required Amanda to infer word meanings.
- f) Auditory Discrimination required Amanda to listen carefully.

2. Language Usage

- a) Word Definitions were difficult for Amanda. Lack of experience was evident.
- b) The Sentence Completion subtest was well done.
- c) Sentence Imitation responses were not exact imitations, but the structure and meaning were intact. For example, the original to be imitated was "Those women aren't baking cakes." Amanda's imitation was "Those women are not baking cakes."
- d) In the Grammatic Completion subtest Amanda had difficulty completing a sentence that she had not created herself.
- e) In the Semantic Absurdities subtest, Amanda was to respond with a comment like: "You sing a lullaby."
- f) On the Word Articulation subtest, Amanda did quite well.

3. Rhymes

Example: (word provided): "that", (clue given): "a pet",
Amanda's response: "a mat sat on a cat". Amanda showed a minor reversal problem in rhyming.

4. Responses to "Wh" Questions

It was characteristic of Amanda to give one word responses to Wh-questions prior to 1989. She was unable to answer "why" questions. As Ervin-Tripp, (1970). suggested, without adequate "levels of interaction", a

child is unable to formulate explanations. Amanda was able to answer Wh-questions following the transition. She also was able to increase the M.L.U. of her responses dramatically.

5. Auditory Retention and Organization

Prior to the transition, Amanda was not capable of auditory memory tasks such as re-organizing sentences so they made sense. Although she did not have syntactic problems when she created sentences on her own, she did during testing.

DISCUSSION OF RESULTS

Since transition into her neighborhood school, Amanda has made dramatic improvements in her expressive language. Prior to and during September, 1989, Amanda scored an average of 2.08 M.L.U. After September, 1989, following the transition into her neighborhood school, Amanda scored an average of 4.6 M.L.U. Prior to the transition, her language consisted of very short utterances. Two examples include: "That sound." What Amanda wanted to say was that she heard a sound. She was only able to express a two-word phrase to convey her thought. Another example is "Susan has cats." The number of complete sentences dramatically increased after the transition to her neighborhood school. Amanda now uses sentences for communicating purposes and does so using more function words. Her sentences are more detailed and descriptive. Amanda began using language for conversational purposes by not only expressing

statements, but also regulations, requests, demands, emotions, and descriptions. She presently employs all types of sentences; declarative, interrogative and imperative. Two examples of Amanda's sentences from each type will follow:

Declarative: "It's so heavy." "I saw Mrs. McDonald and she was goin' home and she said 'Hello'."

Interrogative: "Are you gonna stay at Sarah's school?" "What is that?"

Imperative: "Come on." "Hold my lunchkit." (Appendix pp.77-90). Figure 2 demonstrates pre and post transition data.

Prior to the transition, Amanda did not offer many descriptions or explanations, but rather short answers to questions. Rarely was conversation initiated by Amanda. Some examples include: "Um lunch" Here, Amanda is not answering a question. She wanted to tell me about a lunch party she was involved in planning. The previous "sentence" was her way of initiating conversation on that topic. It was then up to the listener to ask for more detail. Another similar example includes: "Wreath. We made wreath." In Amanda's language sample #12, we see her using sentences which include function words. Three examples include: "I was teaching you a Chinese word.", "What kind of costume are you gonna wear?" and "Can I turn the pages with you?"

The classroom teacher uses language experience stories to encourage speaking, reading, and writing. The "Whole Language" method is used in this class for instruction in reading. This approach has its roots in current socio-psycholinguistic research and recognizes the constructive, generative and transactive nature of language learning. The whole language

approach to reading emphasizes oral language and gives Amanda many opportunities for oral language enrichment. The Language Experience approach to reading, using the daily journal inscriptions, encourages Amanda to write stories about her own life experiences.

Amanda's classroom program is child-centered and directed to the needs of the individual child rather than based on a set curriculum. The children are encouraged to listen and speak, read and write, at their own level. Their personal choices are encouraged and their autonomy is valued. Classroom activities are functional, thoughtful, and appropriate to the children's needs. They are encouraged to explore in a variety of situations without too much interference.

Teaching lessons are divided into units. The units are made real to the children through first hand experience. When the unit on the ocean for example, was nearly completed, the class made a field trip to the beach to interact with the ocean first hand. Most of the children had little or no knowledge of the ocean and its shores. To enrich Amanda's "level of interaction" with the beach, the teacher placed a crab in her hand and Amanda felt it crawl. It was an experience she won't soon forget and as a result, she now knows the size of a crab, how it crawls, and where it lives.

Emphasis in the classroom is placed on language activities. Stress is placed on auditory memory, the ability to follow directions, and reorganize information. The activities are designed to teach the child to think about the language they hear and organize verbal information. Activities to develop auditory discrimination, auditory sequencing, auditory conceptualization, and

auditory synthesis are based on the program developed by Delfosse (1984) called Auditory Processing in Action. Another language program that was used to develop auditory discrimination, auditory association and auditory memory by Lazzari and Peters (1980) is called Handbook of Exercises for Language Processing (HELP). The program Activities for Children Involving Everyday Vocabulary (ACHIEV) (Jorgensen, Huisingh, Zachman, Barrett, Snedden, and Thomsen, 1985) incorporates tasks to develop Critical Thinking, Completing Sentences, Responding to True-False Statements and Correcting False Statements, Naming from Attributes and functions, Stating Attributes and Functions, Making Comparisons, Giving Multiple Answers When the Category, Function, or Attribute is Provided, Naming through Exclusion, Retelling Definitions, Defining Words, and Using Vocabulary in Context.

Reading Ideas, (The Special Education Association Editorial Committee, British Columbia Teachers' Federation, 1975) provided activities for phonics and classification games. To enhance auditory discrimination and comprehension, as well as to develop expressive language, the Monster Stories Reading Program, (Blance and Cook, 1976) was incorporated into the program. Monster Stories (on tape) are based on the idea that beginning reading ought to be linked to the spoken language of children. Narrative makes use of youngster's idiom and sentence structure.

The Mangold Developmental Program of Tactile Perception and Braille Letter Recognition (Mangold, 1977) was used in conjunction with the Patterns Primary Braille Reading Program (Caton, Pester, and Bradley, 1982) and the author's individualized program for teaching braille to Amanda. The

Mangold Program addresses remediation of identified braille reading deficiencies and prevention of potential deficiencies. The program promotes two-handed braille letter recognition. The Patterns Program is a specialized beginning program for reading braille. In Amanda's case stress was placed on sound/symbol association.

In addition to the interactive experiences the school was providing, a student teacher enrolled in the U.B.C. Diploma Programme in the Education of Children with Visual Impairments, began to work with her. The student teacher's role was to enrich and develop out-of-school experiences and to provide high "levels of interaction" to encourage Amanda's expressive language. The underlying premise of this thesis is that high levels of varied, comprehensible interactions with persons and objects is essential to the development of expressive language.

The data suggest that immersion in an environment where Amanda was actively involved and expected to participate significantly encouraged the development of expressive language. While it is reasonable to expect factors of social maturity to account for some of the language development, the dramatic and rapid increase can be assumed to be related to the increased stimulation, high levels of interaction, and expectations in her present school setting. In addition, increase in motivation to learn braille reading and writing was noted.

