A DEVELOPMENTAL STUDY OF THE ASSESSMENT OF COMMUNICATION IN EVERYDAY SITUATIONS

A Thesis

by

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ABSTRACT

A DEVELOPMENTAL STUDY OF THE ASSESSMENT OF

COMMUNICATION IN EVERYDAY SITUATIONS. (November 1982)

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The purpose of this study was to obtain additional normative information on the Assessment of Communication in Everyday Situations (ACES) by examining the performance of children, ages 5, 7, and 9 on Form II, The First Day of School. More specifically, answers to the following questions were sought: (a) Does overall performance on ACES improve as children get older? (b) Does performance on the Social functions of language assessed by ACES improve as children get older? (c) Does performance on the Representational functions of language assessed by ACES improve as children get older? (d) Does performance on the seven uses of language assessed by ACES improve as children get older?

ACES was administered individually to 30 children, ages 5, 7, and 9 with 10 children in each age group. The administration, involving a series of structured role-playing episodes, took approximately 30 minutes and responses were recorded and scored at a later time. To give direction to the data analysis, hypotheses were developed in the null form and tested at the .05 level of significance through 10 separate one-way analyses of variance. ACES is based on a functional taxonomy of language and measures 36 cognitive and social communication strategies. The social communication functions include the Self-maintaining

and Directing uses of language while the cognitive communication functions include the Reporting, Logical Reasoning, Predicting, Projecting, and Imagining uses of Language.

In examining the results of the analysis, it was determined that as children increase in age, their overall performance on ACES improves as does their performance on the Social and Representational functions of language. While there was a significant difference between the 5- and 7-year-old and 5- and 9-year-old group performance, no significant difference was noted between the 7- and 9-year-old groups.

Five uses of language, Self-maintaining, Reporting, Predicting, Projecting, and Logical Reasoning showed similar improvements in performance as children increased in age. No significant differences were noted between the 7- and 9-year-olds while significant differences were noted between the 5- and 7-year-old and 5- and 9-year-old groups.

On the Directing use of language, no significant difference was observed between the 5- and 9-year-old groups and the 7- and 9-year-old groups, but there was a significant difference between the 5- and 7-year-old groups. On the Imagining use of language, the 5-, 7-, and 9-year-old groups all scored similarly.

In conclusion, the results showed that as children increase in age, their overall performance on ACES improves as does their competency on the seven uses of language.

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I wish to sincerely express my gratitude to several individuals who have assisted in the development of this research project. The members of my thesis committee have been considerably helpful in providing encouragement and guidance. Dr. Jane Lieberman, my thesis chairperson and my special friend, spurred my interest in the area of language and provided valuable information and assistance in my exploration of language use in children.

Dr. Edward Hutchinson, Chairman of the Department of Speech Pathology and Audiology, continuously gave emotional support along with professional guidance and encouragement to complete the project. Dr. Roland Tuttle unselfishly spent time in clarifying any confusion regarding the statistical matters.

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Finally, my love and deepest appreciation go to my husband, David, who supported me in every way possible. He believed in me when I could not believe in myself and uplifted my spirits during the darkest of times. A heartfelt thanks also goes to my parents, Mr. and Mrs. Paul Boyd; my sisters, Cammy and Sharon; and my granny, Mrs. Edith Fisher. Without their love and prayers, this project could not have been completed.

DEDICATION

This manuscript is lovingly dedicated to my first child, who I am now carrying for the eighth month and who has been a divine motivation and a very special part of my life during the writing of this project.

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CHAPTER I

INTRODUCTION

Language impaired children often have difficulty perceiving and categorizing the various social situations of their environment. They lack the ability to alter their ways of speaking according to these situations. This inappropriate use of language usually results in misunderstanding and a disruption in communication. It is important for the speech and language clinician to concentrate on developing communication competence in children as well as proper articulation and grammar. As a result, misunderstandings will be avoided, thus facilitating children's transmission and interpretation of information.

Chomsky (1965) introduced the notion of "competence" as abstract knowledge of the rules of language which permits the individual to understand and produce an unlimited set of novel sentences. Although this knowledge of what language means and how it should sound helps the speaker to judge the grammaticality of sentences, it provides little information about children's everyday use of language in particular situations.

In the decade of the 1970's, research in the area of child language has focused on "use" of language as well as form and content. Bloom and Lahey (1978) described language as consisting of "some aspect of <u>content</u> or meaning that is coded by linguistic <u>form</u> for

some purpose or use in a particular context" (p. 11). All three of these components must be successfully integrated for communicative competence to be achieved.

The terms language use and communicative competence have been used interchangeably with functional language, pragmatics of language, and functional communication. Which term is used depends more upon the preference of the author than any substantive differences in meaning. Larson, Backlund and Barbour (1978) view communicative competence as meeting the functional demands of a particular situation. Naremore (1977) defines communicative competence as "one's knowledge of the rules for what is appropriate language use in a given situation" (p. 23). Miller and Yoder (1972) state, "before a child becomes a language user, he needs to have something to say (concepts) and a reason for saying it (semantic intent) as well as a way to say it (linguistic structure)" (p. 48).

Bloom and Lahey (1978) describe two characteristics of competent language use: (a) the mastery of the basic functions of language and (b) the ability to adapt communication to the demands of the situation. Children's verbal expression should reflect their knowledge of language use and grammar and vary according to the communication situation. Language must "work" for children in particular situations, with specific people, and for a wide variety of purposes.

Numerous tools for assessment are available in the areas of phonology, the sound system of language (Hodson, 1980; Weiner, 1978); syntax, the grammatical system of language use (Carrow, 1974; Clark & Madison, 1981; Lee, 1974); and semantics, the meaning system of language use (Boehm, 1971; Dunn, 1964; Zackman,

Huisingh, Jorgensen, Barrett, 1978). However, there are few systematic ways of measuring children's language use (Lieberman & Hutchinson, 1980; Lucas, 1980; Wiig, 1982). Most information related to language use must be obtained through spontaneous language samples. In response to this void in the current testing protocol, Lieberman and Hutchinson (1979) developed a diagnostic tool for evaluation of communicative competence. This instrument, the Assessment of Communication in Everyday Situations (ACES), is based on Tough's (1976) functional taxonomy of language and measures 36 cognitive and social communication strategies necessary for academic success. ACES consists of three alternate forms: (a) The Birthday Party, (b) The First Day of School and (c) The Picnic, each of which contains 45 items. In several studies, this tool was found to be a valid and reliable measure of children's use of language and an appropriate substitute for natural language sampling (Hill, 1980; Peebles, 1980; Wren, 1980).

Preliminary data on a small number of subjects has been collected on the development of communicative competence in children ages 4, 6, and 8 as measured by their performance on ACES. This information needs to be augmented and substantiated with data from additional children at other ages.

Purpose of the Study

The purpose of this study was to obtain additional normative information on ACES by examining the performance of children, ages 5, 7, and 9 on Form II, The First Day of School. More specifically, answers to the following questions were sought:

1. Does overall performance on ACES improve as children get

older?

2. Does performance on the Social functions of language assessed by ACES improve as children get older?
3. Does performance on the Representational functions of language assessed by ACES improve as children get older?
4. Does performance on the seven uses of language (Self-maintaining, Directing, Reporting, Logical Reasoning, Predicting, Projecting, and Imagining) assessed by ACES improve as children get older?

Delimitations

1. The study was confined to three groups of 10 children each, all considered language-normal by their classroom teachers. Children were placed into the three groups according to age: 5, 7, and 9. All subjects were selected from McDowell County, a rural community in the Northwestern foothills of North Carolina.
2. The examiners were two graduate students in Speech Pathology who were trained in administration and scoring of ACES.
3. The data on communicative competence in children was confined to their performance on ACES.

Limitations

To the extent that the subjects selected were not representative of the language-normal population at large, results will not be generalizable beyond the sample investigated.

Assumptions

For this study, it was assumed that ACES is a reliable and valid measure of communicative competence and that the examiners engaged in

the research were qualified to administer, score, and interpret all testing procedures used.

Hypotheses

In order to give direction to the data analysis, the following hypotheses were developed in the null form and tested at the .05 level of significance.

Ho 1. There is no significant difference in the overall performance on ACES as children increase in age.

1.1 There is no significant difference in the overall performance on ACES between 5- and 7-year-olds.

1.2 There is no significant difference in the overall performance on ACES between 5- and 9-year-olds.

1.3 There is no significant difference in the overall performance on ACES between 7- and 9-year-olds.

Ho 2. There is no significant difference in performance on the Representational functions of language on ACES as children increase in age.

2.1 There is no significant difference in performance on the Representational functions of language on ACES between 5- and 7-year-olds.

2.2 There is no significant difference in performance on the Representational functions of language on ACES between 5- and 9-year-olds.

2.3 There is no significant difference in performance on the Representational functions of language on ACES between 7- and 9-year-olds.

Ho 3. There is no significant difference in performance on the

Social functions of language on ACES as children increase in age.

3.1 There is no significant difference in performance on the Social functions of language on ACES between 5- and 7-year-olds.

3.2 There is no significant difference in performance on the Social functions of language on ACES between 5- and 9-year-olds.

3.3 There is no significant difference in performance on the Social functions of language on ACES between 7- and 9-year-olds.

Ho 4. There is no significant difference in performance on the Self-maintaining use of language on ACES as children increase in age.

4.1 There is no significant difference in performance on the Self-maintaining use of language on ACES between 5- and 7-year-olds.

4.2 There is no significant difference in performance on the Self-maintaining use of language on ACES between 5- and 9-year-olds.

4.3 There is no significant difference in performance on the Self-maintaining use of language on ACES between 7- and 9-year-olds.

Ho 5. There is no significant difference in performance on the Directing use of language on ACES as children increase in age.

5.1 There is no significant difference in performance on the Directing use of language on ACES between 5- and 7-year-olds.

5.2 There is no significant difference in performance on the Directing use of language on ACES between 5- and 9-year-olds.

5.3 There is no significant difference in performance on the Directing use of language on ACES between 7- and 9-year-olds.

Ho 6. There is no significant difference in performance on the Reporting use of language on ACES as children increase in age.

6.1 There is no significant difference in performance on the Reporting use of language on ACES between 5- and 7-year-olds.

6.2 There is no significant difference in performance on the Reporting use of language on ACES between 5- and 9-year-olds.

6.3 There is no significant difference in performance on the Reporting use of language on ACES between 7- and 9-year-olds.

Ho 7. There is no significant difference in performance on the Logical Reasoning use of language on ACES as children increase in age.

7.1 There is no significant difference in performance on the Logical Reasoning use of language on ACES between 5- and 7-year-olds.

7.2 There is no significant difference in performance on the Logical Reasoning use of language on ACES between 5- and 9-year-olds.

7.3 There is no significant difference in performance on the Logical Reasoning use of language on ACES between 7- and 9-year-olds.

Ho 8. There is no significant difference in performance on the Predicting use of language on ACES as children increase in age.

8.1 There is no significant difference in performance on the Predicting use of language on ACES between 5- and 7-year-olds.

8.2 There is no significant difference in performance on the Predicting use of language on ACES between 5- and 9-year-olds.

8.3 There is no significant difference in performance on the Predicting use of language on ACES between 7- and 9-year-olds.

Ho 9. There is no significant difference in performance on the Projecting use of language on ACES as children increase in age.

9.1 There is no significant difference in performance on the Projecting use of language on ACES between 5- and 7-year-olds.

9.2 There is no significant difference in performance on the Projecting use of language on ACES between 5- and 9-year-olds.

9.3 There is no significant difference in performance on the Projecting use of language on ACES between 7- and 9-year-olds.