The descriptive measures section of the results shows the dramatic increases in Amanda's language development. Her skills in using the English language are continuously being improved. The lack of this

ability previous to the transition, shows current improvement in English language usage. Examples of auditory reception are included in Appendix pp.98. Final consonant discrimination examples are found in Appendix pp.119-120. Comprehension and Memory for facts responses are found in Appendix pp.125.

Amanda had problems with the Sentence Imitation test, especially when the sentences were longer than the sentences she generally used (Appendix pp.116-117). Semantic absurdities showed Amanda's lack of experience with the English language in understanding when and why sentences did not make sense.

Amanda had difficulty pronouncing the following in the Word Articulation subtest: "feather", "treasure", and "thread". The sections underlined show the specific problem areas. Difficulty with pronunciation in these areas is common for Chinese-English speakers (Appendix pp.123).

In the Rhymes section, Amanda was recalling activities done previously with rhymes similar to those presented (Appendix pp.114). Amanda had a general understanding of how to rhyme words. Her ability to have "fun" with the language in terms of enjoying rhymes and riddles is at the beginning stage. (Appendix pp.124-125). Amanda did not have any experience with rhymes prior to 1989. Although Amanda had difficulties with this section, she was able to complete some of the examples. The difficulties here lie in Amanda's lack of experience using fun word games. Problems with rhymes also affected the Integration of Facts to Solve a Riddle section (Appendix pp.124-125).

Amanda's grade four classroom environment is a non-threatening one. English language is encouraged and developed. Because all of the children are ESL, the classroom emphasis is on English language development. The classroom teacher is careful to introduce new vocabulary in a manner that is most likely to be absorbed by all of her students. Having a blind child in her classroom encourages her to consider ways in which senses other than that of sight are employed. The other children also benefit by touching, smelling, listening and tasting real objects. When at all possible, the class goes on outings to develop high levels of interactive experiences with various persons and objects. These are necessary components in Amanda's language development.

Amanda enjoys engaging in conversations and before each lesson the author spends time talking with her. Amanda often tries to extend the "Talking Time" section of the lesson and by doing so, she has developed the ability to ask questions.

The "level of interaction" Amanda has acquired since arriving in grade four has increased her expressive language. The author feels this study clearly shows that in order for an ESL, totally blind child to make sense of their environment and the labels that are attached to objects within that environment,--a high level of interaction with persons and objects must be provided. This study clearly shows that once this "level of interaction" is provided and descriptions of the interaction are given, language, along with reading and writing dramatically improves.

Amanda's language comprehension is improving. As she learns how to combine her interactions with persons and objects with words, Amanda will show an increase in comprehension. Unless a word has meaning, that is, unless Amanda can relate a word to her repertoire of interactions with the environment, the word is simply a word and has no direct impact on her. She may be able to memorize the word's definition, but to Amanda the word would be meaningless without an experience to attach to it. The author believes difficulties in the Sentence Completion and Word Definition subtests were due in part to lack of interactive experiences with the activities or situations presented in the tests (Appendix pp.122-123 and 112-114). It should be noted that in January, 1989, the author took Amanda to the University of British Columbia Dairy Barn. It was from this environmental interaction that Amanda was able to base her word definitions regarding "cows".

Prior to the transition, June 1989, Amanda could braille six letters with 80% accuracy. Following the transition, March, 1990, Amanda was capable of braille thirteen letters with at least 80% accuracy. (see Figure 5). At this time, Amanda was able to braille fourteen whole-word contractions as well as spell and braille twelve words from her Spelling list. Amanda was not capable of reading words prior to the grade four transition. Since the author has worked with Amanda, the sight-word and phonetic approach to word recognition and reading has been employed. Amanda could recognize only one braille letter in January of 1989. Seven months after the transition, Amanda was able to recognize twenty-one letters at an 80% criteria. Prior to the transition, Amanda did not know how to read letters in braille as whole-word contractions, whereby one braille letter

represents a whole word. By February 1990, Amanda could read eighteen whole-word contractions. At this time, Amanda was also able to read short sentences using her whole-word contraction braille words as well as her spelling words. The following are examples of sentences Amanda was capable of reading: "I like you." "Will you call me?" "I like new snow." "I can clap."

When Amanda entered her neighborhood school, she was a frightened, unhappy child. Amanda's mother confided how unhappy Amanda was at home. She showed her unhappiness by being difficult to handle. She would often tantrum and wet her pants. Amanda did not express her wants or needs verbally, but rather through gestures and body signals. When the signals were misinterpreted, Amanda became frustrated. Now she expresses herself verbally and knows that language is more powerful than signal behaviors. Amanda's mother is thrilled with Amanda's progress at school and this progress has also affected her behavior in the home. Amanda is now a happy little girl whose language skills and self-esteem has dramatically increased.

Amanda's behavioral problems disappeared shortly after entering her neighborhood school. Amanda knew the classroom behavior rules also applied to her and that she was being treated "just like the other kids". She moved to a school program where there were expectations for her and opportunities for positive, rich, social interactions with her peers. Classroom activities were age appropriate.

The classroom aide taught Amanda how to skip, play Hop Scotch, Checkers, Snakes and Ladders, and Tic Tac Toe. Other children were playing these games during free time, noon hour and recess and Amanda was now able to participate. She now is able to play with other children and has some very good friends.

The weekend community interactions and discussions provided by the student teacher since the transition in her neighborhood school, has had an impact on Amanda's language. This is evident in Amanda's journal entries. When she knows what the Sky Train is, for example, she is able to talk about it.

Amanda has done well since enrolling into the grade four classroom. Being immersed in an environment where Amanda felt accepted and actively involved in all learning processes, significantly enhanced her environmental interactions and thus allowed for the development of expressive language. The change has created a happy little girl with increased confidence and self-esteem. The interactive experiences gained within the classroom, as well as those provided by the student teacher on the weekends, gave Amanda the opportunity to attach meaning to words. She is now capable of carrying on conversations and expressing herself in a manner that is understood by everyone.

CHAPTER 5

CONCLUSION

The importance of this study lies in the understanding that there is an intricate relationship between language and high levels of interaction with persons and objects. The study of Amanda's language demonstrates the importance of enrichment and positive expectations for language development. When language learning is complicated by a second language, which is the language of the school, care must be taken so that the blind child has good language models. The kind of enrichment in which meaningful associations can be developed is extremely important.

Experiential deprivation was a factor in Amanda's delay of oral language. Positive interactions, peer group association, and a stimulating environment promote progress. The interactions within the grade four classroom where Amanda is presently enrolled meets her needs for high levels of interaction and motivation. The basic premise of the case study was that high levels of interaction with persons and objects along with positive expectations are important components in first and second language acquisition. Children need interactions with people and objects in order to find meanings in language.

Amanda keeps a journal which includes her own stories. Amanda enjoys reading primary braille books as she searches for the words she knows. Poetry reading has also been a successful motivator since

Amanda loves the rhythm these provide. All completed classroom work is transcribed into braille so that Amanda can re-read what she has written.

It is hoped that this study will be useful to teachers who have a blind ESL child in their classroom. Teachers must be aware of the child's need for environmental interaction in order to develop expressive language. The child's receptive language ability should be considered. As in Amanda's case, the child may well understand conversation, but may not express himself. It is important for the classroom teacher and the itinerant teacher to work closely together in order to develop and carry out goals for their student. The most useful ideas are developed when the classroom teacher, itinerant teacher, and aide all work together and pool their expertise.

The itinerant teacher must consider that braille reading and writing skills are contingent on language development. Care must be taken to incorporate the child's vocabulary into the braille lessons. When the child keeps a journal, he is able to have his verbal thoughts recorded. When this is transcribed into braille, the child sees his own language in the braille format. This is similar to his sighted peers' "sight word" approach to reading. It is important for teachers to be sensitive towards their culturally different students. The teacher should be aware that when there is a different language spoken in the home this will certainly impact English language acquisition. Strong cultural traditions often influence a child's behavior in the ESL school setting. Involving the student's parents allows the teacher to become aware of their student's cultural traditions by getting to know the family and their values. In blind children, language is often a strength. Teachers of blind ESL students should not be afraid of teaching a second

language but rather, should overcome unnecessary overprotectiveness by encouraging participation in classroom activities. Such participation may show large benefits in that child's language development.

Limitations of this study include the number of language samples that were taken. If the language samples were taken more frequently after the transition, it might have been possible to trace more precisely full sentence development and use of function words.

The study demonstrated that even with a severe visual handicap and a culturally different background, high "levels of interaction" dramatically improve language development. In order to have something to talk about, children need to be actively involved in a variety of environmental interactions (Curtiss, 1977).

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APPENDIX

SENTENCES INITIATED BY AMANDA

DECLARATIVE

It's so heavy.

Recess time.

My turn.

Lunch time.

Somebody here.

Mr. Ng is here.

Except you're calling. Calling me.

O.K. Let's go back.

We'll go back.

And everybody will go.

And you'll be going.

I'll carry that.

I'll help you.

I've got it.

I need butter.

I have to go to the washroom.

I'm gonna have the rope.

I'm gonna do it by myself.

Only one hand.

I'll take care of it.

The bell went.

I'll help,too.

Janice here.

The bell went.

Drink some coffee.

Open--door.

And then we will stop.

That was Mr. Ng.

O.K. Let's go back you guys.

Go back.

And you'll be staying home.

I wanna eat lunch.

'Cause I'm bigger.

I don't care.

The book.

I've got the rope.

The skipping rope.

Skipping rope.

Let me do it.

My turn.

O.K. I'll give you another sentence.

It's library time.

Scissors

No, you put your heads down,
thumbs up.

And then we 'll go back to school.
And you would walk by yourself.
I was taking, I was taking care of
the taperecorder.

You got your things.

I wonder.....

My cane found it.

Maybe we should

Maybe we should a go to Stanley
Park.

I take your picture.

I don't forget.

I'll show you where my house is.

Making friends.

John is my neighbor.

My mother won't....

Let's go.

Op, Sorry, Janice.

Now, you're behind.

I'll throw it.

Go down Prior and then that's all.

I'll follow you.

I found some scissors.

Finished

I throw this away.

And I would walk by you.

There's Ms. Corcarin's car.

I'll show you where....

I want to work with you.

Ah., that's bump.

Maybe we should ummmm go
for a field trip.

Smile.

Hm You gonna have lunch.

Me and you.

I know what....,Mrs. Olson.

We are making friends.

I can't walk with him.

She won't let me.

You walk be.....

And you didn't saw me.

Sarah doesn't know braille.

And then I'll show you my
house.

Somebody's house.

I wanna play skipping.

Somebody's house again.

Nurse what.

Sarah doesn't know.

Next week we're gonna have an

I wanna take it off.

O.K. I'll be right back.

And your sister.

No. No. This is your house.

Ride it outside.

Pretend you're busy.

I have to go to my friend's house.

Bye.

O.K. I'll pick out one.

I never seen Sarah's um new school.

You're teasing me.

Miss Gow is here.

Bridie.

I bet you like apple juice.

You sing this.

Joy to the World

Let's go this way.

Sour tastes, Ugh!

Like this.

I wanna play skipping rope.

I wanna turn the rope.

Next week we're gonna have fun.

That sound.

We're gonna have lunch at the Resource Room.

O.K. O.K. You're my sister.

No. We have to ride our bikes.

I need my bike.

You're my mom.

Excuse me.

I know.

Miss Gow doesn't know Sarah.

Hide it up.

I have some and I didn't wear them.

And then my Mom blew the cake.

I bet.

I like pickles.

Let's do...

Time to go.

Um You mean the tasting and the stuff.

Lemon, Ugh!

The taste centre, the Smell centre.	And you just came here.
That's it.	Games,games.
Wear some.	The bell went.
John is John B.	We can do it in the....
Oh Oh His last name is Pang, but uh...	His last name was....
I think it starts with a "B".	Like his last name.
Let's do "Thinking of a Letter".	Take the paper out.
No. You're teasing me.	Um like Birthday card.
I just gave it to my mother and my sister.	I will help you.
I didn't say any bad words.	I'll help him.
I won't talk to you either.	You're doin' "w".
The tape's not in.	The tape's not in there.
Let's do it right now.	"Frog and Toad".
Miss Harven.	You're name is Cathy.
I forgot your name.	Um Let me think.
It's stopped.	It's still goes
That's in.	I didn't put the paper in.
Well, I never went.	Well, I never went to my Mom.
No, I never seen a play like that.	John is be nice.
I didn't phoned you yet.	I went to piano lessons.
At the weekend.	Tomorrow you work with me.
Kung Fu.	I like Kung Fu.
Jimmy likes it.	Like... Miss Gow will be here.
I'll get it.	But you're tired.
You, you might be tired.	I never seen Sarah's school.
Your letters.	Open the door.

Braille.

No push pin.

Um. I went to music.

Go.

I'll do it.

I know.

For you.

Jimmy is "Special Person".

Kung Fu.

I'll go and get it.

"a" for apple "a".

You're supposed to sing.

Miss Gow isn't here.

But, Miss Gow isn't here.

I'll teach you.

I'll pick a color.

freezing.

O.K.

"a,b,c,"

I'll ask him.

My cane.

Or you can show.

I wanna ask a question.

Down.

You can ask me if you need help.

"w" looks like that.

Um like Um like um. I did my journal today.

Oh! I remember this.

I'll help.

Maybe its all finished.

You don't have any chair.

Jimmy "Special Person".

But I like it.

Miss Gow wasn't here.

O.K.

This is a sticker.

I'm sorry Miss Gow isn't here.

Maybe she will come later.

"w"

Felt pen.

It's cold.

purple.

It's freezing cold.

I don't wanna play, I wanna help you.

Your friend.

Yes it is.

Sure.

Go across.

You can ask me.

You're behind us.

I never been to your school.

Siu May.

You're a special friend.

Ya.

She wanted to be a surprise.

And his mother didn't know.

Mess.