Ho 10. There is no significant difference in performance on the Imagining use of language on ACES as children increase in age.

10.1 There is no significant difference in performance on the Imagining use of language on ACES between 5- and 7-year-olds.

10.2 There is no significant difference in performance on the Imagining use of language on ACES between 5- and 9-year-olds.

10.3 There is no significant difference in performance on the Imagining use of language on ACES between 7- and 9-year-olds.

CHAPTER II

REVIEW OF RELATED LITERATURE

The Importance of Communicative Competence

"Communicative competence" is a term currently used by various authors which was originally associated with the work of Hymes (1971). This term refers to competence in the use of language, or to the speaker's ability to use language in ways appropriate to the situation.

Communicative competence is essential for personal, social, and educational growth. According to Halliday (1978), to be competent, language must be functional.

> Being appropriate to the situation is not some optional extra in language; it is an essential element in the ability to mean. . . Our functional picture of the adult linguistic system is of a culturally specific and situationally sensitive range of meaning potential. Language is the ability to mean in the situation types or social contexts that are generated by culture. When we talk about "uses of language" we are concerned with the meaning potential that is associated with particular situation types. (p. 34)

Chomsky (1965) viewed "competence" as knowledge of linguistic rules which helps the speaker interpret and produce sentences. His viewpoint emphasizes the grammaticality of sentence structure rather than use of language in everyday situations. This limited notion of "competence" should be expanded to include knowledge of use and pragmatic rules as well as linguistic knowledge. In this way, learning

to communicate requires a merger between the forms of language (grammar) and their function or use (Hopper & Naremore, 1973).

Wood (1976) believes that people are competent communicators if they have the ability to adjust their message to the time and place of the communication event, the persons involved in the communication situation, the subject matter, and the goal of the communication. Cazden (1970) also supports this point of view but adds that even though language may be faulty in form, if it is appropriate to the situation, the message is considered effective.

Functional Classification Systems

Several classification systems of language use have been developed to categorize children's communication. Halliday (1978) believed that ordinary everyday use of language was an essential quality of society. He studied the emergence of language through the development of his son, Nigel, and showed how the early functions of language evolved into adult functions in three phases. In Phase I, which covered a period from 10½ to 18 months in Nigel's life, communication was idiosyncratic and utterances consisted of vocal postures which contained neither structure nor words. This phase included six functions:

1. The Instrumental or the "I want" function. This function of language is used by the child to obtain services or objects to satisfy personal needs.
2. The Regulatory or the "Do as I tell you" function. In this function, language is used to get another person to do something or to direct the actions of others.

3. The Interactional or the "Me and you" function. The child uses language to interact with others around him.
4. The Personal or the "Here I come" function. This function is used by the child to express uniqueness as an individual.
5. The Heuristic or the "Tell me why" function. Language is used in this function to explore and learn more about the world.
6. The Imaginative or the "Let's pretend" function. The child uses language to create a make-believe world.

Halliday (1978) found that by 16½ months of age, Nigel had expressed these six functions with the first four appearing first, followed by the other two. By the end of this phase, the child's utterances were more recognizable as adult language; however, each utterance only performed one function.

In Phase II, which began at approximately 16½ to 18 months, and continued until 24 months for Nigel, the transition into the adult language system began. It is in this phase that a seventh function appeared, the Informative or the "I have something to tell you" function. In this function, the child used language to provide information to another person. During this phase, these seven individual functions merged into two macrofunctions: (a) the pragmatic function which derives from the instrumental and regulatory functions and is defined as "language as doing", and (b) the mathetic function which derives from the personal and heuristic functions and is defined as "language as learning". By the end of Phase II, each of Nigel's utterances consisted of both macrofunctions; whereas, at the beginning,

each utterance consisted of only one or the other. This shows that language was becoming more complex.

Phase III began at 24 months for Nigel, and was the beginning of the adult language system. Two main functions emerged in this phase: (a) the Ideational function involved use of language to describe the real world and (b) the Interpersonal function was a means by which the individual participated in a speech situation. A third function appeared in this phase, the Textual, which derived from the imaginative, informative, pragmatic, and mathetic functions and allowed the Ideational and Interpersonal functions to operate by providing the "text" of the messages delivered through these functions.

Dore (1975) used a speech acts analysis to classify child language at the one-word stage. He described these early one-word utterances as "primitive speech acts", each containing two elements: a "rudimentary referring expression" and a "primitive force". The rudimentary referring expression is a single word and the primitive force is the prosodic pattern which accompanies the single word. Therefore, a one-word utterance can be used by the child to express different communication intents depending upon the intonational contour of the word. Dore's classification system included the following primitive speech acts: (a) labeling, (b) repeating, (c) answering, (d) requesting (action and answer), (e) calling, (f) greeting, (g) protesting, and (h) practicing.

Later, Dore (1976) expanded his work to include a speech acts framework for describing child language at the 3-5 year age level. He made video recordings of children interacting with one another and their teachers in a preschool setting. He then identified how

preschool children perform speech acts by developing a list of illocutionary acts which he placed into six categories:

1. Requests which elicit an action or needed information.
2. Responses which complement the immediately preceding comment.
3. Descriptions which represent verifiable aspects of content.
4. Statements which express facts, attitudes and beliefs.
5. Conversational devices which regulate conversation.
6. Performatives which accomplish acts by merely being said.

Bruner (1975) and Hymes (1972) also identified several functions of communication expressed in utterances which children must learn to take their place in the community. These five communication functions include:

1. Informing - The transfering of descriptive information from one person to another. Two people can simultaneously inform one another. Text books are classified as informative since the writer has information to share with the reader. According to Halliday's (1978) study, informative utterances are the last to appear in a child's pragmatic development. Informing is the "I've got something to tell you" function.
2. Controlling-persuading - One person manipulates or moves another person in some direction. Control strategies include: arguing, convincing, nagging, and correcting behavior.
3. Expressing feelings - The purpose of this function is to express an internal emotional state such as anger, joy, or sorrow.
4. Ritualizing - Much behavior functions mainly as a kind of repetitive organizing. Examples include religious rituals,

pledging allegiance to the flag, and highly sterotyped greetings. Bruner (1975) suggests that ritualistic communication games between a mother and child, such as "peek-a-boo" are the key teaching procedures in communication development.

5. Imagining - This function includes all forms of pretending such as story-telling, acting, and make-believe. Children pretend at a very early age and this behavior shows that they are developing internal representations of reality. In later years, they engage in rehearsal of roles which they plan to assume on other occasions.

Hopper and Naremore (1973) noted that many utterances can serve more than one function. For example, a child crying to mother "I fell off my pony and scratched my arm", is informing while at the same time trying to control mother's behavior (do something about my arm). The child may be expressing frustration and anger as well as ritualizing since this incident happens frequently.

The classification systems developed by Bruner (1975), Dore (1975), Halliday (1978), and Hymes (1972) are based on developmental uses of language in the very young child. Tough (1977) proposed to analyze the language use of preschool- and school-aged children by combining a speech acts approach within a functional framework. She believed that Halliday's (1978) functional classification system included broad categories that did not capture subtle differences in meaning. Therefore, she developed a taxonomy of seven language uses:

1. Self-maintaining - use of language to create an awareness of

the speaker's identity and to promote the individual's position in relation to others.

2. Directing - use of language to control or regulate the physical actions and operations performed by others.
3. Reporting - use of language to provide information about past and present experiences.
4. Logical Reasoning - use of language which employs rational thought and argument to interpret experiences.
5. Predicting - use of language to extend communication beyond immediate present or past experiences to events that have not yet occurred and which may never take place.
6. Projecting - the use of language within an unfamiliar or external context.
7. Imagining - use of language by an individual to create a world of make-believe.

These seven uses of language can be further divided into 36 strategies, which show "different ways of expressing meaning that serve particular uses of language" (Tough, 1977). For example, within reporting, children may label, describe, refer to incidents or the sequence of events.

The seven uses can also be grouped into two major functions: (a) Social which includes Self-maintaining and Directing and (b) Representational which includes Reporting, Logical Reasoning, Predicting, Projecting, and Imagining. These two main functions are similar to Halliday's (1978) macrofunctions, Ideational and Interpersonal.

Using Tough's (1977) classification system, it can be determined whether children are competent or not in their use of language. If children are not competent in the seven language uses and the 36 strategies, their academic success may be in jeopardy.

Development of Communicative Competence

According to Hopper and Naremore (1973), the study of communicative competence involves how language is used to communicate. As children learn the rules of social interaction within their community, they come to realize that various situations make specific demands on the kind of language they produce. Although children can learn the rules of grammar in a short time (generally by the age of 4 years), it takes many more years of experiencing various speaking situations before language usage will resemble that of a mature communicator. Even though learning the rules of effective communication is a lifelong task, awareness of these rules is shown at a very early age. Young children speak differently to different people (parents, friends, dolls). They also speak differently to the same people under different circumstances.

A child has to learn how major components of communication interact with one another and how the functions of communication predict what is happening in a message. There are five situational contexts that make demands on how people communicate:

1. Personal Context - (the people present) The people in any situation shape that situation and have an effect on communication. Children make adjustments in their speaking behaviors according to the audience. A student who is angry would express this feeling differently to a classmate than to a teacher.

2. Message Context - (what has been said before) What goes before and after a statement can be just as important in the conversation as the statement itself.
3. Content Context - (the topic being discussed) Children want to discuss matters that touch on their interests in some way. They are not as likely to talk about topics that are of little interest to them.
4. Task Context - (the goal) In analyzing any utterance, it is important to ask, "What is the speaker trying to do?" What objective is the speaker trying to accomplish? This is especially important for children. If a child says "Daddy shirt", it could be taken as a comment "there's daddy's shirt" or as a request "daddy, put my shirt on".
5. Physical Context - (time and place) People are more comfortable and talkative in certain situations than in others. Children are sensitive to physical contexts and use these contexts to communicate by pointing and showing things even after they learn to talk. They also use context in understanding sentences, especially visual context. (Hopper, 1973)

Bloom and Lahey (1978), Halliday (1975), and Prutting (1979) share similar views on the acquisition of language use from infancy to adulthood. Bloom and Lahey (1978) describe the first stage of development as Primary forms in which infants' needs are primarily physiological. Prutting (1979) describes this Prelinguistic stage, which spans from birth to 9 months, as consisting of behaviors such as gazing, crying, touching, smiling, laughing, vocalizing, grasping, and sucking.

Prutting's (1979) Stage I covers the period from 9 months to 18 months and focuses on the movement from prelinguistic communication to one-word productions. At this point, communication serves particular purposes. Prior to the emergence of the infant's first words, meaning is intentionally transmitted through movement and sound. "Infants come to know that their behavior can influence the behavior of others and they behave with the intention of achieving that influence" (Bloom & Lahey, 1978:204). Bloom and Lahey refer to this stage as Conventional forms. Giving, showing, pointing and other gestures are used by the infant to regulate action and attention from adults.

Stage II of Prutting's (1979) model includes language development from 18 to 24 months. During this stage, a child learns how to engage in a dialogue. Based on Halliday's (1978) research, the child develops five additional functions which result from Stage I functions. These functions were also described earlier but are listed again in developmental order: (a) Pragmatic, (b) Mathetic, (c) Interpersonal, (d) Textual, and (e) Ideational. Bloom and Lahey (1978) refer to this stage as Conventional means of communication. Children's communication in this stage is intentional as well as conventional; however, their first words are usually accompanied by some sort of gesturing.