Back to you.

Wait,...don't....

Mom dry our hair and they got all wet.

Turn the page.

Thank-you, Miss Sparrow.

You're not coming with us.

Ready.

I didn't want-but a I just wanted to go.

Macaroni.

Together.

Sentences.

Period.

No, I'm 'head of you.

I want to turn.

Turn the page, then.

INTERROGATIVE

Are you gonna stay at Sarah's school?

What is that?

What do you do with Sarah?

Did you drink some coffee?

Can you tell me?

Can we go back?

Who is it?

We're not gonna do it?

Do you need to take it back?

But you're not gonna be there at the morning?

How come?

Did Sarah play it?

What are Sarah's friends?

Is all by itself?

Does Sarah do "Good Morning" songs?

Who's that lady?

Can I look at a book?

Is this for Janice?

At the office?
Can I help Janice, too?
Is she gonna go today?

That the cold one?
Can you hold my lunchkit?
Can I walk with him?
Can I take my notebook home?
Everybody's gone?
Does that hurt?

Braille?
Janice?
What is that?
Where's your car?
What do you got?
Where you gonna go?
Would you like to buy one?
Where you gonna go, Sarah's?
Who?
Are you gonna see him?

Did you remember?
Um David?

And what are you gonna do with
Sarah?

And then we have to help
Janice?
Well, is Janice gonna go to see
his car?
And this is the hot one?
Can I ask John something?
Can I play checkers after this?
Can I walk over?
How come your hair is curly?
Are you gonna work with
Sarah?
How 'bout me?
How come?
What are you doing?
You got your....um things?
What's the noise?
What's a helicopter?
You might go outside?
Who's Thompson?
Who's Thor?
Who's, Where do you work
with him?
And who are there?
Thursday, are we gonna do
some work?
Are you gonna do that?
Are you gonna play a game?

Janice, are you gonna be....

What is she gonna do?

Can I play checkers?

But you have to count?

Office?

In here?

Who told you?

This way?

What is that?

What, green?

Is this the ladder?

You're the children, O.K.?

Who's class is that?

Um How did it go yesterday?

Um What did you do after that?

Is it workin'?

Did you work with Sarah?

What did you do with Sarah?

And a man?

Who is she doin' with?

How will we do that if a name?

You will see me on Monday?

What are you gonna do?

How do you push it down?

Are you gonna be in the
morning or afternoon?

Is she gonna, Is she everybody?

Can you teach me?

But you just play a game, like,...

Is it bleeding?

Are you gonna go?

Why?

Can I close the door?

Can you tie my laces?

What are we gonna do today?

Did you work with Sarah
yesterday?

Are you gonna work with Sarah
here?

Who's playing that?

How 'bout Sarah?

How come?

What?

How come?

Was she a man or a lady?

Was she doin' a dance?

Can I have a drink?

What's a beaker?

In the classroom?

What is that?

What are you thankful for?

Are you gonna join us?	Miss Gow?
I say bad words?	How come?
Where?	Um Is that your book?
Are you doin' work?	Did you see Sarah?
What else?	After recess?
Is it, is it an easy one?	"k" is an easy one?
Some more letters?	What is it?
What is this?	Can we do both?
Can I do ten rows?	Can we finish?
Can we do the whole thing?	What kind of costume are you gonna wear?
	Janice?
Might go to Sarah's school?	Um Can we have "Talk Time"?
Is she gonna take a picture?	You're not gonna do it?
Miss Gow's gonna do braille with me?	Can we do "a"?
You work everyday?	Janice?
Um Like, well, is the new teacher	What's she gonna do?
is the aide that Sarah works with?	Why don't ya come after recess?
	Can we go faster?
After lunch?	Is it long?
What is his school?	But who will take me?
Is it long long way?	But who will do some braille?
But, Jimmy, did you ask him?	Mrs. Carr?
You gonna do some silly songs?	Can you sing it?
Did you sing, you know, that song..	Who's the fellow?
"A is for Apple"?	What is she gonna do with me?
Is she gonna work with me?	

Is she here?

Can you give her phone number to
me so I can just phone her?

You don't do Kung Fu, right?

Is Sarah age?

Is Everybody will be singing

"Happy Birthday"?

Do I have to copy it?

Can I help you?

David?

Can I ask him by myself?

Does Sarah do braille with

Mrs. Carr?

What are the favorite games?

Does Sarah punch?

How does Sarah do sighted

Do you have any toys?

How 'bout Miss Gow?

Works with me?

Um Are you doing to drive her?

You brailled it?

O.K. That's it?

What do you want to show him?

He?

Can I phone her? At home?

You like to do some Kung Fu?

Am I old enough?

When is Sarah gonna have a
birthday?

How 'bout Mrs. Carr?

Am I copying it?

What's copy?

Who's a man?

Can I show Mrs. Carr?

That's the last row?

um Sarah?

This tape in the garbage?

Does Mrs. Carr know how to
do sighted guide?

guide with Mrs. Carr?

When are you gonna come to
my house?

Who's Siu May?

Does she have any cars?

How 'bout Miss, Miss
Hathaway?

Some children take bath... when
they..., they what?

Can we turn?

Show Miss Gow what?

The words?
Caterpillars?
You don't have any baby?
What's a forest?
Are you gonna go after school?

Like, are we gonna do some O&M?
What kind of costume are you
gonna wear?
Um Like you might be going to
Sarah's school?
What's a judge?

Can I turn the pages with you?
What about the haunted house?
Got this?
How does it stick?
Did you made it?
Can I hold the book?
Do you know what I saw?
Pigs?
What's poor?
Woods?
Is it scary?

Is there monsters?
Do you have any woods?
Are we gonna stop?
How 'bout fruit roll-ups?
Well, what are you gonna wear
um a costume?
Can we do the whole thing?
What are these?
Janice?
Like, you're not gonna wear a
costume, right?
You could get your tongue to
do it?
Can I copy you guys?
Like is it scary?
It sticks?
So it sticks?
Bought it in the where?
Can I turn the page?
What kind?
The beach?
Sugar is You make coffee
with it?
Goldilocks?

IMPERATIVE

Come on.

You carry it.

Let's go.

Don't touch me.

Stop.

Hold my lunchkit.

Take it off.

EXCLAMATION

Oh, I know!

No. One hand!

Hi Janice!

Stop it!

Wait. I gotta tell you something!

Yas, of course!

I'll do faster!

Mine!

Hi!

Janice!

This one!

That's it!

Wake up!

No!

Sorry!

Sure!

Hi!

I know!

For you!

Oh!

Thank you, Miss Sparrow!

It's easy!

Kung Fu!

Nice dress!

PRAGMATICS

REQUEST

I'll help, too.

I'll carry that.

I have to go to the washroom.

I wanna eat lunch.

I need butter.

I'll take care of it.

Maybe we should um um go for a
field trip.

Maybe we should go to
Stanley Park.

I wanna play skipping rope

Can we go back?

Can you hold my lunchkit?

Can I ask John something?

Can I play checkers after this?

Can I play checkers?

I'll help.

I'll get it.

Can we do "a"?

Can we do both?

Can we finish?