Stage III covers the period from 2 to 3 years of age according to Prutting (1979). During this time, children's linguistic abilities become more elaborate and their functional capabilities expand. They are now able to make a statement, a demand, or ask questions. Children can carry on a conversation but there is rapid topic change

throughout the discourse and their attention span is limited. Bloom and Lahey (1978) label this third stage Conventional use. Children, from this point on, add to what they already have acquired until they have a maturely developed communicative system.

According to Prutting (1979), Stage IV includes children 3 years and older. During this stage, children acquire the ability to maintain a topic over successive utterances and their conversations more closely resemble conversations between adults. 4-year-old children were even able to modify their speech patterns according to the age of their listener. Indirectives or hints begin to appear in children's speech patterns during this period. Utterances such as "my mother always lets me snack before dinner" are used to request indirectly rather than to inform.

An important development occurs around the age of 5 years. Children acquire the ability to think about language as well as to produce it and comprehend it. They can judge sentences as grammatical or ungrammatical. "This process of becoming aware of language is thought to be an extremely sophisticated act, a basis for further aesthetic choices" (Prutting, 1979:18).

Stage V is the period of adult communication competence. By this time, it is assumed that people can operate as effective communicators, although with varying degrees of communicative competence. Grice (1975) proposed a set of conversational rules for competent communicators which he believed speakers and listeners expect each other to observe. These conversational rules include the following:

1. Quantity - "Make your contributions as informative as is required. Do not make your contributions more informative than is required or your listener will be misled or think you talk too much."
2. Quality - "Do not say what you believe to be false. Do not say that for which you lack adequate evidence."
3. Relation - "Be relevant."
4. Manner - "Avoid obscurity of expression. Avoid ambiguity, be brief, be orderly" (Grice, 1975:10).

Measures of Communicative Competence

Most language assessment tools in circulation are used to measure phonology, morphology, syntax, and semantics. Few are designed to measure communicative competence in children.

Lucas (1980) developed the Behavioral Inventory of Speech Acts Performance (BISAP), a criterion-referenced tool which evaluates the speech act production of children ages 3 to 5. Eight commonly used speech acts are assessed by BISAP and include the following: requests for objects, requests for action, assertions, denials, statements of information, requests for information, calling, and rule orders. Lucas (1980) uses different activities for the assessment depending upon the experience of the child. These include art activities, preschool academic tasks, and infant-to-caregiver tasks. During this activity, the examiner presents a series of probes, comments and questions to elicit the desired speech acts from children. For example, to get children to make assertions, the examiner might ask them to tell something about a picture they have drawn.

The Assessment of Communication in Everyday Situations (ACES) is a test of communicative competence for children ages 4 to 8 years, developed by Lieberman and Hutchinson (1980). This assessment tool is based on Tough's (1977) taxonomy of language use and was designed to elicit spontaneous language through the use of situations familiar to the child. In this system, language is categorized into seven uses and 36 strategies. The seven uses are: Self-maintaining, Directing, Reporting, Logical Reasoning, Predicting, Projecting, and Imagining. "Language use is defined as the meaning conveyed through language to portray an individual's interpretation or reaction to particular situations" (Tough, 1977:27). Language strategy is a term that refers "to the different ways of expressing meaning that serve particular uses of language" (Tough, 1977:28).

ACES consists of three alternative test situations: Form I, The Birthday Party; Form II, The First Day of School; and Form III, The Picnic. The forms were designed to represent situations that are familiar to the child in order to elicit representative language use.

Wiig (1982) developed an assessment tool of language use for pre-adolescents, adolescents and young adults. This tool, Let's Talk, probes children's ability to use speech acts and is based on Well's (1978) taxonomy of communication functions. These functions are as follows: ritualizing, informing, controlling, and feeling. The test consists of 40 items, each involving a picture of communicative exchange between two adolescents and another picture of communicative exchange between an adolescent and an authority figure. Students are asked to form a sentence or series of sentences which

the adolescents in the pictures would be likely to say in particular situations. Total scores for each of the four functions can be compared to each other or to the age-related criterion developed from the field test studies.

Summary

Communicative competence has been defined by Hymes (1971) as "who can say what, in what way, where and when, by what means and to whom" (p. 15). According to Halliday (1978), to be competent, language must be functional. Learning to communicate requires a merger between the forms of language (grammar) and their function or use. Bloom and Lahey (1978) identified two major components of communicative competence: (a) the function or intent of communication; and (b) the context or influence of specific situational factors on communication. Children learn these rules of social interaction within their community at a very young age. They also come to realize that various situations make specific demands on the kind of language they produce. Rules of grammar are learned in a short time; however, before language usage resembles that of a competent communicator, many years of experiencing different speaking situations is required.

The development of communicative competence begins at birth and continues until adulthood. Prutting (1979) and Bloom and Lahey (1978) created models which trace the developmental patterns of language acquisition from pre-linguistic forms to more mature verbal choices of adults.

Only a few assessment tools have been designed to measure communicative competence in children. Most tools are linguistic in focus rather than communicative and measure the major language components of

phonology, morphology, syntax, and semantics. Several criterion-referenced tests, BISAP (Lucas, 1980), "Let's Talk" (Wiig, 1982), and ACES (Lieberman & Hutchinson, 1980), have been developed to analyze communicative competence in structured situations. These tests provide an assessment of language in use rather than language form or language content.

CHAPTER III

METHODS AND PROCEDURES

Subjects

The subjects consisted of three groups of 10 language-normal children. Ten children, ages 4 years, 9 months to 5 years, 3 months were selected from the First Baptist Day Care of McDowell County; ten children, ages 6 years, 9 months to 7 years, 3 months were selected at random from a population pool of approximately 30 7-year-old children enrolled in first grade at Pleasant Gardens Elementary School in McDowell County; and another 10 children, ages 8 years, 9 months to 9 years, 3 months were selected at random from a population pool of approximately 30 9-year-old children in third grade at Pleasant Gardens Elementary School in McDowell County. For a list of pertinent subject characteristics see Tables 1, 2, and 3. Each subject's guardian was asked to sign a letter of permission before testing procedures took place (see Appendix A). To comply with the administrative requirements of ACES, each subject selected a friend from the remainder of the population not included in the study. No child was allowed to act as a friend if they had been selected as a subject and each friend selected was only allowed to participate once.

At the time of the testing, none of the subjects was enrolled in speech therapy nor exhibited any gross visual or auditory defects.

TABLE 1

SUBJECT CHARACTERISTICS

First Baptist Church Daycare

Identification Number	Sex	Age in Months
1	Female	62
2	Male	57
3	Female	63
4	Male	63
5	Male	63
6	Female	59
7	Male	59
8	Female	62
9	Female	60
10	Female	58
Range		57-63
Mean		60.6

TABLE 2

SUBJECT CHARACTERISTICS

Pleasant Gardens School - Grade 1

Identification Number	Sex	Age in Months
11	Male	86
12	Male	87
13	Male	85
14	Male	86
15	Male	82
16	Female	85
17	Female	85
18	Female	88
19	Female	84
20	Male	82
Range		82-88
Mean		85

TABLE 3

SUBJECT CHARACTERISTICS

Pleasant Gardens School - Grade 3

Identification Number	Sex	Age in Months
21	Male	111
22	Male	110
23	Female	107
24	Male	111
25	Male	110
26	Female	109
27	Male	110
28	Female	111
29	Female	111
30	Female	105
Range		105-111
Mean		109.5

Materials

The Assessment of Communication in Everyday Situations (ACES), developed by Lieberman and Hutchinson (1979), was used to evaluate the communicative competence of the children in this study. ACES is based on Tough's (1977) functional taxonomy of language use and is designed to elicit spontaneous language through various role playing situations which are familiar to the child. Tough's taxonomy categorizes language into seven uses and 36 strategies. The seven uses of language evaluated in ACES are: (a) Self-maintaining, (b) Directing, (c) Reporting, (d) Logical Reasoning, (e) Predicting, (f) Projecting, and (g) Imagining. The 36 strategies refer "to the different ways of expressing meaning that serve particular uses of language" (Tough, 1977:27). For definitions of the seven uses of language and 36 strategies see Appendix B. ACES consists of 45 items which measure children's ability to use the 36 strategies in both declarative and interrogative forms. The test employs a role playing technique and uses various materials and puppets to encourage natural responses to test items (see Appendix C).

Administration of ACES can be completed in 30 minutes and responses are scored on a 0 to 2 scale, with 0 representing an inappropriate response, 1 representing an appropriate response after a prompt, and 2 representing an appropriate spontaneous response. The maximum overall score possible is 84. The scoring guide to the 45 items of the test can be found in Appendix D.

Results provide a score for each of the seven uses and each of the 36 strategies. From this data, an overall score can be determined as well as a score for each of the two broader categories of

language functions: (a) Representational, which includes the Reporting, Reasoning, Predicting, Projecting, and Imagining uses of language and (b) Social, which includes the Directing and Self-maintaining uses. This information provides a profile of children's functional strengths and weaknesses in communicative competence.

Peebles (1980) studied the content and concurrent validity of ACES. Content validity was assessed by 63 speech pathology specialists who judged whether specific test items on ACES would elicit acceptable responses. Of the 103 test items evaluated, 88 reached or exceeded the .75 level of agreement, the acceptable validity level established for this study. Also, 34 communication strategies were assessed with 31 strategies receiving percentages of agreement equal to .75 or higher (Peebles, 1980).

Concurrent validity was determined by comparing the use of communication strategies on ACES to the use of the same strategies employed in everyday academic situations by 4-year-olds. These results revealed a mean percentage of agreement of .74, indicating a high level of correspondence between strategies produced on ACES and in everyday situations.

Hill (1980) investigated several aspects of the reliability of ACES including alternate form, test-retest, internal consistency, and rater reliability. Results of the alternate form study revealed correlation coefficients (r) among the overall scores for the three forms of ACES to be high, positive at the .0005 level of statistical significance: r = .97 for Forms I to II, .93 for Forms II to III, and .89 for Forms III to I. Coefficient alpha (rxx) among the

three sets of test forms was .94, .93, and .93, respectively, indicating that the three forms of ACES are alternate forms of the same test and that they measure the same characteristics overall.

The correlation coefficients between overall scores in a test-retest situation for each of the three forms of ACES were all found to be high positive at the .005 level of significance: r = .90 for test-retest of Form I, .94 on Form II, and .91 on Form III. Coefficient alpha between each of the three sets of tests was .92, .94, and .94 respectively indicating stable performance over time on ACES.

To determine rater reliability, seven raters each scored and rescored five tests. Results revealed a high positive correlation overall for intra-rater reliability (r = .84, p = .001) and inter-rater reliability, ranging from (r = .73, p = .009) to (r =.94, p = .001). These results indicate that raters score the same test in the same manner on two separate occasions and score tests administered to different subjects in the same manner.

Procedures

Two examiners administered ACES to a target child and a friend in a quiet room apart from the routine activity of the school. Form II of ACES, The First Day of School was used. The testing sessions required approximately 30 minutes and were audio recorded. Portable Wollensak audio tape recorders (Model 2620) and Wollensak microphones (Model A-0506) were used to record all test administrations.

Prior to administering ACES, the examiners, two graduate students in speech pathology, demonstrated their ability to give and score the test. The examiners listened to a number of audio tapes of actual test administrations for each of the three forms of ACES. Then, five

audio tape administrations were scored by each examiner and a period of time was allowed for discussion. This procedure was continued until 90% accuracy was attained for each examiner.

To determine the intra- and inter-reliability of ACES, two examiners scored and rescored five tests selected at random. The tests were scored at least one week apart and were scored in random order during each session. Each examiner was given a blank score sheet, a scoring guide, and an audio tape of the test. Examiners were allowed to listen to each test item twice and had 45 minutes to score each test.

CHAPTER 4

RESULTS AND ANALYSIS

The individual raw scores, means, standard deviations and ranges of performance on ACES are presented in Tables 4-6.

The overall performance on ACES for the 5-year-old group ranged between 23 and 59 with a mean of 42.7 and a standard deviation of 11.786. When the overall score was further subdivided into the Social and Representational functions of language, scores were as follows: On the Social function of language, the range of scores for the 5-year olds was 5-11 with a mean of 8.0 and a standard deviation of 2.108. For the Representational function of language, the scores ranged from 17 to 50 with a mean of 34.7 and a standard deviation of 10.056. The Social function was further subdivided into two language uses: Self-maintaining and Directing. On the Self-maintaining use, the range of scores was 4 to 9 with a mean of 5.8 and a standard deviation of 1.989. On the Directing use, the range of scores was from 0 to 3 with a mean of 2.2 and a standard deviation of 1.317. The Representational function was further subdivided into five language uses: Reporting, Logical Reasoning, Predicting, Projecting, and Imagining. On the Reporting use, the range of scores was from 5 to 15 with a mean of 8.9 and a standard deviation of 2.961. The Logical Reasoning use showed a range of scores from 2 to 9 with a mean of 5.4 and a standard deviation of 2.221. On the Predicting use, the score

TABLE 4

RAW SCORES ON ACES FOR 5-YEAR-OLDS

Subjects	Overall	Social	Repres.	Self-main.	Dir.	Rep.	Reas.	Pred.	Proj.	Imag.
1	57	11	46	8	3	12	7	13	8	6
2	26	5	21	5	0	6	2	5	4	4
3	46	10	36	7	3	9	5	12	6	4
4	23	6	17	5	1	5	3	6	3	0
5	59	9	50	9	0	15	9	13	9	4
6	42	7	35	4	3	7	6	10	8	4
7	40	7	33	4	3	9	4	10	6	4
8	52	11	41	8	3	10	8	11	8	4
9	40	7	33	4	3	9	4	10	6	4
10	41	7	34	4	3	7	6	10	7	4
Range	23-59	5-11	17-50	4-9	0-3	5-15	2-9	5-13	3-9	0-6
Mean	42.7	8	34.7	5.8	2.2	8.9	5.4	10	6.6	3.8
St. Dev.	11.786	2.108	10.056	1.989	1.317	2.961	2.221	2.667	1.955	1.476

TABLE 5

RAW SCORES ON ACES FOR 7-YEAR-OLDS

Subjects	Overall	Social	Repres.	Self-main.	Dir.	Rep.	Reas.	Pred.	Proj.	Imag.
1	65	12	53	9	3	10	15	16	8	4
2	60	11	49	7	4	13	10	14	8	4
3	57	10	47	5	5	9	12	13	9	4
4	62	12	50	8	4	11	10	13	10	6
5	64	10	54	7	3	15	13	15	8	3
6	47	11	36	7	4	6	7	12	8	3
7	53	8	45	6	2	10	7	16	8	4
8	66	12	54	7	5	18	11	12	9	4
9	69	14	55	9	5	11	14	16	10	4
10	62	16	46	10	6	11	7	12	10	6
Range	47-69	8-16	36-55	5-10	2-6	6-18	7-15	12-16	8-10	3-6
Mean	60.5	11.6	48.9	7.5	4.1	11.4	10.6	13.9	8.8	4.2
St. Dev.	6.587	2.221	5.782	1.509	1.130	3.307	2.952	1.729	.919	1.033

TABLE 6

RAW SCORES ON ACES FOR 9-YEAR-OLDS

Subjects	Overall	Social	Repres.	Self-main.	Dir.	Rep.	Reas.	Pred.	Proj.	Imag.
1	58	10	48	5	5	12	9	14	9	4
2	70	13	57	10	3	14	14	16	9	4
3	64	13	51	8	5	14	12	16	9	0
4	67	13	54	11	2	12	12	16	9	5
5	75	12	63	9	3	17	16	16	10	4
6	67	12	55	9	3	13	13	16	10	3
7	71	15	56	7	8	13	15	15	9	4
8	54	11	43	5	6	12	5	14	6	6
9	66	15	51	9	6	11	13	15	8	4
10	65	13	52	9	4	10	12	15	9	6
Range	54-75	10-15	43-63	5-11	2-8	10-17	5-16	14-16	6-10	0-6
Mean	65.7	12.7	53	8.3	4.5	12.8	12.1	15.3	8.8	4
St. Dev.	6.111	1.567	5.416	2.058	1.841	1.932	3.143	.823	1.135	1.700

range was from 5 to 13 with a mean of 10.0 and a standard deviation of 2.667. On the Projecting use, scores ranged from 3 to 9, with a mean of 6.6 and a standard deviation of 1.955. The Imagining use showed a range of scores from 0 to 6 with a mean of 3.8 and a standard deviation of 1.476. For a summary of these data, see Table 4.

The overall performance on ACES for the 7-year-old group ranged between 47 and 69 with a mean of 60.5 and a standard deviation of 6.587. When the overall score was further subdivided into the Social and Representational functions of language, scores were as follows. On the Social function of language, the range of scores for the 7-year-olds was 8 to 16 with a mean of 11.6 and a standard deviation of 2.221. For the Representational function of language, the scores ranged from 36 to 55 with a mean of 48.9 and a standard deviation of 5.782. The Social function was further subdivided into two language uses: Self-maintaining and Directing. On the Self-maintaining use, the range of scores was from 5 to 10 with a mean of 7.5 and a standard deviation of 1.509. For the Directing use, the range of scores was from 2 to 6 with a mean of 4.1 and a standard deviation of 1.130. The Representational function was further subdivided into five language uses: Reporting, Logical Reasoning, Predicting, Projecting, and Imagining. On the Reporting use, the range of scores was from 6 to 18 with a mean of 11.4 and a standard deviation of 3.307. Logical Reasoning revealed a range of scores from 7 to 15 with a mean of 10.6 and a standard deviation of 2.952. On the Predicting use, the score range was from 12 to 16 with a mean of 13.9 and a standard deviation of 1.729. On the Projecting use, scores ranged from 8 to 10, with a mean of 8.8 and a standard deviation of .919. The Imagining

use showed a range of scores from 3 to 6 with a mean of 4.2 and a standard deviation of 1.033. A summary of these data is presented in Table 5.

The overall performance on ACES for the 9-year-old group ranged between 54 and 75 with a mean of 65.7 and a standard deviation of 6.111. When the overall score was further subdivided into the Social and Representational functions of language, scores were as follows. On the Social function of language, the range of scores for the 9-year-olds was 10 to 15 with a mean of 12.7 and a standard deviation of 1.567. For the Representational function of language, the scores ranged from 43 to 63 with a mean of 53.0 and a standard deviation of 5.416. The Social function was further subdivided into two language uses: Self-maintaining and Directing. On the Self-maintaining use, the range of scores was from 5 to 11 with a mean of 8.3 and a standard deviation of 2.058. For the Directing use, the range of scores was from 2 to 8 with a mean of 4.5 and a standard deviation of 1.841. The Representational function was further subdivided into five language uses: Reporting, Logical Reasoning, Predicting, Projecting, and Imagining. On the Reporting use, the range of scores was from 10 to 17 with a mean of 12.8 and a standard deviation of 1.932. The Logical Reasoning use revealed a range of scores from 5 to 16 with a mean of 12.1 and a standard deviation of 3.143. On the Predicting use, the scores ranged from 14 to 16 with a mean of 15.3 and a standard deviation of .823. The Projecting use showed a score range of 6 to 10, a mean of 8.8 and a standard

deviation of 1.135 and the Imagining use showed a range of scores from 0 to 6 with a mean of 4.0 and a standard deviation of 1.700. Table 6 includes a summary of these data.

Analysis of Data

In order to test subhypotheses 1.1 through 1.3, the data were submitted to a one-way analysis of variance and the results are shown in Table 7. The data revealed a significant difference among the groups' overall performance on ACES (F = 19.470, df = 2/28, p = 0.0001).

A post hoc analysis using Duncan's Multiple Range Test was performed to determine which groups contributed to significant differences in performance. The results of this test revealed that the 7- and 9-year-olds scored significantly better than the 5-year-old group but there was no significant difference between the 7- and 9-year-old groups in overall performance. On the basis of these results, subhypotheses 1.1 and 1.2 were rejected but 1.3 was not rejected.

In testing subhypotheses 2.1 through 2.3, the data were submitted to a one-way analysis of variance which revealed a significant difference among the groups on the Representational function of language (F = 17.698, df = 2/28, p = 0.0001). See Table 8.

The results of a post hoc analysis using Duncan's Multiple Range Test revealed that the 7- and 9-year-old groups scored significantly better than the 5-year-old group but no significant difference was detected between the 7- and 9-year-old groups. Therefore, subhypotheses 2.1 and 2.2 were rejected but 2.3 was not.

TABLE 7

SUMMARY OF ONE-WAY ANOVA FOR THE OVERALL PERFORMANCE ON ACES ACHIEVED BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	2932.4997	1466.2498	19.470	0.0001
Within groups	26	1958.0542	75.3098		
Total	28	4890.5507			

TABLE 8

SUMMARY OF ONE-WAY ANOVA FOR THE REPRESENTATIONAL FUNCTION OF LANGUAGE ON ACES ACHIEVED BY THE 5-, 7-, AND 9-YEAR-OLD GROUP

Source	df	SS	MS	F	p
Between groups	2	1984.4420	992.2209	17.698	0.0001
Within groups	26	1457.6991	56.0653		
Total	28	3442.1411			

To test subhypotheses 3.1 through 3.3, the data were submitted to a one-way analysis of variance with results showing a significant difference among the groups on the Social function of language on ACES (F = 12.517, df = 2/28, p = 0.0002). See Table 9.

The post hoc analysis revealed that the 7- and 9-year-old groups scored significantly better than the 5-year-old group but there was no significant difference between the 7- and 9-year-old groups. On the basis of these results, subhypotheses 3.1 and 3.2 were rejected but 3.3 was not rejected.

In testing subhypotheses 4.1 through 4.3, the data were submitted to a one-way analysis of variance with results showing a significant difference among the groups in performance on the Self-maintaining use of language on ACES (F = 9.407, df = 2/28, p = 0.0008). See Table 10.

The post hoc analysis revealed that the 7- and 9-year-old groups scored significantly better on the Self-maintaining use of language than the 5-year-old group but there was no significant difference between the 7- and 9-year-old groups. Therefore, subhypotheses 4.1 and 4.2 were rejected but 4.3 was not

In order to test subhypotheses 5.1 through 5.3, the data were submitted to a one-way analysis of variance. See Table 11. The data revealed a significant difference among the groups on the Directing use of language on ACES (F = 3.563, df = 2/28, p = 0.0429).

A post hoc analysis using Duncan's Multiple Range Test was performed to determine which groups contributed to significant differences in performance. The results showed no significant differences between the 5- and 9-year-old groups and the 7- and 9-year-old

TABLE 9

SUMMARY OF ONE-WAY ANOVA FOR THE SOCIAL FUNCTION OF LANGUAGE ON ACES ACHIEVED BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	96.7526	43.3763	12.517	0.0002
Within groups	26	100.4888	3.8650		
Total	28	197.2414			

TABLE 10

SUMMARY OF ONE-WAY ANOVA FOR THE

SELF-MAINTAINING USE OF LANGUAGE

ON ACES ACHIEVED BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	53.1293	26.5647	9.407	0.0008
Within groups	26	73.4222	2.8239		
Total	28	126.5515			

TABLE 11

SUMMARY OF ONE-WAY ANOVA FOR THE

DIRECTING USE OF LANGUAGE ON ACES

ACHIEVED BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	7.6261	3.8130	3.563	0.0429
Within groups	26	27.8222	1.0701		
Total	28	35.4483			

groups. However, there was a significant difference in performance between the 5- and 7-year-old groups. On the basis of these results subhypothesis 5.1 was rejected but subhypotheses 5.2 and 5.3 were not.