I'll go and get it.

Can I phone her? At home?

Can I show Mrs. Carr?

I wanna ask a question.

I wanna play skipping

Can you tell me?

Can I help Janice, too?

Can I help you?

Can I walk with him?

Can I walk over?

Can you teach me?

I'll do it.

Can we have "Talk Time"?

Can we go faster?

Can I do ten rows?

Can we do the whole thing?

You're supposed to sing.

Can I help you?

Can I ask him by myself?

Like, pretend you're calling me
and then my mother said.....

PRETEND

You are my sister again.

O.K. You can be boy.

No. No. This is your house.

Pretend you're busy.

No. No. Your name is Cathy.

Well, I'm a lady.

No. We have to ride our bikes.

You're my Mom.

DEMANDS

My turn.
I've got the rope.
I'm gonna do it by myself.
My turn.
Come on!
You carry it!
Don't touch me.

Go.
I don't want it yet.
Let me do it.
Now, its my turn.
Stop!
Hold my lunchkit.
Read with me.

EXPRESS EMOTION

No Steve!
I felt like walking.
Sorry!
I'm tired.

I felt good.
I want to work with you.
Sorry, Janice!
I'm sorry Miss Gow isn't here.

REGULATION

The bell went.
Somebody here.
O.K. Let's go back.
We'll go back.
It's library time.
Hm. You gonna have lunch?
What do you do with Sarah?
Can we go back?
You're teasing me.
The tape's not in.

Lunch time.
And then we'll stop.
O.K. Let's go back you guys.
The bell went.
I found some scissors.
What is that?
Did Sarah play it?
Can I play checkers after this?
The bell went.
Is that your book?

This is a sticker.

Can we turn?

Turn the page.

O.K. That's it?

I want to turn.

Turn the page, then.

I WORD LEVEL

A) BOUND MORPHEMES

NEGATIVES

No

not gonna

No, Steve

never seen

never

that's not underwear

I'm not

not the right one

No, that's the wrong one

No, I'm not

not teasing

No, you're teasing me

not in

not coming

never seen

never went

NEGATIVE CONTRACTIONS

don't wanna

I don't want it

I don't forget

I don't know

don't touch

don't know

don't have any

didn't say

don't have

don't know

doesn't know

doesn't

didn't phone

haven't learned

won't talk

don't wanna

DESCRIPTION

It's so heavy.

'Cause I'm bigger.

Now you're behind.

The tape's not in.

It's stopped.

I didn't put the paper in.

Is it long long way?

It's cold.

Purple.

That's the last row.

You're behind us

It's hot.

No. You put your head down,
thumbs up.

Go down Prior and then that's
all.

The tape's not in there.

It's still goes.

Is it long?

Nine years old.

Freezing.

It's freezing cold.

What are the favorite game?

COMPARISONS

bigger

PLURALS

songs

knows

checkers

scissors

socks

pickles

feels

friends

bikes

games

thumbs

buns

tomatoes

tastes

starts
things
pants
squares
carrots
thanks
songs
works
looks
rows

goes
tools
sentences
slippers
sticks
words
likes
letters
lots
cars

POSSESSIVE 'S'

Sarah's
somebody's
everybody's
friend's
Beth's

Ms. Corcarin's
Mrs. McDonald's
boy's

INTEROGATIVE PRONOUNS

WHO

Who
Who is it?
Who told you?
Who's class is that?
Who is she doin' with?
Who's Thompson?

Who's Thor?
Who's playing that?
Who's the fellow?
Who's a man?
Who's Siu May?
Who's that lady?

WHAT

What?
What is that?
What did you do with Sarah?
What are Sarah's friends?
What is that?
What do you got?
What is she gonna do?
What is that?
What, green?
What else?
What did you do after that?
What did you do with Sarah?
What are you gonna do?
What are you doing?
What are we gonna do today?
What is that?
What is this?
What is she gonna do with me?
What is his school?

What are you thankful for?
What is it?
What kind of costume are you gonna wear?
What do you want to show him?
What about the haunted house?
What are the favorite games?
What are these?
What kind?
What's the noise?
What's a helicopter?
What's a beaker?
What's she gonna do?
What's copy?
What's a forest?
What's a judge
What's poor?

WHEN

When is Sarah gonna have a birthday?
When are you gonna come to my house?

WHERE

Where?
Where you gonna go?
Where do you work with him?
Where's your car?

CONTRACTIONS

you're	I'll
you'll	we'll
you're	he's
let's	I'm
don't	I've
who's	where's
it's	everybody's
there'	what's
that's	that's
can't	won't
didn't	doesn't
tape's	haven't
wasn't	isn't

CONJUNCTIONS

and	or
but	because
if	

ASSOCIATIONS

("Find the one that's different") Amanda scored 2/9.

Items/Items"*" if correct response made by Amanda

scissors, saw, knife, doorknob*

doorbell, siren, light, whistle

empty, stormy, sunny, windy

monkey, tiger, lion, dog*

tired, cheerful, cloudy, frustrated
bush, hair, tree, grass
inch, minute, day, month
puppy, horse, kitten, lamb
lemonade, milk, ice cream, cheese

SYNONYMS

"*" are responses made by Amanda.

chef	bashful
repair	donate
enormous	imaginary
locate	remain
journey	assist-help*
beverage	quarrel
humorous	vacant
collide	abandon

ANTONYMS

item/opposite (first letter sound given) Items "*" correct response.

black/white*	dark/light
up/down*	in/out*
sharp/dull	hot/cold*
happy/sad*	fat/thin*
wide/narrow*	sit/stand*
fast/slow*	fat/skinny*

big/little*

high/low*

long/short*

shallow/deep

rough/smooth*

crooked/straight

SEMANTIC ABSURDITIES

Fifteen questions were given for the test. Three examples are shown here.

Amanda's response:

- | | | |
|----|---|-----------------------|
| 1. | The mother fed the lullaby to her baby. | "You sing a lullaby." |
| 2. | He sprinkled a glass on milk for me. | "You pour milk." |
| 3. | Judy was exhausted from sleeping all might. | |

AUDITORY RETENTION AND ORGANIZATION

1. Amanda was required to verbally correct sentences which are incorrect syntactically. Three examples are shown. Twenty two questions were given.

like school I

happy he is

mine is that

2. For this exercise, Amanda was required to repeat a given sequence of places mentioned by the examiner. Two examples are given. Five were used for testing purposes. .

On Monday, Larry went to the grocery store, the post office, and McDonlad's. Where did Larry go on Monday?

On Tuesday, Larry went to the post office, the shoe store, and to the gas station. Where did Larry go on Tuesday?

On Wednesday, Larry went to the movies, the icecream store, and the library. Where did Larry go on Wednesday?