To test subhypotheses 6.1 through 6.3, the data were submitted to a one-way analysis of variance and the results are shown in Table 12. There was a significant difference among the groups on the Reporting use of language on ACES (F = 10.965, df = 2/28, p = 0.0004).

A post hoc analysis revealed that the 7- and 9-year-old groups scored significantly better than the 5-year-old group; however, there was no significant difference between the 7- and 9-year-old groups. Therefore, subhypotheses 6.1 and 6.2 were rejected whereas 6.3 was not.

In testing subhypotheses 7.1 through 7.3, the data were submitted to a one-way analysis of variance with results showing a significant difference among the groups in performance on the Logical Reasoning use of language on ACES (F = 12.727, df = 2/28, p = 0.0001). See Table 13.

A post hoc analysis revealed that the 7- and 9-year-old groups scored significantly better than the 5-year-old group but there was no significant difference between the 7- and 9-year-old groups. On the basis of these results, subhypotheses 7.1 and 7.2 were rejected but 7.3 was not rejected.

To test subhypotheses 8.1 through 8.3, the data were submitted to a one-way analysis of variance with results showing a significant difference among the groups in performance on the Predicting use of language on ACES (F = 17.461, df = 2/28, p = 0.0001). See Table 14.

TABLE 12

SUMMARY OF ONE-WAY ANOVA FOR THE

REPORTING USE OF LANGUAGE ON ACES

ACHIEVED BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	133.2882	66.6441	10.965	0.0004
Within groups	26	158.0221	6.0778		
Total	28	291.3101			

TABLE 13

SUMMARY OF ONE-WAY ANOVA FOR THE LOGICAL REASONING USE OF LANGUAGE ON ACES ACHIEVED BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	223.5999	111.8000	12.727	0.0001
Within groups	26	228.3999	8.7846		
Total	28	451.9998			

TABLE 14

SUMMARY OF ONE-WAY ANOVA FOR THE

PREDICTING USE OF LANGUAGE ON ACES ACHIEVED

BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	131.0898	65.5449	17.461	0.0001
Within groups	26	97.6000	3.7538		
Total	28	228.6897			

The post hoc analysis revealed that the 7- and 9-year-old groups scored significantly better than the 5-year-old group, however, no significant difference was detected between the 7- and 9-year-old groups. Subhypotheses 8.1 and 8.2 were rejected and subhypothesis 8.3 was accepted.

To test subhypotheses 9.1 through 9.3, the data were submitted to a one-way analysis of variance with results showing a significant difference between the groups in performance on the Projecting use of language on ACES ($F = 8.594$, $df = 2/28$, $p = 0.0014$). See Table 15.

A post hoc analysis revealed that the 7- and 9-year-old groups scored significantly better than the 5-year-old group but no significant difference was shown between the 7- and 9-year-old groups. On the basis of these results, subhypotheses 9.1 and 9.2 were rejected but subhypothesis 9.3 was not.

To test subhypotheses 10.1 through 10.3, the data were submitted to a one-way analysis of variance which revealed no significant difference among the groups on the Imagining use of language on ACES ($F = 0.321$, $df = 2/28$, $p = 0.7280$). See Table 16. The 5-, 7- and 9-year-old groups performed similarly on this language use, therefore, subhypotheses 10.1 through 10.3 were not rejected.

In summary, the 7- and 9-year-old groups scored significantly better than the 5-year-old group on overall performance on ACES, but no significant difference was shown between the 7- and 9-year-old groups. The same results were observed for the Representational and Social functions of language and the Self-maintaining, Reporting, Logical Reasoning, Predicting, and Projecting uses of language.

TABLE 15

SUMMARY OF ONE-WAY ANOVA FOR THE

PROJECTING USE OF LANGUAGE ON ACES ACHIEVED

BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	34.5007	17.2504	8.594	0.0014
Within groups	26	52.1888	2.0073		
Total	28	86.6896			

TABLE 16

SUMMARY OF ONE-WAY ANOVA FOR THE

IMAGINING USE OF LANGUAGE ON ACES ACHIEVED

BY THE 5-, 7-, AND 9-YEAR-OLD GROUPS

Source	df	SS	MS	F	p
Between groups	2	1.1065	0.5533	0.321	0.7280
Within groups	26	44.7555	1.7214		
Total	28	45.8620			

On the Directing use of language, results showed no significant difference between the 5- and 9- and the 7- and 9-year-old groups, but a significant difference between the 5- and 7-year-old groups. On the Imagining use of language, results revealed no significant differences among the groups. The 5-, 7-, and 9-year-old groups performed similarly on this language use.

Reliability

Two measures of reliability were examined in this study to determine the consistency of measurement associated with ACES.

Intra-Rater Reliability

Intra-rater reliability refers to the extent to which a rater will score the same way on two different occasions. To establish an intra-rater reliability index, five language samples selected at random were rescored by the author using a point-by-point percentage of agreement formula:

$$\frac{\text{Number of Agreements}}{\text{Number of Agreements + Disagreements}} \times 100$$

The results of this analysis yielded the following percentages of agreements for samples one to five: 96, 100, 100, 89, 100. The mean overall intra-rater reliability index was 97, which is indicative of a high degree of scoring precision by a single rater.

Inter-Rater Reliability

Inter-rater reliability refers to the extent of agreement between different raters classifying the same behavior. An inter-rater reliability index for ACES was established between two raters using the point-by-point percentage of agreement formula. The results yielded the following percentages of agreement: 96, 93, 89, 98, 96. The mean overall inter-rater reliability index was 94.4, suggesting a high degree of scoring consistency between two raters.

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

The purpose of this study was to obtain additional normative information on the Assessment of Communication In Everyday Situations (ACES) by examining the performance of children, ages 5, 7, and 9 on Form II, The First Day of School. More specifically, answers to the following questions were sought:

1. Does overall performance on ACES improve as children get older?
2. Does performance on the Social functions of language assessed by ACES improve as children get older?
3. Does performance on the Representational functions of language assessed by ACES improve as children get older?
4. Does performance on the seven uses of language assessed by ACES improve as children get older?

Thirty children, ages 5, 7, and 9 were used for the study with 10 children in each age group. Form II of ACES was administered to each child. The administration took approximately 30 minutes with each child and responses were recorded and scored at a later time.

The results of the present study indicate that the 7- and 9-year old groups scored significantly better than the 5-year-old group on

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

The purpose of this study was to obtain additional normative information on the Assessment of Communication In Everyday Situations (ACES) by examining the performance of children, ages 5, 7, and 9 on Form II, The First Day of School. More specifically, answers to the following questions were sought:

1. Does overall performance on ACES improve as children get older?
2. Does performance on the Social functions of language assessed by ACES improve as children get older?
3. Does performance on the Representational functions of language assessed by ACES improve as children get older?
4. Does performance on the seven uses of language assessed by ACES improve as children get older?

Thirty children, ages 5, 7, and 9 were used for the study with 10 children in each age group. Form II of ACES was administered to each child. The administration took approximately 30 minutes with each child and responses were recorded and scored at a later time.

The results of the present study indicate that the 7- and 9-year old groups scored significantly better than the 5-year-old group on

overall performance on ACES, but no significant difference was shown between the 7- and 9-year-old groups. The same results were observed for the Representational and Social functions of language and the Self-maintaining, Reporting, Logical Reasoning, Predicting, and Projecting uses of language. On the Directing use of language, results showed no significant difference between the 5- and 9- and the 7- and 9-year-old groups, but a significant difference between the 5- and 7-year-old groups. On the Imagining use of language, results revealed no significant differences among the groups. The 5-, 7-, and 9-year-old groups performed similarly on this language use.

Discussion

Analysis of this data reveals that the 7- and 9-year-old children are more competent with each of the language uses than the 5-year-olds. Based on the statistical treatment of the data, the greatest interval in performance on ACES was between the 5- and 9-year-old children.

This evidence supports the fact that chronological age determines the degree of communicative competence in children as well as their performance on ACES. These results are similar to those observed in the acquisition of other language areas such as phonology, morphology, semantics and syntax.

In reviewing other studies similar to this one, it was noted that results are comparatively alike. In Tough's (1977) study, children at the ages of 3, 5½, and 7 were recorded during free play and interviews in which the children were required to use language for

purposes which are necessary for academic success. In this study, all of the uses and strategies of language did appear in the transcribed data at each age level but more frequently and competently as the children increased in age.

Wren's (1980) study comparing 4-, 6-, and 8-year-olds on the Assessment of Communication in Everyday Situations revealed a significant difference in the overall performance of 4- and 6-year-old children and 4- and 8-year-old children but no significant difference in the overall performance of the 6- and 8-year-old children. The 4-year-old group was the least communicatively competent which is similar to the results found in this study with the 5-year-old group. See Table 17 for a performance by age on the communication uses. These data were not collected at the same time nor from the same form of ACES. The 4-, 6-, and 8-year-old group was administered Form I (The Birthday Party) in 1980 and the 5-, 7-, and 9-year-old group was administered Form II (The First Day of School) in 1982. Table 17 shows a steady increase in overall performance by age which is most likely due to the steady increase in the Representational function. Table 17 also shows that the mean overall performance for the 9-year-old group is still 20 points below the maximum possible score on ACES. This could be due to how specific items are presented on ACES or to the incomplete development of communicative competence of 9-year-olds.

Recommendations for Further Research

The following suggestions are made for future research as a result of the present study:

TABLE 17

PERFORMANCE BY AGE ON THE COMMUNICATION FUNCTIONS

	4-Year-Olds		5-Year-Olds		6-Year-Olds		7-Year-Olds		8-Year-Olds		9-Year-olds	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
SOCIAL FUNCTIONS												
Self-Maintaining	5.0	5.5	5.8	2.0	5.1	5.0	7.5	1.5	5.6	5.2	8.3	2.1
Directing	4.0	5.1	2.2	1.3	5.0	5.9	4.1	1.1	5.0	5.5	4.5	1.8
REPRESENTATIONAL FUNCTIONS												
Reporting	6.0	6.8	8.9	3.0	9.0	9.3	11.4	3.3	16.0	15.0	12.8	1.9
Reasoning	4.0	5.6	5.4	2.2	7.0	9.0	10.6	3.0	9.0	9.2	12.1	3.1
Predicting	7.0	7.6	10.0	2.7	9.0	9.9	13.9	1.7	12.0	12.0	15.3	.8
Projecting	4.0	5.4	6.6	1.0	6.0	6.5	8.8	1.0	7.0	7.3	8.8	1.1
Imagining	3.0	3.5	3.8	1.5	4.0	4.0	4.2	1.0	4.0	4.0	4.0	1.7
Overall Social Uses	9.0	3.0	8.0	2.1	10.0	3.3	11.6	2.2	10.7	3.0	12.7	1.6
Overall Repres. Uses	22.0	4.2	34.7	10.1	36.5	3.5	48.9	5.8	49.0	4.3	53.0	5.4
Total	33.0	6.2	42.7	11.8	47.0	6.0	60.5	6.6	60.5	6.5	65.7	6.1

1. Differences in performance on the Assessment of Communication in Everyday Situations (ACES) among children of high, middle, and low socio-economic status should be studied.
2. Larger samples should be studied on all forms of ACES to corroborate current results.
3. Additional samples over the age range of 4 to 10 years for all forms should be studied.
4. Differences in performance between language-normal and language-impaired groups should be investigated once the normative information has been obtained.
5. Differences in performance on ACES between different types of language-impaired children, e.g. hearing impaired, emotionally disturbed, should be researched.
6. An item analysis to determine the discriminative power of individual items on ACES should be conducted.