3. For this exercise, Amanda was required to find the two words that were the same. Thirty six questions were given. Four are listed below.

farm, form, farm

pork, pork, park

born, barn, barn

car, core, car

4. Amanda was required to think of as many words beginning with the letter the examiner provided. Ten questions were given. All ten are listed below with Amanda's responses:

"b" bat, baseball, ball

"c" caterpillar, can

"f" fall

"g" goat, go, Gow

"l" like, library

"m" Mommy

"p" people, popcorn

"r" run

"s" 'Snakes are sliding'

"t"

II PHRASE LEVEL

A) NOUN PHRASE

PRONOUNS

it's

I

my

me

what

them

who

this

your

what

who's

us

we

you

it

she

myself

everybody

him

yourself

they

our

that

ARTICLES

a

an

the

ADJECTIVES

heavy

sunny

cold

hot

ADJECTIVES CONTINUED:

O.K.

green

freezing

nice

just	real
some	soft
all	looks
that	busy
good	chocolate
this	favorite
another	sour
your	right
curly	new
seven	easy
finished	any
all	last
next	wrong
comfortable	ready
purple	helpful
thankful	birthday
happy	Chinese
strawberry	English
big	hungry
bad	either
ready	round
special	

PREPOSITIONS

at	to
by	on
with	like

except
for
after
in

up
of
over
off

B) VERB PHRASE

ADVERBS

so
too
here
then
where
only
now
down
away
left
behind
about
quietly
well
next
out

there
how
well
back
alright
yet
across
up
maybe
again
front
why
sure
right
still
when

AUXILIARIES

is

will

will be

will help

was answering

was turning

was working

were gittin'

won't talk

are

are sliding

are making

be goin'

can be

can have

do

did go

wanna

wanna take

gettin' tired

are

does

gonna join

am thinking

is here

will go

will see

was

was listening

was doing

was taking care

were listening

are giggling

are on

are there

be

be staying

have

did have

did

did have

wanna play

wanna eat

went

gotta tell

gonna

gonna have

III) MISUSES

SUBSTITUTIONS

Amanda said:/Amanda should have said:

at/in	big/smaller
the/to	same/woman
she/he	drawed/drew
everybody/everyone	mouse/mice
doesn't wanna come/isn't coming	gum/more
right/do they	any/a
what we want/what ever we've written	punch/pinch
could have coming/have been coming	everybody/everyone
all by himself/by himself	boy/girl
The mother /Mother	before/and
has seen/had seen	could/would
right now/now	stopped/dropped
door/boys	could/noise
Does she/doesn't	she/he
a/the	boy/bird
boy/car	we are/we've
and/before	that we/we've
showed the car/I could call	she is/she's
you/me	could have/have been
and bumped into a car/before I could call	has been/have been
what/who	had been/have been
Is all by itself/Is it all by itself	boy/boys
his/her	drive/drives
gets/get	he/she

for/on
da/the
saw/see
wanna/want to
gonna/going to
comfortable/uncomfortable
at/in
you/I
Miss/Mr.
guy/man
to/with
yas/yes
up/under
if/for
to/for
come/came
helpful/thankful
sing/sang
say/said
you/I
yourself/myself
phoned/phone
ya/you
mans/men
same/girls
a man/drummer
man/painter

forget/forgot
his/her
leaved/leave
a man/him
a man, is a lady/singer
in/on
cow/cows
could/couldn't
feel/felt
gone/going
he/she
'bout/about
it's/it has
his/her
him/her
them/it
go/went
maked/made
dreamed/dreamt
any/a
cars/car
baby/baby's
biggest/smallest
now/jumping
bigs/bigger
throws/threw
rides/rode

bags/most

I never/I've never

she/he

who's/which

do/go

his/her

do/know

wanna/want to

REVERSALS

said/should have said

bars like/like bars

fish and stands/fish and chip stands

chips and stands/fish and chip stands

REPITITIONS

I was talking, I was talking

You got your/You got your

Maybe we should/Maybe we should

Are you gonna/Are you gonna

Making friends/Making friends

Are you gonna be/Are you gonna be

Sarah doesn't know/Sarah doesn't know

checkers/checkers

Like/like

After/after

it's/it's

in/in

you/you

Is it/Is it

Um like/um like

Ohl/ohl

since/since

MISPRONUNCIATIONS

gonna/going to

goin'/going

isleling/listening

giwl/girl

yo/you

tilden/children

dawls/dolls

char/car

kingarden/kindergarten

trajeck/project

teef/teeth

dah/the

kally/tally

Mishow/Michelle

pways/plays

wanna/want to

ta/to

tune/train

crarling/crawling

ya/you

brock/block

NON-WORD VOCALIZATIONS

uhh

Yeah

Uhuh

je je yeah

a da ta

hmf

yep

Um

yah

Hmmm

Da

aye aye

woooo

ooh

ah

Um

uuyh

OMMISSIONS

said/left out/should have been

k./o./o.k.

cat/s/cats

written/what ever we've/whatever we've written

jumping/is/is jumping

black/is/is black

to read/me/me to read

open-door/The is/The door is open.

tax/i/taxi

cause/be/because

'bout/a/about

workin'/g/working

wanna/to/want to

gonna/ to/going to

and we just back and forth/go/and we just go back and forth

doin'/g/doing

goin'/g/going

Getting to bed/ready for/Getting ready for bed

blew the cake/out, on,candles/blew out the candles on the cake

coughn'/g/coughing

it's circle/a/it's a circle

talk/ing/talking

page/s/pages

Is it long long way/a/Is it a long long way

you gonna/Are,to/Are you going to

you like to do/Would/Would you like to do

is Sarah age/What,'s/What is Sarah's age
'bout/a/about
Went I was done/before/Went before I was done
Beth/'s/Beth/s
head/a/ahead

IV CLAUSE STRUCTURE

COORDINATION

AND

Me and you.
Go down Prior and then that's all.
I have some and I didn't wear them.
I just gave it to my mother and my sister.
Mom dry our hair and they got all wet.
You mean the tasting and the stuff.
And everybody will go.
And you'll be going.
And then we'll go back to school.
And you would walk by yourself.
And then we will stop.
And you'll be staying home.
And I would walk by you.
And your sister.
And you didn't saw me.
And then I'll show you my house.
And then my Mom blew the cake.

And you just came here.

And his mother didn't know.

And this is the hot one?

And what are you gonna do with Sarah?

And a man?

And who are there?

OR

Or you can show.

BUT

But you're not gonna be there at the morning?

IF

You can ask me if you need help.

How will we do that if a name?