REFERENCES

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Bloom, L. & Lahey, M. Language development and language disorders. New York: John Wiley and Sons, 1978.

Boehm, A. Boehm test of basic concepts. New York: Psychological Corporation, 1971.

Bruner, J. The ontogenesis of speech acts. Child Language, 1975, 2, 1-19.

Carrow, E. Carrow elicited language inventory. Austin, TX: Learning Concepts, 1974.

Cazden, C. The neglected situation of child language research and education. Journal of Social Issues, 1970, 26, 36-60.

Chomsky, N. Aspects of the theory of syntax. Cambridge, MA: MIT Press, 1965.

Clark, J. & Madison, C. Test of oral language. Tigard, OR: C. C. Publications, Inc. 1981.

Davis, A. Language use in normal and learning disabled children, Unpublished educational specialist's thesis, Appalachian State University, 1982.

Dore, J. Children's illocutionary acts. In R. Freedle (Ed.), Discourse: Comprehension and production. New Jersey: Lawrence Eribaum Associates, 1976.

Dore, J. Holophrases, speech acts, and language universals. Journal of Child Language, 1975, 2, 21-40.

Dunn, L. Peabody picture vocabulary test. Circle Pines, MN: American Guidance Services, 1964.

Grice, H. Logic and conversation. In P. Cole and J. Morgan (Eds.), Syntax and semantics, Vol. 3: Speech acts. New York: Academic Press, 1975.

Halliday, M. Language as social semiotic. Baltimore: University Park Press, 1978.

Halliday, M. Learning how to mean: Explorations in the development of language. In E. Lenneberg & E. Lenneberg (Eds.), London: Edward Arnold Publishers, Ltd., 1975.

Hill, B. Reliability study of the assessment of communication in everyday situations, Unpublished master's thesis, Appalachian State University, 1980.

Hodson, J. Assessment of phonological processes. Danville, IL: Interstate Printers & Publishers, 1981.

Hopper, R. & Naremore, R. Children's speech: A practical introduction to communication development. New York: Harper & Row, 1973.

Hymes, D. Competence and performance in linguistic. In R. Huxley & E. Ingram (Eds.), Language acquisition: Models and methods. New York: Academic Press, 1971.

Hymes, D. Introduction. In C. Cazden, V. John & D. Hymes (Eds.), Functions of language in the classroom. New York: Teacher's College Press, Columbia University, 1972.

Larson, C., Backlund, P., Redmond, M. & Barbour, A. Assessing functional communication. Falls Church, VA: Speech Communication Association, 1978.

Lee, L. Northwestern syntax screening test. Evanston, IL: Northwestern University Press, 1974.

Lieberman, R. & Hutchinson, E. The assessment of communication in everyday situations. Unpublished, 1980.

Lucas, E. Semantic and pragmatic language disorders. Rockville, MD: Aspen Systems Corporation, 1980.

Miller, J. & Yoder, D. A syntax teaching program. In J. McLean, D. Yoder, & R. Schiefebusch (Eds.), Language intervention with the retarded. Baltimore, MD: University Park Press, 1972.

Naremore, R. The learning of communication roles and norms. In R. Allen and K. Brown (Eds.), Developing communication competence in children. Stokie, IL: National Textbook Co., 1977.

Peebles, L. Validation of assessment of communication in everyday situations, Unpublished master's thesis, Appalachian State University, 1980.

Prutting, C. Process/pra"ses: The action of moving forward progressively from one point to another on the way to completion. Journal of Speech and Hearing Disorders, 1979, 44, 3-30.

Tough, J. Listening to children talking. London: Ward Lock Educational, 1976.

Tough, J. The development of meaning: A study of children's use of language. New York: John Wiley and Sons, 1977.

Weiner, F. Phonological process analysis. Baltimore, MD: University Park Press, 1978.

Wells, G. Language use and educational success: An empirical response to Joan Tough's 'The development of meaning'. Research in Education, 1978, 18, 9-34.

Wiig, C. Let's talk. Baltimore, MD: University Park Press, 1982.

Wood, B. Children and communication: Verbal and nonverbal language development. Englewood Cliffs, NJ: Prentice Hall, Inc., 1976.

Wren, K. A developmental study for the assessment of communication in everyday situations, Unpublished master's thesis, Appalachian State University, 1980.

Zackman, L., Huisengh, R., Sorgensen, C., & Barrett, M. OLIST. Moline, IL: Lingui Systems, 1978.

APPENDIXES

APPENDIX A

Letter to Parents

Letter to Parents

Dear Parents,

We are interested in learning more about how children use language and need your assistance in carrying out this project. We need permission to talk with your child at school and ask him/her some questions. The children will be involved in a role playing activity about the first day of school and will be asked questions about the story. The activity will last about 30 minutes. We will be at your child's school to talk with him/her 2 or 3 times during the rest of February and March.

Your child's name will be kept in strictest confidence and the results of the project will not be put in his/her school records. Mrs. Ricketts, Director of Exceptional Children's Programs in McDowell County Schools, is aware of this project and is allowing us to send you this letter. Please sign below if you give permission for your child to participate in this project and return it to school with your child. Thank you for your help.

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Appalachian State University

Mrs. Pat Ricketts
Director of Exceptional Children's Programs
McDowell County Schools

Yes, I give permission for my child to participate in this project. ___

No, I DO NOT give permission for my child to participate in this project.____

Signed:_____
Parent's name

Please check one of the above, sign your name, and return this to school with your child. Thank you.

APPENDIX B

Tough's (1977) Framework for the Classification of the Uses of Language

Operational Definitions and Examples from ACES

Tough's (1977) Framework for

the Classification of the Uses of Language

Operational Definitions and Examples from ACES

I. SELF-MAINTAINING - the use of language to create an awareness of the speakers' identity and to promote their position in relation to others.

a. Referring to physical and psychological needs - includes utterances which seek to satisfy desires.

1. I want the big one.
2. I want the one with the stars on it.
3. I want the yellow one.

b. Protecting the self and self interests - includes utterances spoken in defense of oneself and one's rights and property.

1. I was using that. Give it back.
2. Give me that back, I'm using it.
3. Give it to me, I'm using it.

c. Justifying behavior and claims - includes utterances which give a psychological (appealing to internal states or motivations) or social (appealing to rules, conventions, what is expected of simply fact) reason for actions or demands.

1. I'm gonna tear your house up cause it's ugly.
2. I'm gonna mess your picture all up because I don't like it.
3. Yours isn't pretty so I'm gonna mess it up.

d. Criticizing others - includes utterances which find fault with the listeners, often by belittling their status or abusing him by name calling.

1. Yours is ugly, like you.
2. Your house is too fat.
3. I don't like your house, it's yukky.

e. Threatening others - includes utterances which promise to bring about a state considered to be unpleasant to the listener. A threat is usually accompanied by a statement of the external conditions under which the event will take place.

1. You better let me have a turn or I'll tell the teacher.
2. Your house is ugly. I'm gonna mess it all up.
3. If you don't let me swing, I'll tell the teacher.

II. DIRECTING - the use of language to control or regulate the physical actions and operation performed by oneself and others.

a. Monitoring own actions - includes the running commentary or monologue which accompanies and reflects upon the speaker's own ongoing activity.

1. I'm gonna put the chimney here.
2. I'll put the doors here and the window here.
3. The windows are going right here.

b. Directing the actions of the self - includes the running commentary or monologue which guides and controls the speaker's own ongoing activity. It implies a measure of high concentration on precise, sustained or intricate activity which commonly occurs in the face of some difficulty or obstacle.

1. I have to slide this thing off and put this through the paper.
2. I have to stack all the paper.
3. This is hard to get through. I have to push, there it goes.

c. Directing the actions of others - includes utterances which are designed to guide a listener through an immediate action or series of actions.

1. Pick out a square. Put the door in the middle and the chimney on top.
2. Put the triangle on top of the square.
3. Use the little squares for windows on the big square.

d. Collaborating in action with others - includes utterances made in a context of cooperation which propose or plan a course of action for the speaker and one or more listeners.

1. I'll find the wheels and you find the doors.
2. You put on the lights and I'll find the windows.
3. When you finish putting on the wheels, I'll put on the windows.

III. REPORTING - the use of language to provide information about past and present experiences.

a. Labeling - includes utterances which serve the simple purpose of identifying observed phenomena.

1. I see a pencil, kleenex, and an eraser.
2. There's a ruler, pen, and eraser.
3. A pen, pencil and marker.

b. Referring to detail - includes utterances which serve to describe the attributes of objects, actions and/or events.

1. The gun is blue and has a trigger and handle.
2. The nurse's kit has some tiny bandaids and a thermometer in it.
3. The helicopter has a round thing on top that goes round and round.

c. Referring to incidents - includes utterances which describe the occurrence of an action or event.

1. We played with the farm set and the star patrol set.
2. We played with the shapes and I got to clean the blackboard.
3. Outside we played duck duck goose, climbed on the monkey bars, and swung.

d. Referring to the sequence of events - includes utterances which accurately reflect the serial nature of several related actions or incidents.

1. We had show and tell, then played with the shapes, then went outside.
2. First we had show and tell, then we played, then I cleaned the blackboard, and then we went outside.
3. The dog stole a pork chop, ran to the river and then dropped his chop when he saw another dog.

e. Making comparisons - includes utterances which link objects, actions or experiences through examination of similarities and differences.

1. This one is from Wendy's and this one is from Burger King.
2. This lunch box is little and this one is big.
3. This one has writing on the bottom and this one doesn't.

f. Recognizing the related aspects - includes utterances which show an association between two or more actions or events.

1. He was on top of the monkey bars and fell and hurt his arm.
2. He was walking on top of the monkey bars in his new shoes and he slipped and fell.
3. He was walking on the monkey bars and fell and got his breath knocked out.

g. Extracting or recognizing central meaning - includes utterances which impose a primary structure or coherence upon a situation or event and serve to unify the contributing parts into a composite whole.

1. He had one pork chop but wanted two, and lost both pork chops.
2. The dog wasn't happy with just one pork chop and he tried to get another one and lost them both.
3. A dog stole a pork chop and tried to get another one but in the end he lost both pork chops.

h. Reflecting on the meaning of experiences - includes utterances which express the speaker's attitudes or feelings about a situation.

1. Sad.
2. I feel sad about my best friend being in a different class.
3. I feel lonely.

IV. TOWARDS LOGICAL REASONING - the use of language which employs rational thought and argument to interpret experiences.

a. Explaining a process - includes utterances which describe a particular method of doing something, generally involving several steps of operations.

1. Everybody gets in a line and one person runs over and tries to break the line. If they do, they get to take somebody back to their side.

2. Everybody gets in a circle and one person walks around the circle and taps everyone on the head, when he says goose, you got to run and try to catch him.
3. You sit in a circle and if someone taps you on the head and says goose, you chase them back to your place. If they get your place, you have to go in the mushpot.

b. Recognizing casual and dependent relationships - includes utterances which acknowledge a logical and relevant connection between two situations and which express this most commonly in terms of "how" and "why."

1. I can't use this. It doesn't have any lead.
2. I can't write with this pencil cause it doesn't have a point.
3. I can't use this pencil. It's broken.

c. Recognizing problems and their solutions - includes utterances which acknowledge obstacles to a course of action and suggest ways to surmount them.

1. I want to wear the white one; the red one is dirty.
2. The red blouse is missing a button. I'll wear the white one.
3. I can wear the white one cause the red one has paint on it.

d. Justifying judgements and actions - includes utterances which offer a reason or explanation for decisions and behaviors which apply only to a particular situation.

1. I'll be out later. I have to clean the blackboard.
2. I can't go with you now. I have to clean the blackboards first.
3. Mrs. Green wants me to clean the blackboards. I can't go now.

e. Reflecting on events and drawing conclusions - includes utterances which evaluate the implications of an action or event and result in judgements.

1. If you're greedy, you might lose everything.
2. It's not nice to be greedy.
3. You shouldn't be greedy.

f. Recognizing principles - includes utterances which provide an elemental rule or rules to explain observed phenomena.

1. We should share.
2. No, it's not right cause we should take turns.
3. You have to share things.

V. PREDICTING - the use of language to extend communication beyond immediate, present or past experiences to events that have not yet occured and which may never take place.

a. Anticipating/forecasting - includes utterances which contemplate future happenings.

1. I'll turn cartwheels.
2. I'm gonna play on the swing.
3. I'm gonna play kickball.

b. Anticipating the detail of actions and events - includes utterances which delineate or describe future happenings or remote concerns.

1. I'd want some chocolate pudding.
2. I'd like some sugar cookies and some chocolate milk.
3. I would like some chocolate ice cream.

c. Anticipating the sequence of events - includes utterances which propose an ordered series of related actions or events.

1. I get up and brush my teeth and then brush my hair.
2. First I get dressed and then I eat breakfast.
3. I get up, then get dressed, then get my school stuff ready.

d. Anticipating problems and possible solutions - includes utterances which acknowledge possible obstacles to a planned course of action and suggest ways to surmount them.

1. If I couldn't get in, I'd go to my Grandmother's house.
2. If the door was locked, I'd go over to Jeff's house and wait til Mom got home.
3. I'd go to my friend's house and wait on Mom.

e. Anticipating and recognizing alternative courses of action -

1. I'd use a crayon or marker.
2. I could use a pen or a crayon.
3. I could use another pencil or a crayon.

f. Predicting consequences of actions or events - includes utterances which suggest a possible outcome of some immediate or future action or event.

1. I might fall if I'm not careful.
2. If I'm not careful, I might fall and hurt myself.
3. I could fall if I'm not careful.

VI. PROJECTING - the use of language within an unfamiliar or external context.

a. Projecting into the experiences of others - includes utterances which contemplate everyday occurrences from another's perspective.

1. She will have to work hard.
2. She will make new friends.
3. She will learn new things.

b. Projecting into feelings of others - includes utterances which reflect what it feels like to be another individual. Emotions and attitudes which are representative of another's point of view are expressed.

1. Sad.
2. She's sad, too.
3. She feels bad.

c. Projecting into reaction of others - includes utterances which consider how another individual would respond to a particular situation or experience.

1. "Be quiet or we'll stay in."
2. "Alright quiet down or we won't go outside."
3. "Get quiet or we'll have to stay inside."

d. Projecting into situations never experienced - includes utterances in which the speaker conjectures about his own feelings and reactions to unfamiliar activities or events.

1. I would paddle anybody that was mean.
2. I'd let everybody go home at noon.
3. I'd walk around and talk to all the teachers.

VII. IMAGINING - the use of language by individuals to create their own world.

a. Developing an imaginary situation based on real life - includes utterances used to assume a make-believe role in a situation which is possible in everyday life.

1. I'm going to feed the pig. It looks hungry.
2. Look ! The horse is chewing on the fence.
3. I'm going to plow the fields today.

b. Developing an imaginary situation based on fantasy - includes utterances used to assume a make-believe role in a situation which has never happened or could never happen.

1. I'm gonna radio to base ship. There's a falling star in our path.
2. We better kill all the aliens.
3. Watch out somebody's sneaking up behind you!

c. Developing an original story - includes a fictional account of incidents or events, generally consisting of an introduction, development and conclusion.

1. The detective chased the thief and caught him. Then he put the handcuffs on him and took him to jail.
2. One day a little doggie got sick. Nurse Nellie gave his some medicine and made him all better.
3. One day I got sick. The doctor came to my house and used all this stuff to make me better, and I was better the next day.

APPENDIX C

Assessment of Communications in Everyday Situations

Form II: The First Day of School

INSTRUCTIONS

We're going to talk to some puppets and play with some toys today. While we're playing, I'll be asking both of you many questions. Some of the questions will be hard to answer and some of them will be easy, but I want you to answer all of them as completely and as well as you can.

Sometimes, I'll be talking to _____ a little
subject's name

bit more than _____ but I want _____
friend's name friend's name

to listen very carefully so he/she can be the helper. Are you ready? Let's meet my puppet friends, now.

ITEM	ACTION	INSTRUCTION	INTRODUCTION - THE FIRST DAY OF SCHOOL
1.	Hold up Danny Puppet	_____ and subject's name _____, I have some friend's name friend's I'd like you to meet. This is Danny, a new boy in your class this year. Hi _____ and subject's name _____. friend's name --- _____, *say hello to* *subject's name* *Danny.* _____, *say hello to* *friend's name* *Danny.*	
2.	Hold up Mrs. Greene Puppet	This is your new teacher, Mrs. Greene. Hi _____. subject's name Hi _____. friend's name --- _____, *say hello to* *subject's name* *Mrs. Greene.* _____, *say hello to* *friend's name* *Mrs. Greene.*	
3.	Hold up Danny Puppet	Mrs. Green and Danny would like to get to know you better. They want to talk with you for a few minutes. Will you talk to Mrs. Greene and Danny, _____? subject's name Will you _____? friend's name	

ITEM	ACTION	INSTRUCTION
3.		*Will you talk to Mom and Bobby, _____?* *subject's name* *Will you _____?* *friend's name*
4.	Hold up Danny Puppet	Today's my first day of school. I'm going to be in Mrs. Greene's class. Do you like school _____? subject's name How about you _____? friend's name --- *_____ and* *subject's name* *_____, I want you to* *friend's name* *come with me to school. Will you come to school with me _____? How about you* *subject's name* *_____?* *friend's name*
5.	Hold up Danny Puppet	My mom packed some pudding in my lunchbox for school. _____, do you like subject's name chocolate or vanilla pudding? _____? friend's name --- *I like chocolate pudding. Mom also packed some juice. _____, do you like* *subject's name* *apple or orange juice? _____?* *friend's name*

ITEM	ACTION	INSTRUCTION
6.	Hold up Danny Puppet	We're going to play outside during recess, too. What kinds of things do you like to do during recess _____? How about subject's name you _____? friend's name --- *I like to swing and climb on the monkey bars. What other kinds of things do you like to do _____? subject's name _____? friend's name*
7.	Hold up Danny Puppet	Tell me how you play _____, use activity child mentioned _____. subject's name friend's name how do you play _____ use activity _____ child mentioned. --- *When I play on the monkey bars, I like to climb way up to the top and hang upside down from my knees. Tell _____ how to friend's name play. _____ use activity child _____. mentioned*