DEFINITIONS

true-(no response)

old-"old means old house"

castle-"a castle means a king"

behind-"behind a chair"

autumn-"autumn the leaves fall down." "The leaves fall down because the tree will be..."(incomplete sentence)

season-"Season is autumn, winter, summer and spring."

tall-"Tall means that I am tall." "Tall, tall building."

north-"North means that way."

bamboo-(no response)

kayak-(no response)

crow-"A crow is an animal." "a insect"

noise-"Like an animal." "You can make a noise." "Like talk."

sad-"Sad means sad." "crying" "crummy"

finger-"It...your baby finger." "That you braille with it." "You tuck it under."(Amanda does this sometimes when she is brailing.)

lamb-"It's an animal." "It's soft....soft fur."(The author and Amanda visited a taxidermist shop where Amanda had the opportunity to feel a stuffed lamb.)

bird-"A bird is an animal." "A bird that it is fly." "A bird that is um a bird is creature."

apple-"Apple is round." "You can eat an apple." "You can eat an apple and peel it and then we can eat it but your and we can share it." "Apples grows um tree."

brown-"He is bright and bright and..... "Um apple is brown."

ice-"Ice ,you can put water in ice." "Ice, you can drink of it." "Drink of water and you put ice in it." "You can eat it." "Ice is frozen." "Ice, ice you can play with it."

bed-"A bed is-ya sleep on." "A bed is-um you put clothes on and that's it."

cow-"A cow is an animal." "It's an animal that it is in farm." "Cow makes milks." "The cow makes hay out of milk." "The cow eats hay." "The cow, he eats um, he drinks milk out of um he eats."

face-"A face is-you look like people." "Like you, like you look at me." "Face and mouth and ears and eyes." "You have big eyes." "Eyes and nose."

sugar- "You drink it in coffee." "And you have a cup of tea and you have a break." "It tastes like coffee."

ocean- "Ducks live at the ocean." "Baby beluga." "Fisherman."
"Fishermen there." "The ocean has water." "Skin divers." "Chips and stands."
"Fish and stands." "Fish and chip stands."

kitten- "Cat is a furry....a cat."

forest- "It's like a Goldilocks." "It has animals."

baby- "A baby cow."

duck- "bird"

change- "switch"

note- "Like you're taking a note to the office."

felt- "Felt pens or markers".

RHYMES

Amanda was required to supply the word that matches the definition and rhymes with the clue given. Four examples are shown. Twenty seven were used for testing.

item/clue given/Amanda's response

that/pet/"a mat sat on a mat, cat"

dog/wood/"driftwood"

shed/a place to sleep/"bed"

drive/a number/"five"

In this exercise Amanda was required to discriminate and identify two words which rhyme that are embedded in the context of a sentence. Twelve questions were given. Three are shown below.

The batter hit the ball over the wall.

Whose new shoes are these?

This picture was drawn out on the lawn.

AUDITORY CONCEPTUALIZATION

1. This exercise demonstrates Amanda's ability to appropriately respond to verbal commands which require differentiation between the right and left of her body. Nine questions were asked. Three are listed below.

Put your right hand in the air.

Raise your left hand.

Touch your nose with your left hand.

2. Here, Amanda was expected to differentiate between various times of the day by responding appropriately to questions. Ten questions were asked. Three are listed below.

When do we eat breakfast?

When do we go to bed?

Do you go home from school in the morning or at night?

AUDITORY SYNTHESIS

1. During this section of the testing, Amanda was required to label an object as it is described and for which only the first sound of its name is given. Ten questions were asked. Three are listed below.

I am thinking of something....

that you might play with at recess time. It is a b...

that you might eat for breakfast. It is c.....

that you might watch on TV. It is c.....

SENTENCE IMITATION Nineteen questions were asked. Those correct are marked "*".

original

Those women aren't baking cakes.

Before bed we drink from our special cups.

Here's a picture that you should see.

In the afternoon, there is no one home from school.

There are no children allowed, are there?

She didn't believe he liked her.

Our dog chased a cat a mile, didn't he?

Monkeys don't eat bananas by the dozen, do they?

Those children sold two friends a bicycle.

If you need money, you must earn it at your job.

Because he misbehaved, his father took away the candy.

Weren't the children taken to the zoo by their teachers?

Last week I sold Mrs. Thomas

Amanda's imitation

Those women are not baking cakes.

Before bed we drink um our special cups.

Here's a picture that you um see.

In the afternoon, there is no one home, no one from, from, school period.

There are no children allowed, are there?

She didn't believe he liked her.*

Our dog chased a cat a mile away, didn't she?

Monkeys don't eat bananas um, do they?

Those children sold um a bicycle, do they?

If you need money, then you just have to do it.

Um, his father took away his candy.

Weren't the children not taken by the zoo um, yesterday?

Last week he stoled Mrs. Thomas, I

my best bicycle.

Although she won't play with him,
he likes her.

Although you don't believe me,
there's a good program on
television.

Are those cats being given a bath by
their owner?

The car which was in the accident
was wrecked.

The train which hit the car fell from
the tracks.

Yesterday, we were saved from the
clutches of an angry tiger.

stoled Mrs. Thomas, last week he
stoled the bicycle, period.

He, he don't want to play with him,
he likes her.

You don't believe me. I believe you,
Janice.

Are those baths bein given a bath by
their owner?

The car, the car wrecked the car,
period.

The train,who broke the car, broken
there.

Yesterday, yesterday, was.....

AUDITORY DISCIMINATION

Those marked "" Amanda got incorrect. Fifty three questions were asked.

original

read/dead

work/work

bed/bread

chair/chair

pig/big

sat/sad

response

different

same

different

same

different

same~

vale/dale	different
chop/shop	different
rub/rug	different
roped/robed	different
refracted/retracted	different
cash/catch	different
fresh/flesh	different
cry/cry	same
watch/wash	different
face/face	same
vest/vexed	different
never/never	same
defection/deflection	different
weak/weep	different
falls/false	different
stop/stop	same
leave/leaf	different
win/when	different
madder/matter	different
conical/comical	different
tip/dip	different
red/red	same
cheap/jeep	different
pin/bin	different
shin/chin	different
pal/pal	same
zip/sip	different

goat/coat	different
coast/toast	different
feel/veal	different
boon/moon	different
bum/dumb	different
yes/yes	same
sip/ship	different
fix/fix	same
mold/cold	different
yard/lard	different
thin/fin	different
hill/fill	different
leaf/reef	different
den/ten	different
peach/beach	different
fall/fall	same
cheap/sheep	different
some/come	different
feel/feel	different~
yawn/lawn	different

FINAL CONSONANT DISCRIMINATION

Same or different. Those marked "" Amanda got incorrect. Twenty seven questions were asked.

rack/rag	different
leaf/leave	same~
moon/moon	same

plt/pill	different
razz/rash	different
rip/rib	different
bus/buzz	same~
home/hope	different
run/run	same
cup/come	different
had/hat	same~
good/good	same
then/them	same~
sob/sop	different
ride/ripe	same~
clay/clay	same
Ruth/roof	same~
much/mush	different
swim/swim	same
tide/tight	different
rub/rum	same~
seed/seat	same~
wig/wing	different
steam/steep	same~
take/tail	different
bat/bad	same~
live/lip	same~

GRAMMATIC COMPLETION

Amanda's correct responses in brackets. Thirty questions were asked.

Mary has a dress and Joan has a dress,. They have two.(dresses).

The shoes belong to the boy. Whose show are they? They are the (boy's).

A lady likes to drive. Everyday she (drive).

John likes to cook everyday. Yesterday he (cooked).

The toys belong to the children. Whose toys are they? They are the (children"s).

It is his horse. The horse it belongs to ().

A person who sings is a ().

Jane likes to jump. Now she is ().

Linda is a girl. Mary is a girl. They are both ().

A girl plays the piano every day. Yesterday she ().

The dress belongs to the woman. Whose dress is it? It is the (woman's).

Betty likes to eat cookies. Everyday she (eats).

A dog can be big, but a horse is ().

A person who plays a drum is a ().