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
1.	clock	Brrrring! It's seven o'clock and time to get up and get ready for the first day of school. You want to roll over and go back to sleep. What might happen if you sleep longer? --- *What might happen if you go back to sleep?*	If I sleep longer, I'll be late for school.	Pd-f	5.6			
*2.	Hold up Mother Puppet	Mom comes to your bed and says, "Time to get up!" She wants to make sure that you have plenty of time to get ready. Tell her <u>everything</u> you need to do to get ready for school from the time you get up til the time you leave. --- *From the time you get up til the time you leave what do you need to do to get ready for school?*	First I get dressed and then I eat breakfast.	Pd-c	5.3			
3.		You don't know what to wear this morning. What would you say to your mom? --- *Ask your mom what you should wear to school?*	What should I wear, Mom?	Dr-e	2.5			
4.	Show red shirt and white shirt	Mom wants you to look very nice on your first day of school. She takes out two shirts/blouses, a red one and a white one. She says "wear the red one." What would you say to her? ---		LR-c	4.3			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
4. (cont.)		*Do you want to wear the red shirt/blouse? Why do/don't you want to wear it?*						
5.	Hold up Two pencil boxes Hold up Mom Puppet	Finally you get dressed, eat your breakfast and are ready to go. Mom bought two pencil boxes, one for you and one for your big brother. Tell mom which pencil box you want. --- *Which pencil box do you want?*	I want the blue one with the blackboard on it.	SM-a	1.1			
* 6.	Give Pencil Box to child	You are very excited about your new pencil box. Mom put several things inside that you will need for school. Open up your pencil box and tell me what you find inside. --- *Name the things in your pencil box.*	pencils, scissors, and an eraser	Rp-a	3.1			
7.	Hold up Mother Puppet and give broken pencil to child	Mom doesn't want you to lose your pencil box. She says, "Here's a pencil. Write your name on your box." --- *"Here's a pencil. Write your name on your box."*	I can't write with this pencil cause it doesn't have a point.	LR-b	4.2			
8.	Mother Puppet	"Oh, I'm sorry. I didn't notice that the pencil was broken and I don't have another one," says mom. "What else could you use to put your name on your box?" "Anything else?" ---	I could use a pen or a crayon.	Pd-e	5.5			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
8. (cont.)		*Besides a pencil, what else could you use to put your name on your box? Anything else?*						
*9.	Sister Puppet	As you are putting your name on your pencil box with the crayon/pen etc., your little sister comes by. She wants the crayon/pencil/etc. so she walks up & grabs it. What would you say to her? --- *What would you say to your little sister if she grabbed your crayon/pen/etc. away from you while you were using it?*	**Give it back. I'm using it.**	SM-b	1.2			
10.	Give notebook and paper to child. Point to notebook clip.	Mom also bought you a notebook and some paper. Put the paper in the notebook. --- *Put the paper in your notebook.*	**I have to slide this off and put the thing through the paper.**	DR-b	2.2			
*11.	Mother Puppet-Hand lunchbox to child	You gather up all of your new school supplies and are about ready to leave. Mom hands you your lunchbox and says, "Have a nice day!" Do you have a lunchbox at home? Tell me about <u>your</u> lunchbox. How is it different from this one? --- *Tell me about these lunchboxes. How are they different from each other?*	**My lunchbox has Snoopy on it and this one has Star Trek on it.**	Rp-e	3.5			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
12.	Sister Puppet Mother Puppet	As you are walking out the door, your two-year old sister says, "I want to go to school, too." Mom says she will have to wait a couple of years. Why? --- *Why can't your little sister go to school with you?*	She can't go to school cause she's too little.	LR-b	4.2			
13.	Set up school blackboard and flag	When you get to school, you find out that one of your best friends won't be in your classroom this year. He/She has to go to another room. How do you feel? --- *How do you feel when you find out that your best friend will not be in the same class with you?*	I feel sad.	Rp-h	3.8			
14.		How do you think your best friend feels about being moved to another room? --- *Repeat*	He/She's sad, too.	PJ-b	6.2			
*15.		What do you think will happen to your friend in his/her new classroom? --- *What will your friend do in his/her new classroom?*	He/She will make new friends.	PJ-a	6.1			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
16.	Boy Puppet	After you sit down, you notice that there is a new boy seated next to you. Find out his name. *Ask the new boy what his name is.*	What's your name?	Rp-i	3.9			
17	Boy Puppet	You like the new boy. You want him to sit with you and _____ at lunch. What would you say to him? friend's name *Ask the new boy to sit with you at lunch.*	Will you sit with us at lunch?	Sm-f	1.6			
*18.	Set out toys	Now, it's time for school to begin. The teacher says, "pick out a toy and describe it to the rest of the class." *Describe a toy to the rest of the class.*	The nurse's kit has some teeny weeny bandaids in it and a thing to take your blood pressure.	Rp-b	3.2			
19.		Now make up your own story about the toy. *Tell me a story about the toy.*	One day a little doggie got sick. Nurse Nellie gave him some medicine and made him all better.	Im-c	7.3			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
20.	Set out paper shapes	After show and tell, your teacher gives you and your friend _____ (friend's name) some freetime to do whatever you would like. You and _____ (friend's name) decide to play with the shapes. You decide to make a house with the shapes. Go ahead and make it. --- *Make the house.*	I'll put the door here and the windows here.	DR-a	2.1			
21.	Shapes	Now it's _____ (friend's name) turn to make something with the shapes. He/she decides to make a house, too. Tell him/her what to do. --- *Tell _____ (friend's name) how to make his house.*	Pick out a square. Put the door in the middle and the chimney on top.	DR-c	2.3			
*22.-23.		As _____ (friend's name) finishes his house, you both get into an argument about whose house is the best. What do you say to each other? --- *Have an argument with _____ (friend's name) about whose house is the best.*	I'm gonna mess your house all up cause it's yukky. I don't like your house.	SM-c/d	1.3 1.4			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
*24.	Shapes	You are about ready to clean up when you and _____ friend's name decide to make a car together. Talk it over and decide how you will do it. --- *Repeat*	I'll put the wheels on and you put the windows on.	DR-d	2.4			
25.		You have been working hard and are ready to go out to play. What will you do on the playground? --- *What will you do on the playground?*	I'm gonna play on the swing.	Pd-a	5.1			
26.		Find out from your teacher when you will be going out to play. --- *Ask your teacher when you will be going out to play.*	When are we going out to play?	Pd-g	5.7			
*27.	Teacher Puppet	Your teacher says, "We'll be going out to play in a few minutes. But first, I have to take something down to the principal's office." When your teacher returns, the class is very noisy. What do you think your teacher will say? --- *Repeat*	Alright quiet down or we're not going outside.	PJ-c	6.3			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
28.	Boy Puppet	Your teacher was very angry because the class was making so much noise. One of your classmates, the new boy even started to cry. What would you say to the new boy to find out why he was crying? --- *Ask the new boy why he is crying.*	Why are you crying?	PJ-e	6.5			
29.	Teacher Puppet Playground Set	It's almost time to play. Your teacher says, "Please stay a few minutes and clean the blackboard before you go outside." _____ friend's name wants to be the first on the playground. He/She asks you to go to the front of the line with him/her. What would you say to _____? friend's name --- _____ *wants you to* *friend's name* *go out on the playground with him/her but your teacher has asked you to stay and clean the blackboards. What would you say to your friend?*	I can't go with you, now. I have to clean the blackboards first.	LR-d	4.4			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
30.		You finally finish cleaning the blackboards and join the other children on the playground. Everyone is playing duck, duck goose. You don't remember how to play. What would you say to the teacher? --- *Ask your teacher how to play Duck, Duck Goose.*	How do you play duck, duck, goose?	LR-g	4.7			
31.		_____ would like to friend's name play also, but he doesn't know the rules. Tell _____ how to play the friend's name game. (If child does not know how to play Duck, Duck Goose, find out what games he/she does know how to play and have him/her tell friend how to play.) --- *Repeat*	Everybody gets in a circle and one person is it. He walks around the circle and taps everyone on the head. When he says goose, that person tries to catch him.	LR-a	4.1			
*32.		After you've finished playing Duck, Duck Goose, you decide to swing on the monkey bars. What will happen if you're not careful? --- *What will happen if you're not careful while playing on the monkey bars?*	If I'm not careful, I might fall down and hurt myself.	Pd-f	5.6			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
33.	Teacher Puppet	_____ was not very careful. He was walking on top of the monkey bars in his new shoes and he slipped and fell. Tell the teacher what happened. friend's name --- *While walking on top of the monkey bars, _____ slipped and fell. Tell the teacher what happened.* *friend's name*	_____ was walking on the monkey bars and he slipped and fell. friend's name	Rp-f	3.6			
34.	Boy Puppet	Now you decide to take a turn on the swing. The new boy has been swinging for a long time. You would like to swing now. What would you say to the new boy? --- *Ask the new boy if you can take a turn on the swing.*	May I swing now?	SM-f	1.6			
35.	Boy Puppet	The new boy says "no". You ask him again but he still won't give you a turn. You have tried to ask him nicely. Now, what would you say to him? --- *The new boy doesn't want to let you take a turn on the swing. You have asked him nicely to let you swing several times--now what would you say to him?*	You better let me swing or I'll tell the teacher.	SM-e	1.5			
36.		Do you think it's right for the new boy to refuse to let	No, it's not right cause we should take turns.					

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
36. (cont.)		you have a turn on the swing? Why? *Repeat*		LR-f	4.6			
*37.	Story-The Dog and His Reflection	Play time is over. You and _____ go back into friend's name the classroom for storytime. Today your teacher will read the story of The Dog and His Reflection. Listen very carefully because when the teacher has finished the story, she will ask you to tell it in your own words. THE DOG AND HIS REFLECTION One day a dog stole a pork chop from his master's table. He rushed out of the house with it before anyone could stop him, and never stopped running until he reached the woods. As he carried the chop over a bridge, the dog looked down into the stream. There he saw his own reflection in the clear water. But he thought he was looking at another dog with another, biggerlooking pork chop. Being greedy, he wanted to have that, too. The dog let out a loud growl and opened his mouth	The dog stole a pork chop and ran away. Then he dropped it in the stream.				

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
37. (cont.)		to grab the other dog's chop. Alas! As soon as he opened his mouth, his own chop dropped into the water and sank out of sight. Instead of having two chops, the greedy dog had nothing at all. Now _____ you subject's name tell the story in your own words. --- *Now _____, you* *subject's name* *tell the story in your own words.*		Rp-d	3.4			
38.		"That was very good." What do you think this story was really about? --- *Repeat*	The story was about a dog who stole a pork chop. But he wasn't happy with just one pork chop and he tried to get another one and ended up losing them both.	Rp-g	3.7			
39.		What do you think we could learn from this story? --- *What does this story teach us?*	It's not nice to be greedy.	LR-e	4.5			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
*40.	Farm (Examiner assumes role of farmer's wife to encourage initiation of play. Examiner then allows children to play, unassisted, for approximately two minutes.) (pretend to feed lambs) (Move car up to house) (horse goes up to fence and chews on it) (move cowboy over to coral)	Now, it's almost time for lunch. Your teacher gives you and _____ some free time to play in the "Lets Pretend" corner. You decide to play with the farm set, first. "I'll be the farmer's wife and you be a hired hand and you be a hired hand." "These baby lambs sure are hungry." "I hear a car coming. I wonder who it is." *"Look! The horse is chewing on the fence."* *"Hey, Texl Come help me with this new pony."*	I'm gonna go feed the horses. Here's some hay and water.	Im-a	7.1			
*41.	Star Patrol (Examiner assumes role of Star Commander to	Next you and _____ decide to play with the Star Patrol.	I'm gonna radio the base ship. There's a falling star in our path.					

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
*41. (cont.)	encourage initiation of play. Then examiner allows children to play, unassisted for two minutes.)	I'll be the Star Commander and you be a crew member and you be a crew member.						
	(move star ship through air)	The star ship is in space drive.						
	(move crew members to star ship)	Beam the crew members aboard.		Im-b	7.2			
	(move enemy ship towards star ship)	*Enemy ship approaching, secure battle stations.*						
	(move star patrol members)	*Activate your phasers.*						
42.		After lunch, time passes quickly and soon you're ready to go home. What kind of snack would you like when you get home from school?	I'd like some sugar cookies and some chocolate milk.					
		What kind of snack would you like?		Pd-b	5.2			

ITEM	ACTION	INSTRUCTION	COMMUNICATION ACT	TARGET		RESPONSE		SCORE
43.		Suppose your mother is not at home when you get there and the door is locked. What would you do? --- *What would you do if you got home from school and found your mother gone and the door locked?*	If the door was locked, I'd go over to _____ friend's name's house and wait til mom got home.	Pd-d	5.4			
44.	Mother Puppet	Fortunately, your mom is waiting for you when you get home from school. She wants to hear all about your first day of school. What would you tell her? --- *Tell your mom some of the things you did at school today.*	We played duck, duck, goose and Mrs. Greene read us a story.	Rp-c	3.3			
45.		Suppose you were the principal (director) of the school, for a day. What do you think it would be like? --- *What would you do if you were the principal (director) of school for a day?*	I'd let everybody go home at noon.	Pj-d	6.4			

APPENDIX D

Scoring Guide

First Day of School

Scoring Guide

First Day of School

Item	Use	Strategy
1.	Predicting	Predicting the consequences of actions or events
2.	Predicting	Anticipating a sequence of events
3.	Directing	Questioning
4.	Logical reasoning	Recognizing problems and solutions
5.	Self-Maintaining	Referring to needs
6.	Reporting	Labelling
7.	Logical Reasoning	Recognizing casual and dependent relationships
8.	Predicting	Anticipating and recognizing alternative courses of action
9.	Self-Maintaining	Protecting the self and self-interest
10.	Directing	Directing the actions of the self
11.	Reporting	Making comparisons
12.	Logical Reasoning	Recognizing casual and dependent relationships
13.	Reporting	Reflecting on the meaning of experiences

Item	Use	Strategy
14.	Projecting	Projecting into the feelings of others
15.	Projecting	Projecting into the experiences of others
16.	Reporting	Questioning
17.	Self-Maintaining	Questioning
18.	Reporting	Referring to detail
19.	Imagining	Developing an original story
20.	Directing	Monitoring own actions
21.	Directing	Directing actions of others
22.	Self-Maintaining	Justifying behavior and claims
23.	Self-Maintaining	Critizing others
24.	Directing	Collaborating in action with others
25.	Predicting	Anticipating/Forecasting
26.	Predicting	Questioning
27.	Projecting	Projecting into the reactions of others
28.	Projecting	Questioning
29.	Logical Reasoning	Justifying judgment and actions
30.	Logical Reasoning	Questioning
31.	Logical Reasoning	Explaining a process
32.	Predicting	Predicting the consequences of actions or events
33.	Reporting	Recognizing related aspects

Item	Use	Strategy
34.	Self-Maintaining	Questioning
35.	Self-Maintaining	Threatening others
36.	Logical Reasoning	Recognizing principles
37.	Reporting	Referring to the sequence of events
38.	Reporting	Extracting or recognizing the central meaning
39.	Logical Reasoning	Reflecting on events and drawing conclusions
40.	Imagining	Developing an imaginary situation based on real life
41.	Imagining	Developing an imaginary situation based on fantasy
42.	Predicting	Anticipating the detail of events
43.	Predicting	Anticipating problems and possible solutions
44.	Reporting	Referring to incidents
45.	Projecting	Projecting into situations never experienced

VITA

Cynthia Boyd Blust was born in Marion, North Carolina on March 14, 1956 to Mr. and Mrs. Paul Frank Boyd. She attended Pleasant Gardens Elementary School in that city and in 1974 graduated from McDowell High School. In August 1976, while employed by the Department of Social Services, Mrs. Blust entered McDowell Technical Institute under the Appalachian Extension Program, where she completed her general education requirements. In 1978, she entered Appalachian State University and received a Bachelor of Science degree in the field of Speech Pathology and Audiology in December, 1980. In December 1982, she completed the requirements for a Master of Arts degree in this field from Appalachian State University.

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