John likes to throw a ball everyday...Yesterday he ().

We built the house all by (ourselves).

A person who paints fences is a ().

A cake might be small, and a cupcake is smaller, but a cookie is the ()

Bob is a man. Bill is a man. Bob and Bill are both ().

The doll belongs to me . It is ().

A boy likes to ride his bicycle every day. Yesterday he ()

Today I found a leaf. Yesterday I found two (leaves).

Joe had a gumdrop, and Sue had a handful of gumdrops, but Tom had a bagful, so he had the ().

I said the book was mine, but you said that you had brought the book and it was (yours).

A cat might be small, but a kitten is ().

Mary is a woman. Joan is a woman. Mary and Joan are both ().

Betty likes to draw everyday. Yesterday she ().

Mike worried about everything. Everyone called him a ().

I have a mouse. She has a mouse. We had two ().

Joe had one gumdrop. Sue had a handful, so she had ().

SENTENCE COMPLETION

(Picture Vocabulary--the pictures were described and the incomplete sentences read.) Fourteen questions were asked.

"" means incorrect response

A bird builds its nest in a~

You wash your hands and face with a bar of(soap).

You help your mother wash the(dishes).

This is a roller.....(skate).

To cross a river, cars drive over this. It's a~

You blow into this and it makes a noise. It's a~

Big kids ride a(bike).

You wear this on your finger. It's a diamond.....(ring).

You carry clothes in this . It's a~

He looks like a horse, but has stripes and lives in a zoo. He's a~

You cut paper with a pair of(scissors).

You park the car in the~

The boy's jacket didn't have buttons. Instead it had a(zipper).

The boy is nine years old today. His mother baked him a cake for his(birthday).

ARTICULATION

Item

(Items marked "" Amanda had difficulty with. Problem area underlined). Twenty questions were asked.

tree	soap
dishes	skate
bridge	whistle
bicycle	ring
basket	zebra
scissors	judge
garage	zipper
razor	<u>feather</u> ~
soldier	<u>thread</u> ~
<u>treasure</u>	birthday

INFERRING CONNOTATIVE WORD MEANINGS

"" are responses that Amanda got incorrect. Three examples are given.

The happy little plotch ran to his master.

He wagged his tail and flopped his ears.

Then the plotch jumped up on his master's

lap and licked his master's face.

A plotch is:

b) a puppy

Jenny looked at the snaff. The time was getting later and later. She hoped that her mother would be home soon. The snaff's hands went around slowly as it went "tick-tick.

A snaff is:

c) a clock

Down, down, fell the dosh. The ground was wet and muddy. Jim waited for the dosh to stop so he could go out to ride his bike.

The dosh is:

a) his bike~

INTEGRATION OF FACTS TO SOLVE A RIDDLE

Amanda was required to integrate three segments of information in order to identify the "mystery object." "" indicates incorrect response. Five examples are shown and seven were included in the testing.

1. I am good to drink. I am while. I rhyme with silk. What am I? ~

2. I have two hands. I have numbers from 1 to 12. I measure time.

What am I?

3. I gather twigs and strings. I weave these together to make a home.

I keep eggs in it. What am I? ~

4. I am made of glass. I use electricity. I light up a room. What am I? ~

5. I am worn on the face. I have a frame. I help people see. What am I? ~

COMPREHENSION AND MEMORY FOR FACTS

Amanda was required to listen to short passages and answer factual comprehension tasks on what has just been heard. Three examples are listed. Twenty three questions were asked for testing purposes. Questions marked "", Amanda scored incorrectly.

1. Tom's teacher made popcorn yesterday.

What was made?

Who made it? ~

2. Jim will give his dog a bath on Saturday.

Who will give the dog a bath?

When will he get it?

3. Joan baked a cherry pie. It was for her husband George's birthday.

What was baked? ~

For whom was it baked?

Why was it baked?

ANSWERS TO 'WH' QUESTIONS

WHO

ONE WORD

Stephen

Tony

TWO OR MORE WORDS

Stephanie and Yen

like you

Steve

You

Me

everybody

Beth

Beth's mother

His mother

'WHO' SENTENCE

You run it by yourself.

WHAT

ONE WORD

Sunny

"G"

Bus

"A"

Pender

Airplane

Cars

Braille

Lunch

Drinks

Pickles

Cathy

Talking

Touch

TWO OR MORE WORDS

The calendar

The tally

Common sense

Bars like

A lady

Tomato, onion

Taking baths

Um a car

Ham and cheese and tomatoes and
pickles

Rudolph the Reindeer

The birthday party

You brush your teef

Comb your hair

Wash your hair

Friday	It's round and it's a circle
Um games	Sing some songs
Thanksgiving	It's called a Chinese
Un chocolate	about everything
Thursday	your shirt
"K"	face and mouth and ears,eyes
7-up	Angelea, Anita, and Anna Rita
work	right now
Daylight	one sunny day
Popcorn	They buy popcorn
Cheeks	Go in the water
Braille	Feed the ducks
Dress	Do something
Chocolate	Read a story
	Splashing all around

'WHAT' SENTENCE

I don't know.	Today is.....
It's a chain.	They sell oranges and fish.
My teacher was Mrs. McDonald.	
After school I went home.	I like to do some work at school.
I hate Math.	The color of the classroom is yellow.
I just play there.	We are thankful for eating.
We just sang "Happy Birthday".	
It's called Chinese food.	They said thanks.
Um It's an animal.	Its called a toothpaste, toothbrush.

Um They just sing songs.
Jimmy likes to play Kung Fu.
The brailier. It is heavy.
I go to bed.

I wear pyjamas.

I cleaned up the bathtub.

I dreamed about bubble baths.

We talked about lots of things.

Beth...get all wet.

I just stayed at home.

Beth's make...Beth's mother maked a
special sauce.

The shower curtain inside the bath...
inside the....

I wring out the washcloth.

WHERE

TWO OR MORE WORDS

In the bathtub.

At McDonald's

A store

Splashing all around

Duck pond

It was um um park..park.

Went to the park

Fall on Beth

'WHERE' SENTENCES

I eat in the cafeteria.

I went to the library to get some
Books.

It's just right across from our school.

Beth went to the park.

I hang my towel in the... rack.

WHEN

ONE WORD

Sunday

Today

Friday

TWO OR MORE WORDS

last period

When you wake up in the morning

On Friday

Sunny
Tuesday
Afternoon
Today

Kung Fu
After lunch
When you play games
Un When are we ...last period.
When they laughed and they cleaned
them up.

'WHEN' SENTENCES

We get ready for bed right now.
I have Music last period.

WHY

TWO OR MORE WORDS

'Cause my mother, my mother
won't, she won't let me.

Change her clothes

'Cause she didn't know why

'WHY' SENTENCE

I don't have any.

Because we are thankful.

Because you are eating something.

So we have Miss Gow, ... you and the
other person.

Um because he um answered the
telephone.

HOW

ONE WORD

Scary

TWO OR MORE WORDS

Nine years old

Since, since January

'HOW' SENTENCES

I haven't learned it yet.

It tastes like coffee.

My Mommy and my Dad drive me.